



RESOURCE GUIDE

Mainstreaming Gender in Water Management



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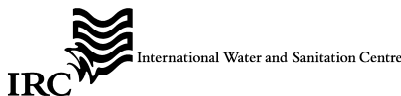


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Foreword

Throughout the developing world, the water and gender scenario is all too familiar: women labour to provide water for household needs while men make decisions about water resources management and development at both local and national levels. We believe projects, programmes and policies that address gender inequalities will enhance both water resources management and human development opportunities for both men and women.

In many cases the analysis of gender perspectives in relation to water resources must be context-specific. Productive versus domestic use of water, women's and men's access to and control over water, and land, credit and extension services are examples of issues that need to be addressed. The now abundant literature about gender relations in water management has been inventoried for easy access by all users. In the process, many valuable resources have been identified and compiled. But gaps in information have also emerged, showing the need for further research in this sector.

The initial UNDP Resource Guide for Mainstreaming Gender in Water Management was launched during the 3rd World Water Forum in Kyoto in 2003. The feedback received since then has shaped this second, totally revised version introduced in March 2006 during the 4th World Water Forum in Mexico. This once again edited edition of August 2006 is available in four languages: English, French, Spanish and Arabic. Most sections of the latter three versions are translations from English, but some are original texts specific to the language region. Such an approach gives scope for much wider distribution and utilization of the Resource Guide.

This edition of the Resource Guide divides the resources among thirteen water sub-sectors, to facilitate access for specific purposes and water uses. Introductions to the sectors describe current debates and gender issues. References, resources (including manuals and guidelines), case studies and relevant websites are all grouped by sub-sector. The Gender and Water Alliance writers of this document tried to keep in mind easy reading and clear categorization throughout the writing process. Nevertheless, readers are advised to browse through the whole Resource Guide when in search of useful and interesting documents.

With this Resource Guide, UNDP, GWA, IRC, Cap-Net and GWP seek to assist water professionals, politicians, gender specialists and others in their efforts to provide improved access to water for poor women, children and men all over the world. We welcome users' assistance in the form of comments, additions, case studies and other feedback for future editions and for the regular updating of the website version of the Resource Guide at www.genderandwater.org/

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Acknowledgements

We are very pleased with the outcome of the excellent collaboration on this edited second edition of the Resource Guide for Mainstreaming Gender in Water Management of August 2006. This new edition has been greatly expanded and improved. It includes sub-sector overviews, additional resources and case studies, all of that in four languages, and some of the resources in five languages. Most of the texts are translated from English, some from Spanish and French.

Many people, women and men, and organisations have made significant contributions to the completion of this work, and we are indebted to all those who worked so hard to achieve it. We thank all those who strengthened the new contents by giving feedback and suggestions for improvements when invited to do so via the various e-mail listservs and web sites. The Gender and Water Alliance is honoured to have been entrusted to update the Resource Guide by the organisations providing the necessary finance: The Swedish International Development Agency (SIDA) and the United Nations Development Programme (UNDP).

Special thanks go to the main authors, our GWA partners Prabha Khosla and Sara Ahmed, and their team of contributing authors including Maria Angelica Alegria, Khadouja Mellouli, Mame Dagou Diop, Pauline Ikumi, Noma Neseneni and Betty Soto who surfed the internet to find new and relevant resources, who wrote, rewrote, read and revised texts, who screened and adapted case studies. A special thank you also to Marcia Brewster, Task Manager of the UN Interagency Task Force on Gender and Water, for her professional editing and rewriting. Esther de Jong reformatted and checked the full text once again in June-July, and the url-links were corrected then. The translators Susana Carrera, Hela Gharbi and Nizar Dridi, had the difficult task to be at the end of the chain, trying to complete their translations in haste when everything else had been completed. Their work is highly valued.

Serious attempts have been made to acknowledge all authors of case studies which were selected to be included in full in the Resource Guide. If sometimes this has not been adequate, we request authors to notify GWA so that we can make corrections in the website and in the next version.

We thank the partner organisations in this endeavor for their valuable contributions: UNDP, IRC, Cap-Net and GWP. IRC has taken on herself the technical process of producing the web pages and CD-Rom, without which all the writing would not have been accessible. Cap-Net gave useful advice and took care of reproduction.

The Resource Guide will be updated regularly and is available in the GWA website www.genderandwater.org as well as via links in the partners' websites. All comments and additions are welcome.

Joke Muylwijk
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Acronyms and Abbreviations

CapNet	Capacity Building for Integrated Water Resources Management
CBOs	Community-Based Organisations
FAO	Food and Agriculture Organisation
GRBIs	Gender-Responsive Budget Initiatives
GWA	Gender and Water Alliance
GWP	Global Water Partnership
IRC	International Water and Sanitation Centre
IUCN	The World Conservation Union
IWRM	Integrated Water Resources Management
MDGs	Millennium Development Goals
NGOs	Non-Governmental Organisations
O&M	Operations and Maintenance
UNEP	United Nations Environment Programme
UNICEF	United Nations Children's Fund
UNDP	United Nations Development Programme
WATSAN	Water and Sanitation
WSSD	World Summit on Sustainable Development

Chapter 1 Introduction to the Guide

1.1. What is this Resource Guide?

This is the second edition of the Resource Guide on Mainstreaming Gender in Water Management of August 2006, which was first published by the United Nations Development Programme (UNDP) in 2003. The Guide is a reference document to assist water and gender practitioners and professionals as well as persons responsible for gender mainstreaming, and anybody else who is interested in the water sector. It is a compilation of newer resources – documents, papers, books, case studies, tools and toolkits - on gender mainstreaming in Integrated Water Resource Management (IWRM). It is meant to support action and further reading and research. New sector overviews have been added, particularly those relating to current issues and debates. Url-links as valid by mid 2006 are included. However they tend to keep changing, and we suggest you try and find new links before enquiring with the publishers.

1.2. Why was it developed?

The Guide was developed in response to an identified need for information on gender mainstreaming in IWRM. While considerable information exists, it is dispersed among different institutions and organizations, making it difficult to know where to get specific resources for particular aspects of gender mainstreaming in the water sectors. This Guide supports the efforts of those trying to mainstream gender in their programmes and projects and those seeking to improve their knowledge and skills in gender and IWRM.

1.3. What are its objectives?

The resource guide is meant to:

- Facilitate access to available literature and resources regarding gender and IWRM;
- Improve the sustainability and effectiveness of water-related activities through incorporation of gender equality and diversity or social equity analysis;
- Improve understanding and awareness of gender concepts through an easy reference to existing materials, cases, and tools; and
- Improve approaches to the planning, implementation, management and monitoring of IWRM.

1.4. How was it developed?

The development of the Resource Guide has been an interactive process involving consultants, water practitioners, gender specialists and programme officers working in different water sectors and in different continents. The compilation of this 2nd edition was coordinated by the Gender and Water Alliance (GWA) with the technical contribution of the International Water and Sanitation Centre (IRC). The GWA, IRC, and CapNet, collaborated in this effort while the UNDP provided the financing.

1.5. How should it be used?

The Resource Guide is not a set of guidelines, nor is it a step-by-step tool kit for gender mainstreaming. It is a reference guide that should be used in conjunction with the texts and materials to which it refers. It gives a brief overview and summary of issues within the different sub-sectors of IWRM and is designed to raise awareness and promote learning and analysis on the relevant social equity and gender issues. Chapters and sections make it easy for those interested in particular topics to specifically zero in on them. It may be useful to review those sections of interest first, rather than trying to read the Guide from cover to

cover. Other sections provide users with additional materials and resources that are valuable for a holistic approach to water resources management

Chapter 2 Gender and Integrated Water Resources Management (IWRM)

2.1 Introducing IWRM

Integrated Water Resources Management (IWRM) is a systematic process for the sustainable development, allocation, and monitoring of water resources. The concept and principles of IWRM were articulated at the International Conference on Water and Environment held in Dublin in 1992 and in Chapter 18 of *Agenda 21*, a consensus document from the United Nations Conference on Environment and Development (UNCED), held in Rio also of 1992.

IWRM is a cross-sectoral holistic approach to water management, in response to the growing competing demands for finite freshwater supplies. It is an approach that aims to ensure the coordinated development of water, land and related resources to optimise economic and social welfare without compromising the sustainability of environmental systems (Global Water Partnership, 2000). Policy makers, analysts, international organisations and governments have sought consensus on principles to guide the setting of priorities, policy making and the elaboration of specific initiatives in IWRM. Key principles include:

- Water should be treated as an economic, social, and environmental good.
- Water policies should focus on the management of water as a whole and not just on the provision of water.
- Governments should facilitate and enable the sustainable development of water resources by the provision of integrated water policies and regulatory frameworks.
- Water resources should be managed at the lowest appropriate level.
- Women should be recognised as central to the provision, management and safeguarding of water.

The application of IWRM as a philosophy, policy, and implementation guideline can assist in addressing the:

- Need for improved water governance and for increased coordination and collaboration among various water sectors, such as drinking water supply and sanitation, irrigation, and ecosystem maintenance.
- Potential competition and conflicts among different stakeholders from all sectors and among individuals, communities, and governments.
- Environmental degradation that is threatening all life on the planet.
- Gender and social disparities in terms of equitable access to and control over resources, benefits, costs, and decision making between women and men.
- Need for sustainable water resources development as a key to poverty eradication.

2.2 Introducing Gender

Gender mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies and programmes in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres, so that women and men can benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality [*by transforming the mainstream*] (ECOSOC, 1997, emphasis added).

In the area of water resources management, an uncoordinated and sectoral approach has resulted in environmental degradation from overexploitation of water resources, inappropriate allocations among competing uses, inequitable distribution of benefits and burdens, and inadequate operation and maintenance of infrastructure. Inadequate involvement of both women and men has hindered programmes and projects aimed at addressing sustainability in water resources management. Community participation and management approaches have failed to address these issues, largely because communities are often seen as a collection of people with a common purpose.

The reality is that a community is not a collection of equal people living in a particular geographic region. It is usually made up of individuals and groups who command different levels of power, wealth, influence and ability to express their needs, concerns and rights. Communities contain competing interest groups. Where resources are scarce, there is competition for supplies, and those at the lowest end of the power spectrum - poor women and men - will go without. Unequal power relations place women in a disadvantaged position. Applying a gender analysis helps water sector agencies allocate their resources better to meet the needs of different women and men and marginalised groups.

People-centred approaches do not always ensure that gender perspectives are taken into account. Thus, a deliberate strategy of gender mainstreaming can be useful to ensure that these issues that effect women and men are part of analysis, programme and project planning, implementation, and evaluation. More importantly, gender mainstreaming can assist in bringing about institutional and organisational change necessary to ensure gender equality as an on-going commitment.

2.3 Defining Gender

Gender refers to the different roles, rights, and responsibilities of men and women and the relations between them. Gender does not simply refer to women or men, but to the way their qualities, behaviours, and identities are determined through the process of socialization. Gender is generally associated with unequal power and access to choices and resources. The different positions of women and men are influenced by historical, religious, economic and cultural realities. These relations and responsibilities can and do change over time.

In this Guide, the use of the term gender also recognises the intersection of women's experience of discrimination and violation of human rights not only on the basis of their gender but also from other power relations that result from race, ethnicity, caste, class, age, ability/disability, religion, and a multiplicity of other factors including whether they are indigenous.

Women and men are defined in different ways in different societies; the relations they share constitute what is known as gender relations. Gender relations constitute and are constructed by a range of institutions such as the family, legal systems, or the market. Gender relations are hierarchical relations of power between women and men and tend to disadvantage women. These hierarchies are often accepted as 'natural' but are socially determined relations, culturally based, and subject to change over time. Gender relations are dynamic, characterised by both conflict and co-operation, and mediated by other axes of stratification, including caste, class, age and marital status or position in the family.

Sex differences such as the ability to give birth are biologically determined and are different from socially prescribed gender roles.

Recognising the above, a gender analysis refers to a systematic way of looking at the different impacts of development on women and men. Gender analysis requires separating data by sex and understanding how labour is divided and valued. Gender analysis must be done at all stages of the development process; one must always ask how a particular activity, decision, or plan will affect women differently from men (Parker, 1993).

2.4 The Historical Framework of Gender

Women and Gender approaches in development have evolved over past decades. Until the early 1970s, development policies addressed the needs of poor women entirely in the context of their role as wives and mothers. Known now as the ‘welfare’ approach, the focus was on mother and child health, childcare, and nutrition. It was assumed that the benefits of macro-economic strategies oriented towards modernisation and growth would trickle down to the poor, and that poor women would benefit as the economic position of their husbands improved. Women were passive recipients of benefits. Water and sanitation services were defined in the context of health care and hygiene, which were seen as women’s responsibilities.

From the 1970s and 1980s, the Women in Development (WID) approach aimed to integrate women into the existing development process by targeting them, often in women-specific activities. Women were usually passive recipients in WID projects, which often emphasised making women more efficient producers and increasing their income. Although many WID projects improved health, income, or resources in the short term, they did not transform unequal relationships, and a significant number were not sustainable. A common shortcoming of WID projects was that they did not consider women’s multiple roles or that they miscalculated the elasticity of women’s time and labour.

From the late 1980s on, the Gender and Development (GAD) approach was developed with the objective of removing disparities in social, economic, and political balances between women and men as a pre-condition for achieving people-centred development. Much of the work in the water sectors today is informed by this approach. However, there are many perspectives in this approach and no one blueprint for enabling equality and equity in water resources management.

Both WID and GAD approaches are still in use.

In recent years, a gender and empowerment approach has attempted to transform existing gender relations by stressing women’s self-empowerment.

2.5 Principles of IWRM and their Gender Implications¹

Integrated Water Resources Management (IWRM) offers an opportunity to create a paradigm shift in water resources management. The global environmental crisis, growing poverty in urban and rural areas, and continued gender inequalities all point to the need for a different governance approach to water use and management.

Applying this approach requires cohesion among the different institutions, policy, and regulatory frameworks and deliberate measures that take account of environmental sustainability and an intersectional analysis. Gender in this context is not a sufficient point of

¹ Adapted from: Wijk-Sijbesma, 1998 and Thomas et al, 1997.

analysis without also considering intersecting identities of race, class, caste, ethnicity, age, ability, and geographical location.

- **Water should be treated as an economic, social, and environmental good.**
 - Freshwater is valuable and limited. Water supply services and infrastructure are economic activities, while at the same time, access to basic water supply is a fundamental human right. Water use for sanitation and domestic purposes, which tends to be the responsibility of women, should be incorporated into the assessments of economic values of the use of water. Women often have no rights to land and water, and development efforts may negatively affect their livelihoods.
 - While it is desirable for water supply to be paid for, it is also important to take into account people's ability to pay. Women's interests and gender relations are often overlooked. If charges for domestic water supply have to be paid, both men and women should be involved in determining the rates. Even though women often do not have control over cash, they are still expected to pay for water and sanitation, more than men, because they are the main users and it is considered their responsibility. A gender and social equity analysis of demands is required.
 - Access to basic amounts of water supply as a social good and human right needs to be included in policies and planning. Increased charges for water should not apply to meeting basic human needs and should not reduce water minimum consumption for cooking and hygiene.

- **Water policies should focus on the management of water and not just on the provision of water.**
 - Governments and local stakeholders should be key actors in water management.
 - The private sector can play a role in providing water supply services for greater efficiency. National governments need to retain responsibility for oversight of water quality and for regulating and monitoring private providers. The government is also responsible for ensuring that the water supply needs of the whole population are met. Companies solely interested in making a profit will not be concerned about low-income households, domestic water users and those who use water sources and water catchments for their basic necessities of life. Women are heavily represented in these categories.
 - With increased privatisation, capacity building of local communities becomes more important, and it should be ensured that women and men benefit equally from capacity building initiatives.

- **Governments should facilitate and enable the sustainable development of water resources through the provision of integrated water resources policies and regulatory frameworks.**
 - Holistic water management is needed because actions taken in one water sector have an impact on water availability, quantity and quality in another. Such impact is different for men and women, between and even within households, and according to sex, age and status.
 - At higher levels coordination within countries and ministries is necessary, including coordination at sub-national levels, and women's interests and rights need to be taken into account.

- **Water resources should be managed at the lowest appropriate level.**
 - Participation by all stakeholders leads to better water management. Because of women's traditional roles in water resources management, they have knowledge which should be included in planning and practice.
 - The lowest level is most important to ensure that decisions are supported by those who implement water projects on the ground. These are often women. Female-headed households tend to have less bargaining power in communities than male-headed households. A specific effort to include them is needed.
- **Both women and men should be recognised as central to the provision, management and safeguarding of water.**
 - Campaigns to reduce water wastage should target men and women and especially industries and institutions that waste water.
 - Women's skills and knowledge are crucial for the effective and efficient management of water.
 - More attention is needed to control pollution and to improve water quality and sanitation for the benefit of women who collect domestic water and to improve health.

2.6 Why use a gender perspective in Integrated Water Resources Management?

A gender perspective in IWRM is necessary for a variety of reasons, as outlined in the sections below.

2.6.1. Concern for effectiveness and efficiency in water sector programmes and projects.

Involving both women and men in integrated water resources initiatives can increase project effectiveness and efficiency. Participation by both women and men improves project performance and improves the likelihood of sustainability. In other words, a project is more likely to achieve what planners hope it will achieve if women and men (both rich and poor) are active participants and decision makers.

In addition to a vast body of anecdotal evidence, three specific studies have looked at this issue:

Voice and Choice for Women - Linkages on Demand, Gender and Poverty from 44 Water Schemes in Asia and Africa. A research project of the UNDP/World Bank Water and Sanitation Programme. 2001.

Preliminary findings appear to validate the hypothesis that water services will be better sustained and used by the communities if institutions and policies enable the communities (men and women, rich and poor) to initiate the service, take informed decisions about the type of service management and financing systems and build capacities to maintain and manage the services so that burdens and benefits are equitably shared

A World Bank review of 121 rural water supply projects

This review found that women's participation was among the variables strongly associated with project effectiveness. Furthermore, it was found that the failure to take gender differences and inequalities into account can result in failed projects. For example, in India, compost pits located outside villages went unused, and women continued to deposit waste near their homes - even when fined for doing so - because they did not wish to be seen carrying loads of refuse to the outskirts of the village. If there had been consultation with women, perhaps this problem could have been avoided (Narayan, 1995).

IRC study of Community Water Supply and Sanitation projects

A study by the International Water and Sanitation Centre (IRC) of community water supply and sanitation projects in 88 communities in 15 countries found that projects designed and run with the full participation of women are more sustainable and effective than those that do not involve women as full partners (Wijk-Sijbesma, 2001).

Although research has tended to focus on the water supply and sanitation sector, the same trend can be seen in other water sectors as well. The positive impact of paying attention to gender issues can be seen in the Philippines Communal Irrigation Development Project. This project exceeded physical development targets and appraisal estimates of irrigation intensity and paddy yields. The project's success has been attributed to the full participation of the intended beneficiaries. The project partly draws on a tradition of farmer-built irrigation systems and responds to a cultural context in which women exercise independent land rights. The project's success in the community was attributable to: recruitment of community organisers, two-thirds of whom are women; ensuring membership of both spouses in water user associations; and actively encouraging women to assume leadership roles. It was also noted that women's membership facilitated the payment of fees, because women controlled family finances (Quisuimbing, 1994).

2.6.2 Concern for environmental sustainability

Women and men around the world play distinct roles in managing plants and animals, in use of forests, drylands, wetlands and agriculture. Moreover, gender roles are differentiated in collecting water, fuel, and fodder for domestic use, and in generating income. Due to their distinctive engagements with the natural environment, women's experience and knowledge are critical for environmental management (UNEP, 2004). Using a gender perspective and enabling the integration of women's knowledge of the environment will increase the chances of environmental sustainability.

A watershed management project was initiated in a fragile area of a cloud forest in Mindanao, Philippines. A lake used to generate electricity was silting up from deforestation and soil erosion. There was a need to reduce soil loss and to engage local institutions in monitoring soil loss and soil recovery. The project first invited young men to monitor the water to determine whether the techniques being used for soil conservation were reducing the silting. However, the men were not consistent in monitoring. Women farmers, as well, were brought in to monitor the water without much success. The project then determined that women were more interested in health issues than soil loss. As women learned about how water quality affected the health of their families and the programme expanded to include monitoring for *e coli* bacteria, women became interested and participated. This led to their further engagement in a wider range of environmental activities. Ultimately, the community's involvement led to positive outcomes, such as an increase in the adoption of soil conservation techniques by both men and women farmers (Diamond, et al., 1997).

2.6.3. Need for an accurate analysis of water resources use

Social and economic analyses are incomplete without an understanding of gender and social differences and inequalities. With a gender analysis, planners gain a more accurate picture of communities, natural resource uses, households and water users. Understanding the differences among and between women and men (who does what work, who makes which decisions, who uses water for what purpose, who controls which resources, who is responsible for different family obligations, etc.) is part of a good analysis and can contribute to more effective results.

In Bangladesh, despite the widespread perception that gender issues were not relevant in the impact of floods and flood prevention plans, there are several ways that differences and inequalities among women and men are relevant. Women are responsible for the production and processing of farm food products and for the preparation of food resources in households in rural Bangladesh. Water-related hazards, such as early flash floods, can damage not only the fields producing crops, but also food stores and processing equipment, driving up the prices of food staples. Any disruption in food supply will impact a woman's ability to make a living from existing resources. Women's lack of mobility also limits alternative strategies for coping with stress on family resources, especially if she is the head of household owing to male migration or desertion (Thomas et al, 1993).

The differences and inequalities between women and men influence how individuals respond to changes in water resources management. Understanding gender roles, relations, and inequalities can help explain the choices people make and their different options.

In Alto Piura, Peru, female farmers complained that they always had to irrigate at night, in spite of the official rule that night turns should be equally distributed among irrigators. Since male irrigators had better relations with the irrigators' committee and with the water delegate, they were often more successful in negotiating day turns (from Zwarteveen 1997). If a project aims to provide all irrigators and farmers with equitable access to water resources, then strategies are required to deal with this specific difficulty faced by women.

Gender relations and inequalities influence collective responses to water resource management issues. Women and men tend to organise in different ways. Women often face specific obstacles to participating in a project, joining a water-users committee, or providing input into a consultation session.

Poor women are less likely to be elected to positions on water committees or village development committees. When asked about the criteria used to elect people to positions of responsibility in the village, interviewees in Zimbabwe repeatedly mentioned two qualifications: i) someone they could respect (for position, influence, hard work or ability to forge consensus over difficult issues), and ii) someone with resources such as a bicycle or cash who could represent the village at district headquarters when required. In addition to not meeting those qualifications, poor women generally have greater constraints on time and labour resources than other women or men. They and their children are likely to be in poorer health and they therefore could benefit most from improvements that bring water supplies closer to their homes. However they are least likely to participate in the collective decision-making that will bring this about (Cleaver, 1998).

2.6.4 Concern for gender equality, equity and empowerment

Without specific attention to gender issues and initiatives, projects can reinforce inequalities between women and men and even increase gender disparities. Although many initiatives are thought to be 'gender neutral', this is rarely the case. Projects and programmes often bring new resources (training, tools, technology, etc.). Whether someone is male or female can influence whether he or she can take advantage of these opportunities. Programmes need to enable both women and men to benefit equally from water initiatives. Gaps between rich and poor women can often increase as a result of development interventions.

An initiative can also serve to reinforce existing inequalities, even when there may be opportunities to help support people's efforts to build more equitable societies and

economies. The importance of specific attention to gender and diversity issues is all the more critical given the generally low profile of these issues among many water professionals.

2.6.5 Realisation of international commitments by governments and partners

Governments and development agencies have made commitments to support equality between women and men and to use a gender perspective in all programmes and projects, including those related to water and the environment. Specific commitments include:

- The results of and follow-up to the International Drinking Water Supply and Sanitation Decade (1981-1990) were discussed in consultations in New Delhi in 1990. Although these consultations were limited on the discussion of gender issues, there was a clear call for an increase in women's decision-making and management of water resources.
- The *Dublin Statement* (1992), endorsed by over 100 countries, recognises that women play a central part in the provision, management, and safeguarding of water resources. It recognises the pivotal role of women as providers and users of water and guardians of the living environment and for this reality to be reflected in institutional arrangements for the development and management of water resources.
- Principle 20 of the *Rio Declaration* (1992) states, "Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development". *Agenda 21* (1992) contains a chapter on women and sustainable development (Chapter 24) and a chapter on water management (Chapter 18).
- The *Beijing Platform for Action* (1995) highlighted environmental issues as one critical area of concern - "gender inequalities in the management and safeguarding of natural resources and in the safeguarding of the environment". Three strategic objectives were agreed: (1) To involve women actively in environmental decision making at all levels; (2) To integrate gender concerns and perspectives in policies and programmes for sustainable development; and (3) To strengthen or establish mechanisms to assess the impact of development and environmental policies on women.
- The Johannesburg Plan of Implementation of the 2002 World Summit on Sustainable Development (WSSD), para 25(a), includes agreement by governments to: "... support capacity building for water and sanitation infrastructure and services development, ensuring that such infrastructure and services meet the needs of the poor and are gender-sensitive."
- In December 2003 the General Assembly proclaimed (resolution 58/217), the period 2005 to 2015 as the International Decade for Action, 'Water for Life', and called for a focus on the implementation of water-related programmes and projects, "whilst striving to ensure women's participation and involvement in water-related development efforts ...".
- The Millennium Development Goals, which have the same time frame as the 'Water for Life' Decade, include 2015 targets on gender equality and empowerment of women, as well as on safe water and sanitation.

2.6.6 Participatory processes in IWRM initiatives need to recognise inequalities and differences between women and men

Experience demonstrates that participatory processes and 'attempts to involve poor people' do not automatically include women. Attention to gender differences and inequalities is required if participatory development initiatives are to involve women as well as men. Specific issues include:

Power relations in communities. Communities are not harmonious groups with a common set of interests and priorities. There are often strong divisions along the lines of age, religion,

class and gender. These power differentials make it difficult for some people to voice opinions that contradict the views of those in power. Power differentials may even affect *who* participates in specific meetings. Outside officials may invite only ‘community leaders’ (generally men) to participate in consultations.

Intra-household and intra-family relations. Some women may find it difficult to speak out in front of their husbands or fathers (cultural norms of seclusion). They may also believe that discussions relating to family matters (such as issues relating to workloads or gender discrimination in resource entitlements) are not for public forums.

Different constraints to participation. Men and women have different responsibilities and workloads. Women often have less time to devote to new activities. Attending specific meetings may raise problems for women if meetings are set for the times of the day when they tend to be occupied with household responsibilities or childcare. Additionally, formal or informal membership norms in community institutions can also deny women the right to participate.

Different abilities to participate. Given gender biases in education, women and men often have varying literacy levels. Men may also have more experience putting their arguments forward to outsiders and feel more confident dealing with new people than women.

Perceived benefits of participation. Women and men may make different calculations about the costs and benefits of their involvement in participatory processes. Given the already high demands on most women’s time, they often have little time to participate fully. Participatory methods are only as good as the people who use them. It is now clear that there is more to participation than a series of exercises. When they are done well, gender-sensitive participatory processes challenge organisations in many ways.

Challenges to Participatory Processes

Skills	Organisations need to develop the skills to facilitate gender-sensitive participatory processes. This requires experience, skills, and the ability to deal with conflict, should it arise.
Time	Participatory processes can take a long time and may require support over a period of years.
Flexibility and Adaptability	The selection and sequencing of tools for participatory processes should be based on specific circumstances. Responding adequately to specific contexts requires flexibility.
Support	Participants, both women and men, require support as they explore new issues. It is irresponsible for an outside organisation to encourage people to raise issues of gender inequalities and then not remain to engage with the consequences.
Follow-up	Can the organisation respond to the issues raised? If development cooperation organisations are serious about participatory processes, they must be prepared to act on the priorities identified and issues that emerge.

2.6.7 Participatory methods used to introduce gender equality issues

Beginning in 1992, the German development cooperation agency, GTZ assisted the Zambian Ministry of Agriculture, Food and Fisheries to integrate a participatory approach into its extension services. Extension officers used participatory methods to assess farmers’ priorities, which led them towards a multi-sectoral approach to the programme. They used seasonal calendars to plan extension activities at times convenient to farmers. They began to involve farmers in monitoring and evaluating of the outcome of extension efforts. However, an evaluation revealed that women were not benefiting from the improved participatory approach to extension services provision. The staff began to make concerted efforts to

address the problem and involve women in the programme. As awareness grew, two three-day workshops helped couples to analyse gender relations in their households. The case study raises several key points:

- Gender is not always the sensitive topic some claim it to be. With the right methods, attitudes, and approaches, local people and staff members welcome discussion about it.
- Gender is not a foreign, theoretical concept, and women and men can address it.
- Gender should be inherent in participatory approaches, but it is not automatically addressed without specific efforts (Frischmuth, 1998).

2.6.8 Participatory methods illustrate different perceptions of well-being

The use of gender-sensitive participatory methods in Darko, Ghana, identified differences between women and men in their understanding of poverty. These methods documented people's own perceptions of intra-household relations and provided a far better understanding of the situation and changes underway than would have been possible through data collection on externally selected indicators. Men and women prepared separate social maps of the village and carried out wealth and well-being rankings. Differences in the two discussions were analysed and the findings are outlined below.

- Men's criteria of wealth centred on assets like a house, car, cattle and type of farm. They considered crops grown by men, but not those of women. Initially they left those with no assets out of the ranking altogether. They then moved on from wealth to a discussion of well-being, using 'god-fearing' as the main criterion.
- Women started with indicators like a house, land and cattle but moved to analyse the basis of agricultural production. Again they considered only 'female' crops and did not mention cocoa or other cash crops grown by men. Contrary to common perceptions, women focused on marketed crops, and not on subsistence food crops.
- Women's criteria for the 'poorest' were related to a state of destitution, and the lack of individual entitlements or health-related deprivation. Men focused on the absence of assets.
- Each group had its own perception of well-being. Women tended to identify factors for women, while men focused on men. Neither group looked at the household as a unit for analysing welfare.
- For both women and men, being wealthy did not always mean being better off. In the men's analysis none of the rich were 'god-fearing' and two houses with no assets had 'god-fearing' people. As for the women, the biggest vegetable producers (seen as an indicator of being well-off) were not in the richer categories (Shah, 1998).

2.7 Mainstreaming Gender in Water Management

Gender mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels (global, national, institutional, community, household). It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal is to achieve gender equality by transforming the mainstream (UNESCO, 1997 in GWA 2003a).

Operationalising gender mainstreaming involves:

- Understanding the gender-differentiated systems for access to resources, labour, water uses, water rights, and the distribution of benefits and production. Sex-disaggregated data and the documentation of unpaid labour are important.

- Focusing on gender relations, not just women. Although many analyses draw attention to women (since it is generally women who face disadvantages and women's views that tend to be overlooked), a gender analysis looks at the relations (differences, inequalities, power imbalances, differential access to resources, etc.) between and among women and men and how these are negotiated. The position of women cannot be understood in isolation from the broader relationships between women and men.
- Understanding that gender is a factor that influences how people respond both individually and collectively. Men and women face different obstacles and draw on different resources when attempting to participate on a water committee, confront a local official or attend a training session.
- Understanding the gender dimensions of institutions at all levels in society (within the household, community-based organisations, water users associations, local governments, national civil services, etc.). These formal and informal institutions play fundamental roles in water resources management, yet they have gender dimensions: Who makes what decisions? Does the structure facilitate or hinder women's participation? Is there the capacity to reduce inequalities between women and men in the institutions? How are different needs and perspectives negotiated inside institutions? Are institutional policies developed in an inclusive and gender-sensitive manner?
- Confirming or rejecting assumptions in each specific context, ideally using participatory methodologies. Assumptions from one country or project cannot be carried over into another region or initiative. Furthermore, power relations, working arrangements, and resource availability can change over time. The specificity of each situation must be investigated.

2.7.1. Getting the initiative or project right

To ensure that the analysis increases the positive impacts of water programmes and that the overall objective to support the advancement of women is reflected in all IWRM initiatives, the following should be considered:

- Incorporating the insights from the analysis into project design. For example, it is not enough to document women's priorities. Their views should influence the priorities and objectives of the initiative.
- Giving importance and recognition to women's responsibilities and views. For example, often women's uses of water are given less importance than men's (they are not documented, women's uses are not given priority, they are not visible to planners, etc.).
- Making links to key expected results of the initiative. There should be a clear analysis that links [the] gender analysis to the overall objectives of the project. If the project is focusing on flood control, the gender dimension should look at how women are consulted, involved and affected by various options for flood control (rather than a side initiative on small-scale credit for women).
- Identifying concrete objectives. During the project design phase, objectives relating to gender equality should be clearly specified (rather than kept general, such as 'incorporate gender equality issues into the project').
- Developing indicators to track success towards meeting the results. General indicators should be disaggregated on the basis of sex (instead of total number of people consulted, there should be a breakdown between women and men).

2.7.2. Gender-sensitive monitoring and evaluation indicators

Programme and project interventions have not led to sustained and sustainable development. Benefits and costs that accrue from an intervention are also not always disaggregated by sex and socio-economic class; consequently, it becomes difficult to understand the effects of

those interventions on different groups. A monitoring and evaluation process that has gender-sensitive indicators and involves men and women not as informants but as participants will result in a better understanding of who in the community has benefited, who bears the costs and what motivates different groups to act. Furthermore, a monitoring process that involves men and women ensures that monitoring becomes a self-management tool rather than a policing instrument, thus leading to collective action.

If data collection is not disaggregated by sex, it will be difficult to assess the positive or negative impacts of the programme or project on women and men, young and old and rich and poor. For example, if water provision in an urban slum has lessened the burden of water fetching for women and girls, this could free more girls to go to school. This positive result cannot be assessed without sex-disaggregated data collection, which can assist in measuring the scope of the impact, i.e., the increased enrolment and retention of girls in school. If water provision services have freed poor women's time to engage in income generating activities, without sex-disaggregated data, the positive impact will lack empirical evidence and will remain anecdotal.

Additionally, the following issues cannot be measured or monitored without gender-sensitive indicators:

- The impact/effectiveness of activities targeted to address women's or men's practical gender needs i.e., new skills, knowledge, resources, opportunities or services in the context of their existing gender roles;
- The impact/effectiveness of activities designed to increase gender equality of opportunity, influence or benefit e.g., targeted actions to increase women's contribution to decision-making; opening up new opportunities for women/men in non-traditional skill areas;
- The impact/effectiveness of activities designed to develop gender awareness and skills amongst policy-making, management and implementation staff;
- The impact/effectiveness of activities to promote greater gender equality within the staffing and organisational culture of development organisations e.g., the impact of affirmative action policies (Derbyshire, 2002: 28).

The Canadian International Development Agency has developed an extensive guide on the issue, its history and evolution, its implications and how to develop gender-sensitive indicators for the organisation as well as the project level (CIDA, no date).²

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This document gives a glimpse of the work that has taken shape in gender mainstreaming at all levels through shared knowledge and action with a range of stakeholders including governments, NGOs, research centers, universities, and community based organisations'. It also provides an analysis of the remaining gaps for enhancing gender mainstreaming. Despite some progress, there is a continued sense that not enough is being done, and that there has not been effective translation of theoretical concepts about gender into tangible action and measurable changes on the ground. How can we identify and seize opportunities both to strengthen and consolidate current work, while continuing to push and

expand the gender agenda? How do we become more strategic, more powerful in linking the important issues of gender with development, and in truly integrating and mainstreaming these issues into our daily work?

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means that the strengths and attributes of both sexes should be used to full advantage. That applies at all levels, from the household to the highest levels of management. Usually it means that power structures, working practices, timings of meetings, legislation and financing systems need to be reviewed to create greater opportunities for women's talents and skills to be mobilised, but without adding to their existing heavy workloads. This paper revisits some of the arguments that have led to the international pressure for gender equity in human and social development. It provides a refresher course for those whose commitment to the gender cause has been frustrated by inaction at government or agency level, and a primer for those coming new to the topic of gender and water.

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D. Allély, O. Drevet, J. Etienne, J. Francis, A. Morel-à-l'Huissier, G. Verdelhan Cayre, P. Chappé (1999). Eau, genre et développement durable. Expériences de la coopération française en Afrique subsaharienne

Basé sur l'expérience de la coopération française, cet ouvrage présente les évolutions majeures survenues depuis les années 1970 en matière de rencontres internationales, recherche, terminologie, d'approches spécifiques visant à intégrer les femmes aux processus de développement.

Alan Gelb, 2001. « Genre et développement : Un potentiel occulté en Afrique ». *Development Outreach, Vol. 3, N°2*, printemps 2001. Institut de la Banque Mondiale. Disponible à: http://www.genreenaction.net/article.php?id_article=3443

OCDE, 1995. Le rôle des femmes en Afrique dans la gestion des ressources en eau : le regard de l'OCDE. Document de travail de l'OCDE d'après séminaire

Élizabeth Côté, Les femmes et les défis de la gestion de l'eau à Bamako, Mali. Disponible à: <http://www.ceci.ca/fra/information/histoires/popup/eaufem.htm>

Spanish Language Resources

Género y Agua, Informe de Desarrollo sobre Género y Agua 2003. *Perspectivas de Género en las Políticas del Sector de Agua*. Gender and Water Alliance. Publicado para la Alianza de Género y Agua.

El análisis del manejo sostenible de los recursos hídricos y la equidad de género en el campo del manejo del agua, provee de argumentos para afirmar que: i) Involucrar a hombres y mujeres en roles influyentes en los diferentes niveles de decisión puede acelerar la consecución de la sostenibilidad en el manejo de los escasos recursos hídricos, ii) La gestión del agua realizada de una manera integrada y sostenible, puede contribuir significativamente a mejorar la equidad de género porque aumenta el acceso a los recursos hídricos y a los servicios relacionados con el agua, tanto de mujeres y hombres para cubrir las necesidades básicas. Así se aborda el progreso que los gobiernos y las agencias de cooperación han logrado en la aplicación de estos argumentos.

Disponible en: www.es.genderandwater.org

IDRC - CIED PERU, 2002. *Perspectiva de Género y Rol de la Mujer en la gestión de los recursos Hídricos en el Altiplano*.

Presenta diferentes experiencias sobre conceptos, metodologías y actividades que permiten la implementación de los proyectos de agua y saneamiento y de riego en las zonas andinas de

Latinoamérica, resaltando las experiencias exitosas en la búsqueda de incorporar la perspectiva de género. Disponible en: <http://www.ciedperu.org/publicaciones/frapublica.htm>

UICN y HIVOS, *La Fuerza de la Corriente. Cuestión de cuencas hidrográficas con equidad de género*. Disponible en: <http://www.aprchile.cl/pdfs/La%20Fuerza%20de%20la%20corriente.pdf>

WSP – GWA, 2005. *Construyendo una Visión para la Acción. Avances y desafíos de la transversalización del Enfoque de Género en la Gestión Integrada de los recursos Hídricos en América latina*. Bolivia.

Ofrece recomendaciones importantes para la construcción de una visión común en América Latina sobre la transversalización del enfoque de género en la gestión integrada de los recursos hídricos, visión que puede servir como un conjunto de lineamientos orientadores para las instituciones y organizaciones interesadas en contribuir a la construcción de una sociedad más justa, donde hombres y mujeres gocen del beneficio de una mejor calidad de vida.

Disponible en: <http://www.es.genderandwater.org/page/2209>
http://aprchile.cl/pdfs/lac_construyendo.pdf

Chapter 3 Guide to Resources on Gender and the Water Sectors

3.1 Introduction

This Chapter consists of thirteen sector-specific overviews that briefly examine gender and its intersection with water in particular sectors. The objective of the sector overviews is to highlight the linkages between diversity, gender, and water in the relevant water sector. Each sector overview is accompanied by a list of resources for further reading and research in that particular sector. Additionally, case studies follow each sector overview and the resources list. The cases further elaborate the relationship of gender to each sector theme.

Sector overviews include the following:

- 3.2 Gender, Governance and Water Resources Management
- 3.3 Gender, Water and Poverty
- 3.4 Gender, Sanitation and Hygiene
- 3.5 Gender, Domestic Water Supply and Hygiene
- 3.6 Gender and Water Privatisation
- 3.7 Gender, Water and Agriculture
- 3.8 Gender, Water and Environment
- 3.9 Gender and Fisheries
- 3.10 Gender and Coastal Zone Management
- 3.11 Gender and Water-Related Disasters
- 3.12 Gender and Capacity Building
- 3.13 Gender and Planning Tools
- 3.14 Gender-Responsive Budget Initiatives for the Water Sectors.

3.2 Gender, Governance and Water Resources Management

Introduction

Since the 1990s, the international community has recognised and accepted that good governance plays a significant role in improving the livelihoods of people. Weak water management impacts negatively on poor men and women through unreliable services, limited access to services, and higher costs for inefficient and ineffective services which often subsidise the rich. Improved water governance can lead to equitable water resources development and access for all. Persistent development problems, as well as the current and predicted water crises, reflect failures in governance (UNDP, 2002). There appears to be a correlation between weak water governance, persistent poverty and inadequate access to water for vulnerable groups, leading to stunted development.

Good governance can have positive impacts on gender inequalities, including the following:

- Ensuring that poor women and men's human rights and fundamental freedoms are respected, allowing them to live with dignity.
- Introducing inclusive and fair rules, institutions and practices governing social interactions to improve outreach to the vulnerable, such as poor men and women, and the younger and older generations.
- Ensuring that women are equal partners with men in decision making over development, use, technology choice, financing, and other aspects of water management.
- Ensuring that the environmental and social needs of future generations are reflected in current policies and practices.
- Focusing water development policies toward eradicating poverty and improving the livelihoods of women and men.

Given that water is key to meeting most of the Millennium Development Goals, the solution is not only in developing new technologies and increasing supply, but also in managing the available resource effectively, efficiently and equitably. It also entails a rational assessment of the competing demands for water and equitable allocations based on a list of priorities that take into account the needs of all stakeholders.

It is against this background that there has been a move towards water reforms aimed at improved water resources management. During the World Summit on Sustainable Development, held in Johannesburg in 2002, world leaders set a target for all countries to develop IWRM and water efficiency plans by 2005. It is through the IWRM planning process, with multi-stakeholder consultations, that issues of equity, access and creation of an enabling environment can be addressed. The major challenge has been the meaningful involvement of women and men from the grassroots.

Challenges of gendered approaches in water governance

Water governance refers to the range of political, social, economic and administrative systems that are in place to regulate the development and management of water resources and provision of services at different levels of society. The involvement of women water users in stakeholder consultations and forums demands specific attention and approaches. The current tools used in multi-stakeholder consultations are mainly suited for an educated, literate group, and will require adaptation for use at the local level. Many women for example, in conservative social contexts, face cultural constraints that prevent them from speaking in public while poor women face economic constraints that do not allow them to voice their needs.

Water has been classified as an economic good, and has a cost attached to its development, distribution, operation and maintenance. While the principle of paying for water is justified, and sometimes necessary, poor women are often not able to afford the tariffs that have been set. Access to safe and affordable water is also a basic human right and this right should also inform discussions on the economic value of water. It has been acknowledged that those who cannot pay should at least pay in kind — but for the poor there is an opportunity cost to this when their time could have been used for earning income. Often when free labour is required, women usually provide it, but if there is paid work it usually goes to men.

The efficacy of IWRM derives from institutional frameworks with sufficient capacity to manage water resources. It is assumed that the institutions will be accountable and transparent. However, there is little attention to gender concerns in the water governance structures or processes. This problem needs to be addressed and constraints to mainstreaming gender in water institutions identified. Institutions are grounded in norms, culture, market systems and policies that often perpetuate gender inequalities (Odgaard, 2002). Poor women and men's practical and locally important knowledge is rarely recognised or tapped, and many lack the skills necessary for participating in committees. For most poor women and men, time is a valuable resource and its use in meetings has to be balanced with their domestic and income generating activities.

Power relations also influence the way water is allocated and the choice of technology. An irrigation pipeline is generally associated with productive use of water, and men have more influence than women over the utilisation of the resources. A hand-dug well on the other hand is generally associated with women's domestic use of water. While this use can be considered productive, and provides benefits to women and men, it may not be given a priority. The decision-making mechanisms and politics associated with water allocations have different implications for men and women.

The natural environment shapes the way poor women and men access water and the way they relate to water management structures. Frequent droughts or perennial scarcity of water means that the poor often do not have access to water or have to use poor quality water. Women and men in marginalised areas lacking in infrastructure, and removed from the central government will access water through different local systems, rather than through organised services provided by governments. This further implicates their level of participation in decision-making compared to those who are more centrally located.

An emerging challenge in governance is the issue of the rights of girls and boys. In sub-Saharan Africa, the HIV/AIDS pandemic has created a rise in the number of child-headed households. Decision-making in governance has always assumed that there will be adult men (and sometimes women) as heads of households. Children heading households are under age and unable to express their choices in public because of their young age and low socio-economic status. Water governance needs to take account of the needs and roles of girls and boys in water services provision.

Community management has been identified as a mechanism for ensuring effective water governance at the local level, especially for common property resources. It is often assumed that the local institutions are inclusive and take care of fair distribution of resources. However, in reality, communities consist of different categories of men and women in different positions of power aiming to improve their own situations. Effective water governance needs to incorporate a differentiated analysis of community and community management.

The Way Forward

Good water governance designed to ensure effective water resources management that allows for decision making from all stakeholders, including poor women and men, should provide access to safe and affordable drinking water and basic sanitation for all, and meet water needs for improved livelihoods. It would also allow for the development of an enabling environment including supportive policies, legal instruments and fair pricing structures.

Currently there is little evidence to suggest that water management has deliberately and consciously addressed gender concerns. Effective gender-sensitive water management will require:

- A conscious effort to consult with men and women during the planning processes. This can be achieved through the use of gender-inclusive participatory tools designed to engage grassroots women and men.
- A focus on gender in IWRM should not only target civil society, but should also address all water management structures and institutions, recognising the different constraints faced by men and women, and ensuring that there is equity.
- Capacity building at all levels is a critical component of water governance and for the incorporation of gender concerns.
- Issues of gender, governance and water management should not be viewed as women's issues only but should be recognised as broad issues of power relations, control and access to resources by disadvantaged groups, who may be women, children or men.
- The importance of social aspects of water management also needs to be taken into account. Women play a central role in managing water for social, hygiene, health and productive uses.

Four Key steps of a gender-approach in governance³

Information

Context-specific information about women and men's different experiences, problems and priorities is essential to effective gender mainstreaming. Statistical information should be routinely disaggregated into women and men's experiences, with gender analysis being part of the situational analysis. This will assist in identifying inequalities where they exist and in making a case for developing policies that address these inequalities.

Consultation, advocacy and decision making

It is important that women and marginalised groups have a strong voice to ensure that their views are taken into account. This means promoting the involvement of women and men in consultation and decision making from the community to the highest levels of management.

Action to promote gender sensitive beneficiary groups

Action to promote greater equality in decision making and opportunity for poor women and men should be based on context specific sex-disaggregated data and gender analytical information.

Action to promote gender sensitive organisations

Gendered approaches in water governance will depend on the skills, knowledge and commitment of staff involved in implementation and management. Developing appropriate capacity in staff as well as addressing gender difference and inequality in organisations is crucial to creating inclusive water sector organisations.

³ Adapted from Derbyshire, 2002.

Water governance cannot be good governance if there is no deliberate attempt to address the institutions, policies, legal frameworks and technology instruments that perpetuate gender inequalities. A gender approach in governance should be an integral part of setting up governance structures and mechanisms.

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Beltrán, Elizabeth Peredo 2004. *Water, Privatisation and Conflict: The Women of Cochabamba Valley*. Heinrich Böll Foundation.

Anna Grossman A, N. Johnson, et al, 2003. *Diverting the Flow: A Resource Guide to Gender, Rights and Water Privatisation*.

This publication is a resource guide for policymakers, and human rights, environmental, and economic and gender justice advocates working on global policy, to examine the impact that the privatisation of goods and services like water has on the livelihoods of women, particularly poor women.

Available at: <http://www.wedo.org/files/divertingtheflow.pdf>

Aguilar, Lorena. 2004. *Fact sheet: Gender Indicators*, IUCN - Community Conservation Coalition.

Fact sheets about the linkages of the gender equity approach and gender indicators, supported in lessons learned in international initiatives.

Available at:

http://www.iucn.org/themes/spg/portal/seminar/background_papers/iucn_documents/gender/protected_areas.pdf

Begum Shamsun Nahar et al, 2002. *Workshop Report on Pro Poor Water Governance, Gender and Water Alliance*.

This is a summary of a workshop hosted by GWA and gives an overview of the important elements of gender and governance. This report will be of particular use to practitioners, government officials and policy makers.

Available at: www.genderandwater.org/page/732

Cap-Net (2002) *The Importance of Local Ownership, Partnership and Demand Responsiveness*.

This is a brief and succinct introduction to water governance issues giving the rationale for water management and key principles for it. It is useful for those wanting to advocate for governance and convincing those who are still opposed to the principles. There are other documents on this site that give a background to IWRM in clear simple language easily understood by all. It is useful for academics, researchers, policy makers, NGOs, Government officers, water managers and utilities.

Available at:

http://cap-net.org/FileSave/65_Capacity_building_ofr_IWRM_3_principles.pdf

Derbyshire, H, 2002. *Gender Manual: Practical Guidelines for Development Policy Makers*, DFID.

A practical handbook that outlines the concepts of gender, aiming at assisting non-gender specialists with addressing gender issues. It gives key areas for gender mainstreaming. The book is useful for policy level NGO staff, government officers, researchers and academics.

Available at: <http://www.dfid.gov.uk/pubs/files/gendermanual.pdf>

Cleaver, Frances, 1998. *Moral ecological rationality, institutions and the management of communal resources*.

This thesis gives a conceptual overview of water resources management at the local level giving practical examples from working with a local community. It is useful for researchers, academics and policy makers.

Available at: <http://www.indiana.edu/~iascp/Final/cleaver.pdf>

Cleaver Frances and D. Elson, 1995. *Women and Water Resources: Continued Marginalization and New Policies*, London: International Institute for Environment and Development, Gatekeeper Series No. 49.

The article gives and insight into some of the gender issues that need to be considered when introducing IWRM. It is a useful publication that looks at IWRM from a gender perspective throwing caution to the commoditisation of the resource. It is useful for practitioners, policy makers, researchers, academics and water managers.

Global Water Partnership (GWP), no date, *Catalyzing Change: a Handbook for Developing integrated water resources management (IWRM) and Water Efficiency Plans*, Technical Committee

This succinct booklet gives the principles of IWRM and how to carry out water efficiency plans. The document can be downloaded from the web page making it easy to access. The book is useful for water managers, utilities, government officers, NGOs and policy makers.

Available at: <http://www.gwpforum.org/gwp/library/Handbook.pdf>

Global Water Partnership, no date. *Sharing Knowledge for Equitable Efficient and Sustainable Water Resources Management: Tool Box*

The toolbox gives the principles of IWRM, guiding the use to the key principles as well as justification for the necessity of IWRM. It is good way of understanding the principles and useful for convincing those who may be opposed to IWRM.

Available at: <http://www.gwptoolbox.org/>

MAMA-86, 2002 *Drinking Water in Ukraine: Communication and Empowerment for Local and International Action*. 3rd Edition. Kyiv.

Allély, D, O. Drevet-Dabbous, J. Etienne, J. Francis, A. Morel à l'Huissier, P. Chappé, and G. Verdelhan Cayre, (2002). *Water Gender and Sustainable Development: Lessons learnt from French co-operation in sub-Saharan Africa*. Paris, France : Drevet-Dabbous Groupe de recherche et d'échanges technologique.

Schreiner, Barbara, Barbara van Koppen and Kathy Eales, 2003. '*Gender Mainstreaming in Water Policy and Legislation: the Case of South Africa*'. Paper developed for the Gender in Court Session at the 3rd World Water Forum, Kyoto, Japan.

A paper that gives an overview of progress in water reforms in South Africa from a gender perspective. It is useful as a case study example.

United Nations Development Programme (UNDP), 2002. *Deepening Democracy in a fragmented World*, Human Development Reports various years.

These are a series of global reports that show progress in human development and are generally useful in understanding growth trends. The reports have growth indexes from around the world and some data may have sex-disaggregated information.

Available at: <http://hdr.undp.org/reports/global/2002/en/pdf/overview.pdf>

United Nations Development Programme (UNDP), 2002, *Dialogue on Effective Water Governance, Update*.

The dialogue gives an insight into the governance debate, defining key principles of water governance and helps in clear understanding of the subject. It is a useful document for advocacy and assisting those who may still not be convinced about integrated water management.

WEDO, 2003. *Diverting the Flow: A Resource Guide to Gender, Rights and Water Privatisation*. Women's Environment and Development Organization, New York.

A useful resource for analysing the rights of women and vulnerable groups within the context of privatisation. The book enhances understanding of issues related to water rights, policies and legislation. It is particularly useful to government officials, water managers, utilities, academics and NGOs.

Available at: <http://www.wedo.org/files/divertingtheflow.pdf>

Murshid, Sharmeen, 2000. *Water Discourse: Where Have All the Women Gone?*

Available at: www.iiav.nl/nl/ic/water/water_vision.html

Spanish language resources

Mujeres de la Alianza Social Continental, 2004. *Las Mujeres en la defensa del Agua como Derecho Fundamental*. Disponible en: REBRIP / CUT – Rua Caetano Pinto. 575 – Brás CEP 03041-000 São Paulo – SP – Brasil Tel: (55) 11 2108 9129 e-mail: seccr.asc@cut.org.br

La presente publicación presenta dos estudios realizados por el Comité de Mujeres de la Alianza Social Continental, para contribuir a la elaboración de una propuesta de estrategia de acciones y políticas desde la visión de las mujeres, en defensa de uno de los recursos más importantes y preciados para la vida: el agua. Se presenta los resultados y problemáticas surgidas de los estudios de caso de Bolivia y Brasil llevadas a cabo el 2003.

El conflicto generado por la privatización del agua en Cochabamba, Bolivia en el 2000, es un caso que ejemplifica claramente los procesos de privatización del agua, muestra los grados de impacto y la diversidad de factores y tensiones en las que desarrolla la problemática. Además evidencia una contradicción que existe en torno al agua en el mundo de hoy: privatización versus bien común.

El otro estudio de caso analiza los impactos de la privatización de servicios relativos al agua sobre los derechos de las mujeres, a través de un proyecto realizado en las represas del río Xingu de la región amazónica del Brasil. El proyecto fue el motivo por el que las mujeres de Altamira y de la Transa masónica en Pará, se movilizaron durante muchos años para impedir su construcción

Las propuestas de acciones pretenden contribuir a la lucha de las organizaciones de mujeres en el mundo para evitar que las políticas neoliberales sigan trabajando con el agua, profundicen los impactos negativos, impulsen la no valoración los saberes locales para la gestión del agua y las implicaciones negativas de la privatización en los derechos de las mujeres,

Gender and water Alliance, 2003. *Género y Agua, Informe de Desarrollo sobre Género y Agua. Perspectivas de Género en las Políticas del Sector de Agua*. Gender and Water Alliance.

El contenido es un aporte al análisis de los avances en políticas de género y agua en diferentes países. Un documento que es un primer paso en el proceso central de la promoción de género que se está traduciendo en políticas por los gobiernos y donantes en los últimos años.

Comentarios:

El análisis del manejo sostenible de los recursos hídricos y la equidad de género en el campo del manejo del agua, provee de argumentos para afirmar que: i) Involucrar a hombres y mujeres en roles influyentes en los diferentes niveles de decisión puede acelerar la consecución de la sostenibilidad en el manejo de los escasos recursos hídricos, ii) La gestión del agua realizada de una manera integrada y sostenible, puede contribuir significativamente a mejorar la equidad de género porque aumenta el acceso a los recursos hídricos y a los servicios relacionados con el agua, tanto de mujeres y hombres para cubrir las necesidades básicas. Así se aborda el progreso que los gobiernos y las agencias de cooperación han logrado en la aplicación de estos argumentos.

Soto, Betty, María Esther Udaeta, Gloria Lizárraga, 2004. *Políticas Públicas de Género, Auditoria de Género: Sectores de Saneamiento Básico y Riego de Bolivia*.

El libro presenta una investigación que muestra los avances y el desarrollo de la incorporación de la perspectiva de género y equidad en las políticas públicas, coadyuvando a la lucha contra la pobreza, la superación de la marginalidad y el impulso al capital social.

Comentario:

Las políticas públicas según el texto son las posiciones que toma un gobierno respecto a un problema determinada y su importancia radica en que define medidas concretas que orientan las acciones y recursos para la solución de los problemas, para lo cual es importante la participación ciudadana, que las políticas respondan a las demandas y necesidades de la mayoría.

Los resultados de la investigación muestran a nivel bisectorial que las políticas de género en el país han desarrollado los macro lineamientos que fueron la base para la formulación de políticas sectoriales. Los enfoques de género sectoriales no dejan visualizar la integración de equidad de género en sus políticas.

Permite identificar los efectos en hombres y mujeres de la población de las políticas sectoriales, a nivel de las y los profesionales operativos a través de la ejecución de programas, proyectos que han generado diversas experiencias, que no se encuentran sistematizadas. Las y los usuarios de los sistemas de agua y riego demuestran una gran sensibilización por el tema de género y una práctica de la equidad a nivel comunal y familiar, por lo que se hace necesario tomar en cuenta esos avances en la formulación de políticas a partir de las diferencias existentes a nivel local entre hombres y mujeres ricos y pobres de ámbito rural y urbano

El instrumento metodológico ha permitido analizar y llevar adelante la auditoria con objetividad, lo que se demuestra por los resultados claros y concretos y permite concluir que existe un estancamiento de la Transversalización del género en los sectores auditados.

BID, no date, *Plan de Acción del BID para la integración de Género*

This Gender Mainstreaming Action Plan seeks to reactivate efforts and generate new energy around the advances achieved to date. The Plan builds on accumulated experience indicating that promoting gender equality and investing in women's capabilities are fundamental for improving the impact of development interventions in Latin America and the Caribbean. Investing in women - in their access to information, resources, opportunities and spheres of political decision making - contributes to poverty reduction, economic growth and good governance at the local and national levels.

The Action Plan brings together the commitments of all operations divisions and relevant departments of the Bank in the development of actions that aim to improve equality between men and women. The likelihood of success implementing this Plan is high because it represents a collaborative agreement and shared commitment between different members of the institution, including the high levels of the Administration, professional staff and assistants involved in the design, supervision, monitoring and evaluation of operations supported by the Bank.

Disponible en:

<http://www.aprchile.cl/pdfs/Plande%20Accion%20para%20Integracion%20generoSbid.pdf>

Villalobos, Guiselle Rodríguez, Montserrat Blanco Lobo y Francisco Azofeifa Cascante. 2004. *La Diversidad Hace La Diferencia*. UICN y HIVOS.

This book intends to highlight the importance of biodiversity in the broadest sense of the term, by making visible and illustrating the differentiated relations that women and men establish with nature and the consequences thereof in regard to development promotion. This document is basically focused on the recognition of the Convention on Biological Diversity (CBD) and the National Biodiversity Strategies (NBS), as participation and awareness-raising mechanisms of our societies to build a new form of relation between human beings and their environment.

Disponible en:

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/biodiversidad.pdf (Spanish)

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/BIODIVERSITY.pdf (English)

Berrón Sañudo, Linda, ed. 2005. *Everything Counts! Valuing Environmental Initiatives with a Gender Equity Perspective in Latin America*.

Compilation of a selection of thirty experiences from Brazil, Chile, Costa Rica, Cuba, Ecuador, El Salvador, Mexico, Peru and two international experiences about the outcomes in making the linkages between gender and environment, as people working in social sciences include ecological considerations, and the inclusion of the gender equity approach in all technical processes of conservation and management of the resources.

Disponible en:

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/EVERYTHING%20COUNTS.pdf (English)

UICN. 2004. *Everything Counts! Valuing environmental initiatives with a gender equity perspective in Latin America*

El objetivo de este documento es reconocer los esfuerzos que se realizan desde diversos lugares de mundo por mejorar las condiciones de vida de mujeres y hombres, y en especial, de las relaciones que establecen entre ellos, en el uso y beneficio que proporcionan los recursos naturales del medio en que viven. Muestra, este conjunto de 30 experiencias, el avance en la vinculación entre ambiente y género, tanto por la apropiación de la dimensión ecológica por parte de las personas que trabajan en los temas sociales, como también por la redimensión de los procesos técnicos de conservación y uso de los recursos

Disponible en:

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/TODO-cuenta.pdf
(Spanish)

R.Meinzen-Dick, M. Zwartveen. 1997. *Gendered participation in water management: issues and illustrations from water users' associations in South Asia*.

Este documento se preparó para el Taller Sobre Agua y Mujer, del Instituto Internacional del Manejo de la Irrigación 15-19 Septiembre 1997, Sri Lanka

Disponible en:

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/agua_agua_1.pdf (English)

Kunst, Sabine, Tanja Kruse, 2001. *Integrating gender perspectives : realizing new options for improved water management. Cross-cutting thematic background paper*.

El llamado a un enfoque holístico y sensible al género para el manejo hídrico debe ser reiterado como punto inicial del desarrollo sostenible. Los esfuerzos deben buscar objetivos paralelos: el mejoramiento de la vida diaria y de las condiciones de vida, y el planeamiento a largo plazo para un futuro ambientalmente sostenible. La transversalidad de género en relación con el agua es definida por la Visión Mundial del Agua (World Water Vision).

Disponible en:

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/gender3.pdf
(English)

Green, C. and S. Baden. 1994. *Water Resources Management: A Macro-level Analysis from a Gender Perspective*.

Este reporte argumenta que la nueva política requiere urgentemente asegurar que los aspectos relacionados con el género no se sobreestimen en el manejo del agua.

Disponible en:

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/water_resources_management.pdf (English)

Ruijgh-van der Ploeg, Martinez. 2000. *Water and conflict : the role of women and men. Presentation of good practices two perspectives on the importance of decision-making and (gender) equity for sustainable water management.*

Las mujeres y los hombres pueden trabajar juntos hacia la equidad de género en la toma de decisiones sobre el manejo sostenible del recurso hídrico. Esto requiere cambios en las reglas del juego de los procesos de toma de decisiones, cambios en la forma en que se selecciona, presenta y distribuye la información sobre el manejo del agua. Si tenemos un conocimiento más amplio acerca de las contribuciones que las mujeres hacen y pueden hacer en el manejo del agua, será mucho más sencillo efectuar los cambios que se sugieren y evaluar su efectividad.

Disponible en:

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/309_7_18_18_coope.pdf (English)

Case studies

The complete case studies are found in the annex of this resource guide

- Africa: Water for African Cities: A Partnership between United Nations Human Settlements Programme (UN-HABITAT) and the Gender and Water Alliance (GWA)
- Bangladesh: Women, Men and Water-Pumps
- Cameroon: “One Hand Does not Tie a Bundle”: Women’s Participation Transform Water Management -Nkouondja
- Global: Inputs to Thematic Paper on water and sanitation: Case studies from the Interagency Gender and Water Task Force
- Indonesia: Separate Women’s Meetings a Key to Participation in Water Management Java
- Pakistan: From Purdah to Participation
- Uganda: Mainstreaming Gender into Policy: Examining Uganda's Gender Water Strategy

3.3 Gender, Water and Poverty

Introduction

Water is essential to human beings and all forms of life. But pollution and lack of access to clean water is proliferating the cycle of poverty, water-borne diseases, and gender inequities (Khosla and Pearl, 2003). Water is an entry point for sustainable development, poverty eradication, human rights, reproductive and maternal health, combating HIV and AIDS, energy production, improved education for girls and a reduction in morbidity and mortality. And yet there are still 1.1 billion people without access to safe drinking water and 2.6 billion without access to adequate sanitation. This situation has an enormous negative impact on women and children.

There is deepening poverty worldwide, and the most vulnerable groups are women and children. Women experience poverty differently than men, as they are generally treated unequally. It is estimated that, of the 1.3 billion people living in poverty around the world, 70% are women. Women work two-thirds of the world's working hours, produce half of the world's food, and yet earn only 10% of the world's income and own less than 1% of the world's property (UN Millennium Campaign, 2005).

Why gender, water and poverty?

In 1997, the Human Development Report revealed that countries with the lowest gender-related development indices (Sierra Leone, Niger, Burkina Faso and Mali) also had high poverty rates and little access to water, health and education. Other, countries with high poverty rates (Bolivia, Colombia, Guatemala, Honduras, Nicaragua and Paraguay) also had high rates of social, gender and ethnic inequality (Schreiner, 2001).

Linkages among gender, water and poverty

- Access to water of sufficient quality and quantity will reduce the incidence of water-washed and water-borne diseases, improve health and productivity for women and attendance in schools for children.
- When there is competition for water resources, women and the vulnerable often lose their entitlements.
- Women's development priorities for water resources may be for sources nearer homes so that they are able to balance their productive and reproductive roles. If they are not consulted, then these priorities will not be considered.
- Improved livelihoods and food security for women and the disadvantaged are also dependent on access to sufficient water resources.
- Participation in water management can also improve the dignity of women through giving them a voice and choice. It also improves targeting and efficiency.

Women are more vulnerable than men to chronic poverty due to gender inequalities in various social, economic and political institutions. Such inequalities can be found in the uneven distribution of income, control over property or income and access to productive inputs (such as credit), decision-making resources and water resources, rights and entitlements that often favour men in opposition to women. Women are also subject to bias and social exclusion in labour markets.

According to the United Nations Development Programme, five years after world leaders signed a commitment towards reducing poverty, “the gap between MDG targets for halving poverty and projected outcomes is equivalent to an additional 380 million people in developing countries living on less than a dollar a day.” Women and children carry an unequal burden of deepening poverty.

Definitional Misconceptions

Poverty is multi-dimensional, location specific and varies by age, culture, gender and other socio-economic aspects. Perceptions of poverty also differ from women to men: for example, in Ghana men defined poverty as the inability to generate income, while women viewed it as food insecurity (Narayan, 2000).

Poverty is not only about material deprivation; it also includes a lack of voice or power, vulnerability to crises and other adverse situations and limited capacity to cope with such vulnerabilities. If water resources are located far away from homes, women and girls have to walk further to collect water, thus reducing the time available for productive work. Effective water management offers social networks for women through management committees, but very often women end up doing unskilled and unpaid work related to water management. Continuing to link poverty to material well-being masks other dimensions of poverty, such as powerlessness and exclusion from decision making.

Measuring poverty: the gender dilemma

The traditional methods of measuring poverty have been through Gross Domestic Product or household income statistics, masking gender differentials within the household. Participatory poverty assessments (PPAs) are an instrument for including poor women’s and men’s views in the analysis of poverty and the formulation of strategies to reduce it through public policy interventions (Norton, 2001).

Gender, Poverty and the Environment: A three-way interaction

While separate Millennium Development Goals have been set for poverty, gender and the environment (encompassing water and sanitation), they are interrelated and there is a three-way interaction among them. Water is essential for the well being of human beings, vital for economic development and a basic requirement for the health of ecosystems. Clean water for domestic purposes is essential for human health and survival and, combined with improved sanitation and hygiene, it will reduce morbidity and mortality especially among children. Water is also vital for other facets of sustainable development such as environmental protection, food security, empowerment of women, education of girls and reduction in productivity loss due to illnesses. Water is a catalytic entry point for developing countries in the fight against poverty and hunger, and for safeguarding human health, reducing child mortality and promoting gender equality and protection of natural resources (UN Millennium Task Force on Water and Sanitation, 2005).

The HIV and AIDS pandemic, which is both a cause and a consequence of the vulnerability that is characteristic of poverty, has driven some countries to adopt home-based care approaches as health institutions fail to cope with the demand for services. The home-based care approach implies that there should be water of sufficient quality and quantity to avoid secondary infections as well as to reduce the burdens of care-givers, who, in most cases, are women and girls.

Some Policy Implications

In IWRM, water is viewed as both an economic, environmental and a social good, and thus in some cases it can be considered a commodity responding to the principles of supply and demand. It thus has a market value determined for certain uses (Thomas, Schalkwyk and Woroniuk, 1996). The water sector is often divided into productive and non-productive water uses. The non-productive uses of water (health, domestic chores and sanitation) tend to be the responsibility of women and are not considered in economic assessments. These should be incorporated into the assessment of relative economic values of water resources to allow for the understanding and consideration of the interdependence between productive and domestic water.

Water as a commodity implies that the development of water resources should be based on demand. However, poor women are generally unable to express their demands for services, nor do they have the capacity to defend their rights, especially if there are recognisable and transferable property rights over water. In addition, children-headed households have even lower capacity to express demand and defend their rights.

In order to meet the water demands of poor women, governments must collect sex-disaggregated data and develop gender-sensitive indicators in all sectors, including water, sanitation, agriculture and irrigation. The use of participatory tools is also important for engaging the voiceless and less educated who may have difficulties understanding written text. Only this way can priorities of the poor women and men and boys and girls be heard and understood.

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The publication outlines a framework for action linking poverty to water security and introducing related issues of governance, water quality issues, livelihood opportunities, capacity building and empowerment

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<http://www.irc.nl/themes/management/prodwat/> (full text) (only with password)

Dayal, R, C. van Wijk and N. Mukherjee, 2001. *Methodology for participatory assessments, with communities, institutions, and policy makers.*

This publication is suitable for those wishing to carry out participatory assessments that look at gender poverty and sustainability indicators within the context of water and sanitation.

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This gives research methods and indicators for measuring the impact of poverty reduction. Four country studies from India, Bangladesh, Ghana, and Uganda are presented. The report describes the research process and summarises key findings. Incorporates gender perspectives and gives some interesting examples and analysis of gender differences. Raises some questions about the importance of quantitative indicators to communities and describes the use of meta-indicators.

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Kabeer, Naila, 2003. *Gender Mainstreaming in Poverty Eradication and the Millennium Development Goals: A Handbook*.

The handbook is useful for policy makers and other stakeholders designing gender sensitive projects.

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The paper examines the methodological and policy issues and suggests strategies for using water as a key instrument to address poverty and gender concerns.

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The purpose of this background paper is to provide an analytical framework and illustrative cases on the linkages between water, gender and poverty alleviation in the MENA region in preparation for the forthcoming flagship MENA development report on water. This paper will attempt to argue that it makes economic sense to make sure that women and female farmers and small-scale entrepreneurs have the same access to water as men and male farmers both for domestic and irrigation purposes, while at the same time highlighting the challenges and limits of doing so.

Nunan F, and D. Satterthwaite, 1999. *Urban governance, partnership and poverty: the urban environment*.

This is a working paper and there are a series of them looking at the urban environment. They focus on the effects of diseases, vectors and chemical hazards and are meant for policy makers and practitioners.

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The report contains discussion of the gender mainstreaming debates on economic reform and poverty. It highlights the importance of gender to economic reforms and poverty linkages. It concludes with a look at the implications for policy and practice.

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UNEP, 2002. *Water for the Poor*

This report presents a road map for delivering water services to the poor. It shows how business has begun providing an enabling environment needed to accelerate progress.

UNEP, 2002. *Where are the poor? Experience with the development and use of Poverty Maps*

This publication shows how international, national and local decision making bodies to direct investments can use road maps.

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IWMI, 2000. *Pedaling out of Poverty: Social Impact of a Manual Irrigation Technology in South Asia*

This research report offers an assessment of the social impact of the treadle pump technology for manual irrigation. The treadle pump can be a useful tool for poverty reduction.

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Upadhyay, B, 2003. *Water poverty and gender review of evidence from Nepal, India and South Africa*. Abstract available at:

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Khosla, P, y Rebecca Pearl, 2003. *Conexiones claves. Genero, agua y pobreza.*, Organización de las Mujeres para el Medio Ambiente y Desarrollo (WEDO).

This paper presents an overview of the relationship between gender, poverty and water. The first section explores how, in every corner of the globe, women play a central role in managing water supply and distribution. It also examines how access to water and sanitation has implications for women's health and economic activities. Case studies highlight water projects and initiatives that have succeeded in elevating women's status.

Disponible en:

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Soto, Betty y Virginia Chumacero, 2000. *Rol de la mujer en los sistemas de provisión de agua* – Potosí – Bolivia. Dirección: The World Bank.

Esta publicación revela el papel de la mujer en las actividades que realiza en forma cotidiana, haciendo hincapié su relación con un sistema de agua potable, el uso y consumo del agua, su participación en la organización que administra el servicio, el aporte de su fuerza de trabajo, el nivel de decisión y su cosmovisión. Resultados obtenidos a través de un estudio que muestra datos estadísticos y un análisis de género, como un aporte para estimular el debate en torno a la participación de la mujer en los sistemas de agua.

Espejo, Norah y Ineke van der Pol, 1994. *“Mejor, cuando es de a dos”* – Guía de campo – La Haya Holanda, IRC - CINARA. Primera Edición,

Guía de campo, orientada a promover y desarrollar la perspectiva de género en cada una de las fases del ciclo de un proyecto de agua y saneamiento. Presenta ideas, conceptos, listas de verificación, técnicas grupales, casos, cuadros, etc. Información producida en un Taller Latinoamericano.

Hermosa, Yenny Melgar, 2002. *Perspectiva de Género y Rol de la Mujer en la gestión de los recursos Hídricos en el Altiplano*.

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French Language Resources

Khosla, P. and Pearl, R., 2003. “*Connections inexploitées : genre, eau et pauvreté*” Women's Environment and Development Organization (WEDO), New York.

Donnant un aperçu de la relation entre genre, eau et pauvreté, ce rapport évoque le rôle central des femmes dans la gestion et la distribution de l'eau. Il examine comment l'accès à l'eau et à l'assainissement a des implications sur la santé, les activités économiques des femmes et le développement durable dans son ensemble.

Disponible au:

http://www.wedo.org/files/untapped_eng.pdf [en anglais]

Web-sites

UNDP, Human Development Reports

This site has various human development reports with development index from around the globe. It is relevant for all levels within the development sphere and gives good reference statistics

<http://hdr.undp.org/>

Case studies

The complete case studies are found in the annex of this resource guide

- India: Gender and Economic Benefits from Domestic Water Supply in Semi-Arid Areas
- Jordan: Rural Women Securing household water through installation of water cisterns in Rakin Village
- South Asia: Addressing Water and Poverty at the Grassroots: A Case Study of Area Water Partnerships and Women and Water Networks in South Asia

3.4 Gender, Sanitation and Hygiene

Introduction

Water supply, sanitation and hygiene promotion and education must be considered as an integrated unit if real progress is to be made in improving the health and well-being of the poor. Sanitation and health are subjects that have been intimately associated with women and water supply or the lack of it. Globally, more people have access to water than to sanitation facilities. According to the WHO-UNICEF Joint Monitoring Programme, at the end of 2002, 1.1 billion people lacked access to safe drinking water, and 2.6 billion – 40 per cent of the world's population - did not have access to a sanitary means of excreta disposal. As a result, each year more than 2.2 million persons in developing countries die from diseases associated with lack of access to safe drinking water, inadequate sanitation and poor hygiene. The social, health and environmental costs of ignoring the need to address sanitation (including hygiene, wastewater collection and treatment) are far greater than the costs of incorporating sanitation and hygiene education into water supply programmes.

A focus on gender differences is of particular importance with regard to hygiene and sanitation initiatives, and gender-balanced approaches should be encouraged in plans and structures for implementation. Access to adequate and sanitary latrines is a matter of security, privacy, and human dignity, particularly for women. However, even in places with adequate latrine coverage, the availability of sanitation facilities does not necessarily translate into effective use, because of taboos, culture norms and beliefs.

Hygiene promotion and education are often missing between the construction and long-term sustainable use of latrines. As men generally control household income, hygiene promotion and education need to be targeted at them to ensure that resources are available for the construction and maintenance of sanitary facilities. To make programmes sustainable, cost recovery strategies for sanitation projects can be linked to income generating activities for the poor.

Women are acutely affected by the absence of sanitary latrines:

- When women have to wait until dark to defecate and urinate in the open they tend to drink less during the day, resulting in all kinds of health problems such as urinary tract infections (UTIs).
- Women are sexually assaulted or attacked when they go into the open to defecate and urinate.
- Hygienic conditions are often poor at public defecation areas, leading to worms and other water-borne diseases.
- Girls, particularly after puberty, miss school due to lack of proper sanitary facilities.

Policy Overview

At the policy level, sanitation lags far behind water resources, and in many interventions sanitation and environmental hygiene are added as an afterthought. At the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg, sanitation was elevated to an unprecedented level of political priority. For the first time, world leaders agreed on a target to reduce by half the proportion of people who lack basic sanitation by the year 2015. Thus, sanitation was added to the water supply target as part of the Millennium Development Goals. In response, for instance, the Government of Bangladesh has initiated a campaign to attain 100 per cent sanitation coverage by 2010. However, hygiene still does not get the attention it needs in policy documents.

In the sanitation sector, there are encouraging efforts being made to mainstream gender in sanitation programmes in South Africa, Zambia and Zimbabwe. Current sector policies are being supplemented with specific strategies to reflect gender concerns. These countries are currently implementing programmes for gender mainstreaming in the water and sanitation sector, including training programmes aimed at a variety of levels.

In Ghana, a national environmental policy was formulated by the Ministry of Local Government in May 1999. The document indicated that sanitation is for the public good, and is therefore the responsibility of all citizens, communities, private sector enterprises, NGOs and government institutions. Following the WSSD, Senegal was one of the first countries that created a ministry directly responsible for sanitation and hygiene promotion (now called the Ministry of Health and Hygiene). While the roles of men and women may not be specified in these national policies, the responsibilities of individual households and community-based organisations (CBOs) are included.

Key Actors in the Sector

At the national government level, line ministries, such as the ministries of health, water resources and social services are key actors and have important roles to play in ensuring that sanitation, hygiene promotion education and gender are incorporated into water resources and health policies. The line ministries should be motivated and willing to address gender in sanitation policies and legal frameworks.

At the community level, hygiene and sanitation are considered a women's issue, but they impact on both genders. Yet societal barriers continually restrict women's involvement in decisions regarding sanitation improvement programmes. Thus, it is important that sanitation and hygiene promotion and education are perceived as a concern of women, men and children and not only of women. Separate communication channels, materials, and approaches have to be developed to reach out to men and boys. It is also important to target community leaders for gender sensitisation; this would facilitate mainstreaming gender in sanitation and hygiene promotional activities.

Attention and funds should be focused on sanitation and hygiene in schools, in order to reduce transmission of water-related diseases and implement hygiene and health education. School children are key change agents because they can influence their parents and will be tomorrow's adults. When they learn sanitation-related behaviours, such as hand washing, they can bring about change in their families and communities, leading to health improvements and higher school attendance of girls. It is critical that school sanitation and hygiene programmes address both boys and girls.

One problem that has been observed is that the latrine designs, especially for primary and secondary schools, are mainly prepared by male masons. The tendency therefore has been to construct latrines which are not sensitive to the special needs of girls. This has resulted in girls staying away from schools when they are menstruating, even when their schools have latrines. In the case of small boys too, the urinals are often too high. Moreover, it is important that separate sanitary latrines are constructed for boys, in order to prevent boys from taking over the latrines that are meant for the girls. And toilet blocks for girls and boys should not be constructed next to each other. Sanitation design needs to be sensitive to physically challenged girls and boys too.

A study in Senegal of over 5,000 schools showed that 53 per cent of schools had no water supply and 46 per cent had no sanitation facilities. Only half of the schools had separate facilities for boys and girls (Republic of Senegal and UNICEF, 2002). In India, a survey carried out among school children revealed that about half the ailments found were related to unsanitary conditions and lack of personal hygiene (UNICEF and IRC, 1998).

Gender Mainstreaming in the Sector

While promoting an integrated approach to water resources management, separate sanitation and hygiene strategies should be designed to address the needs of both men and women for hygiene promotion and sanitation improvements.

Given the importance of gender issues in sanitation and hygiene, specific institutional arrangements are necessary to ensure that gender is considered an integral part of efficient and effective implementation of projects and programmes. Financing is one of the major constraints to expansion of sanitation services, partly because most policies delegate financing to local governments. Governments, NGOs, small-scale providers, development partners and male community leaders are important actors who should make sure that gender is addressed in policy formulation and that legislation and by-laws go through a gender review before they are adopted.

Finally, it is vital to take women's needs into account in planning and implementing sanitation projects. For example, in South Africa, the use of the Aqua Privy ignored the needs of women. The toilets faced the street, causing embarrassment and harassment. When the latrine tank was full, it was a woman's task to empty it and women performing this task were seen to be unmarriageable.

Providing urban sanitation to informal settlements is a unique challenge. Urban problems tend to be more complex and involve many issues beyond the traditional aspects of water supply and basic sanitation. For example, many people in slum areas lack legal title to the land they occupy and have little or no political voice. Most poor urban dwellers, unlike their rural counterparts, must pay cash for their sanitation and water services and thus may have to settle for wholly inadequate facilities as that is all they can afford.

The results of surveys and studies can be very instructive. For example, in a research study conducted by NETWAS International in Kenya (2003), the results suggested that women's educational level is related to hygiene practices. Women with some primary school education tended to have some hygienic behaviour, but better-educated women were more likely to have hand washing knowledge, skills and practice, as well as consistent latrine use. Educated women and girls are agents of change.

It is important to note that improving sanitation is a process affecting individuals and households, not a top-down directive. Women and men must be meaningfully consulted and involved in sanitation and hygiene education programme planning, implementation and follow-up.

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This field guide defines concepts and then works through the programme planning cycle. Concepts discussed include Gender, Gender awareness, Gender policy, Partnership, Integrated water supply projects, Environmental problems and Sustainability. The Guide looks at the general stages of a water supply and sanitation project and offers concrete suggestions to involve women and men and ensure their needs and perspectives are included. The document was produced in Africa and was developed through a process that explicitly aimed to draw on the experiences and expertise of Africans. Concrete examples from various countries are provided.

Available at: <http://www.irc.nl/page/1858>

Wijk Sijbesma, C.A., 1998. "Cinderella and the Missing slipper: Sanitation and Gender" in *Gender in Water Resources Management, Water Supply and Sanitation: Roles and Realities Revisited*, Delft: IRC.

Additional Resources

Coates, S., 1999. *A Gender and Development Approach to Water, Sanitation and Hygiene Programmes*, a WaterAid Briefing Paper. Available at: http://www.wateraid.org/documents/a_gender_development_approach.pdf

Eales, Kathy, 2005. *Bringing pit emptying out of the darkness: A comparison of approaches in Durban, South Africa, and Kibera, Kenya*. London: Building Partnerships for Development (BPD), Sanitation Partnership Series.

Much attention has been focused in recent years on partnerships in the water and sanitation sector. However, as is often the case when sanitation is bundled with water, much of the spotlight has been on water. Consequently, while we increasingly understand the circumstances in which partnerships to provide drinking water are successful, much less is really known about sanitation. One often encounters the false assumption that what applies to 'water' partnerships (or solid waste partnerships) will hold true for those catering specifically for sanitation. In order to gain a better understanding of where partnerships fit in the debates around sanitation, BPD set out in 2004 to work with a series of sanitation-specific case studies. The first challenge was to find such partnerships, less easy than first supposed; eventually Dar es Salaam, Durban, Maputo, Maseru and Nairobi were chosen.

This paper is one of a series that looks at sanitation partnerships in poor urban communities, and questions when and why partnership may be appropriate or inappropriate to the delivery of on-site sanitation services.

IRC/SEU, 1996. *The community managed sanitation programme in Kerala: Learning from experience*. Delft: IRC and Kerala: Socio-Economic Unit.

Schordt, Kathleen and Sandy Caincross, 2004. *Sustainability of hygiene behaviour and the effectiveness of change interventions*, Booklet 2, Delft: IRC.

The booklet is on findings and implications for water and sanitation programmes from a multi-country research study. The research was to see the link of sustainability of hygiene behaviour after a hygiene promotion intervention. Countries in the research included Ghana, Kenya, Sri Lanka, India, Nepal and Uganda with guidance from IRC and London School of Hygiene. The booklet describes how the study was conducted and its findings. Booklet 1 outlines the methodological lessons learnt.

Available at: publications@irc.nl

Khan, Mohammad Taimur Ali, 2005. *Livelihoods and gender in sanitation, hygiene and water services among the urban poor*, London: DFID.

Mathew, T, 1998. "New Skills, New Lives: Kerala's Women Masons", *Waterlines*, 17(1), pp. 22-24.

Simpson, Mayling, Ron Sawyer and Lucy Clark, 1997. *The PHAST initiative: Participatory Hygiene and Sanitation Transformation, a new approach to working with communities*, UNDP-World Bank Water and Sanitation Program, WHO Geneva

This is an information document to the water and sanitation sector. It is a participatory hygiene and sanitation transformation, an innovative approach designed to promote hygiene behaviours, sanitation improvements and community management of water and sanitation facilities using specifically developed participatory techniques. The document describes the underlying principles of the approach, the development of the specific participatory tools and results of the field tests done in four African countries.

NETWAS, 2003. *Iguacu Action Plan: Key findings for the rapid study for the WASH programme in Soweto & Korogocho villages in Nairobi, Kenya*. Network for Water and Sanitation, NETWAS

SIDA, 1997. *Health – Sanitation: Handbook for mainstreaming a gender perspective in the Health Sector*. Available at:

<http://www.sida.se/shared/jsp/download.jsp?f=HDD1997.8%5B1%5D.pdf&a=2512>

UASNET (Uganda Water and Sanitation NGO Network) and WaterAid Uganda, 2002. *Mainstreaming Gender in Sanitation and Hygiene in Uganda*.

Paper presented at sanitation and hygiene conference held in South Africa. The theme of this paper is the mainstreaming of gender in sanitation with a purpose to facilitate incorporation of gender. The paper focuses on the concept of mainstreaming and the status of sanitation in Uganda, the progress made in this field, gaps and lessons learnt.

Available at: <http://www.wateraid.org/documents/ugnangender.pdf>

Voorden, Carolien Van der and Kathy Eales, 2002. *Mainstreaming Gender in South African Sanitation Programmes: A Blind Spot or Common Practice?*

Paper prepared for the AfricanSan Conference, South Africa 2002.

WHO, UNICEF, UNIHABITAT, UN/DESA, UNEP, 2004. *The sanitation challenge: Turning commitment into reality*.

This document looks at international sanitation development targets, legislation and commitments, building capacity, gender and equity issues, and progress on monitoring.

Available at:

http://www.who.int/water_sanitation_health/hygiene/sanchallengecomp.pdf

Wright, Albert M, 1997. *Toward a Strategic Sanitation Approach: Improving the Sustainability of Urban Sanitation in Developing Countries*. UNDP/World Bank Water and Sanitation Programme. Available at: wsp@worldbank.org or http://www.wsp.org/publications/global_ssa.pdf

WSSCC and WHO, 2005. *Sanitation and Hygiene Promotion: Programming Guidance*. Geneva: Water Supply and Sanitation Collaborative Council (wsscc@who.int) and the World Health Organisation (bookorders@who.int).

This document is a collaborative productive, based on an earlier UNICEF Handbook, which looks at setting in place a process whereby people (women, children and men) can develop and sustain a hygienic and healthy environment for themselves. It argues that the objective of policy-makers should be to establish a consistent set of rules under which all sanitation and hygiene promotion projects and investments can be made, such that they all work towards an agreed long-term vision for improved health and dignity for the entire population, particularly women and adolescent girls.

Case Studies

The complete case studies are found in the annex of this resource guide.

- Egypt: Empowering Women's Participation in Community and Household Decision-making in Water and Sanitation
- Ghana: Gender Integration in a Rural Water Project in the Samari-Nkwanta Community
- India: From Alienation to an Empowered Community - Applying a Gender Mainstreaming Approach to a Sanitation Project, Tamil Nadu
- Nicaragua: Gender Equality as a Condition for Access to Water and Sanitation
- South Africa: Women in Sanitation and Brick Making Project, Mabule Village
- Togo: Integrating Gender into the Promotion of Hygiene in Schools SSHE
- Zimbabwe: Gender Mainstreaming in water supply and sanitation in Manzvire Village, Chipinge District

3.5. Gender, Domestic Water Supply and Hygiene

Introduction

All people, men, women and children need water daily for drinking, for bathing, for the preparation of their food, for sanitation (see 3.4), and to ascertain clean cloths and a clean living space. To take care of the availability of sufficient water for all in the household, worldwide women have the major responsibility. Traditionally they manage domestic water sources and together with daughters fetch water, sometimes from far away. They also take care of most of the domestic work which makes them the ones who use more water in and around the house. However, men, and especially the male leaders, often control the water sources and make the major decisions related to location and type of facilities available. The differentiated gender relations are often reinforced by official efforts to improve domestic water supply. This is despite widespread evidence that water management function better when both women and men are actively involved in planning, construction, operation and maintenance. Only when women are directly involved in a meaningful way will solutions be found that are appropriate and sustainable. Involving women's skills and interests in domestic water management also has the potential of addressing gender imbalances in society, leading to more equity.

Conventional approaches in the water supply sector are generally not gender-sensitive and have undervalued women's needs and contributions to the sector. Women's knowledge about water sources and the multiple uses of water are not given significant recognition. When women have access to water, they will have more time for child care and economic activities that will improve their families' quality of life and their own health and wellbeing.

Hygiene is important for a sustainable and safe water supply; half of the contamination of water happens after fetching it. Water might be stored in dirty pots or water sources can become polluted, because people are watering livestock from the same source. However, while hygiene promotion and education typically focus on women and girls, this does not reach men who are often the ones to take major decisions in the household. All family members need to be aware of hygiene issues to make it work. As men and boys often serve as role models, they should be involved in hygiene promotion and education programmes. To be more gender sensitive, such programmes need to target men and boys through culturally appropriate channels.

Gender and the Drinking Water Supply Sector

The drinking water supply sector is the only water sector that paid some attention to women, because of the visibility of women carrying water over long distances in many countries. The effort to improve water supply has paved the way for a gender-based approach that takes account of changing social structures, and their effects on the way that women and men use and manage water resources. Successes have been achieved in incorporating a gender analysis into local drinking water supply programmes. A number of participatory toolkits have been developed for this purpose.

However, a lot still remains to be done:

- Gender has not been mainstreamed in the engineering and technical design of water supply systems nor in the management of the sector at all levels;
- Staff of line departments are seldom sensitised towards the needs of women and prefer to deal with their male counterparts in the villages and slums;

- A disproportionate part of investments goes to large, multi-village schemes that offer less opportunity for participation, in particular by women (GWA 2003).
- Women and men's different skills and knowledge regarding the local water situation need to be tapped for more efficient water management and increased sustainability;
- Outcomes of gender analysis have seldom been incorporated into project designs and operation and maintenance practices;
- An integrated approach to water management is important for women at the local level who often face fierce competition from the men who prefer to use limited supplies of water first for agriculture and for their animals; and
- Hygiene is still usually considered to be women's domain though men have an important role to play as decision-makers;
- Interests and needs of marginalised groups such as poor women and men, indigenous peoples, ethnic minorities, refugees in conflict situations need to be given attention.

Considering the development and provision of infrastructure, Improving access to drinking water and sanitation can make an enormous difference to the economic well being of households, as women gain time and energy to engage in economic and personal activities.

Economic Benefits Of Domestic Water Supply

From a research project on gender and economic benefits of domestic water supply carried out by the Self-Employed Women's Association (SEWA) in India, IRC International Water and Sanitation Centre and the Foundation of Public Interest (FPI), it was demonstrated that improved water supply combined with micro-enterprise development and capacity building programmes for women has much potential to reduce poverty in semi-arid areas. The calculations were made in terms of the costs of reduced water collection time and the potential benefits of this reduced time.

Within households and communities, men, women and children have different tasks related to water and hygiene. Unequal power relations shape the daily practices. Within households different categories of women have different responsibilities. Because of ignorance about hygiene in some cultures, daughters-in-law, who do most of the cooking, are forbidden to wash their hands or use the toilet, because it is seen as a luxury they do not deserve.

Policy Overview

National water policies, if in existence, include perhaps the mention of women's important role and at best the division of responsibilities between women and men, but they do not have a comprehensive and consistent gender focus. Gender still does not penetrate deeply into policies and legislation (GWA, 2003).

From a social equity and diversity perspective, it can be seen that inequality remains a serious problem among various groups (socio-economic, religious, ethnic, caste), and between women and men within these groups. Yet very few policies recognise diversity and gender inequalities in combination, and do not address them in a comprehensive manner.

Water sector reforms in many countries have created many new institutions, some of which may include a gender unit. Nevertheless these do not really seem to have affected the way the institutions work. In Uganda, a Water Sector Gender Strategy was introduced in 2003 that stipulates targets for involving women at all levels of water management. While this is a laudable initiative, so far it is difficult to measure the effects of the strategy on the ground.

There is need for more attention to be paid to the roles and positions of men and why they may or may not be supportive of gender equality in the sector.

Other positive examples include affirmative action policies incorporated into regulations of water ministries in for example Lesotho, Uganda and South Africa, specifying percentages of staff who should be women. The 1996 South African Constitution explicitly states that every citizen has the right to basic amounts of drinking water and sanitation, and recognises equality of men and women. In the Dominican Republic, there is a regulation of the National Water Authority, requiring that at least 40 per cent of the water committee must be women.

Key Actors in the Sector

In many countries the state has moved away from water provision and is focusing on poverty reduction policies and creating an enabling environment for other actors to provide water and sanitation. Private-sector enterprises, particularly (but not only) small-scale local service providers, have an important role to play. However, the framework in which they operate should be clearly spelt out. This is particularly so when the private sector takes over water supply systems in urban or peri-urban areas, and the interests of low-income communities require special attention. From the daily practice of GWA members messages reach us that poor women are affected most by the privatisation of water supply.

Involvement of local communities in the planning, implementation, operation and maintenance (O&M) of drinking water supply is essential for the quality and sustainability of the systems. However, within communities men tend to dominate the decision-making, even though women are the main stakeholders. NGOs and community-based organizations (CBOs) have key roles to play in facilitating the planning, implementation and O&M in a gender-sensitive and equitable manner. For this capacity building support is crucial.

Gender Mainstreaming in the Sector

Gender is a critical factor in ensuring efficiency and sustainability and hence overall success of water projects. Gender mainstreaming is a way to ensure that there is adequate representation of men and women in planning, operation, maintenance and management of programmes and projects.

Some of the challenges to gender mainstreaming in the sector are the following:

- There is need to have an integrated and holistic approach to rural and urban development reform, so as to empower women and enable them to influence the design and location of the services to meet their domestic and economic requirements as well as utilise their specialised expertise.
- There is also a need to involve experienced CBOs and NGOs with communities and local governments in providing water supply and supporting micro-enterprise development in the re-formulation of current policies.
- The promotion of private-sector development of natural resources should take into account women's needs, knowledge and subsistence activities for economic development.
- There is need to build capacity of sector professionals to mainstream gender, including NGOs, CBOs, and managers.
- To enable sound water management, water and sanitation services should be provided at fair and reasonable rates. Payment systems should be flexible to reflect that women and men in different economic groups have different income sources and mobility.

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Gender and Water Alliance (GWA), 2003. *The Gender and Water Development, Gender Perspectives on Policies*. Delft, Netherlands: Gender and Water Alliance. Available at: <http://www.genderandwater.org/page/287>

Gender and Water Alliance, 2003. Tapping into sustainability: Issues and trends in gender mainstreaming in water and sanitation. A background document for the Gender and Water Session, 3rd World Water Forum, Kyoto, Japan. Available at: <http://www.genderandwater.org/page/156/offset/10>

International Water and Sanitation Centre (IRC), 1994. Occasional Paper series. *Working with women and men on water and sanitation: An African Field Guide*. Available from: <http://www.irc.nl/page/1858>

Maharaj, Niala, 2003. *The Global Approach to water management: Lessons learnt around the globe*. Findings of an electronic conference series convened by the Gender and Water Alliance, Delft, Netherlands. Examines emerging lessons from 82 case studies on gender mainstreaming in the water sector. Available at: <http://www.genderandwater.org/page/725>

WEDC, 2004. *The Gender Millennium Development Goal: What Water, Sanitation and Hygiene Can Do*. Briefing Note 4, London Water Engineering & Development Centre (WEDC).

Available at:

<http://www.lboro.ac.uk/well/resources/Publications/Briefing%20Notes/BN%20Gender.htm>

Wijk-Sijbesma, C. van, 1998. *Gender in water resources management: Roles and realities revisited*, Technical series 33-E, The Hague: International Reference Centre for Water and Sanitation.

Additional Resources

ADB, Gender Checklist for water and sanitation

This publication starts by discussing why gender is important in water supply and sanitation projects and goes on to list key questions and action points in the project cycle, and to explain gender analysis from project design to a policy dialogue.

Available at:

http://www.adb.org/Documents/Manuals/Gender_Checklists/Water/gender_checklist_water.pdf

Ahmed, S. 2002. "Mainstreaming gender equity in water management: institutions, policy and practice in Gujarat, India," in *Natural Resources Management and Gender: A Global Source Book*. Amsterdam: KIT (the Royal Tropical Institute) and Oxford: Oxfam.

Alter, R. C. 2001. *Water for People: Stories about People and Development in the Himalayas*, New Delhi: Orient Longman.

This is the story of a Himalayan community and their struggle for a better quality of life both for themselves and the environment which shelters them. Women in these mountain villages play a critical role in developing and maintaining community (piped) water supply schemes as well as addressing local health and education needs.

Colleen Lowe, Morna, 2000. *Mainstreaming gender in water and sanitation: Literature review for the South African Department of Water and Sanitation*, Gender Links.

This paper is a review of international, regional and national literature on mainstreaming gender in the water and sanitation, forms part of the study on gender mainstreaming. Commissioned by the South African Department of Water Affairs and Forestry (DWAFF).

The review is divided thematically as follows:

Key gender concepts

Key lessons of gender mainstreaming in water and sanitation

Best practices of gender mainstreaming in water and sanitation

Available at: <http://www.gdrc.org/uem/water/gender/genderinwatersanitation.pdf>

Danida, 1999. *Gender and Water Supply and Sanitation: Guiding Questions Working Paper*.

This document provides 'guiding questions' for the water supply and sanitation sector, including, health and hygiene promotion, and water resource assessment and promotion. It contains questions, actions and examples to include gender dimensions into various topics, including key areas in programme planning and implementation and in monitoring and evaluation.

Available at: UM Information Office, Ministry of Foreign affairs, Asiatisk Plads 2, 1448 Copenhagen. E-mail: info@um.dk

DFID, 2002. *Gender issues in the management of water projects*.

DFID, WSP, India Case, Community Management field notes: *Sustainable community management of a multi-village water supply in Kolhapur, Maharashtra, India: Small Private Initiatives (SPI) in the water and sanitation in India*.

This is a series of field notes on small private initiatives in the water and sanitation sector in India. It is designed to document a few successful urban and rural experiences focusing on the poor.

DFID, 1998. *Guidance manual for water supply and sanitation programmes*.

A manual prepared by Water and Environmental Health at London and Loughborough and published by the Water Engineering and Development Centre (WEDC), Loughborough University, UK.

Available at: Water Engineering and Development Centre (WEDC), Loughborough University, UK

Makule, Diana, 1997. *Water and Sanitation for all: Partnerships and Innovations: Gender Perspective*. Ministry of Water, Tanzania.

The paper was presented in the 23rd WEDC Conference on gender issues in water and sanitation, the case of Tanzania. It provides an overview on the situation of water and sanitation to enable the reader to comprehend the reality of what Tanzanian women are going through. The paper does not go into detail on the reason that sum up to the actual situation of water and sanitation in Tanzania.

Available from: Water Engineering and Development Centre (WEDC), Loughborough University, UK.

FINNIDA, 1993. *Looking at gender, water supply and sanitation*. Finnish International Development Agency (FINNIDA), Helsinki

FINNIDA, 1994. *Looking at gender, water supply and sanitation*. Finnish International Development Agency (FINNIDA), Helsinki

IRC, International Water and Sanitation Centre, *Abstracts on women, water and sanitation*.

Annual annotated listing of new publications and resources (journal, articles, books, research publications and reports) that goes beyond sanitation issues and also gender and water. From 1998 it has become a web-based resource.

Available at: <http://www.irc.nl/page/6130/offset/20>.

InterAgency Taskforce on Gender and Water, The UN Commission on Sustainable Development, 13th Session. *A gender perspective on water resources and sanitation: Background Paper 2, 2005.*

Paper covers issues such as equitable access to resources, participation, resources mobilisation, pricing and privatisation, water resources and conflict. It also includes recommendations for actions by governments, communities and civil society as well as donors and international organisations.

Available at: http://www.un.org/esa/sustdev/csd/csd13/documents/bgground_2.pdf

Khosla, Prabha, Christine Van Wijk, Joep Verhagen, and Viru Jmes, 2004. *Gender and Water*, Technical Overview Paper, IRC. Available at: <http://ww.irc.nl/page/15499>

Rathgeber, Eva M, n.d. *Women, men, and water resource management in Africa*, IDRC.

This paper examines some of the concerns that have motivated African governments and donors to become involved with water projects. Although there is a general recognition of the needs of “communities” for reliable water systems, it is argued that the different attitudes, perspectives, and the needs of women and men with respect to water access and use have been given little focussed attention by environmental planners and water resource managers in Africa. More specifically, it is suggested that throughout the 1970s and 1980s, although concerted efforts were being made to increasing water accessibility, little effort was made to integrate the economic roles of women into water resource planning.

Available at: http://www.idrc.ca/en/ev-31108-201-1-DO_TOPIC.html

Regmi, S.C and B Fawcett, 1999. “Integrating gender needs into drinking water projects in Nepal,” in C. Sweetman (ed.) *Women, Land and Agriculture*, Oxford: Oxfam.

Regmi, S.C and B. Fawcett, 2001. “Men’s roles, gender relations, and sustainability in water supplies: Some lessons from Nepal”, in C. Sweetman (ed.) *Men’s involvement in gender and development policy and practice: Beyond Rhetoric*. Oxford: Oxfam working papers

Regmi, S.C. and B. Fawcett, 2001. *Gender implications of the move from supply-driven to demand-driven approaches in the drinking water sector: A developing country perspective*.

The paper was presented at the first South Asia Forum on Water, Kathmandu, November 2001. The article argues that lack of gender in the international water policies can marginalise poor rural women in the developing countries from the benefits of improved water services. Water supply improvements implemented under such policies neither empower women, a prerequisite for development, nor do they achieve sustainable practical benefits for women and men.

Singh, N, G. Jacks and P. Bhattacharya, 2005. “Women and community water supply programmes: An analysis from a socio-cultural perspective,” *Natural Resources Forum*, Vol. 29, pp. 213-23.

Singh, N, P. Bhattacharya, G. Jacks and J. E. Gustafsson, 2004. “Women and modern domestic water supply systems: Need for a holistic perspective,” *Water Resources Management*, Vol. 18, pp. 237-248.

UNICEF, 1998. *A Manual on Mainstreaming Gender in Water, Environment and Sanitation (WES) Programming*. Water, Environment and Sanitation Technical Guidelines Series, No 4.

The manual represents gender policies & strategy frameworks based on UNICEF principles, details current issues in WES Programmes illustrates how gender issues relate to the sector using case studies, best practices and lessons learnt.

Available at: wesinfo@unicef.org

UN DESA, DAW, 2005. *Women 2000 and beyond: Women and Water. Gender perspective, Natural resources, Rights, Access, Sanitation, Health, Economics*. Available at: <http://www.un.org/womenwatch/daw/public/Feb05.pdf>

WEDC, 2004. *The Environmental Sustainability Millennium Development Goal, What Water, Sanitation and Hygiene Can Do: Briefing Note 6*, Water, Engineering and Development Centre (WEDC), Loughborough University, U.K. Available at: <http://www.lboro.ac.uk/well/resources/Publications/Briefing%20Notes/BN%20Environmenta1%20Sustainability.htm>

WEDC, 2004. *The HIV/AIDS Millennium Development Goal, What water, sanitation and hygiene can do: Briefing note 5*, Water, Engineering and Development Centre (WEDC), Loughborough University, U.K. Available at: <http://www.lboro.ac.uk/well/resources/Publications/Briefing%20Notes/BN%20HIV%20AID S.htm>

WEDC, 2004. *The Child Health Millennium Development Goal, What water, sanitation and hygiene can do: Briefing note 3*, Water, Engineering and Development Centre (WEDC), Loughborough University, U.K. Available at: <http://www.lboro.ac.uk/well/resources/Publications/Briefing%20Notes/BN%20Child%20Hea lthl.htm>

World Bank/Water and Sanitation Program Toolkit for Gender in WatSan Projects

This webpage provides some checklists of important gender issues to consider when developing projects and sectoral programs. It also has indicators and checklists to help address key gender issues throughout a project cycle. Additional resources including briefing notes on Gender and Development, Toolkits, GenderStats, and training material are provided as weblinks and downloadable (pdf) files.

Available at: <http://siteresources.worldbank.org/INTGENDER/Resources/toolkit.pdf>

White paper on Water Policy, South Africa, 1997.

Paper represents the policy of the South African Government. It focuses on important part of the review and reform of the water law in South Africa.

Available at: http://www.policy.org.za/html/govdocs/white_paper.html#contents

World Bank, 1999. *Rural Water Supply and Sanitation in India*. New Delhi: Allied Publishers.

French language resources

pS-Eau, 2003. *L'intégration du genre dans la gestion de quatre infrastructures Hydrauliques du Programme d'Appui Institutionnel au secteur Eau (PAI-Eau) dans la région de Sikasso, au Mali*. Helvetas Mali et le pS-Eau – Session «Gender in court», 3ème Forum mondial de l'eau, Kyoto, mars 2003. Disponible en: <http://www.pseau.org/outils/biblio/>

pS-Eau, 2003. *Projet hydraulique villageoise au Togo*. Helvetas Mali et le pS-Eau – Session «Gender in court», 3ème Forum mondial de l'eau, Kyoto, Mars 2003. Disponible en: http://www.pseau.org/outils/biblio/ouvrages/genre_cas3_eau_togo.doc

pS-Eau, 2003. *Projet Eau et Assainissement en milieu Rural (PADEAR) au Bénin*. Helvetas Mali et le pS-Eau – Session «Gender in court», 3ème Forum mondial de l'eau, Kyoto, Mars 2003,

Le Programme d'Appui au Développement du Secteur de l'Eau et de l'Assainissement en Milieu Rural PADEAR est un programme basé sur un modèle participatif. Dans le cadre de ce programme, l'implication des femmes à toutes les étapes de décision (depuis l'identification des besoins, la conception du projet jusqu'à la réalisation et à l'organisation de la gestion du projet) est une des stratégies privilégiées

Disponible en: <http://www.pseau.org/outils/biblio/>

Sidibe, M. and S. Dembele, 1990. *Collaboration au niveau du pays dans le secteur de l'eau et de l'assainissement : une étude de cas République du Mali-Bamako DNHE, CREPA, Ouagadougou*.

Spanish language resources

Espejo, Norah and Dr. Betty Soto, sin dato. *Género en el sector agua y saneamiento de la Región Andina: Hallazgos, Recomendaciones y Propuesta Estratégica*, Programa de Agua y Saneamiento Región Andina (PAS-AND), World Bank Office, Lima

Diagnosis of Gender in the Water Supply and Sanitation Area in Bolivia and Perú, to allow institutions and other organisations of the sector to mainstream gender effectively in WSS projects in the Region.

Disponible en:

<http://www.aprchile.cl/pdfs/Genero%20en%20el%20sector%20saneamiento%20andi%20no.pdf>

Guzmán Esaine, Jessica Niño de, y Mercedes Zevallos Castañeda, sin dato, *Construyendo la Equidad: Metodología e Instrumentos para su inclusión en Proyectos de Agua y Saneamiento*. Programa de Agua y Saneamiento, América Latina y el Caribe, World Bank Office, Lima. Disponible en: http://www.aprchile.cl/pdfs/and_genero.pdf

Case studies

The complete case studies are found in the annex of this resource guide

- Egypt: Empowering Women's Participation in Community and Household Decision-making in Water and Sanitation
- Nicaragua: Gender Equality as a Condition for Access to Water and Sanitation
- Nigeria: Using Gender Mainstreaming Processes to Help Protect Drinking Water Resources of the Obudu Plateau Communities in Northern Cross River State
- Pakistan: Initiative of One, Relief for All - Women's Leadership in the Banda Golra Water Supply Scheme
- Uganda: Mainstreaming gender into policy: Examining Uganda's Gender Water Strategy
- Zimbabwe: Gender Mainstreaming in Water Supply and Sanitation in Manzvire Village, Chipinge
- Zimbabwe: The Initiative On Gender Mainstreaming in Water and Sanitation Projects Through the Well Sinking Programme

3.6 Gender and Water Privatisation

Introduction

During the late 1970s and early 1980s and the global economic recession, international financial institutions such as the World Bank (WB) and the International Monetary Fund (IMF) redirected their policies and demanded macro-economic adjustment, economic stabilisation and market development policies from countries requesting loans. The economic crises during the early 1980s and the shift toward market-based economies across the world in the early 1990s, focused on inefficiencies in state-owned companies and the potential role of the private sector in economic growth and development. This marked the beginning of the current trend to privatise state-owned enterprises, public companies and their services.

It was argued that private investment and funding were needed to supplement government efforts to respond to the enormous challenges of meeting growing demands for drinking water and sanitation in the coming decades. Moreover, in a typical city in the South, 40% to 60% of water is lost due to leakages and ‘theft’; privatisation was expected to cut these losses and increase efficiency of delivery systems. In light of the rapidly increasing urban population, it is important to understand how privatisation affects the poor, and in particular poor women, and how negative impacts can be addressed.

The Human Right to Water

In November 2002, the UN Committee on Economic, Social and Cultural Rights (in its General Comment 15) ruled that access to an adequate amount of clean water for domestic and personal use is a fundamental right to which all people are entitled. The Comment also emphasises the obligation of States to fulfil progressively the right to water, without discrimination, which guarantees physical access for all to the minimum essential amount of water that is sufficient and safe for personal and domestic uses. Water is to be treated as a social and cultural good, and not primarily as an economic good. This recognition implies that countries should not be forced to rely on markets or the private sector or reduce subsidies, but should provide universal access to basic amounts of drinking water and sanitation.

The costs of privatisation

While privatisation has generally been used to mean the transfer of water services from state-owned to private companies, at the same time, it has meant that governments have had to take on new responsibilities to regulate the private companies or make up for the social protection that had previously been provided by state-owned companies. Private sector companies may seek to recover their investments, not looking beyond the contract period, or withdraw if they fail to meet expected profit margins. Operation and maintenance are likely to suffer in such cases, and governments will foot the bill for this negligence.

Despite all that has been said and written about the privatisation of essential services such as drinking water and sanitation, there is limited quantitative information available on the real effect of privatisation on women, as different from that on men. However, there is a great deal of information on women’s ability to resist private expropriation of their fundamental rights.

Gender-related effects of privatisation

Experiences reviewed generally highlight three gender-related issues:

- Privatisation can be more damaging for women working in privatised state services;
- Privatisation means, among other things, an increase in water user rates and thus affects poor people negatively, particularly poor women and female-headed households;
- Privatisation fails to take into account community water management experiences and a gender perspective.

In order to maximise profits, private companies try to recover their start-up capital as quickly as possible by increasing water user rates and cutting back on wages and jobs, with women and unskilled workers being most vulnerable to salary cuts and loss of benefits. This happens particularly in countries where governments do not strengthen labour laws and other regulations, and where the negotiating power of trade unions or associations is weak. Consequently, and to avoid these kinds of situations, governments should conduct a more in-depth analysis of the impact of privatisation on people previously working in state-owned water and sanitation companies.

Privatisation of water supply services can have serious negative impacts on the service levels of poor households, and in particular of female-headed households. This is due to the fact that:

- To maximise the returns on invested capital, private companies might prefer to invest in areas that are economically better off and ignore poor neighbourhoods and illegal settlements in particular.
- An increase in water tariffs can lead to the dis-continuation of services to poor households. Home-grown vegetable gardens, which often supplement women's income and households diet, are also affected when water user rates are increased.
- Privatisation schemes that grant companies the exclusive right to provide drinking water services severely affect community drinking water systems, where women's contribution in terms of labour is significant. It is a form of expropriation of water sources in peri-urban and rural communities.

The real cost of water services and the increase in water user rates as a result of privatisation

In Chile, research was conducted on the variation in the average water rates charged by water and sanitation companies throughout the country since water and sanitation services were privatised in 1990. The study shows that 68 percent of all earnings from water rates, which should be invested in improving the systems and/or services - reducing losses, introducing technology, renewing facilities, etc. - were not being invested in these activities, according to figures and results of these companies as shown by the indicators and statistics of the regulating body, even though the private companies had committed themselves to do so. The study also found out that water user rates had increased from 1989 to 2003, i.e., over a period of 14 years, by 314 per cent.

If we consider that one in three households is currently female headed, this has a dramatic impact on more than five million people who rely on women for their subsistence.(Source: Alegría & Celedón 2005).

This situation is further compounded by the negative impact on health of drinking poor-quality or contaminated water, which results in an increase in water-related disease. This is especially crucial for older women and children who head households in AIDS-infected areas of Africa. Finally, when water user rates increase, women have to allocate a larger proportion

of the household income to pay for the water bill, at the expense of food, health, clothing and education. All this is likely to dissappropriately affect poor women.

The “War over Water” in Cochabamba, Bolivia, in 2000

This popular uprising, where women played a significant role in the defence of the right to water, was not only about urban water users challenging an increase in water user rates. The conflict went far beyond that: privatisation of water in a country such as Bolivia - with almost 40 per cent of its rural population living from subsistence farming and close to 70 per cent of the indigenous population living in poor communities with a traditional culture of community water management – violated the water rights of indigenous peoples and affected their self-management systems, that were developed as an alternative to the failure of the government to provide this service. What triggered the conflict was the passing of a law that the government approved to permit privatisation without previously consulting with the people. (Source: Peredo Beltrán, 2003).

As indicated in the above example, privatisation can have a negative impact on indigenous people, and peri-urban and rural women, who are usually responsible for providing food and water to their households. Women are also greatly affected by the degradation of water resources and the ensuing damage to ecosystems.

Conclusion

People, including the poor women and men are willing to pay a reasonable and fair price for a quality service. However, clear rules and regulations are needed to ensure that privatisation does not negatively affect poor households, and in particular women and female-headed households

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Green, Joanne, © Tearfund and WaterAid, 2003, *Advocacy Guide: private sector involvement in water services*

To inform and equip NGOs and other civil society organisations to engage with water policy reform processes that involve the private sector.

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Case Studies

The complete case studies are found in the annex of this resource guide

- Indonesia: The Impact of Women's Participation in the Aqua-Danone Advocacy Programme – A Case Study in Klaten District, Central Java
- United States: Refusing to Back Down
- Uruguay: Privatisation with Protest

3.7 Gender, Water and Agriculture

Why is Gender a Concern for Agriculture?

Agricultural systems and the roles, rights, relations and responsibilities of men and women who farm, differ according to agro-ecological and cultural contexts. While women play a critical role in agriculture in the developing world accounting for about 70-80 per cent of household food production in Sub-Saharan Africa, 65 per cent in Asia and 45 per cent in Latin America (World Bank, 1996), managing land, water and livestock resources, often in the absence of men, they are not always recognised as ‘farmers’.⁴ Social norms, institutional arrangements and the growing liberalisation of agricultural marketing systems (Baden 1998) have an impact on gender-based disparities.

In most developing countries women’s lack of access to land rights whether as private property (inheritance), usufruct rights on common property resources or direct purchase/lease from the market, has an impact on their livelihood strategies, food security and social status (Agarwal 1994). Independent or joint land tenure for women can provide them with access to collateral for bank loans (agricultural credit) in their own names or access to agricultural extension services and information systems which are typically targeted to men. But land reforms in several countries, while important for the poor and landless, have generally targeted male household heads, excluding women from legal tenure, which in turn, affects their claims to water for irrigation and their participation in community institutions (Deere and Leon 1998, van Koppen 1998).

Gender and Access to Irrigation

Irrigated agriculture provides some 40 percent of the world’s food and consumes about 75 percent of the world’s renewable freshwater resources (GWA 2003: 30). However, while most farmers depend on traditional systems of irrigation, investments in irrigation worldwide have tended to focus on large-scale projects (dams, canals) benefiting rich farmers often at the cost of small and marginal farmers who have been evicted, displaced, or had their land expropriated (www.fao.org/sd). These projects coupled with intensive private-owned micro-irrigation (tube-wells, bores) have led to severe environmental damage – water-logging and saline intrusion – and competition over the availability and quality of water for domestic purposes. Overexploitation of groundwater and growing pollution from leaching of fertilizers and pesticides compels women (and girls) to walk further to collect safe water for their domestic needs.

Irrigation planning and policies have typically ignored gender differentiated needs and priorities as they have focused on the construction and maintenance of systems, the efficient distribution of water and increased agricultural output, rather than the nature of crops grown or the impact of irrigation on labour markets or the co-existence of productive and consumptive water uses (Cleaver 1998). For example, small women farmers in rain-fed agricultural areas in Africa use less water for nutritious crops than is used in male farming systems growing one or few crops often including ‘thirsty’ ones like sugar and rice. But increasingly, particularly during extended periods of drought, crop choice is also a function of other factors such as access to labour (many men migrate) and animal draught power as

⁴ Although this sector overview primarily focuses on water for irrigation, the contribution that water makes to livelihoods based on livestock rearing is significant (Hoeve and van Koppen 2005). While gender relations regarding livestock vary across different cultural contexts, in general women are responsible for livestock care and maintenance and need access to water for a number of tasks including fodder cultivation, bathing buffaloes, dairying, animal deliveries and cleaning sheds (Upton 2004).

livestock are severely affected by water scarcity (lack of fodder and water for drinking or bathing cattle).

Recent attempts at the devolution of irrigation management to the local level, such as participatory irrigation management (PIM) policies, only target 'landowners', typically male household-heads as members of Water User Associations (WUAs) responsible for decision-making on the distribution and management of water. The rural household is perceived as a unit of congruent rather than conflicting interests and women in this model are seen to benefit indirectly as co-farmers through their husbands' rights to water.

However, while women may share similar irrigation related needs on family plots – sufficient water for growing one or more crops a year – there may be differences of opinion regarding the timing and timeliness of water delivery (Zwarteveen 1997). Women often have to balance other household tasks along with irrigation and usually find it difficult to irrigate at night, particularly if they are single women, because of social norms defining mobility and security concerns. Female-headed households usually have to hire (male) labour to help with irrigation or depend on social networks of family and friends during the peak season. Moreover, female farmers who grow the same crops as men, and should be entitled to receive an equal amount of water, find it difficult to claim and receive their water entitlement, especially when water is scarce.

Sometimes irrigation can lead to food insecurity because of the shift to cash crops, thus increasing household dependency on the market and devaluing indigenous knowledge systems. For example, in the Gambia, traditional swamp rice farming practices and knowledge are being lost as more land is pushed into irrigated fruit and vegetable production for export purposes (www.fao.org/gender). Research in Malawi shows that children of cash crop cultivators are less well nourished than those of small women subsistence farmers.

Irrigation also has an impact on female labour participation, albeit mixed, providing employment opportunities for women on their husband's plots (unpaid, extra work) or as agricultural labourers on land belonging to large farmers. At the same time, the introduction of irrigation in dry-land or rain-fed areas may reduce distress migration, particularly by women, as it enables families to grow a second or third crop (Ahmed 1999). Women also use irrigation water for other purposes, such as watering cattle, washing clothes and utensils in canals or watering their kitchen plots gardens.

Gender-sensitive technology is another important, but seldom considered factor, for enhancing women's access to irrigation. In a study of peri-urban agriculture in Nairobi, a growing income-generating opportunity, many women farmers found the water pumps in use too costly and not easy to operate or manage (Hide and Kamani 2000). Women find themselves excluded from male networks, remaining at the back of queues for spare parts and repairs (Chancellor et al. 1999). In contrast, in water-rich areas of eastern India, the non-profit organisation International Development Enterprise (IDE) changed its marketing strategy based on market research to target the purchase and maintenance of treadle pumps to small and marginal women farmers (Prabhu 1999).

Mainstreaming Gender in Community Irrigation Management Institutions

Despite the growing recognition of the different needs of women irrigators, their participation in community water management associations is limited or lower than men's for a variety of social and institutional reasons. Formal membership is often restricted to those who legally

own irrigated land, or are household-heads, or sometimes a combination of both factors. Since these categories largely apply to men, women farmers are not considered eligible for membership although in many cases they are cultivating and managing land in the absence of men who have migrated. Policy changes in the context of irrigation devolution policies in India increasingly stipulate a quota for women's membership on the executive committee of Water User Associations (WUAs), despite the fact that they may not be legally members. Although such nominal participation does not give women voting rights it does allow them to articulate the specific concerns of women farmers; such as the time and timeliness of water delivery. Single women, widows, and women from marginalised households find it easier to approach women committee members if they are facing water distribution problems, and women are more efficient in collecting water user fees and resolving WUA conflicts.

However, prevailing beliefs about appropriate male and female behaviour – for example, talking in public meetings in front of male elders – restricts active female participation in much of the South Asian agrarian context. In the Chhattis Mauja irrigation scheme in Nepal women claimed that they never attended meetings of the WUA because they were not able to raise their concerns and needs. Many of these women found it easier to 'steal' water (free-riders) than participate in formal institutional structures (Zwarteveen and Neupane 1996). Urban irrigators in several African cities prefer not to formalise their activities because for many it is an opportunistic activity and for some (many of them women), it is illegal. Poor urban women engaged in group gardens on landholdings without tenure (encroached riverbeds) in the Gambia and Zambia have little access to water taps and are dependent on wastewater discharged from treatment plants.

While it is clear that access to irrigation is a source of power and conflict, the role of participatory and gender-sensitive external facilitators in capacity building and communication processes in order to encourage the articulation of socially inclusive rights and obligations is critical. Examples of the 'social construction' of irrigation in the Ecuadorian Andean community illustrate the importance of multi-stakeholder decision-making involving diverse social groups (Boelens and Appolin 1999). The Irrigation Sector tools developed by FAO (2001) provide irrigation engineers, government agencies and NGOs with participatory planning frameworks that can improve the performance of irrigation schemes while strengthening the position of rural women and disadvantaged groups. In addition, many civil society organisations are beginning to use 'models' of successful WUAs where the participation of women farmers and other marginalised groups has made a difference to the sustainable management of water for agriculture and to negotiations on changes in legislation that will essentially de-link access to water from land ownership.

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Ahlers, R. and S. Vlaar, 1995. *Up to the Sky: A Study on Gender Issues in Irrigation in Cambodia in the Provinces of Takeo and Pre Veng*, Ede (Netherlands): SAWA.

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Bastidas, E.P, 1999. *Gender Issues and Women's Participation in Irrigated Agriculture: The Case of Two Private Irrigation Canals in Carchi, Ecuador*. (iwmi@cgiar.org)

By considering women as a heterogeneous group among the different water user groups, this report seeks to understand the factors that influence the involvement of *mestizo* (mixed race) women in irrigated agriculture in two private irrigation canals in the province of Carchi, Ecuador. After an introduction to the study area, this report describes the users, their needs, and the different water uses of the two irrigation systems. Further, the degree of women's involvement in irrigated agriculture is defined. Finally, factors that limit women's involvement in irrigated agriculture and their participation in water user associations are identified. A typology based on "household life stage" and household composition is used to explain women's involvement in irrigated agriculture. Water user's relation to the resource and women's previous rural/urban background are analysed for the different types of households. Women's participation in agriculture was higher in female-headed households. In households where the couple had small children, women's participation in agriculture was limited by family obligations. In households where an old couple lived by themselves, women were either too old or too sick to participate as they used to in agricultural activities. Finally, in households where the couple had no small children, women preferred to engage in other activities where they could control their income. It was also found that women with a rural background are more likely to participate in agricultural activities than those with an urban background. The study suggests that it is only by taking a closer look at the intra-household dynamics and urban/rural background that affect women in each of the different types of households, that we can properly explain women's involvement in irrigated agriculture.

Bell, C, 2002. *Water for Production: An Overview of the Main Issues and Collection of Supporting Resources*, BRIDGE Report No. 64, Brighton: Institute of Development Studies.

This report provides key considerations and recommendations for development organisations working on water management issues. Further areas of research are also outlined. It also provides supporting resources to help agencies increase gender awareness in this sector and related sectors, including best practices, lessons learned, check lists produced by a variety of development organisations to aid gender awareness in the water sector.

Available at: <http://www.bridge.ids.ac.uk/reports/water.pdf>

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Boelens, R. and F. Appolin, 1999. *Irrigation in the Andean Community: A Social Construction*. An audio-visual resource published in English and Spanish by IWMI, Colombo.

This training kit and video provide insights into participatory processes used in gender-balanced, community-based rural development. The kit documents detailed steps involved in the inclusive planning of a technical irrigation project, and highlights how initial investments in infrastructure determine water rights for both women and men. Although the documentation notes that there are no blanket prescriptions, it does point out that: "an irrigation system is much more than a physical facility; it is a social construction. Therefore it is indispensable to undertake processes of research, capacity building and communication that will make it possible to inter-relate the participatory construction of infrastructure with the creation and consolidation of their organisation, and with the system of rights and obligations."

Available at: iwmipublications@cgiar.org

Boelens, R. and M. Zwarteveen, 2002. "Gender dimensions of water control in Andean irrigation," in Boelens, R. and P. Hoogendam eds. (2002) *Water Rights and Empowerment*, Assen (the Netherlands): Koninklijke Van Gorcum.

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Chancellor, F., Hasnip, N. and D. O'Neil, 2000. *Gender Sensitive Irrigation Design*. Oxford: H R Wallingford Consultants (for DFID).

These six reports detail the findings of a research project into smallholder irrigation in southern Africa. The objective was to improve smallholder irrigation through greater gender-sensitivity in design and operation. The approach employed was to identify the gender-based constraints and opportunities in existing irrigation developments, investigate their origins and formulate strategies to reduce negative impacts and increase positive ones.

Cipollini, E, 2005. *Rapport d'évaluation sur la Performance de certains Groupements d'Intérêt Collectif d'irrigation en Tunisie, Projet de développement agricole et rural intégré Siliana – Tunisie, Fonds International de Développement Agricole (FIDA)*.

Easton, P, and R. Margaret, 2000. "Seeds of Life: Women and Agricultural Biodiversity in Africa," in *Indigenous Knowledge Notes*, World Bank, August 23rd.

FAO, 1997. *Gender and Participation in Agricultural Development Planning: Key Issues from Ten Case Studies*.

Wide ranging case study examples from Africa, Asia and Latin America including national policy making, local level planning and projects focusing on livestock, forestry and conservation. The document covers entry points, tools and methods, capacity building, gender information, linkages and institutionalisation. Summarises key lessons learned and gives a list of best practice guidelines.

<http://www.fao.org/docrep/X4480E/x4480e04.htm#TopOfPage>

FAO, 1999. *Participation and Information: The Key to Gender Responsive Agricultural Policy*.

This document is a synthesis of several documents (including 10 case studies) which gives an overview of issues including: types of agricultural planning; tools and methods to analyse diversity; social and economic trends - impact on rural women's livelihoods and work. This document can be considered as a good introduction to the debate around policy making and planning.

http://www.fao.org/sd/seaga/index_ar.htm

Available at: www.fao.org/docrep/x2950e/x2950e00.htm

FAO, 2001. *Socio Economic and Gender Analysis (SEAGA) Irrigation Sector Guide*

The purpose of the guide is to support participatory planning of irrigation schemes and the integration of socio-economic and gender issues in the planning process. The ultimate aim is to improve irrigation scheme performance, while strengthening the position of rural women and disadvantaged groups.

SEAGA is an approach to development based on an analysis of the socio-economic factors and participatory identification of women's and men's priorities and potentials. The objective of the SEAGA approach is to close the gaps between what people need and what development delivers.

The SEAGA approach has three guiding principles:

- 1) Gender roles are key;
- 2) Disadvantaged people are priority;
- 3) Participation is essential.

The Irrigation Sector Guide Irrigation is just one piece of the complete SEAGA Package. Three Handbooks are available that describe specific tools. The "Field-level Handbook" is written for

development practitioners who work directly with local communities. The “Intermediate-level Handbook” is for those who work in institutions and organisations that link macro-level policies to the field level, including government ministries, trade associations, educational and research institutions and civil society groups. The “Macro-level Handbook” is for planners and policy makers, at both national and international levels. All three handbooks draw upon the concepts and linkages described in detail in the “SEAGA Framework and Users Reference”.

Available at: <http://www.fao.org/sd/seaga/downloads/En/IrrigationEn.pdf>

Hamdy A, 2002. *Role of Gender Issues in Water Resources Management and Irrigated Agriculture*, Proceedings of the CIHEAM/MAI.BARI Special Session in the First Regional Conference on Perspectives of Arab Water Cooperation: Challenges, Constraints and Opportunities, Cairo.

Jackson C, 1998. “Gender, irrigation and environment: Arguing for agency,” *Agriculture and Human Values*, 15, pp. 313-324.

Kabeer, N. and Tran Thi Van Anh, 2000. *Leaving the Ricefields but not the Countryside: Gender Livelihood Diversification and Pro-Poor Growth in Rural Vietnam*, Occasional Paper No. 13, Geneva: UNRISD.

Khadouja, M, 2005. *Law, Gender and Irrigation Water Management*, Faculté des Sciences Juridique, Politiques et Sociales, Ariana, Tunisia.

Van Koppen, B, 1998. *More Jobs per Drop: Targeting Irrigation to Poor Women and Men*. Amsterdam: The Royal Tropical Institute (KIT).

This book analyses the role of governmental and non-governmental irrigation agencies in including or excluding poor men and especially poor women as right holders, using a review of literature from across the world plus two in-depth field studies on irrigation support for rice cultivation. In Southwest Burkina Faso, where rice cultivation is a female cropping system, a state-financed rice valley development project is studied. In Bangladesh, where irrigated rice cultivation is a male cropping system, the focus is on NGO-supported ownership of private pumps by groups of functionally landless women who sell the water as well as using it to irrigate their own household land. This empirical basis is then used to identify factors that are critical to effective targeting of organisational, technical and financial support by agencies.

van Koppen, B, 1999. *Sharing the Last Drop: Water Scarcity, Irrigation and Gendered Poverty Eradication*, International Water Management Institute, Colombo, Sri Lanka.

van Koppen, B, 1999. “Targeting irrigation support to poor women and men,” *International Journal of Water Resources Development*, 15(1/2), pp.121-140.

van Koppen, B, 2002. *A Gender Performance Indicator for Irrigation: Concepts Tools and Applications*, IWMI Research Report 59, Colombo: IWMI. <http://www.iwmi.cgiar.org/pubs/pub059/Report59.pdf>

van Koppen, B, 2003. *Towards a Gender and Water Index*, Colombo: IWMI, E-Conference Paper, Available at: <http://www.generoyambiente.org/>

van Koppen, B. and S, Mahmud, 1996. *Women and Water Pumps in Bangladesh: The impact of participation in irrigation groups on women’s status*. London: Intermediate Technology Publications.

Koopman, J., Kweka, R., Mboya, M. and S.M. Wangwe, 2001. *Community participation in traditional irrigation scheme rehabilitation projects in Tanzania: Report of a collaborative*

research project. Dar es Salaam: Irrigation Section, Ministry of Agriculture and Cooperatives.

This report presents the results of a collaborative research project involving Irrigation Section staff, the Economic and Social Research Foundation of Dar es Salaam, and villagers in three research sites in Tanzania. The research aimed at learning how government and NGOs can better support community participation in the rehabilitation projects and in the formation of irrigators' organisations. The research found compelling evidence that the participation of many different groups (men, women, owners, tenants) in the planning and implementation of rehabilitation projects and in the formation of irrigators' organisations enhances the technical, social, economic and environmental sustainability of irrigation schemes. It also found that the costs and benefits of rehabilitation are very unevenly distributed among farmers, but village-led efforts to increase equity, especially by giving landless groups more secure access to land, can significantly increase participation in the rehabilitation and the operation of schemes, which in turn improves the prospects for their sustainability.

Lorenzo Cotula, 2002. *Gender and Law: Women's Rights in Agriculture*, FAO Legislative Study No. 76.

This study analyses the gender dimension of agriculture-related legislation, examining the legal status of women in three key areas: rights to land and other natural resources; rights of women agricultural workers; and rights concerning women's agricultural self-employment activities, ranging from women's status in rural cooperatives to their access to credit, training and extension services.

Available at:

http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/005/Y4311E/Y4311E00.HTM

Lokur-Pangare, V, 1998. *Gender Issues in Watershed Development and Management in India*. Agricultural Research and Extension Network, Paper 38, London: Overseas Development Institute. Available at: http://www.odi.org.uk/agren/papers/agrenpaper_88.pdf

Merrey, D. and S. Baviskar, 1998. (eds.), *Gender Analysis and Reform of Irrigation Management: Concepts, cases and gaps in knowledge*, Colombo: IWMI.

Nirundon, Tapachai, 1990. *Women's participation in irrigation management: A case study of housewives in Huay Aeng Tank Irrigation Project, Thailand*. (unpublished thesis)

Housewives have played important role in the irrigation management particularly in vegetable and dry season cropping. Housewives have an opportunity to manage irrigation water only when their husbands were absent. Recommendations were: To provide education and information to the farmer housewives on objectives of the irrigation project and importance of the role of farmers. The RID official should encourage the farmer housewives to participate more in the meeting on irrigation water use. Opportunity should be given to housewives to participate in decision making on irrigation management.

Available at: (Wageningen UR Library)

http://sfx.library.wur.nl:9003/sfx_local?sid=SP:AR&id=pmid:&id=&issn=&isbn=&volume=&issue=&spage=&pages=&date=1990&title=&atitle=Women%20participation%20in%20irrigation%20management%3a%20A%20case%20study%20of%20housewives%20in%20Huay%20Aeng%20Tank%20irrigation%20project%2e&aulast=Nirundon-Tapachai&pid=%3CAN%3E96079951%3C%2FAN%3E%3CAU%3ENirundon%20Tapachai%3C%2FAU%3E%3CDT%3EMonograph%3bNumerical%20Data%3bThesis%20or%20Dissertation%3bSummary%3bNon%20Conventional%3C%2FDT%3E

Patcharin, Laphanum, 1992. "Role of women in Northeast Thailand on water management: A case study at Banphua, Tambon Phralap, Amphoe Muang, Khon Kaen province, *Khon Kaen University Journal*, pp. 3-4. Available at: (Wageningen UR Library)

http://sfx.library.wur.nl:9003/sfx_local?sid=SP:AR&id=pmid:&id=&issn=&isbn=&volume=&issue=&spage=&pages=&date=1997&title=&atitle=%5bRole%20of%20women%20in%20North%20East%20of%20Thailand%20on%20water%20management%20in%20a%20case%20study%20at%20Banphua%2c%20Tambon%20Phralap%2c%20Amphoe%20Muang%2c%20Khon%20Kaen%20province%5d%2e&aulast=PatcharinLaphanun&pid=%3CAN%3E2000064268%3C%2FAN%3E%3CAU%3EPatcharin%20Laphanun%3C%2FAU%3E%3CDT%3EMonograph%3bSummary%3bNon%20Conventional%3C%2FDT%3E

Pulley, T.A., Lateef, S. and A. Shrestha, 2003. *Building Gender Responsive Water User Associations in Nepal*. Manila: ADB. Available at: <http://www.adb.org/Gender/aip-nep-2003.pdf>

Razavi, S. (ed.) 2003. *Agrarian Change, Gender and Land Rights*, Oxford: Blackwell Publishing and Geneva: United Nations Research Institute for Social Development.

Sarkar, S, 2001. "Water Women" *NewsReach*, the in-house journal of PRADAN. Available from: PRADAN: 3, Community Centre, Niti Bagh, New Delhi 110 049, India, E-mail: pradhan@ndb.vsnl.net.in [also revised version in Ahmed, S. (ed.) 2005, *Flowing Upstream: Empowering Women through Water Management Initiatives in India*, Delhi: Foundation Books and Ahmedabad: Centre for Environment Education.

Schenk-Sandbergen, L. and O. Choulamany-Khamphoui, 1995. *Women in Rice Fields and Offices: Irrigation in Laos – Gender-specific case studies in four villages*, Heiloo.

Shah, A, 1998. "Developing Rainfed Agriculture: Implications for Women," in C. Datar (ed.) *Nurturing Nature: Women at the Centre of Natural and Social Regeneration*, Bombay: Earthcare Books.

Sims-Feldstein, H. and Jiggins, J, 1994. (eds.), *Tools for the Field: Methodologies Handbook for Gender Analysis in Agriculture*. West Hartford: Kumarian Press.

Svendsen, M., Merrey, D.J. and T. Shah, no date. *Hydro-politics in the developing world: A Southern Africa perspective*.

Available at:

<http://www.iwmi.cgiar.org/Assessment/files/Synthesis/River%20Basins/River%20basin%20management%20reconsidered%20WESTER.pdf>

van der Vleuten, N, 2001. "(Up)lifting water and women or lift service only? The gender dimension of a lift irrigation programme," in R. K. Murthy (ed.) *Building Women's Capacities: Interventions in Gender Transformation*, New Delhi: Sage Publications.

Wilde V., 1999. *The Responsive Planner: A Framework for Participatory Gender Responsive Agricultural Development*.

This document is part of FAO work based on analysis of lessons learned and the key weaknesses identified - that gender responsive agricultural planning is still limited to short term pilot projects with a strong focus on field level staff and methods. Policy makers and planners at macro levels have been neglected on the whole. The framework (draft) is based on best practices from public and private sectors.

Available at: http://www.fao.org/docrep/X4480E/x4480e05.htm#P1_15

Woroniuk, B. and J. Schalkwyk, 1998. *Irrigation and Equality between Women and Men*. Stockholm: Swedish International Development Cooperation Agency (SIDA).

This short 'tip sheet' or 'briefing note' highlights issues to look for when bringing a gender perspective to irrigation initiatives. It points out that a gender equality perspective is important in irrigation initiatives for at least three reasons:

- 1) Ensuring success of the initiative;
- 2) Ensuring environmental sustainability;
- 3) Ensuring that women benefit as well as men.

It documents a series of false, yet common, assumptions in irrigation planning and provides two concrete examples that demonstrate why attention to gender equality issues is important.

Zwarteveen, M. 1997. *A Plot of One's Own: Gender Relations and Irrigated Land Allocation Policies in Burkina Faso*. Available at:

<http://www.iwmi.cgiar.org/pubs/pub010/REPORT10.PDF>

Zwarteveen, M. and R. Meinzen-Dick, 2001. "Gender and property rights in the commons: examples of water rights in South Asia," *Agriculture and Human Values*, vol. 18, pp. 11-25.

Zwarteveen, M.Z. 2006. *Wedlock or Deadlock?: Feminists' attempts to engage irrigation engineers*. Wageningen UR, Wageningen.

Spanish Language Resources

17 casos de experiencias exitosas de mujeres productoras usuarias de INDA, Chile,

This report is about successful experiences of women in agriculture and productive development as farmers, producers and exporters, supported by a governmental agency, which enabled them to overcome poverty and get a worthier life.

Arroyo, A. and R. Boelens. 1997. *Mujer campesina e intervencion en el riego Andino. Sistemas de riego y relaciones de genero, caso Licto, Ecuador*. Quito: Servicio Holandes de Cooperacion al Desarrollo (SNV), Central Ecuatoriana de Servicios Agricolas (CESA) and Sistema de Capacitacion en el Manejo de los Recursos Naturales Renovables (CAMAREN).

Participación y Género en la Planificación del Desarrollo Agrícola. preparado por Jeanne Koopman, Consultora, Servicio de la Mujer en el Desarrollo (SDWW), Dirección de la Mujer y la Población de la FAO. Disponible en: <http://www.fao.org/sd/SPdirect/WPre0060.htm>

FAO, Oficina Regional para America Latina y El Caribe. La mujer en el desarrollo rural, various resources. Disponible en: <http://www.fao.org/sd/spdirect/wpre0080.htm>

Case studies

The complete case studies are found in the annex of this resource guide

- India: Mainstreaming Gender in Participatory Irrigation Management: The Case of AKRSP
- Kenya: Gender Differences in Community Water Management Machakos

3.8 Gender, Water And Environment

Introduction

The different roles and responsibilities of women and men in water resources use and management are closely linked to environmental change and well-being. This is true both for how women and men affect the environment through their economic and household activities and how the resulting environmental changes affect people's well-being. Understanding these gender differences is an essential part of developing policies aimed at both better environmental outcomes and improved health and well-being.

Gender Relations and Challenges in the Management of the Environment

Women play a critical role in the field of environment, especially in the management of plants and animals in forests, arid areas and wetlands (see box). Rural women in particular maintain an intimate interaction with natural resources, the collection and production of food products, fuel biomass, traditional medicine and raw materials. Poor women and children especially may collect grasshoppers, larvae, eggs and birds' nests to sustain their families (Van Est, 1997). In Burkina Faso, for example, rural women depend on the fruits, leaves and roots of native plants to feed their families; supplementing agricultural grains such as millet and sorghum. Over 800 species of edible wild plants have been catalogued across the Sahel alone (Easton and Ronald, 2000, in UNEP, 2004).

Women and Wetlands in West Africa

Wetlands are fundamental ecosystems for the maintenance of life in West Africa. For centuries people have depended on wetlands for services such as food, water, natural resources and transport. For women, wetland ecosystems and the goods they yield sustain rural livelihoods. The main economic activities undertaken by woman in wetland areas are:

Wild resources provide materials for utensils and construction, and contribute to improved diets and health, food security, income generation and genetic experimentation.

Fishing is done throughout the year using different equipment for different seasons. The flooding of the wetland due to dams, diversions and climate change reduces fishing revenues.

Agriculture includes dry-land farming of sorghum and millet, seasonally flooded rice farming, flood-retreat farming (mainly cowpeas) and irrigated farming. Rice is the most important crop grown in seasonally flooded areas.

Dry season grazing of sheep, goats and cattle occurs when pastoralists move into the area during the dry season.

In the urban centres, the women process fish products, particularly the steaming of fish and oyster breeding. Recently several women's organisations have been getting involved in urban agriculture (market gardens).

Source: Diop, M. D., 2004.

As their knowledge is transmitted through generations, girls and women often acquire a thorough understanding of their environment, and more specifically of its biodiversity. Their experience gives them valuable skills required for the management of the environment. Women have an important role to play in preserving the environment and in managing natural resources to achieve ecologically sustainable production (UNEP, 2004).

Despite women's assumed special relations to nature it should be stressed that all people depend on the environment and all should share the responsibility for sustainable use of water and other natural resources.

Challenges

Public participation in decision making

Public participation in environmental management is increasingly seen as a vital component of environmental policies. Several major international conferences in the 1990s, including the United Nations Conference on Environment and Development (Rio de Janeiro, 1992) and the Fourth World Conference on Women (Beijing, 1995), acknowledged women's contributions to environmental management and proposed actions to strengthen women's role in decision making. However, from the local to the international level, women have had limited involvement in the formulation, planning, and execution of environmental policy. When women do contribute to environmental management, it is usually at the local level. For example, women in Bangladesh, Mexico, the Russian Federation and the Ukraine have been involved in planning and management of freshwater resources through women's groups and cooperatives. They mobilise communities and resources to conserve and protect supplies of clean, accessible water.

Environment vulnerability

The impacts of the degradation of the environment on people's everyday lives are not the same for men and women. When the environment is degraded, women's day-to-day activities, such as fuel and water collection, require more time, leaving less time for productive activities. When water becomes scarce, women and children in rural areas must walk longer distances to find water, and in urban areas are required to wait in line for long hours at communal water points.

Despite their efforts, women living in arid areas tend to be categorised among the poorest of the poor, and have absolutely no means to influence real change. They are often excluded from participating in land development and conservation projects, agricultural extension activities, and policies directly affecting their subsistence. Men make most decisions related to cattle and livestock, and even in households headed by women, men still intervene in the decision-making process through members of the extended family. However, because of the important contribution of women, the fight against the degradation of arid areas requires a gender-inclusive approach.

Access To and Control over Resources

In many countries, rights are linked to women's marital status; widowed or divorced women often lose those rights. Even in countries where the law guarantees women and men equal access to land, women may not be aware of their rights, or customs may exclude women from *de facto* ownership. In, Burkina Faso, Cameroon and Zimbabwe, for example, women have the legal right to own land and trees but, in practice, men control nearly all of the property.

Such insecure land tenure influences how different groups use natural resources. Women, the poor, and other marginalised groups are less likely to invest time and resources or adopt environmentally sustainable farming practices on land they do not own. In the eastern Democratic Republic of Congo, researchers found that men usually plant permanent tree crops, such as coffee, on household land where they have secure tenure. Women's food crops are relegated to rented, steeply sloped land with eroding soils. Because tenure is not secure, women have little incentive to invest in soil conservation measures.

These restrictions on women's land rights hinders their ability to access other resources and information. Unable to use land as collateral to obtain loans, women have difficulty in adopting new technology and hiring labour when needed. In addition, women may not be

able to access other support services, such as extension and training programmes. Agricultural extension agents have traditionally focused on the male farmers, even where men are working off the farm and women are the primary cultivators (Population Reference Bureau, 2002).

Watershed management

Women do sometimes participate in watershed management, for example, by maintaining forest cover to reduce soil erosion which often floods and silts reservoirs and waterways. However, training programmes on the technical and scientific aspects of watershed development are usually aimed at men. Training for women tends to be concentrated on practical issues such as tree planting. Ultimately, this means that women do not have the necessary skills, knowledge and confidence to participate in community decision-making and to assume leadership roles in management of watershed development (Pangare 1998, in Rathgeber, Eva, 2003). Gender analysis has not been a component of most watershed development projects.

Similarly, the impact of displacing local populations to accommodate large dam projects has rarely been analysed from a gender perspective (Baruah 1999, in Rathgeber, Eva, 2003). In some cases, planners actually have been aware of the costs of not incorporating gender concerns into relocation plans but they have rarely acted accordingly. In the Narmada Dam project in Gujarat, India, where populations were displaced from the area that was flooded, it became more difficult for women to collect the forest and biomass resources needed for subsistence. All available water was channeled into the dam and the adjoining land was inaccessible to local populations (Rathgeber, Eva, 2003).

Towards the Integration of Gender

Women's status in conserving biodiversity may be enhanced through the following types of actions to integrate gender concerns into environmental planning:

- Improve data collection on women's and men's resource use, knowledge of, access to and control over resources. Collecting sex-disaggregated information is a first step toward developing gender-responsive policies and programmes.
- Train staff and management on the relevance of gender issues to water resources and environmental outcomes.
- Establish procedures for incorporating a gender perspective in planning, monitoring, and evaluating environmental projects.
- Ensure opportunities for women to participate in decisions about environmental policies and programmes at all levels, including as designers, planners, implementers, and evaluators. Women need official channels to voice their environmental concerns and contribute to policy decisions. Several countries have introduced affirmative actions to this end.
- Foster commitment at all levels—local, national, and international—to integrate gender concerns into policies and programmes which will lead to more equitable and sustainable development. At the international level, the Women's Environment and Development Organization (WEDO) initiated "Women Action 21" at the United Nations Conference on Environment and Development (Rio, 1992), as well as a more recent version, "Action 2015 - women for a healthy and peaceful planet" during the WSSD in Johannesburg.
- Incorporate a gender perspective into national environmental policies, through a gender policy declaration that demonstrates the government's commitment; a reference document for technical staff working on national programs; and a framework for action to develop the capacity of both women and men to address gender concerns.

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DIOP, Mame Dagou, 2004. Les femmes dans les zones humides ouest africaines. Document interne. Wetlands International, Africa Office Dakar.

Economic Commission for Africa (CEA), 1999. *Evaluation Report: Women and Environment*. Sixth Regional Conference on Women: Half-way evaluation concerning the implementation of recommendations of Dakar platform and Beijing Action Plan.

Population Reference Bureau, 2002. *Women, men, and environmental change: the gender dimensions of environmental policies and programs*. Washington, DC. Available at: <http://www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=5473>

Rathgeber, Eva, 2003. *Dry Taps...Gender and Poverty in Water Resource Management*. Food and Agriculture Organization of the United Nations (FAO). Available at: <http://www.fao.org/DOCREP/005/AC855E/AC855E00.HTM>

United Nations Environment Program (UNEP); 2004. *Women and the Environment: Policy series briefing*. DEP/0527/NA, May 2004/03-63959 Available at: <http://hq.unep.org/Documents.Multilingual/Default.asp?DocumentID=468&ArticleID=4488&l=en>

Van Est, D., 1997 : The changing use and management of the floodplain environment by Mousgoum women in North Cameroon. In: M. De Bruijn, I. van Halsema and H. van den Hombergh (eds.), *Gender and Land Use; Diversity in Environmental Practices*. Thela Publishers, Amsterdam, pp. 9-26

Women and Development Commission, 2004. *Gender and Environment*. Available at: <http://www.dgcd.be/documents/fr/themes/gender/CFD%20300mmA-environnement%20FR.pdf> (French)

Additional Resources

Braidotti, Rosi, Charkiewics, Ewa, Häusler, Sabine and Saskia Wierenga, 1994. *Women the Environment and Sustainable Development: Towards a Theoretical Synthesis*. London: Zed Books.

Dankelman, Irene, 2003. *Gender, Environment and Sustainable Development: Theoretical Trends, Emerging Issues and Challenges*. Review Paper. Santo Domingo: INSTRAW.

FAO, 2003. *The State of Food Insecurity in the World*. Available at: <http://www.fao.org/docrep/006/j0083e/j0083e00.htm>

IUCN, 2003. *Maximizing conservation in protected areas: guidelines for gender consideration*. IUCN San José and Population Reference Bureau, Washington, D.C.

Lin, Carol Yong Ooi, 2001. "Gender impact of resettlement: The case of Babagon Dam in Sabah, Malaysia," *Gender, Technology and Development*, 5(2), pp. 223-244.

The resettlement of the Kadazandusun indigenous community of Kampung Tampasak in Penampang, Sabah, to construct the Babagon dam has altered the lives of the community. Women, men and children in the resettled community have begun to experience increased social, economic, cultural and psychological stresses, which are accentuated by the compulsory acquisition of their ancestral lands and resources. Resettlement has resulted in a restructuring of gender relations, livelihoods, value systems and culture. The study shows that the burden of change is far greater for women who have even less access to the benefits of 'development' than do men. There is need for greater involvement of indigenous communities in resettlement efforts supported by more adequate state and community resources.

Maathai, W, 2004. *The Green Belt Movement*. Available at:
<http://www.lanternbooks.com/detail.html?id=159056040X>

Mame Dagou DIOP, 2004: Les femmes dans les zones humides ouest africaines. Document interne. Wetlands International, Africa Office Dakar, 5 pages

Nierenberg, Danielle, 2002. *Correcting Gender Myopia: Gender Equity, Women's Welfare and the Environment*. Worldwatch Paper 161, Washington, DC: Worldwatch Institute.

Rocheleau, D., Thomas-Slyter, B. and D. Edmunds, 1995. "Gendered Resource Mapping: Focusing on Women's Spaces in the Landscape," *Cultural Survival Quarterly*, 18(4), pp. 62-8.

UNEP, 2000. *Success Stories: Gender and the Environment*. Nairobi: United Nations Environment Programme.

UNEP, 2004. *Report of the Global Women's Assembly on Environment*. First Meeting, United Nations Environment Programme, UNEP/DPDL/WAVE/1. Nairobi: United Nations Environment Programme.

WEDO, 2003. *Untapped Connections: Gender, Water and Poverty*. New York: WEDO. Available at: http://www.wedo.org/files/untapped_eng.pdf

WEDO, 2003. *Common Ground: Women's Access to Natural Resources and the United Nations Millennium Development Goals*. New York: WEDO.

Zhou, Wei Wen, 1996. "Water resources and development of women in arid regions in northern China," *Natural Resources Forum*, 20(2), pp. 105-109.

The paper describes the difficult situation faced by women living in arid areas of China, based on field research in Hebei and Shanxi provinces. The causes and effects of poverty in the targeted areas are described, and the roles women could play to alleviate poverty and improve the environment in arid areas is outlined. In addressing policies which could lead to sustainable development, improved education in a number of areas is discussed; public policies aimed at improving women's conditions; ways to involve women in environmental protection; encouraging migration to reduce environmental degradation; and improving child-bearing conditions.

Available at (Wageningen Library URL):

http://sfx.library.wur.nl:9003/sfx_local?sid=SP:CABI&id=pmid:&id=&issn=01650203&isbn=&volume=20&issue=2&page=105&pages=105109&date=1996&title=Natural%20Resources%20Forum&atitle=Water%20resources%20and%20development%20of%20women%20in%20arid%20regions%20in%20northern%20China%2e&aulast=Brewster&pid=%3CAN%3E19971804058%3C%2FAN%3E%3CAU%3EZhou%20WeiWen%3bBrewster%2c%20M%3C%2FAU%3E%3CDT%3EJournal%20article%3C%2FDT%3E

Pangare, Vasudha Lokur. Gender issues in watershed development and management in India. Network Paper 88. Agren. ODI Agricultural Research and Extension Network. July 1998.

Baruah, Bipasha. .The Narmada Valley Project: displacement of local populations and impact on women, . Natural Resources Forum 23 (1999): 81-84.

Key Web Sites

UNIFEM'S Experience in Sustainable Development UN conferences and summits have underlined the contribution of women to sustainable development, with clear gender perspectives in environmental management incorporated.

<http://www.unifem.org/>

'Gender and Environment' <http://www.genderandenvironment.org/> is IUCN's learning community dedicated to research, documentation, and exchanges of experiences that promote the mainstreaming of gender equity perspectives in the environmental management initiatives.

WEDO <http://wedo.org/> is an international advocacy organization that seeks to increase the power of women worldwide as policymakers at all levels to achieve economic and social justice, a healthy and peaceful planet, and human rights for all.

Case Studies

The complete case studies are found in the annex of this resource guide

- Brazil: Conscious Fostering of Women's Leadership
- Guatemala: Meeting Women's and Men's Water Needs in the "El Naranjo" River Watershed Organization

3.9 Gender and Fisheries

Introduction

The important involvement of women in natural resource-based livelihoods and resource management in the developing world has long been acknowledged, but rarely been valued equally with the contribution of men. In fisheries, women have traditionally been occupied in pre- and post-harvest processing of seafood products and marketing the catch.

Women and men are engaged in complementary activities in fisheries. In most regions, the large boats used to fish off-shore and in deep-sea waters have male crews, while women manage smaller boats and canoes. Many more women engage in fishing with rudimentary equipment, wading along the shores collecting shellfish and seaweed. In artisanal fishing communities, women are mainly responsible for performing the skilled and time-consuming tasks that take place on-shore, such as net making and mending, processing the catch and marketing it.

Gender Aspects of Fisheries

In many countries, it is mostly rural women who are engaged in inland fishing. In Africa, they fish the rivers and ponds. In Asia, where fish and seafood are an integral part of the diet of many cultures, women are active in both artisanal and commercial fisheries. In parts of south India, women net prawns from backwaters. In Thailand and Laos, they fish in canals. In the Philippines, they fish from canoes in coastal lagoons. Women have also assumed a leading role in the rapid growth of aquaculture. They often perform most of the work of feeding and harvesting fish and shellfish, as well as in processing the catch. Women in Lesotho and other southern African countries participated in an [Aquaculture for Local Community Development Programme](#), sponsored by FAO, and became managers of small household ponds. The fish produced in these ponds are either eaten by the family or sold to purchase other foods. Often elderly women and children collect shellfish along the shores, adding to family income and nutrition (FAO, 2004).

In some regions, women have become important fish entrepreneurs. For example, in the European Union, women control 39 per cent of the fish industry, administering and controlling significant sums of money and generating substantial returns for their household and community (Aguilar, 2002). As such, women earn, administer and control significant sums of money, financing a variety of fish-based enterprises and generating substantial returns for their household as well as the community.

Key Issues about Gender and Fisheries

The lack of documentation on women's role in fisheries can be explained by a number of factors. First, production goals continue to dominate national policy agendas. Thus, research attention continues to be focused on the catching sector (male dominated) rather than the processing and marketing sector (female dominated). Second, research is often 'gender-blind' and fails to see the broader livelihoods picture. This is compounded by researchers who are often unable to include women in interviews and discussions for cultural reasons, or because they are persuaded that male family members are best placed to speak for them. Third, at the national level, fisheries data is often aggregated with the agriculture sector and there is no sex-disaggregated data, making it doubly difficult to extract information pertinent to the fisheries sector in general, and to gender in particular.

The sexual division of work in the fisheries sector means that women are predominantly responsible for downstream activities (including pre-financing fishing activities), but they are rarely present in the main catching activity. Nevertheless, reduced catches and the worsening economic situation of fishing communities have implications for women in fishing activities.

The problem of direct access to the resource is complex: more often than not there is no real cultural reason for preventing women from fishing, save that as a hard, physical activity it is considered more suitable for men. It might also be uncomfortable for women to be present on the male-dominated fishing trawlers for days at a time. One can find women active in some inshore fisheries or lagoons, such as in Sao Tomé, the Gambia, and Senegal. However, even when they are owners of dugouts, women may employ men to fish in order to supplement their supply of fish during the lean season. This then poses the problem of how to control the men, who sometimes try to cheat them by landing their catch at other beaches, or abandon the dugouts or the nets at other sites. Examples from the Tanji community in The Gambia and the Ipata-Jebba communities in Nigeria show that the women have vocalised their need for a jetty to force men to land fish at designated points (Horemans and Jallow, 1997).

Bennett et al. (2004) noted the gender differentiation over the control of property and assets where women often earn more than the men. These women often reinvest their resources into the fisheries sector, not only because they consider it a family heritage, but also in hopes of being the first recipients of the catch. Nevertheless, experience has shown that women often find themselves in a no-win situation because of their lack of control and decision-making power.

The researchers (Bennett et al., 2004) acknowledged that the ability to influence how those resources are managed is a problem. Women rarely have access to the process of management, although their downstream activities also depend on these resources. Indeed, it was acknowledged that women were rarely represented in the formal institutions of fisheries management or in the local village councils, which manage fisheries resources. In the case of Niger, following a project on facilitating gender equality between men and women, two women were finally admitted to the council of village elders. What this made clear was that access to the resource and access to financial capital are secondary in importance to access to power structures and information. The latter can ultimately be a very powerful tool for those engaged in market and commerce-based activities. In Senegal, many fisher-women are ostensibly in a far stronger position than men. They often own the capital and the means of production, and men are in their employment. The problems arise in the ability of women to be able to exercise their power in a fruitful way and to access the real power structures that influence the decision-making processes related to fisheries management at local, regional and national levels.

Gender-Sensitive Measures in the Fisheries Sector

Since the beginning of the International Decade for Women in 1975, efforts have been made to improve the living conditions of women and to correct the imbalances between men and women. The approach concentrated on:

- providing formal education, adult literacy classes, training and extension services;
- providing informal education in child care, sanitation, and nutrition;
- introducing improved technologies and methods to ease women's burdens and increase their efficiency;
- developing opportunities for more income-generating activities and access to credit; and

- encouraging women to be active in community activities, decision-making, and project implementation and monitoring.

Such support activities have been directed to fishing projects for women in fishing communities. Fisheries projects have contributed to women developing and exercising leadership and sharing in decision-making that affects their future and that of their community.

Improvements in infrastructure

Some assistance has been directed to improving the technology and facilities available to women. The improvement in road and market infrastructure in several African countries has eased the burden on women in their marketing and distribution of fishery products. Some of the infrastructure development has been directed specifically at women. The improvements have shortened the travel time and transaction periods, which not only made their operations more efficient, but also gave them more time to take care of their families. The efficiency has increased their incomes which are spent mainly on food and other household needs. Technical and financial supports are important elements for domestic, social and economic activities. The support can be in technological research, extension and training, banking services, or credit facilities.

Management initiatives

Another way to get fisher-women actively involved is by introducing management initiatives into fishing areas used specifically by women. For example, implementing management strategies in mangrove areas, sand-flats and lagoons along the shore can assist women to identify the types of species available, the changes affecting them and how these problems may be addressed. They will also be able to contribute to solving the identified problems by taking individual actions.

Networking

Women can also actively take part in national and regional networks of practitioners working in the area of community management. Through these forums there can be avenues for exchange of information and lessons learnt from the field.

Research

Areas of research that could contribute to improving gender balance in the fisheries sector are:

- Assessment of country needs, especially in gender aspects of fisheries management;
- Documentation of traditional knowledge, institutions and skills on women's participation in the fisheries sector;
- Assessment and documentation of customary management systems and how these have changed/ or have been modified;
- Fishing trends and seafood consumption patterns in rural coastal communities;
- Development of success indicators from management projects already implemented;
- An inventory of targeted species and distribution patterns at the local level; and
- Assessment of factors that affect fish abundance and distribution and ways of addressing identified problems.

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En una situación precaria. Las Mujeres que trabajan en las plantas procesadoras de pescado chilenas afrontan condiciones de trabajo adversas y un futuro incierto (no date, author)

In this report it is explained in a quantitative way how workers, especially women, have bad working conditions in an industry that has grown extensively in the last years mainly in their production for exports.

Disponible en:

http://www.icsf.net/jsp/publication/samudra/pdf/spanish/issue_22/art09.pdf

Trabajadoras versus modelo exportador: Las estrellas sin Brillo (no date, author)

La agroindustria y la salmonicultura son los sectores más dinámicos de la economía chilena. Sus utilidades alcanzan cifras que hipnotizan a los promotores del libre mercado. Sin embargo, sus cuantiosos retornos se explican por el bajo costo de la mano de obra que utilizan. Sus empleados, principalmente mujeres, son sometidos a tratos inhumanos, que vulneran los derechos más básicos consagrados en el Código del Trabajo.

Disponible en:

<http://www.clasecontraclase.cl/scripts/documentos-descargar.php?id=108>

El papel de la mujer en la pesca. Comisión Europea. (no date)

The study addressed the promotion of equal opportunities and rights for men and women. The rationale for the study was to analyse gender mainstreaming in fisheries development by:

- Examining the roles of women in the fisheries sector of the communities dependent on fisheries
- Providing an analysis of the obstacles and the potential related to women's contribution to the socio-economic development and diversification of these communities; and
- Identifying ways and means for the promotion of equal opportunities for women in the fisheries sector.

Disponible en:

http://europa.eu.int/comm/fisheries/doc_et_publ/liste_publi/studies/women/summary_es.pdf

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Key Web Sites

FAO The Food and Agriculture Organization of the United Nations leads international efforts to defeat hunger. The gender and food security page offers information on diverse subjects: agriculture, division of labor, environment, forestry, nutrition, fisheries, rural economies, population, and education.

www.fao.org/Gender/

ICSF-Women Program The International Collective in Support of Fish Workers (ICSF) is an international non-government organization that works towards the establishment of equitable, gender-just, self-reliant and sustainable fisheries, particularly in the small-scale, artisanal sector. ICSF draws its mandate from the historic International Conference of Fish Workers and their Supporters (ICFWS), held in Rome in 1984, parallel to the World Conference on Fisheries Management and Development organised by the Food and Agriculture Organization of the United Nations (FAO).

www.icsf.net

Red Latinoamericana de las mujeres del sector pesquero.

This website promotes the sharing of information, experiences, knowledge and aims to develop specific projects related with women participation in this sector.

Disponible en: <http://mujeres.infopesca.org/articulos.htm>

Case Studies

The complete case studies are found in the annex of this resource guide

- Senegal: Role of Women in a Model of Community Management of Fish Resources and Marine Environments, Cayar
- Tanzania: Gender and the Protection of Freshwater Resources

3.10 Gender and Coastal Zone Management

Introduction

Sustainable coastal-marine zone management and conservation require a clear understanding of the differences and inequalities between women and men, because their needs and interests are often quite different in relation to aquatic resources. Access to and control over these resources, the resulting benefits and related decision-making are all differentiated by gender.

Gender Equality Issues Relevant in Coastal Zones

On the coast, as in many environments, both men and women play important but different productive, economic and social roles. There are differences in resource use patterns, access to land, natural resources, equipment, labour, capital, outside income, and education, and in the control that women and men exert over these resources (Anon, 1998 in van Ingen et al., 2002).

One of the most documented differences between the work of women and men in coastal zones is the segregated nature of the fishing industry. Studies show that men tend to fish offshore or in major inland water bodies, while women fish close to shore. Women tend to be more involved than men in post-harvest activities, particularly in small-scale fisheries. These differences are important, as women's tasks have often not been counted in economic analyses or received the same level of investment (for example, in terms of technological support, credit, or training). Women's economic activities may also be more difficult to categorise than men's. Women tend to juggle multiple activities (such as combining aquaculture with vegetable gardens or fish-smoking), whereas men's work is often clearly focused on one set of inter-related activities.

Women and men also have different access to and control over land and water resources in coastal zones. There may be conflicts between usufruct rights and legal rights or traditional tenure and formal tenure. Women tend to have access to land through male family members (husband, father, or brother), rather than hold titles in their own names. Tenure has proved to be important as it influences who can make formal decisions about land use, who is consulted on development plans, and who has access to other supportive services such as credit and extension services.

Often coastal zone management decisions are made without the perspective and leadership of female stakeholders and professionals. Women are still the minority decision-makers in political processes, because women tend to have less access than men to formal decision-making authorities and to local decision-making structures, including those related to coastal management.

In terms of environmental risks, it is important to highlight the increasing vulnerability of coastal zones, particularly for some women. For example, the Indian Ocean tsunami of December 2004 had differential impacts on women and on men, due to the strong gender-based division of labour of productive and reproductive activities in the areas it struck. Men have traditionally taken care of fishing and marketing, while women are responsible for fish processing. Therefore more men were away in the sea, while women were along the shores, resulting in a very high death toll for women and children. However, many relief and rehabilitation efforts continue to focus more on men than women. Understanding and measuring the gender differences is essential for an effective response. An age- and sex-disaggregated analysis of the composition of the survivors as well as the constraints to

rehabilitating the livelihood options open to both genders will facilitate a sustainable response (APFIC, 2005).

Mainstreaming Gender

Improving governance and planning

- Planners can borrow tools from gender analysis to work with women and men to collect information on gender differences in resource use, access to decision making and community priorities. It is important not to stereotype men's and women's interests. Sex-disaggregated information must be collected and incorporated into coastal zone plans and projects. Often when women's priorities are not included in programmes or projects they stop participating in them.
- It is important also to expand civil society access to coastal governance. Gender and population issues bring new civil society partners to the table for coastal governance at local, national and international levels. However, capacity building may be necessary to make effective use of this access. For example, the Tambuyog Development Centre in Palawan, Philippines, provided leadership, public speaking, advocacy and environmental awareness training for rural women engaged in coastal management activities.

Changing resource use and management

- In order to predict policy impacts, policy analysis and gender-related information will be needed on resource use and access, household demographics, migration, markets, employment and decision-making. With such information it is less likely that coastal zone policies will have a negative impact on women in general, and on those households headed by women.
- Gender-based knowledge should be used for management of coastal resources. Female resource users often possess different knowledge about marine, coastal and estuarine biodiversity than men. In many countries, it is mostly women who are engaged in inland fishing. In Africa, women fish in rivers and ponds. In parts of India, women net prawns from backwaters. In Laos and Thailand, women fish in canals. In the Philippines, women fish from canoes in coastal lagoons. Collecting shellfish, seaweed, and coastal edible plants for people and cattle is the work of women, children and elderly women who all have useful biological knowledge.

Habitat Restoration Projects

As everyday users of resources, women can also easily identify changes to habitats, species abundance and distribution and can single out factors relating to these changes. Women can also be instrumental in all forms of habitat restoration. An initial point in most management initiatives has been the introduction of practical activities, in which the communities become involved. This is then expanded to other management initiatives. Habitat restoration can include mangrove re-planting, coral re-planting, shore vegetation re-planting, and other such activities. Regeneration at that level can then motivate involvement in wider management issues. In the coastal zone of Senegal, many initiatives on mangrove restoration are developed with women villagers in cooperation with international and regional conservation organisations such as the IUCN and Wetlands International. Involvement of women in mangrove swamp restoration and maintenance, using their knowledge about biodiversity in these coastal ecosystems, will also benefit coastal households and enable sustainable coastal zone management.

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Key Web Sites

The **Women's Aquatic Network** is a private, non-profit organisation incorporated in 1985 in the District of Columbia to bring together women and men with interests in marine and aquatic policy, research, legislation, and other areas. WAN facilitates the interaction of women and men with interests in marine and aquatic affairs in an atmosphere that encourages information exchange; identifies individuals, groups, organisations, programs, and/or employment opportunities that could benefit members in their field(s) of interest and expertise and provides a forum for discussion of topical issues in marine and aquatic affairs.

www.womensaquatic.net/

The Coastal Resources Center at the University of Rhode Island is dedicated to advancing coastal management worldwide. In addition to assisting in the development and implementation of coastal management programs in Rhode Island and the United States, the Center is active in countries throughout the world promoting the sustainable use of coastal resources for the benefit of all.

www.crc.uri.edu

Case Study

The complete case study is found in the annex of this resource guide

- Senegal: Role of Women in a Model of Community Management of Fish Resources and Marine Environments, Cayar

3.11 Gender and Water-Related Disasters

Introduction

All over the world natural climatic variability exacerbated by human-induced climate change are putting societies, particularly women, the poor and vulnerable, at greater risk.⁵ While drought and floods are seen as normal recurring features of our climate, their impact is heightened by human interventions such as the over-exploitation of groundwater or construction of embankments in flood-prone areas, increasing population density and changing land use patterns arising from intensive agriculture, deforestation and the expansion of human settlements in hazard-prone areas. In areas subject to periodic drought and flooding, women and men have developed complex adaptive strategies, differentiated by gender, to cope with seasonal climate change, including spatial mobility, migration and institutional arrangements to manage water and land resources, crops and livestock diversification (Moench and Dixit, 1994; Yamin et al., 2005).

Understanding gender, vulnerability and disasters

Although poverty is a core dimension of vulnerability – all poor people are vulnerable – not all vulnerable people are poor (ActionAid, 2005: 7). Vulnerability is a more dynamic concept than poverty as it captures the changing degree of susceptibility to loss caused by exposure to disaster or unequal risk of individuals, communities and systems. The contextualization of climate change within everyday, overlapping “geographies of vulnerability” (Fordham, 1999) recognizes the role of pre-existing, interlocking systems of physical and social space in structuring vulnerability. These include: the location and nature of dwellings; access to physical infrastructure, information and communication systems; patterns of social capital; and the ability of different groups or individuals to secure alternative livelihoods and ensure the flow of resources – financial, social and political – to maintain livelihood security (Twigg, 2001).

Throughout the world, poor women, children and the elderly carry disproportionate ‘vulnerability bundles’ which place them in the highest risk category, even amongst communities marginalised by caste, ethnicity, race or religion (Wisner et al., 2004). Women’s differential work, lack of control over productive resources and limited access to common coping mechanisms such as formal credit facilities, (micro)-insurance, or survival skills (e.g. swimming in flood-prone areas) as well as restricted mobility (e.g. the practice of *pardah* or seclusion) heighten the impact of disasters for them. In addition, women’s rights are often violated in disaster processes when mitigation, relief and rehabilitation efforts do not consider the differential disaster impacts, capacities and needs across diverse social categories (Ariyabandu and Wickramasinghe, 2003: 45).

The differential impact of drought and floods on gender relations

Droughts have direct impacts on rural livelihoods through crop failure or lower yields, which can lead to urban migration, hunger and in extreme cases starvation. There are also indirect consequences when, for example, water scarcity can lead to the spread of disease because of inadequate safe water for human consumption, sanitation and hygiene. Floods are recurrent phenomena in many parts of the world and some types of floods, for example, periodic riverine floods, can have positive impacts: the maintenance of ecosystems and biodiversity in floodplains and deltas; ensuring fish migration and groundwater recharge; riverine transport;

⁵ Natural climatic variability refers to variations in the amount and distribution of rainfall, while human-induced climatic change can be caused by the impact of say greenhouse gas emissions on global warming.

and access to fertile soils. In recent decades, the effects of increasing population, unplanned urban settlements, deforestation, removal of wetlands, and inappropriate structural solutions have resulted in floods – especially urban flash floods - that have had serious negative impacts on livelihoods, land use, houses and public infrastructure in both developing and developed countries. Although there are limited sex-disaggregated data on the impact of floods and droughts, there is a growing body of qualitative and quantitative empirical material on gender-differentiated impacts, as summarized below:

Economic impacts

Increased time spent on unpaid work

- Women spend more time and energy on domestic water collection in drought- prone areas which affects the time available for productive work (Enarson, 2000);
- Women’s workload increases after a flood as they have to help with house repairs, cleaning and maintenance in addition to their routine work (Nasreen, 2000).

Loss of assets and entitlements

- Women farmers lose food security when floods destroy their land, stored seeds and livestock;
- Families may be forced to sell household assets or pawn women’s jewellery;
- Food consumption patterns and access to food may be gender differentiated.

Reduced opportunities available for productive work

- In both rural and urban flood-prone areas women labourers may lose sources of paid work as fields or workplaces are inaccessible (Enarson and Morrow, 1998);
- Women who do not migrate often end up doing government drought relief work which is very arduous and impacts their health (Fernando and Fernando, 1997);
- Seasonal or long-distance male out-migration puts an added burden on women to manage land often without the security of tenure or access to critical inputs.

Social impacts

Education

- Extended drought years can have an impact on enrolment/retention rates;
- In flood-affected areas schools remain closed until waters recede, while schools located on higher land may be used as temporary community shelters.

Health, hygiene, water supply and sanitation

- During drought periods limited water available for personal hygiene affects women’s ability to bathe regularly, particularly during menstruation;

Limited access to sanitation after floods compels many women, especially the elderly, to eat and drink less to avoid going through the arduous task of finding a safe place for defecation or urination, leading to an increased incidence of Urinary Tract infections (UTI) related diseases;

- Often girls in community shelters go in groups as it provides more security in an uncertain environment.

Conflicts and gendered violence

- An increase in conflicts between women at water queues in drought prone areas has been well documented (see: www.utthangujarat.org);
- Marginalised women, such as *dalits* and *adivasis* in India face additional sexual harassment (Malekar 2000) and are often pushed into sex work.

Adaptive strategies: building community resilience

Historically, women and men in drought and flood-affected communities have evolved their own strategies and coping mechanisms to prepare their families, protect assets and ensure livelihood security. These include seed storage and the preparation of dry foods to support families during floods and for cultivation later. Community-based natural resource management initiatives can be developed around soil and water conservation (e.g. watershed management). Livelihood diversification, whether into non-farm based micro-enterprises or seasonal migration, is also an important strategy for generating income to prepare for drought or flood (Little et al., 2004; Verhagen and Bhatt, 2003). Drought proofing, such as roof rainwater harvesting in the semi-arid Jordan Valley and the high plains of East Africa, South and Southeast Asia has had a significant impact on household water security (www.idrc.ca).

NGOs and other civil society organisations play an important role in enabling households and communities to acquire skills, assets and resources necessary to adapt to ongoing change and restructure their livelihoods. For example, the mobilisation of women and the formation of Self Help Groups (SHGs) to encourage savings and access to micro-credit and micro-insurance before or after a disaster have proved advantageous for many women who would otherwise have had to pawn their jewellery or sell their livestock. In Zimbabwe, the Association of Women's Clubs, in partnership with Oxfam, has been helping rural women to diversify their income, learn new skills and support a micro-credit revolving fund (www.oxfamamerica.org/emergency/art3158.html).

In addition, many NGOs are facilitating women's participation in mixed community level institutions responsible for natural resource management, building leadership skills for disaster mitigation and linking disasters to livelihood, rights and human security.

The role of the state in disaster mitigation

Although the Hyogo Framework for Action (ISDR, 2005) calls for a gender perspective to be integrated into all disaster risk management plans, policies and decision-making processes, in most countries, the state's response to disasters has been short-sighted – for example, drought relief through food-for-work programmes or compensation for flood affected households. Typically, such efforts are characterised by corruption and poor planning, despite the huge amounts spent on disaster management agencies. Civil society participation, particularly of gender-sensitive professionals who can identify gender differentiated needs, priorities, skills and capacities before and after disasters is important (see: <http://www.gencc.interconnection.org/contact.htm>). Initiatives such as the multi-stakeholder Dialogue on Water and Climate launched in 2001 by a consortium of international agencies, is primarily focusing on how water resources can be managed in a world of increasing hydrological variability (see: <http://www.waterandclimate.org>).

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Fact sheet about the linkages of the gender equity approach in climate change and disaster mitigation initiatives, supported in lessons learned in international initiatives.

Available at:

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/Climate.pdf

Ariyabandu, Madhavi, M. and Maithree Wickramasinghe, 2003. *Gender Dimensions in Disaster Management: A Guide for South Asia*, Colombo: ITDG (Intermediate Technology Development Group) South Asia Publications. Available from: ITDG South Asia, 5 Lionel Edirisinghe Mawatha, Kirulapone, Colombo 5, Sri Lanka.

This resource guide looks at the specific vulnerabilities and capacities of women and men and the gender and social dynamics of disaster situations which are not often visible. The book is targeted at policy makers and development practitioners in South Asia, whose contribution is vital for effective disaster risk management and sustainable development in the sub-continent.

Bradshaw, Sarah, 2004. *Socio-Economic Impacts of Natural Disasters: A Gender Analysis*. United Nations Sustainable Development and Human Settlements Division, Chile, CEPAL-Series Manuales 32.

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This report seeks to help the understanding of key questions relating to gender mainstreaming into UNEP's early warning and assessment programme. It analyses key issues in the areas of gender and the environment as they relate to water, poverty, security, conflict, early warning, disaster and vulnerability to environment change.

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Saad, Samia Galal. 2001. *Environmental management and Natural Disasters mitigation: Middle Eastern gender perspective*, EGM/NATDS/

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Mohammad, Baqie Badawi. No date. *Famine, women, creative acts and gender dynamics in Manawashai, Darfur, Western Sudan*.

Available at: www.jendajournal.com/vol2.1/muhammad.html

Key Web Sites

Durvog Nivaran

A Sanskrit word meaning disaster mitigation, this web-site advocates alternate perspectives on disasters and looks into their social dimensions. The site contains research on the issues of livelihoods and disasters, case studies containing best practices on community-based disaster risk reduction from South Asian countries, information on the publications of the network, and a photo gallery depicting various disaster situations.

<http://www.duryognivaran.org>

The Intermediate Technology Development Group

This web-site contains information on ITDG's approach to strengthen the ability of poor people to use technology to cope with threats from natural disasters, environmental degradation and civil conflict by: strengthening the ways that people who live in fragile environments cope with the environmental degradation which threatens their livelihood

opportunities; improving vulnerable communities' ability to prepare for, survive and rebuild homes and livelihoods after natural disasters; preventing and managing conflicts over scarce natural resources and competition for common property resources.

<http://www.itdg.org/>

Gender and Disaster Network

This is an education project initiated by women and men interested in gender relations in disaster contexts. The network intends to document and analyse women and men's experiences before, during and after disasters, situating gender relations in a broader political, economic, historical and cultural context.

<http://www.gdnonline.org/>

The British Columbia Provincial Emergency Programme web-site has made this entire workbook on disaster preparedness and response among women's services available on-line. "It Can Happen to your Agency – Tools for Change: Emergency Management for Women's Services prepared by the B.C. Association of Specialised Victim Assistance and Counselling Programmes focuses on how women's service agencies can prepare to meet the problems and increased demands for services that will accompany any disaster.

http://www.pep.bc.ca/management/Women_in_Disasters_Workbook.pdf

CRID: Regional Disaster Information Center maintains an international collection of Spanish and English-language documents, with a growing collection of gender and disaster writing. See: www.crid.or.cr/

RADIX: Radical Interpretations of Disaster Includes gender-sensitive analysis of disaster vulnerability, response, and prevention.

See: <http://www.radixonline.org/>

Case Studies

The complete case studies are found in the annex of this resource guide

- Bangladesh: Gender Mainstreaming Processes in Community-based Flood Risk Management

3.12 Gender, Water and Capacity Building

Introduction

Building the capacities of different stakeholders is essential for mainstreaming gender at all levels of the water sectors. Grassroots women often lack the capacity to participate in a meaningful way in the planning, implementation, and operation and maintenance of water resources, water supply and sanitation programmes. Water sector institutions are generally dominated by men at management levels. Well-directed capacity building programmes targeted for women are needed to alleviate this situation, while programmes targeted for men are needed to sensitise them to the specific needs of poor women.

However, capacity building needs to go beyond individuals. El-Awar (2003) defines capacity building as “a process by which individuals, groups, institutions, organisations and societies enhance their abilities to identify and meet development challenges in a sustainable manner.” In many countries, there is a need to strengthen institutional capacities in the water sectors. Many countries lack the capacity even to spend the budget allocated for water and sanitation programmes. In particular, institutional capacity building is needed for stakeholders in the water resources and sanitation sectors to translate policy intentions into concrete gender-sensitive programmes.

Capacity Building and Gender Mainstreaming in Integrated Water Resources Management (IWRM)

The contemporary view of capacity building goes beyond the conventional perception of capacity building as training. It includes the creation of an enabling environment through policy frameworks, institutional reforms, and human resources development.

The concept of mainstreaming gender in Integrated Water Resources Management (IWRM) is gaining ground in the water sectors, raising the interest of government agencies, non-governmental organisations, donors and technical support agencies for supporting gender approaches. Nonetheless, the understanding of the concept of gender mainstreaming and the capacity to implement it in policies and within national and local organisations is very slow and requires a lot of effort and time.

Many water professionals have an engineering education, with little experience in incorporating gender and social equity approaches in their work. Therefore, capacity building provides concrete tools to integrate a gender perspective in their work, through using gender-sensitive socio-economic surveys and training methods.

Across the developing world, women have less access to formal education than men. As a result, women are under-represented at the institutional level, and grassroots women find it difficult to participate in decision-making or to take up paid operation and maintenance tasks. Well-designed capacity building programmes are needed to rectify this. Capacity building targeted for women at the grassroots level should be seen as a process rather than a one-time effort. It requires well-designed training programmes to develop skills that do not require literacy, are based on the needs expressed by the women, and provided by well-trained gender-sensitive trainers. Too often, the wrong people are trained in operation and maintenance, and the women who are trained are not given practical on-the-job training.

However, even when training programmes are well designed, the actual implementation of the training programmes needs to be given due attention. Programmes should be planned at a

time and location convenient to women, and training material has to be appropriate and accessible for the trainees. In South Africa, to ensure proper maintenance of the water projects, Mvula Trust required that all water committees had to have at least 30 per cent women. The committee members received on-the-job training in maintenance, and had to be consulted when decisions were made on changes in design, location or technology. This process was adopted by the Department of Water Affairs and Forestry.

In many villages in Gujarat, India, handpumps provided by the Gujarat Water Supply and Sewerage Board (GWSSB) are the sole source of drinking water. However, the GWSSB found it increasingly difficult to maintain these pumps, and in some cases, it took six months to attend to complaints. Prompted by its own members who felt they could better do the maintenance, SEWA submitted a bid to maintain 41 handpumps. Nevertheless, the GWSSB did not allow the women to participate in their training programme, because they did not meet the required education standards. As a result, SEWA called in an NGO to train the first batch of handpump mechanics. This did not mean the end of the women's struggle, as the villagers showed even less faith in the women's skills than the GWSSB engineers. With active support from SEWA, these barefoot water mechanics managed to gain the trust of the GWSSB and the villages based on their performance alone. Now SEWA grassroots mechanics maintain more than 1,500 handpumps, and they manage to repair defunct pumps within two days, compared to six weeks that it took previously.

Source: Verhagen and SEWA, 2002.

Key Actors

Several key actors play a pivotal role in capacity building to mainstream gender in water sectors. At the international level, international organisations, agencies, donors and NGOs play an important role in providing support in creating the required enabling environment for integrated water resources management. International institutions, such as the Gender and Water Alliance (GWA) and IRC International Water and Sanitation Centre, actively support the development of local knowledge and resources to facilitate the dissemination of knowledge and information. NGOs have been involved in building capacity of CBOs and community members. Though many good practices have emerged from the NGO experience, their coverage is low as the replicability of their programmes is limited.

At the national level, there is a growing recognition of the need to strengthen capacities, and many countries—for instance India and Nepal—are in the process of setting up specialised training or knowledge institutes for the water sector. However, these centres tend to have little outreach to stakeholders at the intermediate and community levels.

Capacity Building tools in Mainstreaming Gender in IWRM

Capacity building tools to enhance the mainstreaming of gender in IWRM can be used to assess the capacity of the staff and identify gaps where capacities need to be further developed.

Institutional development tools assist institutions such as ministries, departments and NGOs, to develop tools for gender mainstreaming at the institutional level. These tools can be used to ensure that internal gender policies and strategies are reflected in recruitment, training programmes and the general practice of the institutions. Indicators should be developed to monitor progress towards achieving gender-related goals.

Social capacity development tools demonstrate how decentralisation and empowerment of local communities can be beneficial for women and girls. They show that the opportunities given to women to participate actively in project management will enhance their capabilities to participate actively in project and community development.

In the Small-Scale Water Resources Development Sector Project in Bangladesh, social capacity building has enabled easy access to institutional positions for the women from farming, fishing and landless families and has extended opportunities for women to be member of the Water Management Cooperative Association (WMCA). It allows the allocation of a 30 percent quota to ensure women's participation in WMCA and for one female to be a member of the First Management Committee.

Source: Begum, 2002.

Participatory learning tools offer creative tools to investigate issues of concern to poor women and men related to planning, implementing, and evaluating development activities. They challenge prevailing biases and pre-conceptions about people's knowledge. The tools used range from visualisation, to interviewing and group work. The common theme is the promotion of interactive learning, shared knowledge, and flexible, yet structured analysis. These tools have proven valuable in a wide range of sectors and situations, in both the North and the South.

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El Awar, Faraj, 2003. *Capacity Development Approaches and Tools for Water Demand Management (WMD) Implementation in the Middle East and North Africa*. Paper written for the International Development Research Centre (IDRC, Canada) for WDM II Consultative Meeting 18-19 January 2004, Cairo, Egypt.

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Available at:

http://www.genderandwater.org/content/download/307/3228/file/GWA_Annual_Report.pdf

Verhagen, Joep and the Self-Employed Women's Association (SEWA), 2001. *SEWA's Barefoot Water Technicians in Sabarkantha*. Part 1 of Women's Struggle for Water, a series of notes and posters on SEWA's Water Campaign. Ahmedabad, India: SEWA.

Additional Resources

Alaerts, G.J, F.J.A. Hartvelt & F.-M. Patorni, 1999. *Capacity building as knowledge management: purpose, definitions and instruments*, eds. Water sector capacity building: concepts and instruments. Proceedings of the second UNDP symposium on water sector capacity building, Delft.

Akerkar, Supriya, 2001. *Gender and Participation, Overview Report*, BRIDGE, Institute of Development Studies, University of Sussex, UK.

This report looks at convergences between approaches to gender and to participation, how these have been played out, and how they have been or could be constructively integrated into projects, programmes, policies, and institutions. A background is given on the concepts of gender and participation, why there has not been more interaction in the past, and attempts for learning across these two approaches. The report also, looks at efforts to combine participatory methodologies and gender in projects and describes ways in which the two have been used to influence policy and to what extent measures have been institutionalised.

Blanco, Lara and Giselle Rodríguez, 2000. *Practising What We Preach: Management and Decision-Making Processes with Equity*. Towards Equity Series, No.7. San José: World Conservation Union and Arias Foundation.

Boezak, Sonja, Ra'ida Al-Zubi, Paola Brambilla, Elena Krylova and Emma Bell, 2002. *Report N° 65 on Gender Websites*, prepared for the Swiss Agency for Development and Cooperation (SDC), BRIDGE, Institute of Development Studies, University of Sussex, UK.

This compilation of websites was commissioned by the Swiss Agency for Development and Cooperation (SDC). The websites listed cover the five thematic areas that SDC's work focuses on: social development; conflict prevention; governance; work and income; and natural resources and the environment. Included are sites in English, French, Spanish and Russian. Websites that cover a range of issues are categorised under the social development section, so check this section for more websites on conflict prevention, governance, work and income, and natural resources and the environment.

Canadian International Development Agency (CIDA), no date. *Accelerating Change: Resources For Gender Mainstreaming*. Available at: 200 Promenade du Portage Gatineau, Quebec, K1A 0G4, Tel: (819) 997-5006 Toll free: 1-800-230-6349 Fax: (819) 953-6088, E-mail: info@acdi-cida.gc.ca

This Manual is the tangible resource that emerged from the proceedings of the Technical Workshop on Gender Mainstreaming, Sanur, Indonesia, February 2000. This Manual is an attempt to capture many of the lessons learned during the workshop and to reflect on the depth and breadth of experience that participants brought to the table. It is intended to be a practical resource for those engaged in mainstreaming gender equality in a variety of contexts. It should be taken as a toolkit of concepts, insights, frameworks and strategies drawn from the exchanges at the workshop. One of the most important realisations to emerge from the workshop was that there is no right answer that will apply to every society. Nevertheless, sharing successes, failures, and all those experiences that fall in between, will lead to the strengthening of capacities for those engaged in the pursuit of gender mainstreaming wherever the Manual is used.

Centre for Strategic and International Studies (CSIS) and Sandia National Laboratories (SNL), 2005. *Addressing Our Global Water Future: A White Paper by The CSIS and SNL*. Washington D.C: SNL, U.S. Department of Energy's National Nuclear Security Administration and CSIS.

This White Paper addresses the growing global challenges of dealing with the devastating effects of increasing water scarcity and declining water quality. The second section deals with building capacities and building solutions, the paper analysed the effective integrated water resource management and the community participation. The principles of this approach can be applied at any level and at any scale,

depending on the circumstances. As such, participatory, integrated water projects can improve gender equality, foster democratic institutions, and improve tenuous or uncertain cross-border relations.

Available at: http://www.sandia.gov/water/docs/CSIS-SNL_OGWF_9-28-05.PDF

El Anwar, Faraj, 2004. *Capacity Development Approaches and Tools for Water Demand Management: Implementation in the Middle East and North Africa*, A paper prepared for the Water Demand Management II Consultative Meeting, January 18-19, 2004, Cairo, Egypt.

Guijt, Irene, 1996. *Questions of Difference: PRA, Gender and Environment – A Training Guide*. London: International Institute for Environment and Development

Gender and Water Alliance, 2003. *Gender Mainstreaming in Integrated Water Resources Management: Training Of Trainers Package*.

This training package is intended for managers, planners and trainers who are concerned with policy development and implementation of integrated water resources management programs and projects. The main objective of this training package is to provide program and project staff with a sufficiently detailed account of the gender approach in integrated water resources management to help them in implementing their activities.

Available at:

http://www.cap-net.org/captrainingmaterialsearchdetail.php?TM_ID=101

GWA, 2003. *Tapping into Sustainability: Issues and Trends in Gender Mainstreaming in Water and Sanitation*. A Background Document for the Gender and Water Session, Third World Water Forum, Kyoto, Japan.

Available at: <http://www.genderandwater.org/page/156>

Hill, C.L.M, 2003. *Guide for Gender-Disaggregated Data in Agriculture and Rural Development*, FAO, SEAGA.

This is a manual of facilitation materials for building capacity of those involved in producing agricultural data and statistics.

Available at: <http://www.fao.org/sd/seaga/downloads/En/GDDEn.pdf>

Keller, Bonnie, Anne-Lise Klausen and Stella Mukasa, 2000. *The challenge of working with gender, experiences from Danish-Ugandan development cooperation*, Danish Ministry of Foreign Affairs (Danida).

This study on Danish-Ugandan development co-operation was commissioned by Danida as a contribution to the five-year follow-up of the Fourth Global Conference on Women held in Beijing, 1995. It recognises that many other countries are grappling with similar issues and that experiences can be usefully shared in order to achieve the goals of gender equality and economic empowerment. This publication stresses opportunities and challenges, rather than 'best practices.' It describes and analyses experiences, pitfalls encountered, achievements and challenges for the future, with particular reference to three Danish-supported programmes in Uganda. Focused skills transfer is necessary to ensure that efforts devoted to capacity building for gender analysis and gender planning are directly applicable to the specific working contexts of those who participate in training activities. Creating linkages between programmes and institutions will promote more efficient use and co-ordination of the resources invested in gender training.

Available at: http://www.siyanda.org/docs_genie/danida/challenge.pdf

Lacirignola, Cosimo, Atef Hamdy and Mladen Todorovic, no date. *Regional Action Programme on Water Resources Management: An Overview of Actions towards Better Water Use in Mediterranean Agriculture*, Centre International des Hautes Etudes Agronomiques Méditerranéennes (CIHEAM).

The Regional Action Program on "water resources management" (RAP-WRM) represents a part of a larger programme developed by Centre International des Hautes Etudes Agronomiques Méditerranéennes (CIHEAM) and its four institutes within the framework of EU activities. The overall objectives of the whole programme are human resources development, institutional capacity building and the improvement of regional cooperation in the agricultural sector through training, promotion of research and communication of scientific and technical information, with particular emphasis on sustainable agriculture and the transition to a more open and competitive market economy.

Available at: <http://ressources.ciheam.org/om/pdf/b44/03001793.pdf>

Lidonde, R.A, D. de Jong, N. Barot, B.S. Nahar, N. Maharaj and H. Derbyshire, 2003. *Advocacy Manual for Gender & Water Ambassadors*, GWA, Delft, Netherlands.

Guidelines for lobbying, speeches, and conferences, training module and case studies.

Available at:

http://www.genderandwater.org/content/download/235/2112/file/00483_GWA_Advocacy_manual_insides.pdf

Liao, Mary E, 2004. *Gender and Water Demand Management: Diagnostic Study (Regional Water Demand Initiative for the Middle East and North Africa project)*, Cairo: International Development Research Centre (IDRC).

The overall purpose of this Diagnostic Study is to review gender and water demand management issues in the countries of the Middle East and North Africa (MENA) region, and to explore ways in which gender may be mainstreamed within the [WaDImena](#) project. The review seeks to justify the importance of gender issues and relevance to water demand management in Middle East and North Africa region, to identify the most salient and relevant theoretical methodological research gaps in gender and water demand management. It also seeks to provide an analysis of needs and priorities at the level of research, policy and development support needed to further the agenda of gender and water demand management and to identify means to alleviate the gaps and address the priorities for gender and water demand management in MENA region.

Available at: http://www.idrc.ca/wadimena/ev-66734-201-1-DO_TOPIC.html

Moser, Caroline O. N, 1993. *Gender Planning and Development: Theory, Practice and Training*. New York: Routledge.

Parker, A. Rani, 1993. *Another Point of View: A Manual on Gender Analysis Training for Grassroots Workers*. New York: UNIFEM.

Rose, Lidonde, 2001. *Gender and participation*. A paper presented at the 27th WEDC Conference held in Lusaka, Zambia.

It gives a background to the development of the Methodology for Participatory Assessment.

Available at:

<http://www.lboro.ac.uk/wedc/papers/27/5%20-%20Institutional%20Issues/11%20-%20Lidonde.pdf>

Schalkwyk, J. 2000. *Exercises in Gender Mainstreaming*, Gender in Development, Monograph Series, UNDP Gender in Development Programme.

This set of five group exercises has been prepared for use in the GIDP Capacity Building Support Programme. The overall purpose of these exercises is to give workshop participants (generally gender focal points) some experience and confidence in identifying relevant gender equality issues. The exercises are based on hypothetical "case studies" in different UNDP areas of policy interest (poverty, governance, human rights, post-conflict initiatives, water resources).

Swiss Agency for Development and Cooperation (SDC), 2005. *Gender and Training: Mainstreaming gender equality and the planning, realisation and evaluation of training programmes*, Berne, Federal Department of Foreign Affairs.

The paper provides detailed information and practical incentives for mainstreaming gender equality in the planning, realisation and evaluating of training programmes.

Available at: http://162.23.39.120/dezaweb/ressources/resource_en_24712.pdf; Swiss Agency for Development and Cooperation (SDC), Federal Department of Foreign Affairs (DFA), 3003 Bern, Tel.: 031 322 44 12; Fax: 031 324 13 48; info@deza.admin.ch

Available in English, German, French and Spanish.

Thomas, H, J. Schalkwyk and Beth Woroniuk, 1996. *A Gender Perspective in the Water Resources Management Sector: Handbook for Mainstreaming*, Stockholm: Swedish

International Development Cooperation Agency, Publications on Water Resources, No.6.

This handbook aims to develop awareness, commitment and capacity for integrating gender perspectives into water resources management. It includes an analysis of linkages between gender equality and water resources to guide sector analysis and policy development and help to set concrete measurable goals, and guidance for mainstreaming gender in different parts of the planning cycle (sector analysis, project formulation/appraisals, annual review and evaluations).

UNEP, 2003. *Empowering Women in Water Management and other Development Initiatives. A Training Manual: Focusing on Rainwater Harvesting*. Earth Care Africa Monitoring Institute, Nairobi, Kenya.

WEDC, 2001. *Practical Guide to Mainstreaming Gender in Water Projects: Guidelines for Water Engineers and Managers*, Loughborough University, UK.

User-friendly guide for engineers and managers, together with a training pack and set of case studies to enable design of projects that meet the needs of women and men.

Zaldaña, Claudia, 2000. *In Unity There is Power: Processes of Participation and Empowerment*. Towards Equity Series No. 5. San José: World Conservation Union and Arias Foundation.

Spanish language resources

Heiland, Stephanie, Betty Soto and Malin Ljunggren, 2003. *Género en Saneamiento Básico. Sistema Modular de Capacitación*.

Módulo de capacitación que focaliza el nivel institucional, para que los actores asuman una transversalización real del enfoque de género en los proyectos de agua y saneamiento, para la toma de conciencia, modificar actitudes y orientar decisiones que mejoren las condiciones de vida y de los hogares más pobres de áreas peri urbanas. Los contenidos son formativos y parten de los conceptos básicos que hacen al género, para introducir luego el género en saneamiento básico, el estado actual del género y las herramientas para transversalizar el enfoque de género en proyectos de agua y saneamiento.

Disponible en: www.anesapa.org

Pimentel, Noris, 2000. *Mujer y Medio Ambiente – Técnicas y ejercicios para el Trabajo*, República Dominicana.

Una iniciativa con alto enfoque didáctico que contiene técnicas y ejercicios para trabajar el tema de mujer y medio ambiente, desde la perspectiva de género. Intenta dar respuesta a una necesidad planteada sobre todo por las mujeres que realizan capacitación sobre el tema de mujer y medio ambiente. El planteamiento parte de que la sociedad vive una marcada desigualdad entre hombres y mujeres, que ambos poseen sentidos y visiones diferentes frente a la naturaleza, los que debemos conocer para programar una intervención equilibrada.

Aguilar, Lorena, Ivania Ayales and Guiselle Rodriguez, 1997. *Género y Figura no son hasta la sepultura – Guía para la construcción de relaciones de equidad en iniciativas de desarrollo sostenible*. Unión Mundial para la Naturaleza (UICN), Área Social, Oficina regional para Meso América.

Presenta una iniciativa práctica para hacer un trabajo comunitario a nivel de proyecto con perspectiva de género en Centroamérica. Presenta una serie de diez instrumentos conceptuales para la integración del enfoque de género y el desarrollo sostenible. Incluye además técnicas de trabajo y algunos lineamientos para la construcción de una ética basada en valores y propósitos donde la concepción y la unión que se logre establecer entre género, sostenibilidad y participación, cobren gran relevancia. A pesar de los muchos aportes para la construcción de género, se ha avanzado mucho en el plano conceptual. El documento aporta en el plano metodológico e instrumental, y plantea tres lineamientos fundamentales: i) trabajo enfocado hacia relaciones ínter genéricas, ii) toma como punto de partida la reflexión grupal y iii) el/la facilitadora cobra sentido al leer el contexto y las relaciones entre los seres humanos.

Escalante, Ana Cecilia, María del Rocío Peinador, Lorena Aguilar, Ana Elena Badilla, 1999. *Ojos que no ven ... Corazones que sienten: Indicadores de equidad*, Unión Mundial para la Naturaleza, Fundación Arias Para la Paz y el Progreso Humano.

Esta publicación une las áreas de género y medio ambiente, a través de un proceso que pretende facilitar y apoyar a organizaciones e iniciativas de desarrollo rural de la región, asegurando la incorporación de la perspectiva de equidad de género en su quehacer institucional. Se enmarca en herramientas e instrumentos que permiten incorporar la perspectiva de equidad de género en el ciclo de un proyecto.

Fundación Arias para La Paz y el Progreso Humano, no date. *Manual de Capacitación para personal técnico de la Cooperación Holandesa: Derechos de las mujeres a la tierra, agua y recursos naturales, una visión latinoamericana* (version preliminar).

Aunque el manual es sintético se aprecia la amplitud del tema de los derechos humanos de las mujeres a la tierra, el agua y recursos naturales en los países de las regiones Andina y Centroamericana.

REPEM, no date. *Red de Educación Popular entre Mujeres – Talleres de formación: Género y Presupuestos*.

The Popular Education Network amongst Women of Latin America and the Caribbean, REPEM (Red de Educación Popular entre Mujeres), has dedicated one of its training manuals on macro and micro-economics to gender sensitive budgets. After contextualising the issue within the framework of globalisation and macroeconomic policies, Alma Espino analyses the allocation of public funds from a gender perspective. Jeanine Anderson provides interesting and complementary analysis to traditional gender budget approaches by looking at women's social and political assets. Carmen Zabalaga provides insights on gender budget work at the municipal level in Bolivia and Irene Sarasúa takes us through a series of case studies worldwide, drawing on the existing gender budget literature.

Disponible en: http://www.idrc.ca/es/ev-66822-201-1-DO_TOPIC.html

French Language Resources

Centre Régionale pour l'Eau Potable et Assainissement (CREPA), pas de date, *Rapport de l'atelier de définition de cadre méthodologique de recherche en approche genre dans le secteur de l'Approvisionnement en Eau Potable, Hygiène et Assainissement* (AEPHA)

Cet atelier constitue une étape importante dans le processus d'appropriation des outils de recherche en approche Genre dans le secteur de l'eau, l'hygiène et de l'assainissement pour les personnes ressources du CREPA.

CREPA, pas de date, *la politique du genre dans l'hydraulique villageoise, l'assainissement et la protection des ressources en eau : un guide méthodologique et technique*.

C'est un rapport final sur le séminaire de sensibilisation des cadres féminins à la problématique de l'eau potable et de l'assainissement. Ce rapport met en exergue la participation communautaire dans tout programme dans le secteur eau.

Disponible au: Centre Régionale pour l'Eau Potable et Assainissement (CREPA), Ouagadougou, Burkina Faso.

Centre Régionale pour l'Eau Potable et Assainissement (CREPA), pas de date. *Rapport de l'atelier de définition de cadre méthodologique de recherche en approche genre dans le secteur de l'Approvisionnement en eau potable, hygiène et assainissement (AEPHA)*

Cet atelier constitue une étape importante dans le processus d'appropriation des outils de recherche en approche Genre dans le secteur de l'eau, l'hygiène et de l'assainissement pour les personnes ressources du CREPA.

Disponible au: Centre Régionale pour l'Eau Potable et Assainissement (CREPA), Ouagadougou, Burkina Faso.

CREPA, Ouagadougou, pas de date, *La politique du genre dans l'hydraulique villageoise, l'assainissement et la protection des ressources en eau : un guide méthodologique et technique.*

Disponible au: CREPA, Ouagadougou, Burkina Faso.

CREPA, Ouagadougou, *Rapport final: séminaire de sensibilisation des cadres féminins à la problématique de l'eau potable et de l'assainissement.*

Il met en exergue la participation communautaire dans tout programme dans le secteur eau.

Disponible au: CREPA, Ouagadougou, Burkina Faso.

Key Web Sites

Capacity Building for Integrated Water Resources Management (Cap-Net):

Cap-Net is an international network for capacity building in IWRM. It is made up of a partnership of autonomous international, regional and national institutions and networks committed to capacity building in the water sector.

<http://www.cap-net.org>

The Gender and Water Alliance (GWA):

The Capacity building program of the Gender and Water Alliance was organised to develop and implement new tailored and improved methodologies, tools and materials for training and capacity building.

<http://www.genderandwater.org>

Global Environment Monitoring System (GEMS):

Global Environment Monitoring System provides a modular approach to training in monitoring and water quality management. A training guide describes a series of courses that are offered through the GEMS Water Programme and our partners. The training programme is oriented toward assisting developing countries in setting up basic capabilities for water resources management or in modernising existing programmes.

http://www.gemswater.org/capacity_building/index-e.html

World Bank Capacity Building Activities (WB):

Capacity building is central to the World Bank's support in the water supply and sanitation (WSS) sector. The World Bank's support to countries follows a learning-by-doing approach

that combines capacity building, reforms, and investments. World Bank capacity building activities are targeted mainly at clients of the World Bank, i.e., policy makers and government officials. However, partners of the World Bank - such as development experts, media representatives, and representatives of bilateral and multilateral organisations, staff of nongovernmental organisations, and others - can also participate in many of the Bank's learning programs

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTWSS/0,,contentMDK:20262460~menuPK:533815~pagePK:148956~piPK:216618~theSitePK:337302,00.html>

Case Studies

The complete case studies are found in the annex of this resource guide

- Brazil: Conscious Fostering of Women's Leadership
- Pakistan: Initiative of One, Relief for All – Women's Leadership in the Banda Golra Water Supply Scheme
- South Africa: Women in Sanitation and Brick Making Project, Mabule Village

3.13 Gender Planning and Tools in Water Sectors

Introduction

A framework for gender analysis shows how to carry out such an analysis step-by-step, helping to raise questions, analyse information, and develop strategies and policies that bring in the realities of both women and men. A gender analysis framework assists in analysing the different roles and responsibilities of women and men and the difference in their access to and control over resources. The analysis assists planners and decision-makers to understand how policies and programmes can be changed to encourage equal involvement of women and men and to ensure that they address gender equality. Furthermore, it can clarify why some programmes, projects and policies have a negative impact on women. Gender should be mainstreamed from the earliest possible point in the programme or project cycle, as it can fundamentally affect the entire programme or project concept and implementation.

A gender analysis should inform the entire policy and programme making process. A gender-sensitive approach is not one isolated activity, carried out at one point in plan development. A gender-sensitive approach usually starts with a clear policy statement which defines the goals of gender planning; thereafter, it needs to be incorporated throughout the planning, implementation, and evaluation processes.

Gender Planning

Gender Planning refers to the process of planning development programmes and projects to make them gender sensitive, taking into account the impact on various gender relations, roles and needs and on different women and men involved. It involves the selection of appropriate approaches to address not only women and men's practical needs, but also identifies entry points for changing unequal relations and addressing strategic needs.⁶

Mainstreaming gender in planning, implementation, and evaluation of programmes and projects is not only meant to involve both women and men in the project, but also to ensure their active participation throughout the planning, implementation, and evaluation stages. Women and men should gain equally as participants and beneficiaries of the programmes. Moreover, this process leads to an increase in the efficiency and sustainability of the programmes and enables monitoring of related goals to empower women and promote gender equality.

Excluding women from the project or programme design may have adverse effects. For example, in Nepal, the lack of consideration of women's needs in project planning resulted in inadvertently increasing women's burdens. In all the communities involved in the study, women complained that their water collection time significantly increased (nearly four or five times) after they received the improved water services. This is because the tap-stands and the tube wells were located along the roadside, where women were unable to bathe and wash clothes freely, without being seen by male passers-by. In order to avoid this, women in Hile village in east Nepal carry water all the way to their homes several times each day, spending significant amounts of time on this activity. In three villages, women reported waiting until dark to bathe and wash clothes. The women complained that the surveyors had not involved them in the design or location of the tap-stands or tube wells.⁷

⁶ Gender Briefing Kit, Gender Terminology, UNDP.

⁷ Shibesh Chandra Regmi and Ben Fawcett, 1999. "Integrating gender needs into drinking water projects in Nepal", *Gender and Development*, 7 (3): 2.

Gender planning tools and methodologies such as gender analysis, social mapping and sex-disaggregated data, are tools that enable the analysis of whether the interventions have responded to the different needs of women and men or not. The objective of using gender analytic tools in planning is not only to increase the success of programmes and projects by fitting them more closely to women's and men's current needs, but also to improve women's status and increase their participation in decision-making at different levels.

Key Actors in the Sector

Planning takes place at different levels of government ministries and agencies, in international organisations, in private companies, NGOs, women's groups, and in individual households. All these actors are key to the overall planning process. It is important to pay attention to diversity, which includes men and women, as well as different age groups, classes, castes, ethnicities, indigenous and cultural communities, etc. Some marginalised groups can be left out of interventions if specific efforts are not made to reach them.

Planners attempt to develop national, regional and district plans, programmes and projects that are compatible with the goals, strategies and policies set by policy makers. Planners may be economists, managers, social scientists or technical specialists employed in the planning units of the ministry or its various agencies or in national or international NGOs and organisations. Successful programmes have taken into consideration all stakeholders' needs and interests and have used a participatory approach and gender planning in the programme's activities.

Planning Tools for Gender Mainstreaming in Water Sectors

Paying attention to gender relations and using gender-sensitive tools for planning can contribute to better project planning and management, and can increase the success of water programmes and projects. Attention to gender is particularly valid for water sectors, because women and men have very different responsibilities, access to and control over water resources.

Tools such as *gender analysis* for a particular project or programme area can increase understanding of the socio-economic and cultural context of the programme, including the interests and needs of women and men and their different priorities, knowledge, attitudes and practices related to water services. For example, introducing the 'user-pay' system for water services may result in a significant burden for women, as they usually have the main responsibility for providing water, but not the main income. Also, women may receive training, but may be prevented from putting their new skills and knowledge into practice by cultural or social factors.

Social mapping is a tool that can provide information about the community regarding its composition, resources available, activities, access and use of the water resources. Mapping can help identify who has access, use and control over water resources by gender, class and ethnic group, for example. Such a tool can increase the input of the community since they are the experts on the local situation. It is an excellent tool for collecting sex-disaggregated data that indicate preferences for water source, location and design of facilities and cultural preferences related to sanitation. Social mapping as an exploratory and planning tool can be used by the project staff to highlight inequalities and gaps in accessing water resources at the community level as well as to assess the impact of interventions at the community level. It is an excellent way to engage the community, both women and men, in the project.

Sex-disaggregated data is extremely useful as a tool, but not sufficient in itself. While it is recognised that gender concerns need to be mainstreamed into national statistics, the categories of data collection need to be examined to ensure they reflect the realities of women's and men's lives and relations. There is a need to create indicators to reflect more accurately women's unpaid labour and work in the informal sector, for example. Standard official statistics have tended to ignore such measures, underestimating women's economic contributions.⁸

Related to the issue of sex-disaggregated data is the question of gender-sensitive indicators, which enable the monitoring of change and the measurement of benefits to women and men of given policies or programmes. For instance, gender-sensitive indicators can measure the impact and the effectiveness of activities targeted to address women's or men's practical needs.

The *histogram* is yet another tool, which allows researchers and planners to get an overview of the situation in the community, identifying important historical events within the village and region, that may have affected water resource management and poverty. It can also assist communities in analysing factors that have an impact on their present problems. The histogram tool is different from a trend analysis, as it covers several events (political, economic, and social changes or natural disasters) that have occurred in the past in the community. It is useful to understand the dynamics of natural and social changes over time that may explain factors influencing current problems within the community. Such a tool requires the participation of all members in the community, particularly older women and men.

A *pocket chart* allows the researcher to collect qualitative socio-economic and sex-disaggregated data and quantify them at an individual and community level. In addition, it helps identify and assess not only the needs and priorities for men and women, but also the benefits and the changes in representation and leadership positions.

Welfare or Wealth ranking can be used to help communities carry out their own socio-economic classification system. It can elicit the community's own indicators of relative well-being (such as education, food, water, health, status, assets, infrastructure and employment). It is a good tool for the communities' self-assessment and identification of the approximate percentage of different levels of socio-economic groups. This tool is useful to monitor whether poor women and men continue to have a voice in decision-making and access to water resources.

Gender-sensitive approaches and tools for planning in water sectors are important to achieving efficiency, social equity and gender-equality goals. Targets, such as those contained in the Millennium Development Goals for water and sanitation, are unlikely to be achieved unless gender perspectives are integrated into planning, implementation and monitoring activities.

⁸ Watch, H. and Hazel Reeves, 2000. Gender and Development: Facts and Figures, Report No.56, Bridge, Institute of Development Studies, UK.

Guidelines, handbooks, and “tool kits” exist to help planners integrate gender concerns at every stage of development activities. These useful resources combine general concepts, techniques, tools and models to facilitate gender equitable approaches in planning.

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Chandra Regmi, Shibesh and Ben Fawcett, 1999. “Integrating gender needs into drinking water projects in Nepal”, *Gender and Development*, 7(3).

Gender and Development Training Centre, Netherlands Development Organisation (SNV), 2000. *Manual for the Participatory Gender Audit*. Haarlem, the Netherlands.

March, C. et al., 1999. *Key Concepts: A Guide to Gender Analysis Frameworks*. Oxford: Oxfam.

Moser, C, 1993. *Gender Planning and Development: Theory, Practice and Training*. London: Routledge,

Oxaal, Zoë and Sally Baden, 1997. *Gender and Empowerment: Definitions, Approaches and Implications for Policy*. Briefing paper prepared for the Swedish International Development Cooperation Agency (SIDA), BRIDGE, Institute of Development Studies, Report no. 40. University of Sussex, Brighton, UK. Available at: <http://www.bridge.ids.ac.uk/Reports/re40c.pdf>

Watch, H. and Hazel Reeves, 2000. *Gender and Development: Facts and Figures*, Report No.56. Bridge, Institute of Development Studies, UK.

Additional Resources

Aguilar, Lorena, 1999. *A Good Start Makes a Better Ending: Writing proposals with a Gender Perspective*. Towards Equity Series, No.1. World Conservation Union and Arias Foundation, San José.

The author proposes a series of preconditions that contribute to the design of a project proposal containing the basic ingredients needed to facilitate the incorporation of a gender equity perspective.

Available at:

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/Modulo%201.pdf (English)

http://www.generoyambiente.org/admin/admin_biblioteca/documentos/modulo%201.pdf (Spanish)

Aguilar, Lorena, Gustavo Briceño, and Iles Valenciano, 2000. *Seek and Ye Shall Find: Participatory Appraisals with a Gender Equity Perspective*, Towards Equity Series, No.2. World Conservation Union and Arias Foundation, San José.

KIT/Oxfam, (2002). *Natural Resources Management and Gender: A Global Source Book*. (Critical reviews and annotated bibliographies series)

The book reflects experiences with mainstreaming gender and natural resources management. It examines diverse natural resources from different perspectives including security of women’s rights to common property resources and land (West Africa), mainstreaming gender in water policy and institutions (India), gender responsive planning in wetland development (Uganda), empowering women in natural resource

management (Pakistan) and development of gender policies for environmental policies (Mesoamerica). The chapters are complemented by an extensive annotated bibliography comprising books, journals, electronic documents and Web resources.

Available at: KIT (Royal Tropical Institute), P.O. Box 95001, 1090 HA Amsterdam, the Netherlands, E-mail: publishers@kit.nl, Website: www.kit.nl

Alfaro, María Cecilia, 1999. *Unveiling Gender: Basic Conceptual Elements for Understanding Equity*, World Conservation Union and Arias Foundation, San José.

Alfaro Quesada, Cecilia, 2002. *If We Organize It We Can Do It: Project Planning with a Gender Perspective*. Towards Equity Series, No.3. World Conservation Union and Arias Foundation, San José.

Atthill, Catherine, no date. *Toolkit: An Integrated Resource for Implementing the Gender Management System Series*. London: Commonwealth Secretariat.

The Gender Management System (GMS) is a holistic approach to gender mainstreaming developed by the Commonwealth Secretariat. It aims to bring about fundamental and lasting change in society as a whole by transforming the structures that create and perpetuate gender inequality. It starts with organisational change in government, institutions, civil society, the private sector and international governmental organisations. The aim of the GMS Toolkit is to help people responsible for gender mainstreaming, to enable them to put the Gender Management System Series of manuals into practice and provide a range of tools to make the manuals more accessible.

AusAID Guide to Gender and Development Water Supply and Sanitation, 2000. *Gender guidelines water supply and sanitation* supplement to the guide to gender and development, AusAID, (updated April 2005). Available at:

http://www.ausaid.gov.au/publications/pdf/gender_guidelines_water.pdf

Beck, Tony, 1999. *A Quick Guide to Using Gender-Sensitive Indicators*. London: Commonwealth Secretariat.

This guide is designed to assist the user in the selection, use and dissemination of gender sensitive indicators at the national level. It should be of particular use to governments that are establishing and using a Gender Management System and/or developing a national data base on gender-sensitive indicators as well as NGOs, women's groups, professional associations, the academic community and others interested in promoting gender equality.

Available at:

http://publications.thecommonwealth.org/publications/html/DynaLink/pages/20/page/2/pub_details.asp

Beck, Tony, no date. *Using Gender- Sensitive Indicators: A Reference Manual for Governments and Other Stake holders*. London: Commonwealth Secretariat.

This reference manual is part of the Gender Management System (GMS) Series, which provides tools and sector-specific guidelines for gender mainstreaming. This manual is intended to be used in combination with the other documents in the series, particularly the Gender Management System Handbook, which presents the conceptual and methodological framework of the GMS. This reference manual has been produced to assist member governments in meeting their commitment to implementing the Plan of Action. It is designed to assist the users in the selection, use and dissemination of gender-sensitive indicators at the national level.

Available at:

http://www.thecommonwealth.org/shared_asp_files/uploadedfiles/%7BD30AA2D0-B43E-405A-B2F0-BD270BCEFBA3%7D_ugsi_ref.pdf

Brambilla, Paola, 2001. *Gender and Monitoring: A Review of Practical Experiences*, Paper prepared for the Swiss Agency for Development and Co-operation (SDC). BRIDGE, Institute of Development Studies University of Sussex, Brighton BN1 9RE, UK.

This report aims to provide a practical tool that can be used to integrate a gender approach into existing monitoring and evaluation mechanisms. This paper looks at how indicators can be made gender-sensitive, who should be involved in this process, and when during the project cycle. Case studies follow of implementation of such approaches at field level (projects and programmes), institutional and government level.

Available at: <http://www.bridge.ids.ac.uk/reports/re63.pdf>

Canadian International Development Agency (CIDA), 1997. *Guide to Gender-Sensitive Indicators*.

This Guide explains why gender-sensitive indicators are useful tools for measuring the results of CIDA's development initiatives. It concentrates in particular on projects with an end-user focus, and shows how gender-sensitive indicators can and should be used in both gender integrated and WID-specific projects, and in combination with other evaluation techniques.

The key questions addressed here are: What are gender-sensitive indicators? Why should CIDA use them? What are the types of such indicators? What are their limitations? How can they be used at the branch and region/country levels and in particular in projects with an end-user focus?

A companion volume, A Project level Handbook is available as a quick reference guide for people working in the development field.

Available at:

[http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/Policy/\\$file/WID-HAND-E.pdf](http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/Policy/$file/WID-HAND-E.pdf) (project level handbook)

[http://w3.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/Policy/\\$file/WID-GUID-E.pdf](http://w3.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/Policy/$file/WID-GUID-E.pdf) (guide to Gender Sensitive Indicators)

Dayal, R, C.A. van Wijk-Sijbesma, and N. Mukherjee, 2000. *METGUIDE: Methodology for Participatory Assessments with Communities, Institutions and Policy Makers: Linking Sustainability with Demand, Gender and Poverty*. (UNDP-World Bank, Water and Sanitation Programme).

Derbyshire, Helen, 2000. *Gender Manual: A Practical Guide for Development Policy Makers and Practitioners*. London: DFID.

This gender manual is designed to help non-gender specialists in recognising and addressing gender issues in their work. The intention is to demystify gender, make the concept and practice of gender mainstreaming accessible to a wide audience, and clarify when to call in specialist help. The manual focuses on the processes of gender mainstreaming which are similar in all sectoral and regional contexts, and also similar, in some instances, to other processes of social development and organisational change.

Available at: <http://www.dfid.gov.uk/pubs/files/gendermanual.pdf>

Fond, M.S., W. Wakeman and A. Bhushan, 1996. *Working on Gender in Water and Sanitation: Gender Toolkit Series No. 2*. (UNDP-World Bank, WSP). Available at: <http://siteresources.worldbank.org/INTGENDER/Resources/toolkit.pdf>

Gender and Development Training Centre, Netherlands Development Organisation (SNV), 2000. *Manual for the Participatory Gender Audit*. Haarlem, the Netherlands.

This manual, developed by Dutch NGO SNV (Netherlands Development Organisation), contains tools to carry out participatory gender audits of the organisation's programmes. It is a self-assessment methodology aiming at improving the organisation's performance with respect to gender equality and women's empowerment.

Available at:

<http://www.snvworld.org/cds/rgGEN/Chapter%201/AuditManualEngDefinit.doc>

Gender and Water Alliance (GWA), 2003. *Training of Trainers Package: Gender Mainstreaming in Integrated Water Resource Management*. Available at: <http://www.genderandwater.org/page/766>

GWA, no date. *Gender Scan*.

Gender Scan is a new tool that is a starting point for organisations implementing an internal change or strategic planning process or both, with regard to gender mainstreaming. It offers a step-by-step approach for an institutional self-assessment and includes a case study of its application.

Available at: <http://www.streamsofknowledge.net/>

Gezellschaft fur Technische Zusammenarbeit (GTZ), 1998. *Gender Training ToolKit*, German Technical Cooperation Self-help Fund Project.

This toolkit provides guidelines for participatory gender sensitisation training, outlining key concepts in raising gender awareness. The premise upon which the guidelines are based is experiential learning. The toolkit incorporates different techniques, exercises, and games, often utilising handouts, and prompts people to learn by analysing and reflecting on their experience. It includes tools for gender sensitisation, and for gender sensitive project planning.

National Commission on the Role of Filipino Women and the Canadian International Development Agency, 2002. *A Guidebook on Gender Mainstreaming. How Far Have We Gone?*

This guidebook is aimed primarily to help the agencies' Gender and Development (GAD) Focal Points, members of their technical working groups and other related GAD committees do their mainstreaming work. It presents the gender mainstreaming evaluation framework (GMEF) which can be used to track their progress and provides them with a holistic view of the gender mainstreaming process. It is also useful to technical people (e.g. planners, monitors, evaluators and analysts) who have a basic knowledge of GAD concepts.

Available at: <http://www.ncrfw.gov.ph/publication/publication.htm>

Rathgeber, Eva M., no date. "Water Management in Africa and the Middle East: Challenges and Opportunities", in *Women, Men, and Water-Resource Management in Africa*, IDRC.

This paper examines some of the concerns that have motivated African governments and donors to become involved with water projects. Although there is general recognition of the needs of communities for reliable water systems, it is argued that the different attitudes, perspectives, and needs of women and men with respect to water access and use have been given little focused attention by environmental planners and water-resource managers in Africa. More specifically, it is suggested that throughout the 1970s and 1980s, although concerted efforts were being made to increase water accessibility, little effort was made to integrate the economic roles of women into water-resource planning.

Available at: http://www.idrc.ca/fr/ev-9334-201-1-DO_TOPIC.html

or http://www.idrc.ca/fr/ev-31108-201-1-DO_TOPIC.html

Rocheleau, D., B. Thomas-Slayter and D. Edmunds, 1995. "Gendered Resource Mapping: Focusing on Women's Spaces in the Landscape", *Cultural Survival Quarterly*, 18(4).

Rodríguez, Guiselle et al, 1999. *Taking the Pulse of Gender: Gender-sensitive Systems for Monitoring and Appraisal*, World Conservation Union and Arias Foundation, San José.

Rodríguez Villalobos, Rocío, 1999. *Module 8: Sharing Secrets: Systematization from a Gender Perspective*, World Conservation Union and Arias Foundation, San José.

UNDP, 2003. *Mainstreaming Gender in Water Management: A Practical Journey to Sustainability*.

This extensive guide includes a useful section on gender mainstreaming within the Project Cycle.

Available at: http://www.undp.org/water/docs/resource_guide.pdf

United Nations Environment Programme (UNEP), 1997. *UNEP Project Manual: Formulation, Approval, Monitoring and Evaluation*. UNEP, Nairobi.

Southern African Development Community (SADC), 1999. *Gender Mainstreaming at SADC: Policies, Plans and Activities*.

The gender plans, activities and policies in the region are outlined and the steps which have been taken by the various governments to establish institutional frameworks for gender mainstreaming.

Available from: SADC Gender Department, Private Bag 0095, Gaborone, Botswana,

Thomas, Helen, Johanna Schalkwyk and Beth Woronuk, 1996. *A gender perspective in the water resources management sector: Handbook for mainstreaming*. Publications on Water Resources, No. 6 (Stockholm, Swedish International Development Cooperation Agency).

This handbook for mainstreaming contains specified questions to be asked at each stage of the project cycle which cover issues ranging from how consultation is designed, how specific indicators of gendered involvement are used, to whether budgets are allocated to ensure gender-equitable approaches. Such resources are to be welcomed although it should be emphasised that they will only be practical if used in a self-critical, reflective manner, adapted to specific contexts rather than utilised as routine checklists.

Available at:

<http://www.sida.se/shared/jsp/download.jsp?f=WaterRes6%5B1%5D.pdf&a=2527>

Thomas-Slayter, Barbara, Xavier Rachel Polestico, Andrea Esser, Octavia Taylor; and Elvina Mutua, 1995. *Manual for Socio-Economic and Gender Analysis: Responding to the Development Challenge*. Tototo Home Industries, Kenya, the Philippines University.

This manual is based on the socio-economic and gender analysis (SEGA) approach, which is an approach to development based on an analysis of the socio-economic factors and participatory identification of women's and men's priorities and potentials. SEGA aims to sensitise practitioners to visualise the interconnected processes of environment, social and economic change and to clarify the relevance of social factors (such as class, caste, gender, age, ethnicity and religion) in determining access to and control over resources. Such an understanding of the relationships among people, social structures, and resource bases, makes it easier to work with communities to change the conditions that hinder their development.

Available (at a price) from: Clark University, IDCE Graduate Program 950, Main Street,

Worcester, MA 01610, Tel: 508-793-7201, Fax: 508-793-8820, Email: idcepub@clarku.edu

Available at: <http://clarku.edu/departments/idce/publications.shtml>

Tortajada, Cecilia, 2002. *Contribution of Women to the Planning and Management of Water Resources in Latin America*. Research Report.

Available at: <http://www.thirdworldcentre.org/epubli.html>

Wilde V. and Vaino-Mattila A, 1996. *Gender Analysis and Forestry Training*, Rome, Food and Agriculture Organization of the United Nations (FAO).

A complete training package, based on experience in Asia, with overview of importance of gender analysis; guidelines on planning and conducting training programmes; using RRA to develop case studies; training notes and materials, including case studies; lessons learned from the testing process. Practical and thorough - helpful for people with little training experience or to give ideas of where to start.

Spanish resources

IDRC, CIED PERU, 2002. *Perspectiva de Género y Rol de la Mujer en la gestión de los recursos Hídricos en el Altiplano.*

Presenta diferentes experiencias sobre conceptos, metodologías y actividades que permiten la implementación de los proyectos de agua y saneamiento y de riego en las zonas andinas de Latinoamérica, resaltando las experiencias exitosas en la búsqueda de incorporar la perspectiva de género.

Disponible en: <http://www.ciedperu.org/publicaciones/frapublica.htm>

GWA, WSP, 2005. *Construyendo una Visión para la Acción. Avances y desafíos de la transversalización del Enfoque de Género en la Gestión Integrada de los recursos Hidricos en America latina. Bolivia.*

Ofrece recomendaciones importantes para la construcción de una visión común en América Latina sobre la transversalización del enfoque de género en la gestión integrada de los recursos hídricos, visión que puede servir como un conjunto de lineamientos orientadores para las instituciones y organizaciones interesadas en contribuir a la construcción de una sociedad más justa, donde hombres y mujeres gocen del beneficio de una mejor calidad de vida.

Disponible en: <http://www.es.genderandwater.org/page/2209>

Banco Interamericano de Desarrollo (BID), 2003. *Plan de Acción del BID para la integración de Género (Marzo 2003 - Junio 2005)*, Preparado por SDS/WID en colaboración con la Red de Género del Banco Interamericano de Desarrollo (BID) Departamento de Desarrollo Sostenible Unidad de la Mujer en el Desarrollo Washington, D.C.

The Action Plan brings together the commitments of all operations divisions and relevant departments of the Bank in the development of actions that aim to improve equality between men and women. The likelihood of success implementing this Plan is high because it represents a collaborative agreement and shared commitment between different members of the institution, including the high levels of the Administration, professional staff and assistants involved in the design, supervision, monitoring and evaluation of operations supported by the Bank.

Disponible en: <http://www.iadb.org/sds/doc/PlandeAccionparaIntegraciongeneroS.pdf>

FAO, no date. *Participación y Género en la Planificación del Desarrollo Agrícola. preparado por Jeanne Koopman, Consultora, Servicio de la Mujer en el Desarrollo (SDWW), Dirección de la Mujer y la Población de la FAO.*

Disponible en: <http://www.fao.org/sd/SPdirect/WPre0060.htm>

FAO, no date. *Oficina Regional para America Latina y El Caribe. La mujer en el desarrollo rural, various resources.*

Disponible en: <http://www.fao.org/Regional/LAmerica/mujer/>

French Resources

Direction Générale de l'Inventaire des Ressources Hydrauliques, Ouagadougou, 2005. *Implication de la femme dans la mise en œuvre du Plan d'Action pour la Gestion Intégrée des Ressources en Eau (PAGIRE).*

Le présent document constitue une source d'inspiration pour les acteurs opérant dans la gestion des ressources en eau.

Disponible au: <http://www2.irc.nl/source/lgfr/item.php/5573>

Case Study

The complete case study is found in the annex of this resource guide

- Africa: Water for African Cities: A Partnership between United Nations Human Settlements Programme (UN-HABITAT) and the Gender and Water Alliance (GWA)

3.14 Gender Responsive Budgeting in the Water Sectors

Introduction

Innumerable conventions, declarations, plans of action, and commitments have been made for women's empowerment, for equality between women and men, for the cultural and economic rights of women and men, for the human rights of women and men, and for equality and equity in access to resources and in decision making power. Over the last 30 years, the water sectors have also made many such commitments.

While gender equality incorporating an intersectional analysis in water institutions and policies is beginning to take place, it has been slow. Furthermore, the implementation of these new inclusive and equitable policies of the last 10 to 20 years has been constrained by a range of factors - from the lack of political will and commitment, to the lack of an integrated approach to water resources management, to continued cultural, economic and political discrimination against women and girls.

Gender Responsive Budget Initiatives (GRBIs) provide concrete tools for putting conventions, policies, and commitments into practice.

GRBIs were developed in recognition of the gender blindness of macro-economic policies and budgets.⁹ The first gender-responsive budget was introduced in Australia in 1984. Macro-economic policies and budgets do not recognise women's unpaid labour and thus do not recognise or value the different contributions of women to the national economy as compared to men's contributions. The national budget is the key document to any country's development priorities. If a government's national budget is not gender-sensitive, it is most likely missing women's roles and contributions to national development efforts and thus not serving women's needs and priorities. Women and men in all countries have different roles and responsibilities and often unequal access and control over resources and decision making; thus, budgets affect them differently.

Gender-Responsive Budget Initiatives

Gender-Responsive Budget Initiatives (GRBIs) analyse policies, taxation, revenues, expenditures, and deficits from a gender perspective. They are tools that make it possible to analyse budgets to assess whether government policies and programmes will have different and unequal impacts on women and men and girls and boys. GRBIs are not about separate budgets for women and men. They involve a gender-sensitive analysis of budget priorities. The exercise enables an analysis of budgets rather than the formulation of budgets. This analysis can then constitute the basis for formulation of budget amendments. Additionally, the analysis does not focus only on that portion of a budget seen as pertaining to gender issues or women. A full gender budget analysis examines all sectoral allocations of governments for their differential impacts on women, men, girls and boys. They can go further and look at the sub-groups of the gender-age groupings (Budlender, 2000:1366).

While a change in the government budget is the ultimate objective of most GRBIs, many other gains can be made along the way. In particular, GRBIs are ways of enhancing democracy by enabling public participation and transparency in finance and decision making and improving governance. GRBIs allow government departments, non-governmental organisations, and other stakeholders to improve accountability and targeting of services,

⁹ See the work of Diane Elson.

ensure that ministries and municipalities respond to their constituencies' needs and priorities, ensure that policies are being implemented with the relevant budgetary allocations and assist in implementing government commitments to international conventions (Khosla, 2003:5).

Gender-Responsive Budgets in the Water Sectors

Putting water on the agenda for gender budget analysis can foster a sustainable and integrated water resources development and management approach as it also involves a multi-sectoral stakeholder approach to budget analysis. The call for GRBIs has been fuelled by the growing frustration with the slow response of senior decision makers and implementing agencies to address poor women's needs and gender inequity in the water sectors. The Tanzania Gender Networking Programme (TGNP) in its pro-poor and gender-sensitive analysis of Tanzania's National Budget (2003-2004) eloquently affirms the need for GRBIs. According to the TGNP, national budgets provide the truest indication of state priorities. The process of allocating scarce resources reveals the Government's highest priorities and identifies their favoured constituents when decision-makers are forced to choose among the policy priorities. Whereas policies and budget guidelines provide standards and set the direction of goals, budgets actually demonstrate political will.¹⁰

Key Actors in the Sector: Who can do GRBIs?

Different levels of government and their relevant ministries and departments along with women's groups and other civil society partners are key actors in gender-responsive budget initiatives. In countries where GRBIs are being used and have been the most successful, the exercise was led and coordinated by the relevant ministry, a women's agency or NGO and/or a research centre or university. For case studies on GRBIs see the books produced by the Commonwealth Secretariat.¹¹ These are not case studies about the water sectors, but a range of other sectors and levels of government where gender budget analysis was undertaken.

GRBIs for Gender Mainstreaming the Sector

GRBI tools such as the *gender-disaggregated beneficiary assessment* can assess current water and sanitation public services and their relationship to existing budgetary allocations. In cases of water privatisation, it could also assist in analysing the implications of pricing policies and their relationship to women's and men's incomes and access to public services. It can also demonstrate the need for budgetary re-allocations for the provision of water services to those who do not have them or are under-serviced. Such an exercise will highlight the lack of services or under-servicing of poor women and men, female-headed households, women without title to land, women and men with small land holdings, etc.

Disaggregated analysis of the impact of the budget on time use is a tool that can demonstrate how the time taken by women to undertake certain tasks that would normally be provided by the state are in fact a subsidy to the state. For example, women generally fill in shortcomings in services by investing more of their time to ensure that the basic needs of families and children are met. In cases where water becomes inaccessible, women spend longer hours in collecting water from more distant water sources, revert to water recycling and conservation methods, and invest more of their time towards meeting basic household needs. If calculated in monetary terms, the value of women's time amounts to a considerable subsidy to a service that the state should primarily be responsible for providing.

¹⁰ <http://www.tgnp.org>

¹¹ See <http://www.thecommonwealth.org/Templates/Colour.asp?NodeID=34006>

Gender disaggregated public expenditure benefit incidence analysis is yet another useful tool. As privatisation of water usually excludes water and sanitation infrastructure, which is mainly left for government investment and loans, a beneficiary analysis of government expenditure would demonstrate the bias in government spending towards the rich. The rich consume more quantities of water for golf courses, swimming pools, and industry infrastructure, as compared to poor women who consume less water due to their different needs and their inability to pay for water.

Disaggregated tax incidence analysis enables the examination of taxation policies at the market and household levels. At the household level, women's unpaid work in water provision and management constitutes both a social and economic tax. Even within a privatised water management context, sanitation mostly remains a government responsibility that uses revenues to finance these investments. In the market context, women in the informal sector and as owners of small enterprises pay taxes, regardless of whether water infrastructure is meeting their needs.

Few GRBIs have specifically focused on the many dimensions of the water sectors. For example, gender-responsive budgeting could be used for provision of water and sanitation services, equitable access to water for irrigation, or integrated water resources management (IWRM). GRBIs in South Africa have raised the issue of the lack of water services provision for many poor women in rural areas, along with the general lack of other basic services such as electricity. More recently, in Tanzania, the TGNP has demonstrated the usefulness of GRBIs in the analysis of the budget of the Ministry of Water and Livestock.¹² The effectiveness of GRBI in areas such as gender violence and policing, agriculture, health services, education, taxation, pensions, food subsidy policies, and land distribution demonstrates its value for IWRM.

References

Budlender, Debbie, 2000. "The Political Economy of Women's Budgets in the South", *World Development*, 28(7). pp 1365-1378.

Elson, Diane, 2002. *Gender Responsive Budget Initiatives: Some Key Dimensions and Practical Examples*. Paper presented at the conference on "Gender Budgets, Financial Markets, Financing for Development", February 19th and 20th 2002, by the Heinrich-Böll Foundation, Berlin. Available at:

http://www.idrc.ca/en/ev-66707-201-1-DO_TOPIC.html

Elson, Diane, 2002. "Integrating Gender into Government Budgets with a Context of Economic Reform", in Debbie Budlender, Diane Elson, Guy Hewitt and Tanni Mukhopadhyay, *Gender Budgets Make Cents: Understanding Gender-Responsive Budgets*. London: Commonwealth Secretariat.

¹² For a case study on TGNP and GRBI with the Ministry of Water and Livestock see Section 7 of *Gender and Water Technical Overview Paper* Prabha Khosla, Christine van Wijk, Joep Verhagen, and Viju James. IRC. December 2004. <http://www.irc.nl/page/15499>

Khosla, Prabha, 2003. *Water, Equity, and Money: The need for gender-responsive budgeting in water and sanitation*. The Netherlands Council of Women.

Available at: http://www.gender-budgets.org/en/ev-80859-201-1-DO_TOPIC.html

Additional Resources

ACFODE, 2005. *Gender Budget Training Manual*. Kampala, Uganda.

The following is a Gender Budget Training Manual created by ACFODE of Uganda to guide trainers who are involved in building capacities of policy makers and other stakeholders at District and Sub-county levels in Gender Budgeting. The overall objective is to ensure that Plans and Budgets at Districts and Sub-counties address the needs of disadvantaged groups, especially women.

Available at:

http://www.idrc.ca/gender-budgets/ev-81782-201-1-DO_TOPIC.html

Coopoo, Sikhander. No date. *Women and Local Government Revenue*. Idasa, South Africa.

Available at: www.idasa.org.za/gbOutputFiles.asp?WriteContent=Y&RID=474

Budlender, Debbie, 2004. *Budgeting to Fulfill International Gender and Human Rights Commitments*. UNIFEM.

Available at:

http://www.idrc.ca/uploads/user-S/11141152661CEDAW_Southern_Africa_Brochure.pdf

Budlender, Debbie. and Guy Hewitt, 2003. *Engendering Budgets: A Practical Guide to Understanding and Implementing Gender-Responsive Budgets*. London: The Commonwealth Foundation.

The gender responsive budget programme is now a well-established initiative from the Commonwealth Secretariat, attracting considerable interest among governments, civil society and development agencies keen to participate in the programme. Work on gender responsive budget initiatives has already taken place in over twenty Commonwealth countries. This sourcebook will be of particular use to practitioners, researchers, government officials and NGOs.

Available at:

http://www.thecommonwealth.org/shared_asp_files/uploadedfiles/%7BFBF59912-40C3-47A6-89C2-F3E5A0EA9B74%7D_Engendering%20Budgets%20final%20doc.pdf

Budlender, Debbie, Diane Elson, Guy Hewitt and Tanni Mukhopadhyay, 2002. *Gender Budgets Make Cents: Understanding Gender-Responsive Budgets*. London: Commonwealth Secretariat.

This publication provides a comprehensive understanding of GRB initiatives and will be invaluable to governments, NGOs, donors and other agencies working to integrate a gender analysis into public expenditure policies and budgets. Divided into four sections, the book provides a conceptual and theoretical framework, traces the evolution of work in this area, assesses the role of different stakeholders and highlights lessons learned to date. A profile of known activities at country level shows how gender responsive budgets have been used as a pivotal tool with which to assess budgetary performance and impact.

Available at:

http://publications.thecommonwealth.org/publications/html/DynaLink/cat_id/33/category_details.asp

Budlender, Debbie and Guy Hewitt, 2002. *Gender Budgets Make More Cents. Country Studies and Good Practice*. London: Commonwealth Secretariat.

This book documents 'good practice' in gender budget work from across the globe. Practitioners share their first-hand experiences and in-depth knowledge of the why, where and how of gender responsive budget (GRB) initiatives. They reflect on both the challenges and successes of initiatives in the Andean region, Australia, Korea, Mexico, the Philippines, Rwanda, Scotland, South Africa and the United Kingdom. A chapter on the Commonwealth Secretariat's involvement in developing and implementing GRB initiatives is also included to suggest the role that can be played by external agencies at the national, regional, and international level. This book will be useful to people from multilateral and bilateral agencies and civil society, and inspire them to take forward gender budget work in their own country and organisation.

Available at:

http://publications.thecommonwealth.org/publications/html/DynaLink/cat_id/33/category_details.asp

Budlender, Debbie and Rhonda Sharp with Kerri Allen, 1998. *How to do a gender-sensitive budget analysis: Contemporary research and practice*. Canberra: AusAID and London: Commonwealth Secretariat.

This document draws data from countries which already have gender-sensitive budgets in place or those which are initiating them (Australia, South Africa, Mozambique, Tanzania, Tasmania, Sri Lanka, Barbados). It shows the diversity of approaches in different countries, and covers the issues, methods and strategies for the first year of implementing the exercise. It has a strong practical orientation, built on a sound research base, and includes theory, examples and discussion questions. The book is the basis for a series of structured workshops for civil servants from different departments.

Available at:

<http://www.llbc.ca/Public/PubDocs/docs/360141/AusAIDTr.pdf>

Hurt, Karen and Debbie Budlender, (eds.) 2000. *Money Matters Two. Women and the local government budget*. Idasa. South Africa.

Inter-Parliamentary Union, UNIFEM, UNDP, and WBI, 2004. *Parliament, the Budget and Gender*.

This reference tool/handbook, available in English, French and Arabic, is the sixth in a series produced by the Inter-Parliamentary Union (IPU) which seeks to advance parliament's own capacity to make a positive impact on the budget, and to equip parliament, its members and parliamentary staff with necessary tools to examine the budget from a gender perspective.

English available at: http://www.idrc.ca/gender-budgets/ev-85201-201-1-DO_TOPIC.html

Arabic available at: http://www.idrc.ca/gender-budgets/ev-85203-201-1-DO_TOPIC.html

French available at: http://www.idrc.ca/gender-budgets/ev-85202-201-1-DO_TOPIC.html

Public Administration Research and Consultation Centre (PARC) and the Egyptian National Council for Women, No date. *Performance-based Budgeting from a Gender Perspective*

This resource book explains performance based budgeting and ways of integrating gender into those budgets. The book, produced in Arabic, also provides a number of examples and practical tools.

Arabic language available at: http://www.idrc.ca/gender-budgets/ev-86435-201-1-DO_TOPIC.html

Sen, Gita, 1999. *A Quick Guide to Gender Mainstreaming in Finance*. London: Commonwealth Secretariat. Available at:

http://publications.thecommonwealth.org/publications/html/DynaLink/pages/50/cat_id/34/category_details.asp

Spanish Language Resources

GTZ, UNIFEM, UNFPA, *Sin Fecha. Presupuestos Públicos y Género en América latina y el Caribe*, Disponible en: <http://www.presupuestoygenero.net/s28/>
<http://www.presupuestoygenero.net/s28/paginas/mapa.htm>

UNIFEM, 2003, *Documento Metodológico sobre el Análisis del Presupuesto Público con Enfoque De Género*.

Este documento, recoge la sistematización de experiencias de análisis de presupuesto y la propuesta metodológica obtenida a través de la adaptación de herramientas desarrolladas por UNIFEM-Región Andina en Bolivia, Ecuador, y Perú, durante el periodo 2001-2003.

Disponible en:

http://www.idrc.ca/uploads/user-S/11000383911Documento_metodologico_Final_enviado_por_AyB.pdf

UNIFEM RA y FLACSO, 2005. *Hacia la transparencia y la gobernabilidad con equidad. Presupuestos sensibles al género en la región andina*. Quito, Ecuador.

Este libro documenta, en seis capítulos, el proceso que UNIFEM-RA siguió para impulsar esas iniciativas en Bolivia, Ecuador y Perú, mediante su programa DESafíos, sobre derechos económicos y sociales (DES), y como una herramienta para lograr el empoderamiento de las mujeres mediante el ejercicio de esos derechos.

Disponible en:

http://www.flacso.org.ec/html/pub1.php?p_number=LB_0000556

Key Web Sites

The Commonwealth Secretariat has been involved in issues of gender mainstreaming, gender equity and gender and macro-economic issues for many years. Their web site has a wealth of information on these subjects including on GRBIs. For additional information on macro-economics and gender-responsive budgets see:

<http://www.thecommonwealth.org/Templates/Colour.asp?NodeID=34005&int2ndParentNodeID=33895&int3rdParentNodeID=33899>

UNIFEM's Programme on Women's Economic Security and Rights.

For many years UNIFEM has been active providing financial and technical assistance for innovative programmes and strategies that promote women's human rights, political participation and economic security. The Programme economics and reducing women's poverty has supported extensive work on GRBIs in all world regions.

http://www.unifem.org/gender_issues/women_poverty_economics/

UNIFEM, The Commonwealth Secretariat and IDRC.

This Gender Responsive Budgets Initiatives (GRBI) website is a collaborative effort between the United Nations Development Fund for Women (UNIFEM) (http://www.unifem.org/index.php?f_page_pid=19), The Commonwealth Secretariat (<http://www.thecommonwealth.org/Templates/Colour.asp?NodeID=34021>) and Canada's International Development Research Centre (IDRC) (http://www.idrc.ca/index_en.html), to support government and civil society in analysing national and/or local budgets from a gender perspective and applying this analysis to the formulation of gender responsive budgets. The initiative strives to promote the global objectives and cross-regional information sharing through the formation/support of a network, further development of concepts, tools

and training materials, global training of trainers, South-South exchanges, and collaboration with international and regional organisations.

http://www.idrc.ca/en/ev-64152-201-1-DO_TOPIC.html

This site is also available in French and Spanish.

Chapter 4 Gender Mainstreaming the Project Cycle¹³

Among the shortcomings in development programmes and projects is that issues of gender, poverty and environment are often included solely as an after thought or as separate and mutually exclusive categories. If gender issues are addressed at project conception, they can more easily be incorporated in the design, implementation and evaluation. Programmes that do not take into consideration the differing needs of men and women and their social, economic, cultural, linguistic realities during all their phases run the risk of being ineffective, inefficient and unsustainable. This chapter presents a generic project cycle that can be adapted to suit local contexts. It also demonstrates the gender aspects that need to be considered at each phase of the project cycle. Country officers supporting national programmes, project offices, gender experts and those interested in gender within project implementation can use the generic project cycle. It is important for the project to be clear on its objectives in relation to gender and equity issues.

Some questions that need to be asked are:

- How are the needs of men and women reflected in the project?
- Who has been consulted?
- How was consultation done to facilitate input from men and women of different social classes?
- Is the project plan based on an understanding of gender differences in the target group/s?
- Has the project taken into consideration the expected changes in needs for time, labour and finance commitments?
- Have gender-sensitive indicators been identified to clarify objectives and facilitate monitoring?
- How will objectives for gender equality and women's participation be pursued in the project? Have specific strategies been identified?
- Have obstacles that may hinder the participation of men and women from all sectors of society been identified and strategies put in place to deal with these?
- Does the project management structure provide the necessary expertise on gender and diversity?
- Have the budgetary implications of diversity and gender been considered?
- Does monitoring provide for sex-disaggregated data collection on participation in various aspects of the project and on the selected indicators? (adapted from SIDA, 1996)
- Has thought been given to gender implications when the project is finished?

Issues and Questions to Consider when Gender Mainstreaming the Project Cycle

4. 1. Programme and Project Identification

Step 1: The external support agency participates in the programme or project identification.

This includes an assessment of key development programmes and trends including those addressed by global conferences and conventions.

¹³ Sources for material consolidated in this Chapter are identified in the list of references at the end.

Issues and Questions

- How can the external support agency assist the fulfilment of national commitments to both gender equality and sustainable development?
- Can the external support agency help identify opportunities where efforts to support sustainable resource use (especially water) overlap with efforts to support equality between women and men?
- Does the overall cooperation framework draw on analysis of how gender inequalities have an impact on environmental issues?
- Have government institutions responsible for gender equality been involved in setting priorities?
- Have women's organisations and gender equality advocates been involved in setting priorities?

Step 2: Analysis of policies

Issues and Questions

- Have gender and diversity issues been given attention in the analysis of existing national policies and programmes in the IWRM sector?
- Are national programmes and investments in IWRM likely to extend benefits and opportunities equitably to women and men and especially poor women and men?

Step 3. Engagement of key government officials and other stakeholders in a dialogue on the policy framework for national development

Issues and Questions

- Have government institutions responsible for gender equality been involved and consulted?
- Have women's organisations and gender equality advocates been involved and consulted?
- Have there been discussions with organisations with an expertise in IWRM as to their interest and capacity in dealing with gender issues?
- Have efforts been made to ensure women's participation at all levels?
 - In grassroots consultations?
 - As water professionals?
 - At all levels of government?
- Has there been an analysis of the obstacles to diverse women's participation and have strategies been developed to overcome those barriers?

Step 4. Assessment of design issues in projects at the community level

Issues and Questions

- Technical design: Have both women's and men's views about technology options and design features been sought?
- User contributions: Have differences between women's and men's willingness and ability to contribute labour, materials or money been determined?

- Time/Workload considerations: Does the initiative increase women's/men's/girls'/boys' workload both during and after construction? Does the demand for women's and girls' unpaid labour increase? Are there conflicting demands?
- Operation and Maintenance: How are operating and maintenance rights and responsibilities shared between diverse women and men? Do these reflect their use of the service system?
-

4.2 Formulating Programmes and Projects

Step 5: Assessing projects to strengthen institutional capacity

Issues and Questions

Gender issues in capacity building projects.

- What is the existing capacity of institutions and individuals to work with a gender perspective?
- What is the capacity of institutions and individuals to promote women's and men's participation at all levels?
- What is diverse women's and men's capacity to participate in tasks in technical fields, in decision making positions, and at the community level?
- Do policies exist to guide the institutions?

Step 6: Gender considerations in project development

Issues and Questions

- Have gender differentials in existing water rights been identified?
- Have existing patterns of access and control of water sources been analysed and addressed?
- Has consideration been given to legal frameworks and institutional reform so as to work towards equitable access for both women and men to productive resources?
- Have needs, roles and workloads of women and men been assessed?

Step 7: Understanding the context and baseline data

The participants in programme or project design should initially establish a common understanding of the situation including socio-economic, gender and bio-physical characteristics.

Sufficient data, sex-disaggregated wherever possible, must be gathered at this stage to establish a baseline for the project.

A stakeholder analysis is recommended.

Issues and Questions

In looking at the water sectors, has the analysis taken into consideration needs, resources, and the different priorities of communities marginalised due to caste, age, disability/ability, class, etc.? For example,

- Within the current water usage and management, are the different roles and responsibilities of women and men in water use and management documented and understood (domestic and productive, commercial agricultural use, subsistence production, the urban informal economy, etc.)?
- Compare access to and control over all resources related to water between women and men in different socio-economic classes (rights to land ownership and capital assets, inheritance patterns, credit, etc.); labour supply (unpaid family labour, paid employment, etc.).

Step 8: Create a vision and define problems to be addressed

The underlying causes of problems will often be perceived differently by different stakeholder groups including individual women and men. Experience in participatory processes can prove helpful in establishing a broad understanding of the situation.

During the process of defining problems, the participants could also research similar experiences in the country or elsewhere.

Issues and Questions

- Who has been consulted and how were they involved in the consultation process?
 - Were both women and men consulted? Were there specific attempts to involve gender equality advocates and specialists (academics, researchers, policy analysts)?
 - Was the consultation process organised so as to maximise input from women and gender equality advocates?

Step 9: Identification of alternative strategies

A wide range of stakeholders should carry out an exploration of alternative strategies so that innovative approaches or new opportunities do not get overlooked and potential risks are identified.

Issues and Questions

- In looking at alternative strategies, consider the possible benefits of strategies that promote women's participation and work toward sustainable water resources management.

Step 10: Selecting the most promising strategy

Before deciding on a programme or project strategy, it is important to consider the implications of possible solutions in terms of likely impacts, opportunities that could be seized, and trade-offs between choosing one strategy over another.

Risks: Interventions imply certain risks and can have positive or negative effects.

Opportunities: The defined scope of the proposed intervention may inhibit the search for measures that mitigate negative effects. Looking for opportunities can pave the way for creative solutions.

Trade-offs: It is important that trade-offs and opportunity costs between different strategies be understood.

The capacity of the concerned organisations, institutions and individuals to carry out activities effectively, efficiently and sustainably must also be examined.

Issues and Questions

- In looking at trade-offs, is specific care taken to ensure that women do not lose?
- Does the risk analysis look at possible and different negative and positive affects on women and men, young and old?
- Has there been an analysis of the opportunities for change and potential to both recognise women's participation and ensure equitable benefits for women and men, young and old?
- In looking at the capacity of ministries and institutions associated with the initiative, do they have the capacity to identify and work with gender issues? For example:
 - Do they have access to information on gender-related issues in the sector?
 - Do they have the skills to formulate and analyse questions on the gender dimensions of IWRM?
- Has the institution developed a strategy for public participation and community empowerment that seeks to understand the views and priorities of both women and men?

Step 11: Defining objectives and outputs

Participants should work out the programme support for project design; that is, a hierarchy of objectives, outputs, activities and inputs.

Issues and Questions

- Consider whether or not it is appropriate to have specific objectives relating to gender. If there are not concrete expected results related to gender, then gender tends to 'fade out'. Usually efforts tend to focus on the expected results as defined in project planning documents.

-

Step 12: Using the logical framework

The logical framework is a matrix that summarises the main elements in programme and project design.

Issues and Questions

- Are gender issues clearly set out in the logical framework?
- Are there specific indicators identified to monitor results relating to diversity and gender equality?
- Will indicators be disaggregated on the basis of sex?

Step 13: Determining activities

Once the outputs have been agreed to, the activities that will produce these outputs must be determined.

Issues and Questions

- What activities are required to ensure attention to gender issues?
- Is training required?
- Is it necessary to research specific issues or draw in particular stakeholders?
- Experience has shown that careful planning is required to ensure that the gender focus is not lost.

Step 14: Determine the management arrangements.

As part of project formulation, it is essential to determine how activities will be carried out so that the programme support or project objectives can be achieved within the established limits of time, quality and costs.

Issues and Questions

- Does the implementing agency or institution have a commitment to gender equality and to achieving positive outcomes for women through the project?
- Are the responsibilities and expectations concerning gender aspects in the project clearly spelled out in project documents, agreements or contracts?

Step 15: Specifying indicators for monitoring and evaluation

Indicators assist in determining the extent to which a programme or project is achieving its expected results.

Through the consultative process outlined above, the participants agree on how progress towards achieving the objectives is to be measured, and what the indicators of success will be.

The monitoring and evaluation arrangements must be determined during the formulation of the programme or project and its objectives.

Issues and Questions

- In projects involving community-based initiatives, have both women and men from the communities participated in the creation of indicators?
- Have other relevant women and men been involved in determining indicators?
- Are there indicators to track progress toward meeting specific objectives relating to women's participation, the capacity of organisations to work with a gender perspective, reduction in women's time obtaining water, etc.?

Step 16: Identifying external factors and risks

External factors are events or decisions that are beyond the control of the managers of the programme or project and which nonetheless affect the achievement of the objectives, the production of the outputs, the implementation of the activities, and the delivery and utilisation of the inputs

Issues and Questions

Women's ability to participate in the initiative may be influenced by a variety of factors outside the control of the programme managers such as discriminatory attitudes, child care and domestic responsibilities, literacy, lack of time, etc.

Step 17: Identifying prior obligations

A common way to minimise risks is to provide for activities to begin only after certain conditions have been met.

Issues and Questions

It is important to monitor whether initial conditions relating to gender issues have been met. For example, if the plan stated that a gender specialist was to be hired, was this done?

4.3 Implementation

Step 18: Ensuring meaningful participation

Issues and Questions

- Are government institutions responsible for gender equity and equality represented during implementation?
- Is there representation from organisations with an expertise in IWRM in the project team?
- Have women been given a chance to participate in technical fields and in decision-making positions?
- Does the initiative increase women's/men's/girls'/boys' unpaid workload during construction beyond what was initially predicted?

4.4 Monitoring and Evaluation

Step 19: Monitoring

Issues and Questions

- In preparation for annual reporting and reviews, analyse important changes in the last year, for example:
 - New legislation, government policies or commitments on gender equality (these could relate to land tenure, credit, NGO policies, etc.);
 - New women's networks or organisations or changed profile/capacity of existing organisations;
 - Changes in economic and social conditions or trends that affect priorities, resources, and needs in the WRM sector.
- Are data for monitoring disaggregated by sex?

Step 20: Evaluation

Issues and Questions

- Do the evaluation 'terms of reference' clearly specify the gender issues and questions to be addressed in the evaluation?
- Will the evaluation consider project outcomes/results with respect to differences in needs and priorities of women and men?
- Does the evaluation team have the expertise to look at gender issues in the specific context of the project (irrigation, water supply and sanitation, wetlands, etc.)?
- In conducting the evaluation, will evaluators:
 - Disaggregate data by sex?
 - Seek the input of both women and men and analyse differences and similarities?
- Will the evaluation identify 'lessons learned' relating to working with a gender perspective in water resources management so these can be transmitted throughout the organisation?

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Thomas, Helen, Johanna Schalkwyk and Beth Woroniuk., 1997. *Handbook for Mainstreaming: A Gender Perspective in the Water Resources Management Sector*. SIDA in close consultation with the Department for Natural Resources and the Environment.

Additional Resources

GTZ, 1998. *Gender Training Tool Kit*. Self-help Fund Project.

This toolkit provides guidelines for participatory gender sensitisation training, outlining key concepts in raising gender awareness. The premise upon which the guidelines are based is experiential learning. The toolkit incorporates different techniques, exercises, and games, often utilising handouts, and prompts people to learn by analysing and reflecting on their experience. It includes tools for gender sensitisation, and for gender sensitive project planning.

Available at: http://www.siyanda.org/docs_genie/gtz/Gen.trng.fin.doc

UNDP, (no date). *Gender Mainstreaming Learning and Information Packs*

Although these Information Packs are meant to be resources for self-training, and for use in workshop situations devoted to gender mainstreaming, they can also be incorporated into workshops on other topics, to strengthen their potential for gender mainstreaming. Each Information Pack contains summary information, along with speaker's notes, handouts, exercises, further reading and linkages to relevant Internet resources.

Available at:

http://www.undp.org/women/docs/GM_INFOPACK/GenderAnalysis1.doc

Beyond Rhetoric: male involvement in gender and development policy and practice. Gender Training with Men.

A collection of articles on reflections and pointers on gender training for men. The experiences include many different countries and cultures.

Available at: <http://www.brad.ac.uk/acad/dppc/gender/mandmweb/seminar5.html>

WaterAid, 2002. *Indicators for a gender-sensitive approach to Sanitation Programmes and Services.*

WaterAid. 2002. *Indicators for a gender-sensitive approach to Water Supply Services.*

French Language Resources

Van Wijk-Sybesma C, 1996. *La politique du genre dans l'hydraulique villageoise, l'assainissement et la protection des ressources en eau : un guide méthodologique et technique.* Centre international de l'eau et de l'assainissement (IRC)

Centre régionale pour l'eau potable et assainissement (CREPA), 1992. *Rapport final du séminaire de sensibilisation des cadres féminins à la problématique de l'eau potable et de l'assainissement. Bamako.* CREPA, Bamako, Mali.

Spanish Language Resources

ANESAPA – PROAPAC – GTZ, 2003. *Género en Saneamiento Básico. Sistema Modular de Capacitación.*

Los contenidos son formativos y parten de los conceptos básicos que hacen al género, para introducir luego el género en saneamiento básico, el estado actual del género y las herramientas para transversalizar el enfoque de género en proyectos de agua y saneamiento.

HIVOS – Unión Mundial para la Naturaleza, Fundación Arias Para la Paz y el Progreso Humano, 1999. *Ojos que no ven ... Corazones que sienten: Indicadores de equidad.* UICN, San José de Costa Rica

Esta publicación une las áreas de género y medio ambiente, a través de un proceso que pretende facilitar y apoyar a organizaciones e iniciativas de desarrollo rural de la región, asegurando la incorporación de la perspectiva de equidad de género en su quehacer institucional. Se enmarca en herramientas e instrumentos que permiten incorporar la perspectiva de equidad de género en el ciclo de un proyecto.

Programa de Agua y Saneamiento, América Latina y el Caribe, *Metodología e Instrumentos para su inclusión en Proyectos de Agua y Saneamiento.* World Bank Office, Lima, Peru.

Methodologies and instruments for gender mainstreaming in water supply and sanitation projects. Disponible en: http://www.aprchile.cl/pdfs/and_genero.pdf

Chapter 5 Gender Mainstreaming in Water Sector Policies and Institutions

What is a Gender Policy?

A gender policy inclusive of intersecting identities of race, class, caste, ethnicity, age, ability, and geographical location. is a public statement of a country's or an organisation's commitment to taking gender issues seriously, and a framework for what this means in the context of the organisation's work. A gender policy in water resources management relates to both of the following:

- the organisation's work: - i.e. women's and men's involvement in the planning, construction, operation, maintenance and management of domestic water supply, irrigation, sanitation or environmental protection;
- the organisation's internal culture and staffing – issues affecting female and male staff at work; for example, recruitment, promotion and training opportunities for female and male staff, sexual discrimination and harassment, and issues such as child care, paternity or maternity leave, and safe travel arrangements (Gender and Water Alliance, 2003).

Why Develop a Gender Policy?

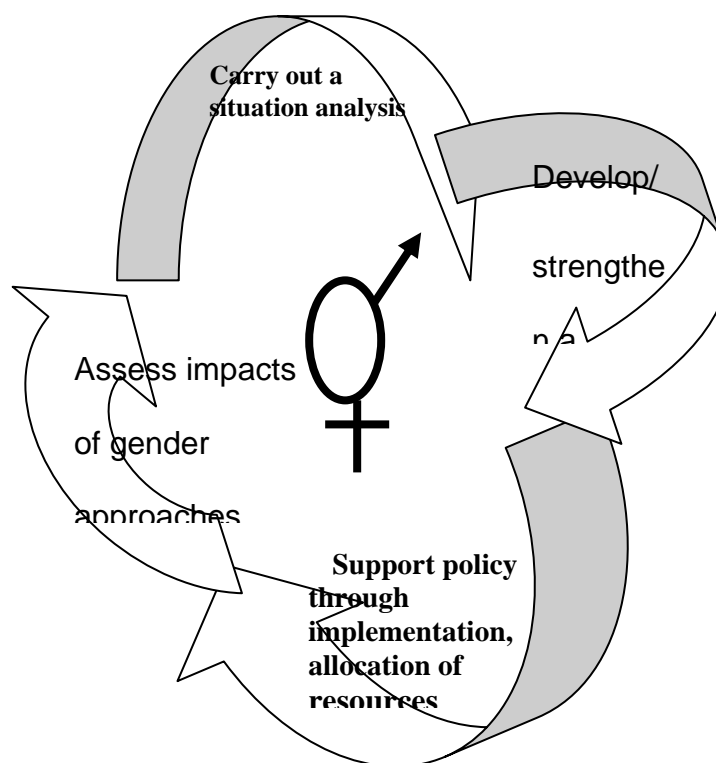
The development of a gender policy is a necessary and common starting point for focusing attention on gender issues in an organisation and its work. For organisations which have already taken some steps towards promoting gender sensitivity (for example, through providing staff with training and guidelines), development of a gender policy is an opportunity to consolidate and formalise the steps they have taken, and think strategically about the future. A gender policy provides:

- a valuable opportunity to involve staff and other key stakeholders in thinking through why gender and social equity are important to the organisation's work and what the implications are for practice;
- a public statement of the organisation's commitment to taking gender issues seriously;
- agreed gender-related action and indicators of change;
- an instrument of accountability against which to evaluate the organisation's performance.

Gender policy development and implementation require an on-going strategy for the capacity building of all members and partners of the institution or organisation.

Policy development is not a one-off process. It is important to re-visit gender policies that have been in existence for some time, evaluate performance, review lessons learnt, and develop and launch revised policy commitments accordingly. The figure below illustrates how policy formulation should be a continuous process.

Policy formulation should be a continuous process



Policy Components

Three distinct components are important for an effective gender policy:

- Situational analysis – examining gender issues concerning beneficiary groups and the organisation itself. The latter includes an examination of staff knowledge, skills, commitment and practices in relation to gender issues, and an examination of gender issues affecting staff (such as gender differences in promotion opportunities or sexual harassment at work).
- The policy itself – this should be devised on the basis of the situation analysis and comprise an explanation of why the organisation considers gender issues to be important, the organisation's vision of gender-sensitive practice, and the various ways in which this understanding will influence the organisation's work.
- An implementation strategy or action plan – this sets out in detail how the policy will be implemented over a specific time period, including activities, time-bound targets, budgets, responsibility and indicators for monitoring and evaluation.

Policy documents are usually public documents. Strategies and action plans are usually internal documents. Some organisations include aspects of their situation analysis in public documentation; others confine public documentation to the policy itself. Policies vary enormously in length – from two to several pages depending on what organisations choose to include in them.

Enabling Institutions

The implementation of a policy will depend to a large extent on a supportive institutional framework. It is therefore necessary to pay attention to the organisation itself. Developing appropriate understanding, commitment and capacity as well as addressing issues of gender

inequality within an institution or organisation is a long-term process of organisational change. Activities such as capacity building, budget allocation, setting of indicators and monitoring need to be undertaken. The table below summarises some of the organisational pressure points important for implementing gender-sensitive policy.

Table: Organisational Points for Gender Mainstreaming Institutions

Category of inquiry	Issues to consider	Steps to be taken for organisational change
WORK PROGRAMME		
Policy and Action plans Gender policies: Attention to gender in all policies.	<ul style="list-style-type: none"> • Is there a gender policy? • When was it developed and who was involved? • Does it use sex-disaggregated data? Is its implementation being monitored? 	If there is no gender policy but a desire to address inequalities between men and women, then follow steps outlined above.
Policy Influencing	<ul style="list-style-type: none"> • What is the attitude of senior management staff to gender issues? Who are formal and informal opinion leaders? • Which external agencies or people have an influence on the organisation? • What are the decision making bodies? 	<ul style="list-style-type: none"> - Assess who are the champions for gender equality and equity - Engage all relevant and potential staff and management. - Create a participatory and inclusive environment for policy development.
Human Resources - Gender Focal Staff - All staff	<ul style="list-style-type: none"> • Is there a designated gender unit/focal person? • What do they do? With what resources? Are other staff members gender-aware? • Is sensitivity to gender included in job descriptions and assessed at job evaluations? 	<ul style="list-style-type: none"> - Have clear TORs for the unit/focal persons. - Establish training in gender mainstreaming and advocacy as an on-going process with action targets. - Have professional backstopping support. - Involve focal units as an integral part of existing processes and programmes.
Financial /time resources - Gender equality initiatives on the ground - Staff capacity building initiatives	<ul style="list-style-type: none"> • Is there funding for capacity building on gender? • Is there funding for gender actions on the ground? 	<ul style="list-style-type: none"> - Allocate budgets for staff capacity building and for actions on the ground. - Allocate time for actions at the operational level. - Develop indicators to monitor progress.
Systems procedures and tools	<ul style="list-style-type: none"> • Is attention to gender included in routine systems and procedures (information systems, appraisals, planning and monitoring)? 	<ul style="list-style-type: none"> - Include gender in systems and procedures - Develop sex-disaggregated information systems - Include gender in staff TORs and interviews.

	<ul style="list-style-type: none"> • Have staff been issued with guidelines on gender mainstreaming? 	<ul style="list-style-type: none"> - Have indicators for monitoring policy progress in implementing gender. - Develop checklists and guidelines
WORK CULTURE		
Staffing statistics	<ul style="list-style-type: none"> • What are the numbers of men and women at each level in the organisation and according to roles and sectors? • Check employment and hiring polices. 	<ul style="list-style-type: none"> - Have gender sensitive recruitment policies that are not discriminatory, even though gender is not about balancing numbers - Provide staff access to decision making processes.
Women and men's practical and strategic needs	<ul style="list-style-type: none"> • Does the organisation create a safe and practical environment for women and men e.g., transport, toilets, childcare, and flexibility of working hours? 	<ul style="list-style-type: none"> - Analyse the organisation with respect to its sensitivity to the different needs of women and men. - Look at organisational assets such as equipment, furniture, toilet design and accessibility, etc. Are they suitable for women and men?
Organisational culture	<ul style="list-style-type: none"> • How does information flow and to what extent are women and men included in the communication chain? • What are the main shared values? Do they relate to equality? And specifically to gender? • Is decision making centralised or decentralised? • What are the attitudes towards female/male staff? 	<ul style="list-style-type: none"> - Adopt an organisational culture that values women and men's perspectives equally. - Explicitly state the organisation's commitments to gender equality in all policies and programmes. - Decentralise decision making to allow both women and men a voice in organisational decision making.
Staff perceptions	<ul style="list-style-type: none"> • What are the male and female staff perceptions towards gender? 	<ul style="list-style-type: none"> - Conduct gender capacity building and awareness raising programmes, especially where gender is seen as just one of the donor requirements and not an organisational value.
Policy and actions	<ul style="list-style-type: none"> • Does the organisation have equal opportunity polices? What does the policy cover? How is it promoted and implemented? 	<ul style="list-style-type: none"> - Pay attention to equality within the structure, culture and staffing of organisations as well as in the programmes, policies and procedures. - Assess and evaluate continuously using gender-sensitive indicators to enable a comprehensive review.

Source: Adapted from Derbyshire, 2002.

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Glossary

Adaptation (adaptive capacity and adaptive strategies) refers to the ability of livelihood systems to cope with or adapt to change by reducing their vulnerability through strategies such as livelihood diversification by developing the requisite skills and capacities as well as access to supporting resources such as micro-credit.

Disaster is a serious disruption of the functioning of a community or society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community to cope using its own resources. A disaster is a function of the risk process: hazards + vulnerability.

Empowerment is about people – both women and men – taking control over their lives: setting their own agendas, gaining skills, building self-confidence, solving problems and developing self-reliance. No one can empower another: only the individual can empower herself or himself to make choices or to speak out. However, institutions including international cooperation agencies can support processes that can nurture self-empowerment of individuals or groups.

Gender is the culturally specific set of characteristics that identifies the social behaviour of women and men and the **relationship** between them. Gender, therefore, refers not simply to women or men, but to the relationship between them, and the way it is socially constructed. Because it is a relational term, gender must include women **and** men. Like the concepts of class, race and ethnicity, gender is an analytical tool for understanding social processes (Status of Women, Canada, 1996).

Gender Analysis is a systematic way of looking at the different roles of women and men in development and at the different impacts of development on women and men. Essentially, gender analysis asks the 'who' question: who does what, has access to and control over what, benefits from what, for both sexes in different age groups, classes, religions, ethnic groups, races and castes? Gender analysis also means that in every major demographic, socio-economic and cultural group, data are separated by sex and analysed separately by sex. A gender focus - that is looking at males and females separately, is needed in every stage of the development process. One must always ask how a particular activity, decision or plan will affect men differently from women, and some women or men differently from other women and men (Rani Parker, 1993). Looking at how water management tasks are divided across the sexes and age groups shows for example on which aspects water projects need to work with women or with men, as within families, different categories of women, and men, tend to have different tasks, decision-making power and knowledge (van Wijk, 1998).

Gender Equality means that women and men enjoy the same status. Gender equality means that women and men have equal conditions for realizing their full human rights and potential to contribute to national, political, economic, social and cultural development, and to benefit from the results. Gender equality is therefore the equal valuing by society of both the similarities and differences between women and men, and the varying roles that they play as for example the different roles of women and men in water resources management.

Gender Equity is the process of being fair to women and men. To ensure fairness, measures must often be available to compensate for historical and social disadvantages that prevent women and men from otherwise operating on a level playing field. Equity leads to equality.

In the water sectors gender equity often requires specific policies that focus on the technical capacity development of women and the hiring and promotion of women in water resources management to address their historical disadvantage in decision making in these sectors.

Gender Mainstreaming is the process of accessing the implications for women and men of any planned action, including legislation, policies and programmes in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres, so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality [*by transforming the mainstream*] (ECOSOC, 1997, emphasis added).

Gender Relations constitute and are constructed by a range of institutions such as the family, legal systems, or the market. Gender relations are hierarchical relations of power between women and men and tend to disadvantage women. These hierarchies are often accepted as “natural” but are socially determined relations, culturally based, and are subject to change over time.

Hazard is a natural or human-made phenomenon that may cause physical damage, economic loss and threaten human life and well-being.

Integrated Water Resources Management or IWRM is a process which promotes the coordinated development and management of water, land, and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. (Global Water Partnership/Technical Advisory Committee.)

Intersectionality is about recognising that women experience discrimination and violations of human rights not only on the basis of their gender but also from other power relations that are due to their race, ethnicity, caste, class, age, ability/disability, religion, and a multiplicity of other reasons including if they are indigenous.

Livelihoods comprises the capabilities, assets (material and social) and activities required for a means of living. A livelihood can be said to be sustainable when it can cope with and recover from stress and shocks, and maintain or enhance its capabilities and assets without undermining the natural resource base.

Resilience is the capacity of a system, community or society to resist or to change in order that it may obtain an acceptable level in functioning and structure. This is determined by the degree to which the social system is capable of organising itself, and the ability to increase its capacity for learning and adaptation, including the capacity to recover from a disaster (self-organise).

Risk is the expected damage or loss due to the combination of vulnerability and hazards. People are considered at risk when they are unable to cope with a disaster.

Stakeholders are those who have an interest in a particular decision, either as individuals or as representatives of a group. This includes people who influence a decision, or can influence it, as well as those affected by it.

Vulnerability defines a set of conditions and processes resulting from physical, social, economic and environmental factors which increase the susceptibility of a community to the impact of hazards.

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Afrika:
Water for African Cities:
**A Partnership between United Nations Human Settlements Programme
(UN-HABITAT) and the Gender and Water Alliance (GWA)**

Background

UN-HABITAT, the United Nations Agency mandated to promote socially and environmentally sustainable human settlements, has since 1999 been assisting cities in African countries, through the Water for African Cities (WAC) Programme, to improve the management of water and sanitation.

The goal of the WAC is to contribute to the achievement of the water and sanitation targets of the Millennium Development Goals (MDGs). The highest priorities of the Programme are to reduce the urban water crisis through efficient and effective water demand management, build capacity to reduce the environmental impact of urbanization on freshwater resources and boost awareness and information exchange on water management and conservation.

The Gender and Water Alliance was established in June 2000 to promote gender mainstreaming as a fundamental part of integrated water resources management. The Alliance works with policy makers and staff in water sector organizations and community groups, developing their skills in gender analysis, their understanding of and commitment to gender equality, and the partnership linkages between them from “bottom” to “top.” This requires capacity building – sharing information, training in gender mainstreaming and advocacy, dissemination of gender analytical tools and methodologies, and networking – as well as targeted initiatives to promote gender mainstreaming in specific contexts.

A. Gender Mainstreaming Strategy Initiative

Fully aware of the burden placed on women and children in fetching water, and the adverse consequences of inadequate supplies in the participating countries, UN-HABITAT, in partnership with the GWA started a Gender Mainstreaming Strategy Initiative (GMSI) in January 2005.

The objective of the GMSI is to facilitate the gender mainstreaming of water and sanitation utilities through the development of gender sensitive norms and standards to enable the poorest urban families to benefit from improved access to safe water and dignified sanitation facilities. The GMSI is comprised of eight underlying principles:

- A participatory research approach, based on the understanding that participation is the key to learning, awareness raising, and garnering political commitment.
- Local expertise and resources, based on the understanding that local experts have a much deeper understanding of local realities and the context surrounding programme initiatives than external experts, and that they will remain in the geographic location. Thus, they represent a valuable human resource.
- Location specific context, knowledge, and situations as the basis of analysis to inform and influence national policy and sector wide reforms, in order to ensure they are pro-poor and gender-sensitive.
- Strengthening of existing networks to support local capacity building through knowledge expansion and forging partnerships that foster multi-sectoral approaches.

- Innovative, creative, and useful learning and communication material to support awareness raising and capacity building efforts.
- Capacity building integrated into the strategy to ensure sustainable long term results.
- Exchange of information, methodological approaches, and situational analysis integrated in the design and implementation of a sustainable Gender Mainstreaming Strategy and city-level Action Plans.
- Follow-up support to the implementation of concrete actions. The strategy will not only produce plans which can be presented as evidence of gender mainstreaming, but will also foster concrete action at local levels to ensure the achievement of the objectives of gender mainstreaming.

B. Achievements from the partnership UN-HABITAT with GWA

In 2005, UN-HABITAT commissioned the GWA to conduct a Rapid Gender Assessment (RGA) in 17 cities in 14 countries, namely: Abidjan, Cote d'Ivoire; Accra, Ghana; Addis Ababa, Dire Dawa, and Harar, Ethiopia; Bamako, Mali; Dakar, Senegal; Dar-es-Salaam, Tanzania; Douala and Yaoundé, Cameroon; Jos, Nigeria; Kampala, Uganda; Kigali, Rwanda; Lusaka, Zambia; Nairobi, Kenya; and Ouagadougou, Burkina Faso.

The objective of the RGA was to use a pro-poor and gender lens to identify, gather and analyze baseline data relevant to the six priority themes of the second phase of Water for African Cities, as indicated in the section below. These priorities were identified by participants from the 17 African cities.

1. Pro-Poor Water Governance and Follow-up Investments

Recommendations focus on how local utilities can deliver water and sanitation services with affordable charges for the poor, especially women.

2. Sanitation for the Poor

Financial mechanisms are needed to ensure that sanitation services are accessible to all in the community, particularly the poor, and specifically poor women and men. Recommendations are aimed at national and regional governments. Specific attention is paid to the creation of opportunities for income generation activities for both women and men in areas such as construction of latrines and recycling and re-use of solid waste, the products of which are used as revolving funds for innovative lending, savings and training, particularly for female headed households.

3. Urban Catchments Management

Residents in peri-urban areas must have access to affordable, convenient, and safe water sources. Recommendations relate to implementation of minimum improvements to the traditional water sources with adequate and regular health education messages to improve effective and hygienic use of water.

Agencies and institutions are urged to incorporate gender equity considerations throughout the programme design, implementation, monitoring, and evaluation processes. Gender analysis skills training can be used to assist urban planners to mainstream gender in Integrated Water Resources Management (IWRM) and help to incorporate poor women and men's needs in urban planning programmes.

4. Water Demand Management

Water demand management is needed to conserve water and improve efficiency, and strategies and plans need to reflect a gender-sensitive and pro-poor perspectives. Gender concerns should be integrated into the institutional and legal framework of the WDM strategies.

5. Water Education in Schools and Communities

A deliberate effort will have to be made to change traditional views of gender roles in textbook writing and the role of curriculum and teachers in gender equality and equity. Recommendations for training and educational material encourage recognition of the needs of both genders.

6. Advocacy, Awareness-raising, and Information Exchange

Recommendations aimed at local governments focus on developing gender-based information, education, and communication materials and tools. The participation and representation of women and men from informal settlements and slums are encouraged in public meetings.

Information exchange and dissemination can use different forms of media such as drama, games and demonstrations in the promotion of water and sanitation and enhancement of gender mainstreaming.

Conclusion

The action plans developed by each city are currently at different stages of implementation, but the outcomes of the process of ownership and learning by doing is remarkable. While the training needs gap will feed into the sub-programme on Training and Capacity Building, UN-HABITAT and the GWA are in the meantime preparing terms of reference for a high level policy meeting of stakeholders from the 17 African cities to reflect on the progress made on the implementation of the various action plans at city level with a view to identify gaps and design a strategy for gender-sensitive policy.

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Bangladesh: Gender Mainstreaming Processes in Community-based Flood Risk Management

Challenges

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 orchestrate 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 are more active in the home and thus have less mobility in the community and understand hazards less. Women's voices are barely heard regarding risk reduction in policy and decision-making processes.

Programme/Projects

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) 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. There was a 98 per cent response rate for the household survey done by CEGIS.

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.

Outcomes

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.

Responses to the programme:

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 save his investment on shifting. *“We understand the flag network warning system and it is helpful”*.

Key Factors for Success

- *Gender analysis framework*: The 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.
- *Additional frameworks*: After the gender analysis framework provided insight into gender and disasters, the Harvard analytical and the access and control frameworks were used to make women’s roles visible in risk management.

Main Obstacles

- *Forecasts not adapted locally*: All of the men and women involved in the survey said that they were unable to 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.
- *Gender disparity in information reception*: In general, women receive very little information in comparison to men before and during floods as they are busy taking care of children, collecting drinking water, and preserving seeds, fuel, food and cash. Men have greater access to warning information because of their interpersonal communication with others and their access to radios and TV.

Looking Ahead - Sustainability and Transferability

In order to continue disaster risk reduction in other locations, two roles need to be successfully fulfilled:

- *Community*: The community is imperative to disaster risk reduction. Community members are the key actors as well as the primary beneficiaries of disaster risk reduction.
- *Government*: National and local government agencies must engage and encourage women to participate along with men in implementing flood preparedness measures. 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.

Further Information

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Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

Bangladesh: Women, Men and Water-Pumps

Innovations in mechanical irrigation equipment have led to a rapid expansion of irrigated agriculture in rural Bangladesh. This technology has been taken up chiefly by men who use the pumps to irrigate their own land and/or to sell the water.

To increase women's participation in this income-generating activity, some NGOs have started female and mixed-sex irrigation groups that own and manage a pump collectively.

The aim is to enable the rural poor to gain control over both the material and social resources essential to enter and compete in the water market. There are four different approaches:

- the household approach aimed at increasing household income;
- the empowerment approach, aimed at improving women's status through income-generating activities which enhance women's own incomes, eg. supporting women to manage and operate a pump autonomously;
- the poverty alleviation approach, e.g. helping the poor to engage in profitable enterprises such as water sale;
- and the shareholders approach in which individuals (not the irrigation group) are responsible for loan-taking and repayment.

If irrigating own household land is an important aim, men's own interests are likely to prevail; whereas, if water sale is the main aim, the opportunity is greater for women to mobilize funds and labour independently. Only a strong female irrigation group that is cohesive, effective in decision-making and problem solving, and able to mobilize its own funds and labour can manage and keep control over an irrigation activity itself.

Results from case studies show that for the majority of female irrigation groups (FIGs) operating in Bangladesh, related men's interests provide the initiative for the irrigation group (IG) to take an NGO loan to purchase an irrigation pump, and that water-selling emerges as a more common aim due to limited access to land for own crop production. Women's limited economic gain from participation in mechanized irrigation is seen mainly in water-selling IGs, in strong groups and in female-managed households.

To assess the impact of women's involvement in irrigation on their status, two FIGs under an empowerment and poverty alleviation approach and two mixed-sex IGs under the shareholders approach were studied. The strong FIG of Shyampur, through managerial and technical skills training, succeeded in independently starting and managing a collective water-selling enterprise with a sound perspective on managerial and financial sustainability. Women's social status definitely improved as a result of their involvement in the enterprise, their familial status in male-headed households improved in ¾ of the cases, and their relations with their husbands in ½ of the cases.

A case in Fuljhuri shows that women must have more control in management at the earliest phase of a new enterprise in order to ensure their continued participation. Six years ago, a group of men in Fuljhuri convinced a female cashier working at Grameen Bank and the Women's Centre to take a DTW (deep tube well) loan, accepting the conditions that the loan be taken in women's names, that a female manager be chosen and that women undertake

some activities in the fields. However, behind these appearances of women's management, men were the real managers of the DTW and in the end installed an exclusively male management committee. Despite this, women's social status in the village and their public behaviour have improved, and they have obtained a better self-concept and increased mobility within the community.

A BRAC (Bangladesh Rural Advancement Committee) sponsored DTW scheme in Jiban Nagar involved a mixed-sex irrigation group in a shareholder approach. The poor shareholders, mostly women, regret that they became shareholders but they cannot withdraw from the scheme until the capital loan is fully repaid without losing the money already put in. In BRAC's approach the gender-composition of the shareholders is not reflected in the IG's decision-making, which remains male-dominated. In the IG, only by virtue of the female manager's ambition, intelligence and socio-economic class, her earlier experience in the scheme committees, the electoral support of most women shareholders (the majority), and the support of her husband, could she become manager in spite of serious opposition from men and the norm rigidly adhered to in the village of women not going into the fields. In general, changes in women's status were negligible.

In a DTW enterprise in Jankhali, the female and male managers represent the two groupings of poor sellers and rich buyers and the power balance between them. The female manager was forced to withdraw after one season by the richer men of the other grouping who wanted to get back their own control over the enterprise.

What the case illustrates:

- Women are well able to take up irrigation management effectively, especially under an empowerment approach.
- BRAC's shareholders approach does not encourage women to fulfil more responsible and paid management functions.
- Although women's own control over economic gains is uncertain, personal, familial and social status of members of FIGs improves considerably.
- The indirect economic gains and improved status for women acting as intermediaries for loans to their male relatives should outweigh possible burdens.
- Provision should be made for poor women shareholders to leave unprofitable enterprises and get back capital instalments already paid, or get partial ownership rights recognized.

Source: Unknown. If you the reader know the source of this case study, please do let us know.

Brazil:

Conscious Fostering of Women's Leadership

Challenges

The community of São João D'Aliança is located in the central plateau region of Brazil, where much of the original vegetation has been cleared to plant cash crops. It is home to about 6,700 people, most of whom work in agriculture. The municipality does not have a sewage collection or treatment system, and 23 per cent of the population in the area use alternative sources of water. Concerns in this area include:

- The disposal of animal scraps in the das Brancas River and domestic waste on the river banks;
- The impact of farm pesticides on people and the environment;
- The increase in diarrhoea during the rainy season, when rain brought pesticides into the river; and
- Gender inequalities stemming from a long heritage of male chauvinism.

Programme/Projects

In 2000, in response to farmers' concerns about the deterioration of water in the area, the local Union of Rural Workers in collaboration with University of Brasília (UnB) designed a water project with the community. The project identified that there was a need to join efforts to stop pollution of the das Brancas River and to rehabilitate the river banks' original vegetation in a women-led initiative, called the 'Water Women' project. The approach was designed to have each group of women adapt environmentally-friendly practices to their every day activities. Some activities that formed part of this project included:

Raising awareness, education and training on the environment:

- A collective effort to plant native seedlings in the most depleted riverbanks to rehabilitate the soil, prevent erosion, restore the original vegetation and improve water quality and levels;
- A waste clean-up campaign organized to raise awareness on the importance of proper garbage disposal and its effects on local quality of life and the environment; and
- A teacher training course in environmental education developed in 11 local schools to raise interest about water protection and conservation and enable the teachers to integrate the issue in their school lessons. Student workshops and school-based contests promoted the awareness of preservation and rehabilitation of the local environment and culture.

Gender mainstreaming and involvement of the entire community:

- A woman's group within the union formed with the purpose of mobilizing public involvement and assessing the community's needs. They visited community members to introduce the project, identify their needs and obtain their support. They also held a meeting to discuss future plans;
- Women were in leadership roles, including the positions of local union president and the technical assistant from the UnB; and
- Men protected the new planted seedlings and created artwork and music to support the clean-up campaigns.

Outcomes

Environmental impact:

- There is a visible absence of waste in the river and domestic garbage by the river banks, a considerable growth of new vegetation of native species on the river banks and decreased soil erosion.

Community impact:

- There is an increased community mobilization of people of all ages and backgrounds; and
- Community awareness of the immediate environment has significantly increased.

Women's empowerment and participation in project leadership:

- The women involved led a successful process of environmental education and river and vegetation rehabilitation. In the process, women's political participation was strengthened and public perceptions regarding their leadership capability were changed.

National recognition of positive effects:

- The organization has gained recognition at the national level through the award of third place for the 2002 Environment Prize von Martius sponsored by the São Paulo Chamber of Commerce and Industry Brazil-Germany.

The creation of an NGO:

- In the wake of this project, the participants decided to create an NGO to continue their work. The 'Water Women' (Mulheres das Águas) NGO was launched in April 2002 to support social and environmental development of the region, with a focus on improving women's situations, generating new jobs and income, providing education to youth and adults and preserving the existing culture and traditions; and
- The Water Women organization has gained formal recognition of its leadership skills through a recent appointment to integrate the mobilization committee for the local implementation of the national Zero Hunger programme.

Change of attitudes:

- The Water Women NGO has acquired respect and sympathy from the community's men; and
- There is now an increased acceptance of, and respect for, women's new roles as community leaders, resulting in more equitable sharing of organizational tasks for community meetings.

Key Factors for Success

Capacity building and mobilization:

- Technical support from an interdisciplinary group throughout the entire process;
- Provision of courses on environmental education and participatory fieldwork. Provision of courses on income generation assisted women to promote sustainable livelihoods; and
- Use of diverse activities to enable all community members of different ages and abilities to participate, including an active school level educational programme and the documentation and rehabilitation of regional traditions.

Gender mainstreaming:

- Inclusion of a gender mainstreaming approach in the project design, especially the decision to encourage and support women's leadership in all projects.

Main Obstacles

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 the lack of support from their husbands. The issue of male support was particularly challenging for the married women involved.

Looking Ahead – Sustainability and Transferability

Future challenges:

- Developing new projects to subsidize their work, setting specific goals and indicators to evaluate the work and finding resources to closely monitor the actions already implemented;
- Improvement of the Water Women group's internal organizational capacity; and
- Finding of ways to work in partnership with the city administration that target the education, health, environment, tourism and agriculture departments.

Further Information

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- For a look at the Water Women project in São João D'Aliança (in Portuguese): <http://www.prac.ufpb.br/anais/anais/meioambiente/mulheres.pdf>

Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

Cameroon:
**“One Hand Does not Tie a Bundle”: Women’s Participation Transform
Water Management -Nkouondja**

This case illustrates:

-Women’s involvement in local water management increases creativity

In 1995, Nhouonda’s community water management system was sliding towards breakdown. The village’s water management committee was not functional. Both the physical condition of the system’s structures and the mentality of the people had degenerated. The committee’s president never called meetings. He took unilateral decisions and carried out irregular spending. The caretaker deliberately disrupted the water supply to certain parts of the village because he received no motivation from users. There were many leaky spots in the pipeline and frequent breakdowns of taps, resulting in shortage of water, especially during the dry season. This resulted in serious conflicts amongst members of the water management committee and between Nkouondja and Fosset, the two communities sharing the water. There was an acute shortage of funds to carry out maintenance on the system, as the population refused to pay when there was no system of transparency and accountability.

The women of Nhouonda were not members of the water management committee. They were therefore more alienated from the decision-making, and more adamant in refusing to pay their monthly contributions.

“Those who are charged with collecting the money are not honest,” one told an external observer. “They ask us to pay while they and their wives do not pay, and they expect those whose husbands have no position to pay.”

Each member of the community was supposed contribute an amount equivalent to 17 US cents every month. But no records were kept. A new system had been tried, in which the collector made a list of the names of contributors. But this list was never signed. People said their contributions were never recorded, the collectors embezzled some of the money, no information was given on the management of funds, and the management team could not even estimate what was expected.

“These men are not serious,” one old lady said. “We contribute money but they do not write it down and afterwards they say we never contributed.”

Villagers were no longer fully participating in the supply of local materials for the construction of a new catchment, meant to fulfil increasing demand by increasing the flow in the system.

This began to change when a Participatory Action Team (PAR) entered the village to help the community analyse its problems and prioritise the actions to be taken. The village chief called all his Quarter Heads together to discuss the halt in work on the new catchment. Various reasons were put forward for the lack of participation. Then the chief called on the PAR team to make a contribution.

The PAR team let the women of the village speak. Soon, the real causes were identified as well as the core solution. The community agreed to resume work on the catchment the very next day. The Quarter Heads said they would inform all members of the community that night that they should turn up for the work, and a monitoring system was set up to know who was not going to participate. The president of the women's group volunteered to supervise all the women and promised to remind them very early in the morning.

“Since you have been coming here,’ the village chief remarked to the PAR team, “you have talked to us about the importance of involving women. But we never could imagine the difference we now see. We wish that you continue to train them as much as possible. I would like to see them drive a car like the woman I saw in Foubot town.”

It was the start of an attitudinal change that was followed by physical changes. New pipes were bought, and all the old, leaky ones replaced. The technique of rationing water during periods of shortage was reversed so each Quarter received water two days a week. Broken taps were repaired punctually since management was decentralised to the Quarter level and even by standpipe. Some people in the Quarters were elected to collect monthly contributions and any other funds necessary for development of new installations. A new system was devised for keeping the surroundings of the standpipes clean: all the women living around a standpipe organised to clean in turns.

All of this has been achieved though the combined efforts of the men and women in the village. The women appreciated the respect they started getting from the Water Management Committee’s President, and so they contributed labour to improvement work.

“This project has come at the time we are very busy in the farm,” one woman noted when the new catchment project re-started. “But the way the president takes time to talk to us is such that you would not hesitate to participate.”

The Committee President retorts that he couldn’t possibly succeed without the help of the president of the women’s group.

Internal village fund-raising, good record keeping, accountability and transparency have become standard – resulting in the gradual improvement of the physical system. The entire system of funds collection has been tightened.

Women’s Voices Now Heard

Today, the women no longer peek from the window when officials connected with water come to the village. They actually attend joint sessions with the men and take part in decision-making. When a representative of the International Centre for Water and Sanitation visited the village in April, 2001, the women came out in numbers to welcome him. The Chief said:

“You have been having only bones when you come here, but today you are going to have the bone and the meat on it. Yes you have been hearing and seeing only what the men are doing, but today you are going to hear and see what the women are doing.”

Amidst clapping and cheering, they welcomed Aminato, the dynamic president of the women's group to the stage. She came out boldly and stood in front of the crowd and

read a prepared speech. At a later meeting, when the men insinuated that they would not cooperate with some of the decisions the women had taken in respect to raising their own contributions, the women openly and boldly said that they had ways to sanction them if they refused to give them support. They said they would refuse give them food. This led to a major debate between women and men. A young man expressed fear of women knowing too much, which could lead to divorces in the village. A woman stood up and challenged him, saying there had been divorces before. The young man backed down.

The village's attitude towards donors has also become more assertive and self-confident.

“We know that we are requesting help,” the Chief told representatives of a major aid organisation at a public meeting. “But that does not mean that we will die if you do not help us. When somebody gives you food with anger you will never feel like having eaten something.”

The youth association is also taking more assertive action in the community's water management programme.

“We have learnt that one hand cannot tie a bundle,” one of its members explained.

Source: Unknown. If you the reader know the source of this case study, please let us know.

Egypt:

Empowering Women's Participation in Community and Household Decision-making in Water and Sanitation

Challenges

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 Fargallah in Upper Egypt from January 2003 to December 2004. The project was aimed at approximately 700 households without sanitary facilities; 60 per cent of the people targeted were women (BLACD, 2002). Most of the residents work as casual labourers in agriculture and have little predictable income. There is one primary school and one health unit in the village. Prior to the project, more than half of the 1500 households in Nazlet Fargallah lacked latrines and access to clean and reliable running water. The most common preventable illnesses, including diarrhoea and kidney disease, were directly correlated with the lack of potable water and poor sanitation practices. Women are responsible for providing their families with water for drinking and washing and for waste disposal. Before the project, their main water source was communal hand pumps. Important concerns in Nazlet Fargallah included:

Water and sanitation:

- Gathering water, which required much time and effort as women had to make up to four separate trips a day to obtain adequate water. The time this consumed kept women from other household tasks, personal sanitation and other activities;
- Washing clothes and dishes in water contaminated with sewage;
- The practice of throwing human waste into the canal, contaminating the water and giving it a yellow colour as well as a bad smell and taste;
- Women and girls having to wait until after dark to relieve themselves. This affected their health and made them vulnerable to violence;

Traditional gender roles and gender imbalance:

- Traditional gender roles, allotted few rights to women. Women rarely took part in activities outside the home, and were fully occupied collecting water, looking after their children, and performing other household tasks. They were unable to participate in external social roles and most are illiterate; and
- Using legal obstacles to prevent 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.

Programme/Projects

The people of Nazlet Faragallah first approached BLACD for help after observing successful installation of latrines and taps in neighbouring villages. The project in Nazlet Faragallah had three main components: water connections; latrine installation at the household level; and hygiene education. BLACD worked actively to integrate gender considerations into its new projects, to strengthen gender-mainstreaming initiatives and increase project effectiveness. 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.

BLACD helped the village health visitors plan awareness raising campaigns about water and sanitation, and provided training on water and sanitation, basic health, nutrition, child and reproductive health and first aid as well as communications skills. The health visitors

participated by choosing the project beneficiaries based on agreed-upon criteria. Both women and men were involved in the project's planning as well as household-level decisions to participate in the project.

Outcomes

BLACD's success includes the following:

Impact on health and sanitation:

- Provided 700 households with 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 waste;
- Increased awareness of disease prevention, leading to change in sanitation behaviour; and
- Decreased time spent (mainly by women) collecting water and disposing of waste.

Gender mainstreaming and empowerment:

- Successfully integrated gender and the particular needs and interests of women into 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 health, well-being and livelihoods;
- Developed a sense of pride, in both men and women, over their households' independent access to water; and
- Increased women's security, dignity and sense of self-sufficiency.

Further activities and development goals:

- Established a women-based community development association for those who wanted to continue their community activities after the project's completion;
- Provided a basis for women seeking other rights in addition to access to water; and
- Increased the likelihood of achieving other development objectives.

Main Obstacles

Existing power structures hindered women's empowerment, particularly at the management level. Although the project 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. Some health visitors faced opposition from male family members, as did some women who wanted to participate in the water connection programme.

Despite numerous obstacles, the development association that was formed as a result of this project has now been formally registered.

Key Factors for Success

The project provides an effective model for implementing gender-sensitive water and sanitation programmes. It further demonstrates that women's active participation in water and sanitation projects is essential because of their key roles in the provision and maintenance of water, sanitation and hygiene at the household level. The project also recognized that in working together in partnership, women and men are effective and can foster increased collaboration between the two sexes at the household level.

Looking Ahead – Sustainability and Transferability

This project has shown that it is possible to both respond to the needs of marginalized communities while promoting changes in traditional gender roles. The development association formed provides a base for further activities using the experience gained through the course of this project.

Further Information

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- For information about Diakonia: http://www.diakonia.se/main_eng.htm

Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

Ghana: Gender Integration in a Rural Water Project in the Samari-Nkwanta Community

Challenges

In Ghana, traditionally, women and children are the primary collectors, users, and managers of household water. When water systems break down women and children are the most affected, since they then have to travel far to search for water for household use. 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.

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 nnko", meaning old women cannot get there. Many girls also had to abandon their schooling to search for water.

Programme/Projects

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. It is extremely painful and can cause permanent disability. This problem combined with poor access to potable drinking water in the region led to the birth of the Samari-Nkwanta Water and Sanitation Project (SWSP) in 1992.

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, which includes an acknowledgement that there is a significant correlation between gender issues, poverty alleviation and the well-being of children.

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

Outcomes

Positive outcomes of the project include:

- Promotion of gender equality: a shift from male-dominance to a more equitable sharing of power and decision-making, particularly within the WATSAN committee;
- Gender roles: women have on average five more hours per day to use more productively on their farms, in their households and for other activities;
- Education: girls now make up 53 per cent of primary school students, compared to 43 per cent in 1995;
- Access to water: farming practices have improved due to reliable access to water; and
- Health and hygiene: guinea worm has been eradicated among the entire water user group.

Overall, the project has allowed for increased education for more community members, healthier individuals, and a deeper respect for women. 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”.

Key Factors for Success

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

- Gender sensitizing and mass awareness training and promotion used at the start of the project;
- 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 concerns in the community.

Additionally, 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 PMVs and 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.

Main Obstacles

Regarding traditional gender roles, 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 engaging in what was perceived as a male role. However, WVG’s decision to consciously involve both women and men in drilling 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 given equal access to training in water systems operations and maintenance and environmental sanitation methods.

Looking Ahead - Sustainability and Transferability

The community was able to achieve these results as well as 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.

Further Information

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- For basic information about Ghana as well as World Vision involvement in Ghana, see: http://www.wvi.org/wvi/country_profile/ghana.htm
<http://wedc.lboro.ac.uk/publications/pdfs/24/akama.pdf>

Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

Global:
**Inputs to Thematic Paper on water and sanitation: Case studies from
the Interagency Gender and Water Task Force
(Marcia Brewster, Task Manager)**

A. New Models for Financing Local Water Initiatives

In Mabule village in *South Africa*, the Mabule Sanitation Project was developed to respond to serious problems of inadequate sanitation facilities and a high prevalence of diseases such as cholera. For many women and girls, visiting the sanitation facilities had become very difficult because of the poor construction and hygiene. The project is a joint initiative of the Department of Water Affairs and Forestry (DWAF) and the community, with funding from Mvula Trust. The DWAF agreed to provide funding for sanitation projects in communities where there was gender-balanced decision-making. The project established a brick-making project for latrine construction and to generate cash, and provided promoted hygiene education for women. Because of these, the community now has safe, hygienic and attractive toilets and improved health and hygiene. There is increased acceptance of women's leadership roles by community members, local government and NGOs, as well as an increased collaboration between women and men. The brick-making project employs up to 10 people, six of whom are women, and the community has access to affordable bricks. [Jabu, M. (forthcoming). *South Africa: Women in Sanitation and Brick Making Project, Mabule Village*. In: Office of the Special Adviser on Gender Issues and Advancement of Women, *Gender, water and sanitation: case studies on best practices*. New York, United Nations (in press)]

In Banda Golra, a small village in Pakistan, Nasim Bibi, a poor woman, had formed a community-based women's organization (CBO) in 2002 in order to be eligible for credit from the Sarhad Rural Support Programme (SRSP), an NGO which could lend money to community-based groups. CBO members started a saving scheme and, over a two-year period, 21 women received loans from SRSP, all of which have been successfully repaid. During their monthly meetings, the women identified increased access to water as a priority for action and decided to develop a water supply scheme. The 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 take turns providing food and accommodation for the labourers engaged in hand pump drilling. Each hand pump was financed by a group of seven households. The sanitation and health situation in Banda Golra has been improved, the decision-making power at the household level has increased for the majority of women involved in the water and credit schemes, and the value of participation in public activities is increasingly recognized. [Bokhari, Johdah (forthcoming). *Pakistan: Initiative of One, Relief for All – Women's Leadership in the Banda Golra Water Supply Scheme*. In: Office of the Special Adviser on Gender Issues and Advancement of Women, *Gender, water and sanitation case studies on best practices*. New York, United Nations (in press)].

The Swayam Shikshan Prayog in *India* has facilitated the formation of over 1,000 women's savings and credit groups that have mobilized their own savings to provide loans for one another. Women started organizing to address development issues such as water supply in their communities. [Swayam Shikshan Prayog Project Website, <http://www.sspindia.org/index.htm>]

The Self-Employed Women's Association in *India* (SEWA) focussed on gaining access to water for productive enterprises, which are often part of the so-called self-employed workers segment. Today more than 93% of all workers in India are considered self-employed workers, more than half of whom are women. SEWA has helped selected areas in India to develop plastic-lined ponds for water conservation, with technical support and training provided by the Foundation for Public Interest (FPI). Local women are now managing their own village ponds, including all book-keeping and accounts. In eight villages of Banaskantha district of Gujarat, women have formed their own water committees. Through these they undertake contour binding, building checkdams, repair of village ponds and other water conservation related construction. [Makiko, W. (2004). *SEWA The Self Employed Women's Association of India: Self Employed Women's Workers*. See: <http://www.gdrc.org/icm/makiko/makiko.html>; and <http://www.sewa.org>]

B. Institutional Development and Political Processes

Uganda introduced a Water Sector Gender Strategy in 2003, which includes an affirmative action component. This mandates that all administrative levels from cabinet down to village should include at least 30% women. As a result, women raised their voices and have been trained to locate water sources in the village, to decide on the location of facilities and to repair pumps. The incidence of breakdown has decreased considerably. Women have also participated in businesses: in rural areas, setting up shops to store spare parts for boreholes and in urban areas, managing water systems. In water user associations, women are often responsible for the finances. A school sanitation and hygiene programme was shared between the ministries of water and education, both of which were headed by women. Working together, the ministers are devising affirmative action programmes to encourage girls to get a better technical education and professional background. [H.E. Maria Mutagamba statement to CSD-13, April 2005]

Affirmative action policies in the water sector in South Africa include 'women in water' awards and a bursary for young women to take up careers in the water sector. These have proved to be a successful means of empowering women. Furthermore, the principle of non-sexism was enshrined in South Africa's 1996 constitution, and a quota system for women's participation cuts across all sectors. South African laws are 'gender-biased', i.e., the government can only procure materials and services from companies where at least 30% of the jobs are held by women. Such 'enforced' participation gave women confidence to emancipate themselves. The empowerment of women has proved to be essential for alleviating poverty and delivering basic services in South Africa. [Statement by H.E. Buyelwa Sonjica to CSD-13]

In *Ukraine*, the cleaning of railway oil tanks combined with an inadequate sewerage system caused overflows of sewage into houses and onto the streets. When women approached the local authority, they were denied funds to solve the problem. With the help of an environmental NGO, women met with residents, launched a political campaign and filed a legal suit against the local authority. As a result, the government allocated resources to finish construction of a sewage pump, financed environmental works, and closed the hazardous oil-tank cleaning facility. [Khosla, Prabha (2002). MAMA-86 and the Drinking Water Campaign in the Ukraine, prepared for the Gender and Water Alliance]

Many examples demonstrate that projects are more effective when women play a pivotal role. For instance, women in the town of La Sirena in *Colombia* wanted to improve the quality of

water in the Canaveralejo River, which was highly contaminated. In 1995 the women struggled to secure leadership positions on the action board. The board was run by men, and the women had to impose themselves to participate. Once the women proved themselves capable and were in a leadership position, a treatment plant was constructed. Since then there have been many improvements. For example, diarrhoea and other children's skin diseases have been reduced, and the town was spared in a cholera epidemic. [IRC International Water and Sanitation Centre (IRC) (undated). *Community Water Supply Management. Case Studies. La Sirena: women taking leading positions.*

<http://www2.irc.nl/manage/manuals/cases/sirena.html> (accessed on 26 March 2004)]

C. Capacity-building and Social Learning

In the Est-Mono region of *Togo*, where only 10% of the population have access to potable water, a project aimed at improving access to water and sanitation facilities did not meet everyone's needs and the facilities fell into disuse. Given these problems, a new project design encouraged the participation of all villagers, boy and girl students, men and women teachers and administrators. Following the diagnosis of the problem in schools, an action plan for hygiene promotion was approved by the schools and the villages. The project provided water and sanitation facilities, as well as educational resources, to each village school. Addressing gender imbalances among students and ensuring the participation of the entire community has led to impacts far beyond the immediate results. Girls have taken a leadership role and increased their self-esteem. Gender-balanced School Health Committees are responsible for the equipment and oversee hygiene. [Alouka, S. (forthcoming). *Integrating Gender into the Promotion of Hygiene in Schools.* In: Office of the Special Adviser on Gender Issues and Advancement of Women, *Gender, water and sanitation: case studies on best practices.* New York, United Nations (in press)]

In *Nigeria*, the construction of a tourist resort on the Obudu plateau led to deforestation and exacerbated pre-existing pressures on water resources and the environment, such as overgrazing and unsustainable agricultural practices. The local Becheve women complained about wasted time in collecting water, poor quality and quantity of water and poor family health. Consequently, the Nigerian Conservation Foundation (NCF) started a Watershed Management Project on the Obudu plateau in 1999, and encouraged women to get involved in the project's decision-making process. Women leaders were elected on the management committee, a source of pride for women in the community, and became involved in the construction and maintenance of a water reservoir. The time for collecting water was considerably reduced and allowed women to spend more time on income generating activities like farming and marketing. A conflict between the Becheve women and the Fulani tribesmen over access to water was resolved through negotiation, and the women were ensured timely access to water. Moreover the women's healthcare burden was reduced, with a 45% reduction in cases of diarrhoea in 2004. [Majekodunmi, A. A. (forthcoming). *Nigeria: Using Gender Mainstreaming Processes to Help Protect Drinking Water Sources of the Obudu Plateau Communities in Northern Cross River State.* In: Office of the Special Adviser on Gender Issues and Advancement of Women, *Gender, water and sanitation: case studies on best practices.* New York, United Nations (in press)]

In eight slums in the Tiruchirapalli district of Tamil Nadu State, *India*, latrines constructed by the municipal corporation had all become unserviceable due to poor maintenance. Poor sanitation and contaminated water affected all families with disease, increasing their medical expenses. Male community leaders did not take any steps to provide improved facilities.

Requests to the government for better services from the women were of no avail until the people joined forces with Gramalaya, an NGO working on water and sanitation projects. The project design called for the installation of drinking water facilities and individual toilets, as well as community mobilization with a focus on gender mainstreaming. WaterAid covered the equipment and installation costs, while Gramalaya covered the capacity building and community mobilization components. The government provided the land sites, electricity, water supply, and loans to community members. The community is not only benefiting from improved water and sanitation facilities and better health, but the women have also gained self-confidence. Women who were once treated poorly by officials are now given respect when they visit government offices. [Berna, I. V. (forthcoming). *India: From Alienation to an Empowered Community - Applying a Gender Mainstreaming Approach to a Sanitation Project*. In: Office of the Special Adviser on Gender Issues and Advancement of Women, *Gender, water and sanitation case studies on best practices*. New York, United Nations (in press)]

D. Application of Science, Technology and Knowledge

In the Witjira National Park in *Australia*, pastoralists had caused serious deterioration of the ‘mound springs’ (referred to as the Tjurkurpa sites) in the Great Artesian Basin. Due to the fencing for livestock and damage to many water sources, Aboriginal people were not able to travel and were denied access to sites that were of high cultural significance. When pastoralists started to move away from the mound springs to seek new water sources for their stock, the Aboriginal people who stayed at the springs were then able to return to their traditional land management practices. Indigenous peoples combined traditional land management skills and western scientific methods to restore the mound springs. They negotiated a cooperative management structure with National Parks; they have a Board of Management with a majority of Irrwanyere people on it, who also hold a 99-year lease over the park. The park remains the property of the South Australian Government but the lease allows the Irrwanyere people to live on, use and manage the park in accordance with the plan of management. Through the process of cooperative management, some of the sites have been restored. [Dean Ah Chee (1995). *Indigenous People’s Connection with Kwatyie (Water) in the Great Artesian Basin*. Department of Environment and Natural Resources 1995. Witjira National Park Management Plan DENR. [http://www.gab.org.au/inforesources/downloads/gabfest/papers/ahchee_d.pdf]

In the community of São João D’Aliança in central *Brazil*, the local Union of Rural Workers in collaboration with University of Brasília (UnB) designed a community water project to stop pollution of the das Brancas River and to rehabilitate original vegetation along the river banks. In the women-led initiative, called the ‘Water Women’ project, each group of women adapted environmentally-friendly practices to their every day activities. The Water Women NGO was launched in April 2002 to support social and environmental development of the region, with a focus on improving women’s situations, generating new jobs and income, providing education to youth and adults and preserving the existing culture and traditions. Community education taught local people not to dump their sewage into the river, and how to plant native species of trees along the river banks. As a result, there is a visible absence of waste in the river, a considerable growth of new vegetation of native species on the river banks and decreased soil erosion. Women’s political participation was strengthened, and public perceptions regarding their leadership capabilities were changed. [Souza, S. M. (forthcoming). *Brazil: Conscious Fostering of Women’s Leadership*. In: Office of the Special

Adviser on Gender Issues and Advancement of Women, *Gender, water and sanitation: case studies on best practices*. New York, United Nations (in press)]

The watershed of the El Naranjo River in *Guatemala* used to have clean water, but the upper watershed now has a scarce and polluted water supply. The communities that depend on its water have a variety of different water needs that vary between men and women and urban and rural communities. 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. In 2002, the Solar Foundation started a three-year project with the support of NOVIB (the Dutch affiliate of Oxfam) to promote social peace through the construction of a more sustainable resource-community relationship. The project focuses on the rights and obligations of users, service providers and local public authorities, and monitors trends in water use. Through training in social planning and organization processes, local leaders and authorities are learning about sustainable management of resources to meet the communities' needs. [van den Hooven, L. (forthcoming). *Guatemala: Meeting Women's and Men's Water Needs in the "El Naranjo" River Watershed Organization*. In: Office of the Special Adviser on Gender Issues and Advancement of Women, *Gender, water and sanitation: case studies on best practices*. New York, United Nations (in press)]

E. Targeting, Monitoring and Implementation Assessment

In *Morocco*, the Rural Water Supply and Sanitation Project of the World Bank aimed at reducing the burden of girls "who were traditionally involved in fetching water" in order to improve their school attendance. In the six provinces where the project is based, it was found that girls' school attendance increased by 20% in four years, attributed in part to the fact that girls spent less time fetching water. It was also found that convenient access to safe water reduced the time spent fetching water by women and young girls by 50 to 90%. [World Bank (2003). *Implementation Completion Report on a Loan in the Amount of US\$ 10 Million Equivalent to the Kingdom of Morocco for a Rural Water Supply and Sanitation Project*, Report No. 25917. See: http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/06/17/000090341_20030617084733/Rendered/PDF/259171MA1Rural1ly010Sanitation01ICR.pdf (accessed on 22 March 2004)]

In *Bangladesh*, a school sanitation project with separate facilities for boys and girls helped boost girls' school attendance 11 % per year, on average, from 1992 to 1999. [United Nations Children Fund (UNICEF) (2003). *Sanitation for All*. See: <http://www.unicef.org/wes/sanall.pdf> (accessed on 22 March 2004)]

The School Sanitation and Hygiene Education (SSHE) campaign, a joint project of UNICEF and the IRC International Water and Sanitation Centre, the Water Supply and Sanitation Collaborative Council (WSSCC) and others, aims to provide water and sanitary facilities in schools to improve health of all pupils and encourage girls to attend school. Research and surveys suggest that separate facilities need to be provided for girls and boys, if girls are not to be discouraged from attending school. The project began in February 2000 in *Burkina Faso, Colombia, Nepal, Nicaragua, Viet Nam* and *Zambia*. With an emphasis on local participation, SSHE provides low-cost teaching aids, inexpensive, community developed

technology and life-skills hygiene education to primary schools [See http://www.unicef.org/wes/index_schools.html].

In the Ejura-Sekyedumasi District of *Ghana*, the Ghana Rural Water Project (GRWP) was initiated by World Vision Ghana (WVG) to address a serious infestation of guinea worm and poor access to potable drinking water. The project has shifted from a strictly technology-driven approach to a community-based, people-oriented, demand-driven focus, including gender mainstreaming, poverty alleviation and the well-being of children. Through the GRWP initiative, WVG supplied the village with two boreholes fitted with hand pumps, two public Ventilated Improved Pit (VIP) latrines and a urinal. The community has since identified this water and sanitation project as having had a high level of community participation and gender integration. It has improved the education of girls, who accounted for 53 per cent of primary school students in 2005, compared to 43 per cent in 1995. The incidence of guinea worm has essentially been eliminated. [Poku Sam, N. A. (forthcoming). *Ghana: Gender Integration in a Rural Water Project in the Samari-Nkwanta Community*. In: Office of the Special Adviser on Gender Issues and Advancement of Women, *Gender, water and sanitation: case studies on best practices*. New York, United Nations (in press)]

A bottled water plant, opened in 2002 in the Klaten district of Java, *Indonesia*, extracted a huge quantity of spring water just 20 metres away from the area's primary water source. This caused a drastically decreased water supply in the district, and the community's access to irrigation water has decreased, with wells starting to run dry. Community members came together in 2003 to establish the Klaten People's Coalition for Justice (KRAKED) to advocate on their behalf. KRAKED's main objective was to close down the bottling plant; its short-term objective was to reduce its extraction rate and establish a community monitoring system. Although women have traditionally little decision-making power, they were able to participate in the KRAKED programme, and set up a research project to monitor the impact of the bottling plant on the community's water. The project also targeted local government and members of local parliament, journalists and company personnel. Women's participation in this process facilitated KRAKED reaching a wider audience. Better insight was gained in the way women and men share information and how these differences can be useful in raising awareness. [Ardhianie, N. (forthcoming). *Indonesia: the Impact of Women's Participation in the Aqua-Danone Advocacy Programme – A Case Study in Klaten District, Central Java*. In: Office of the Special Adviser on Gender Issues and Advancement of Women, *Gender, water and sanitation case studies on best practices*. New York, United Nations (in press)]

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

Challenges

The watershed of the El Naranjo River is located between the departments of San Marcos and Quetzaltenango in Guatemala. Where there used to be plentiful and clean water, the upper watershed now has a scarce and polluted water supply. The communities that depend on its water have a variety of different water needs that vary between men and women and urban and rural communities. For example, men use water mostly for their animals, irrigation and construction, whereas women need water for domestic tasks such as cooking, cleaning and washing. Women also spend a lot of time and effort every other day hauling 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 the current state of legal regulations, and their application to the administration of water.

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

Programme/Projects

The Fundación Solar is a private development organization in Guatemala that promotes the creation of social capacities 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.

Outcomes

- *Joining together under a single objective:* Before the project, 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 almost 78,000 women beneficiaries. The associations are devoted to promoting social strategies to improve integrated water resource management.
- *Training, sensitization, and men's and women's participation:* The project provided training and sensitization sessions in the communities. People expressed their interest in the training and the organizational processes. Workshop topics included caring for the environment and the watershed, reforestation, gender equity, conflict resolution and organization. Now, people are much more open to the ideas, problems and needs

of others. Women comprise 51 per cent of the community association members and several women are on the board of directors. They 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. 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 are starting to have some funds, which they are using for small productive environmental and community projects, such as a greenhouse. These small projects provide resources to invest in other projects, which enable the associations to meet the needs of more people.

Key Factors for Success

Creation of community associations:

- The associations specifically addressed various water needs of men and women in both urban and rural communities; and
- Women represented over 50 per cent of the members and participated actively in the associations.

Gender Mainstreaming:

- Different water needs of men and women were taken into account;
- Consciousness was raised that women are the primary water users and therefore need to participate;
- Women participated in the organization and decision-making processes as well as in building income-generating environmental community projects; and
- Women are empowered through control over their incomes.

Participatory Processes:

- Civil society designed municipal water policies;
- The first association of municipalities was formed for the integrated management of water resources in Guatemala; and
- Joint actions are taken by the municipalities and civil society regarding water resources.

Main Obstacles

At first it was not an easy task to bring people together. A public information and education campaign had to be launched in the local language, spreading information through radio, posters, public forums, and vehicles with loudspeakers. Finally, people were willing to meet on the subject of the watershed.

Looking Ahead – Sustainability and Transferability

Lessons learned: Community education about water, the environment and societal roles will continue to promote positive change in communities around the globe. In the words of community member **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 organization process and now people are listening to our problems... This has given us a lot of experience and others like to hear about it.”

Further Information

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- For information about NOVIB's role in Guatemala:
www.novib.nl/en/content/?type=article&id=5754&bck=y

Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

India:

From Alienation to an Empowered Community - Applying a Gender Mainstreaming Approach to a Sanitation Project, Tamil Nadu

Challenges

In India, only 43 per cent of the urban population 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. This case study documents a community sanitation project in eight slums in the Tiruchirapalli district of Tamil Nadu State, in southern India. The

slums in the study had six community dry latrines in which the human waste fell into an open pit and was collected manually and two latrines with septic tanks constructed by the municipal corporation. However, the structures had all become unserviceable due to the poor maintenance of any municipal infrastructures created before April 1999.

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.

Male community leaders did not take any steps to provide improved facilities. Requests to the government for better services were of no avail until the people joined forces with Gramalaya, an NGO that works with communities on water and sanitation projects.

Programme/Projects

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 Water Aid. 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, 8 slums in total benefited from the project.

Gramalaya had prior experience in water, sanitation and hygiene projects in rural areas, and in

working with women’s groups as the focal point for dissemination and change. The project design called for the installation of drinking water facilities and individual toilets, as well as community mobilization with a focus on gender mainstreaming. Water Aid covered the equipment and installation costs, while Gramalaya covered the capacity building and community mobilization components. The government provided the land sites, electricity, water supply, and loans to community members.

Outcomes

- Women’s empowerment;
- Men’s involvement;
- Income from ‘pay and use’ toilets;
- Community development by women;
- Vermicomposting - sanitation and income;

- Creation of innovative child-friendly toilet (CFT) complex for children;
- Improved sanitation facilities; and
- Changes in key hygiene behaviour.

Key Factors for Success

The key 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 to themselves, their families and the community of women's empowerment;
- Capacity-building of the women's groups in the areas of accounting, and accessing government services;
- Provision of family counseling on domestic violence and communal problems;
- Development of communal sanitation facilities managed by the community;
- Adoption of a pay and use system that supported both facility maintenance and community development activities; and
- Collaboration between the government, NGOs and the community.

Main Obstacles

- Hesitancy from within the community: 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. Gramalaya worked with the community to change this situation by forming women's self-help groups, convincing men to support the women in their new roles and cleaning up garbage and waste.
- Lack of meaningful aid from the government: The usual government practice was to contract companies to do 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. For Gramalaya's project the government gave land, electricity, water supply and loans to the community but was not expected to provide the services themselves.

Looking Ahead - Sustainability and Transferability

- Success of gender mainstreaming in development programmes: The development of water and sanitation facilities using a model based on women's empowerment will bring success to a country where the majority of the population currently still defecates in the open. This project's impact clearly demonstrates that a gender mainstreaming approach should be included in all development programmes to address major concerns more effectively and obtain the maximum benefits.
- Respect for women spreads from the community to the government to the world: 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 shabbily by officials are now given respect and invited to sit on chairs when they visit government offices. Not only their men, but the world also now admires them, and they receive a stream of visitors from all over. Their life has a new meaning filled with hope.

Further Information

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- To read about Gramalaya's work in Tiruchirapalli:
<http://www.gramalaya.org/sanitisedslums.html>

Source

Office of the Special Advisor on Gender Issues and Advancement of Women, Gender, water and sanitation; case studies on best practices. New York, United Nations (in press).

India:

Gender and Economic Benefits from Domestic Water Supply in Semi-Arid Areas

The Setting:

Although a high achiever in terms of overall per capita income¹⁴, the economic future of the state of Gujarat in western India is threatened by an ever-growing water shortage. In 1999, a large part of Gujarat suffered from the worst drought in 50 years. Droughts, however, occur every three years on average. The poorer parts of the population are usually the hardest hit, with frequent droughts eroding any interim livelihood gains and keeping them in a poverty trap.

Banaskantha district¹⁵ is one of the hardest hit districts in this respect and continues to be one of the most backward districts of Gujarat. About 90% of the population of Banaskantha (2,162,578 persons in 1991) live in villages. Many of them lack even the most basic infrastructure such as safe drinking water, electricity, and schools.

Agriculture and dairy production are the economic backbone of Banaskantha. Some 52% and 23% of the population earn their living as cultivators and agricultural labourers respectively. Most farmers are small and marginal and since their income, and that of the agricultural labourers, depend critically on rainfall; livelihoods of the poor are unstable by nature. When monsoons fail, entire communities are forced to migrate for six to eight months in search of work and/or fodder for their livestock.

The drought of the year 2000 has illustrated how dependent semi-arid areas such as Banaskantha are on water. Most households managed to get sufficient drinking water and water for domestic use, although at what price has remained un-assessed. The severest impact was the loss of livelihoods. Direct impacts were clearest in the cases of agriculture and dairying, which came to an almost complete standstill after the rains had failed. The indirect link between the shortage of water and income is the time that women spend to collect water.

Conventional water supply projects, private and government provided, aim at simply providing drinking water in water scarce areas. These projects are expected to increase only general social welfare, not generate specific benefits. Project design is therefore concerned almost exclusively with the technical feasibility for an investment with no economic returns or benefits.

In a newer generation of water supply projects, such as the Santalpur scheme in Banaskantha, it has been recognised that as domestic managers, women are centrally involved in water collection and use. Instead of being just general 'social investments', water supply projects were therefore justified by their potential impact on 'women's welfare issues', such as relieving women's drudgery and giving them more time and water for domestic uses. It was expected that women would use these gains to improve personal and domestic hygiene and

¹⁴ Gujarat has the fourth or fifth highest per capita income (depending on the source of the ranking) among Indian states; the *growth rate* of its per capita income, however, is second only to the state of Maharashtra (Alternative Survey Group, 1999: 158 – 165).

¹⁵ Although a new district of Patan has recently been carved out of Banaskantha and the two blocks where the study was carried out, Santalpur and Radhanpur, are now in Patan, the project area is referred to as Banaskantha in the report to minimise possible confusion. All data in this section are derived from the first phase report unless mentioned differently.

spend more time on domestic work. The benefits from this work would benefit the welfare and health status of the whole family.

These benefits were, however, expected to occur somehow once the basic technical infrastructure (i.e., pipes, taps and pumps) has been provided. No explicit and simultaneous provision was made to give women a say in the planning and design of the system and the operation of the scheme to ensure that the supply would actually meet their requirements. Inputs to improve health and hygiene have remained limited to the provision of health education for women only. How men, and gender relations between women and men, affect the realisation of these welfare benefits was not questioned.

Objectives of the case study

To test the assumption that in semi-arid areas domestic water projects are not only important for welfare and family health but also have economic benefits, applied research using a case study approach was carried out in 27 villages Santalpur and Radhanpur blocks in Banaskantha district, Gujarat, India. This area was chosen because it has an improved rural water supply, the Santalpur pipeline, to which a holistic rural development program with a focus on women had been added. Part of this program is an income generation program that supports the establishment and management of women's micro-enterprises. The program is carried out the Self-Employed Women's Association (SEWA), and financed by the Dutch bilateral development cooperation.

The study was implemented by the IRC in partnership with SEWA and FPI¹⁶. The Swedish International Development Cooperation Agency (Sida) provided financial support. The study had economic as well as gender objectives. The overall aim was to see if and how domestic water supply projects in (semi) arid areas need to be adjusted to maximise the economic benefits of the productive use of water and time. The specific objectives were (1) to assess the relevance of an accessible and reliable water supply for the productive uses of time and water by women in (semi) arid areas; (2) to assess if the income-generating activities by women made a difference for gender relations in the households and communities and (3) to apply participatory learning tools and strengthen the capacities of the implementing organisations, including the women's enterprises themselves, for participatory research.

Methodology

The study used participatory rural appraisal (PRA) methods and tools for time use data, gender data, and part of the enterprise data. Several of the tools were especially developed for the study. Secondary sources were the census data and the enterprise accounts. Representatives of women enterprise members participated in the design of the research tools, the analysis of the collected data, and the discussion of the findings and conclusions of the study.

The community-level participants were women from eleven women's micro-enterprises in nine villages and from five control villages. In ten other villages, interviews with women enterprise leaders took place. All women's micro-enterprises (crafts, dairying, salt farming, gum collection, and tree and fruit plantations) needed time or time and water as one of their inputs.

¹⁶ IRC International Water and Sanitation Centre
SEWA Self—Employed Women's Association
FPI – Foundation of Public Interest

Findings on economic impacts

The findings showed that despite the improved water situation, water collection is still time-consuming. Women in both enterprise households and households in control villages have a working day of 15 to 16 hours throughout the year. On average, women spent 3 hours of this time on fetching water. Daughters 83, sons 12, and husbands 15 minutes per day. This brings the total average time spent on water collection to almost 5 hours a day. This still high time in water collection occurs in a situation where, on paper, all households have year-round access to a piped domestic water supply meant to reduce the drudgery of water collection.

Women provide income to the family in four ways: by doing agricultural work on the land of the household, by engaging in expenditure-saving activities, e.g., fodder collection and vegetable gardening, by hiring themselves out as daily wage labourers, and by doing micro-enterprise work. The work in the micro-enterprises, the crafts enterprises in particular, provides family income at crucial times: in the dry season when income from other sources is absent. During the monsoon as well as summer, women from the micro-enterprises spent significantly more time on income generating activities than women in the control villages.

The quality of the water service had significant economic consequences. Breakdowns of the water supply caused women enterprise members a loss at an average of Rs. 50 per person per month in earnings. Actual losses varied with the profitability of the enterprise. Extrapolating the average loss to all SEWA micro-enterprise members in the two blocks, the inadequate operation and maintenance of the water service constitutes a loss of Rs. 2 million for 40,000 women. Actual losses were higher because the income data included a period of extreme drought during which especially income from dairying, plantations, and agriculture has been virtually non-existent. In addition to financial losses, each woman lost, on average, seven hours per month in summer, for reproductive and/or personal activities. An improvement of the water supply to the extent that women spend one hour per day on collecting water would result in an improvement of their annual income with upper boundaries of between Rs.750 and Rs. 5520 depending on type of enterprise and local conditions. Alternatively, each woman might gain between 45 and 152 eight-hour days annually for domestic, social, and management activities.

Findings on gender relations

In all villages, gender relations had changed in favour of women during the last ten years. From possession of assets, participation in decision taking, and community management activities, progress has been significantly greater for members of women enterprises than for women in the control villages.

On all accounts, participation in community level affairs was higher for women in enterprise households than for women in control villages. This applied to attendance of public meetings in their own and other villages, speaking up at such meetings and being a women's leader in their own village or a cluster of villages. Women in enterprise households were furthermore involved in the management of community water resources.

In both types of villages, gender relations have changed. More women went out alone and more children go to school. In the households of women entrepreneurs, women have savings and own assets. Men referred to economic benefits for the family as a whole, a greater equality between the sexes and women's empowerment as improvements in women's traditional roles. Interestingly, men also mentioned how the empowerment of poor women has also empowered them as poor men.

Conclusions and implications for domestic water supply projects

Combining effective income-generating projects for women with an improved, well functioning domestic water supply results in valuable extra income for livelihoods and improved gender relations. The design and management of most water services have not been adjusted to the economic use of water and time savings. When women have no say in planning and design of services, and no influence on water distribution, service hours and speed of repairs, valuable productive time, water use and income is lost and the service does not maximise its economic potential.

Source: Unknown. If you the reader know the source of this case study, please let us know.

India: Mainstreaming Gender in Participatory Irrigation Management: The Case of AKRSP

Established in 1983, the Aga Khan Rural Support Programme (AKRSP) of India is a non-profit organisation working to organise and empower rural communities and marginalized groups, particularly women, through natural resource management interventions in three districts of Gujarat. Central to these capacity building efforts is the organisation of a variety of formal and informal village level institutions where AKRSP facilitates participatory planning and mechanisms for conflict resolution as well as mainstreaming gender concerns. In addition, since the early 1990s AKRSP has been systematically involved in both policy advocacy on Participatory Irrigation Management (PIM) as well as in organizing farmers to manage their own canal irrigation systems through water user associations and irrigation cooperatives. Involving women in such efforts is a more recent development, partly arising from AKRSP's own re-thinking about the need to address gender equity concerns in PIM right from the beginning, and partly from ongoing efforts at gender-sensitive organisational transformation. Significantly, these engendering processes were facilitated by AKRSP's second director, a man committed to addressing gender inequalities. In the process, AKRSP has been consistently trying to demystify commonly held perceptions which view farming and irrigation as primarily male occupations, by illustrating rural women's predominant role in the larger agriculture system, which includes irrigation.

Insights on gender differences were drawn from participatory exercises with a range of canal irrigation societies in AKRSP's programmes dominated by *adivasi* (indigenous people in the area of South Gujarat). Shilpa Vasavada (2000) argues that women are involved in a number of irrigation activities, such as canal maintenance, field bunding, watering and/or supervising during the day and at night and conflict management on fields and along canals. Yet despite these roles, women often have little say in decision-making as they are only nominal members of the canal societies.

Participatory irrigation and the state

In 1995, the Gujarat government declared a policy on Participatory Irrigation Management, calling for the participation of farmers in the planning, implementation and management of medium and minor irrigation projects. The government also sought the cooperation of NGOs as catalysts for implementation of the policy. A legal framework for involving NGOs and farmers was established and ambitious targets for bringing in 50 per cent of the total irrigable command area under PIM by the year 2003 were defined.

However, except for the limited efforts of a handful of NGOs, such as AKRSP, little was achieved in terms of handing over responsibility for water distribution at the tertiary level to farmers. The chief reason for this was the sheer reluctance of the bureaucracy to share decision-making power with the farmers or to give up the rent-seeking practices that are now endemic to public management systems. Some efforts were made in 1996-1997 to initiate participatory training for the irrigation bureaucracy to influence their attitudes and behaviour, but their stubborn resistance to attend such trainings meant that even this initiative was eventually abandoned.

AKRSP: addressing gender concerns

Meanwhile, discussions were initiated in AKRSP concerning the need to integrate gender in irrigation. Several staff members, though acknowledging the principles of gender equity,

found it difficult to integrate such concerns as an ‘add on’ in already existing projects. Not only was the task of organizing (male) farmers itself massive, the reluctance from the state government to any sort of power sharing, let alone addressing gender, was considerable. It was not till 1997-98 that opportunities emerged for AKRSP to look at gender in new canal projects, making efforts to involve women right from the project inception stage.

Support for AKRSP’s efforts at enhancing women’s membership in PIM societies came, not surprisingly, from *adivasi* men. Interviews with *adivasi* men in a cross section of PIM societies revealed that they felt strongly about women’s inherent capabilities in handling conflicts better than men and in exhibiting more self-discipline when it comes to framing and enforcing rules (Vasavada, 2000). Men claimed that women are more sincere both in terms of collecting irrigation dues and saving money at the household level. In cases where women have been trained as canal supervisors, they have also been more effective than men in ensuring that water is not wasted and that irrigators do not take water out of turn.

In addition to these direct impacts of involving women in irrigation decision-making, the AKRSP case illustrates that canal water has multiple uses for women, such as bathing and washing clothes and utensils, as well as for livestock. It is increasingly being recognized that these gendered needs ought to be addressed in the design of irrigation systems and the adoption of rules governing access to water by PIM societies. However, such efforts will not be sustainable unless gender concerns in PIM are placed in the larger context of equity where water needs of the landless and other stakeholders also need to be addressed.

To summarise some of the key findings of AKRSP’s strategy:

- As an important starting point, AKRSP has been systematically undertaking gender sensitization training of its staff at all levels to challenge perceptions and attitudes on women’s roles and capabilities in natural resource management.
- Building on the success of similar endeavours is essential – for example, women in other project villages had been managing group-well irrigation schemes successfully before AKRSP thought of involving women in PIM.
- Capacity building is important. This includes exposure to other development organisations where women are managing irrigation interventions effectively.
- Women need to be involved from the beginning so that they can also be exposed to the negotiation process with the irrigation bureaucracy, rather than waiting for irrigation societies to start functioning efficiently before addressing equity.
- To facilitate and encourage women’s participation in PIM, it is necessary not only to convince women, but also to involve them in other development interventions which address their practical gender needs, such as savings and credit groups. Strong group formation, both mixed and women only, are integral to AKRSP’s success in its efforts to involve women in PIM.

AKRSP’s success shows that NGOs can and should demonstrate models that challenge legal criteria for membership which link water rights to landownership. Such models must illustrate that involving women is not only a question of empowering them, but also of managing community irrigation more efficiently, effectively and equitably, in order to have a strong role in influencing policy and legislation.

Source:

Abstracted from: Vasavada, Shilpa, 2005. "Mainstreaming gender concerns in participatory irrigation management: The role of AKRSP(I) in South Gujarat," in Sara Ahmed (ed.) *Flowing Upstream: Empowering Women through Water Management Initiatives in India*, Ahmedabad: Centre for Environment Education and New Delhi: Foundation Books.

Indonesia:

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

Challenges

A bottled water plant was opened in 2002 by Aqua-Danone in the Klaten district of Java in Indonesia. The company extracts a huge quantity of spring water just 20 metres away from the Sigedang spring, which is the area's primary water source. Every month, the plant produces 15-18 million litres of bottled water, causing a drastically decreased water supply in the district. Since the opening of the plant, the community, consisting mostly of farmers, has found its access to irrigation water decreasing and its wells starting to run dry. Pumping groundwater for irrigation purposes also dries out community wells. Some farmers have been forced to stop farming and to seek work as construction workers or market labourers.

Programme/Projects

In response to these water-related problems community members came together in 2003 to establish KRAKED (Klaten People's Coalition for Justice) to advocate on their behalf. Despite prevailing cultural values, this also gave Klaten's women the opportunity to participate in the advocacy activities. 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.

Women in the communities utilise water for household and other uses every day. Women have traditional roles with key decisions being made by their fathers, husbands, and brothers. In this case, the women involved in KRAKED were highly motivated to participate in the programme and had the possibility to do so. In the earlier meetings their role was restricted to preparing food and drink for other members. However KRAKED set up a research project to get a better picture of the impact of Aqua-Danone's Klaten operations. Eight women and a couple of men volunteered to conduct the research. The project also targeted local government and members of parliament, journalists and Aqua-Danone personnel. KRAKED asked each of its members to share their knowledge and information about the water shortages with as many people as possible.

Outcomes

Information, mobilization and capacity building:

- More community members are aware of the water shortage issue due to KRAKED's information-sharing methods. Their individual approach works well with the local community; and
- Increased ability among participants to present strong arguments in dialogues with other advocacy stakeholders.

Impact on Advocacy Programme objectives:

- Stakeholders such as the local government, the local parliament and Aqua-Danone, are starting to include KRAKED in their meetings and discussions; and
- On 7 March 2005, KRAKED's second anniversary, the local parliament asked for a re-evaluation of Aqua-Danone's water extraction license. 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 and response from KRAKED.

Research on gender aspects in information dissemination:

- Women's participation in this process made it more effective and facilitated KRAKED reaching a wider audience. Better insight was gained in the way women and men share information and how these differences can be useful in raising awareness; and
- In general, the women appeared to be more effective in sharing information within their families and through informal networks and the men in sharing information outside their families and through formal networks.

Women's skill development and empowerment:

- Participation in the 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;
- Women in the community are more aware of water resources issues and have learned to appreciate water better and to use it more efficiently. They are also more aware of, and motivated to work with, issues concerning gender imbalance;
- Women involved in the advocacy project are now more interested in participating in advocacy and research activities and in activities providing them equal opportunities with men; and
- Male members of KRAKED concluded that, as both women and men suffer the negative impact of Aqua-Danone's operation, both should have the right to participate fully in the advocacy process.

Key Factors for Success

Previous Experience in organisational work:

- Most of the participating women were also members of a Small Entrepreneurs Network for Women that had successfully established a women's cooperative in Klaten.

Women's financial independence or access to financial services:

- Unlike most women in Klaten who work in the home and are housewives, most of KRAKED's women members have their own small businesses.

Support from family and male community members:

- Particularly important is that the women's families have been willing to share household tasks so that they have more time for advocacy activities; and
- KRAKED's male members were willing to give a chance to women to participate in the advocacy initiatives and saw the women as allies.

Evaluation by all community members:

- Data collection was done mainly through focus group discussions and in-depth interviews with different community stakeholders, both those involved and those not involved in the programme. Programme reports were also used to get background information.

Main Obstacles

- Initially the division of responsibility in KRAKED was not gender-balanced. Women participated only at the service and then the discussion level and were not given a decision-making role; and
- A negative aspect of this project is that women have been spending so much time promoting advocacy activities, their small businesses have suffered. This has led to a decrease in their incomes.

Looking Ahead – Sustainability and Transferability

This study indicates that to empower women, a specially made programme with complex methods is not needed. Providing the initial opportunity to participate can empower both women and men. Advocacy organizations can formalize a women's empowerment process by ensuring that there are women representatives at all key meetings with stakeholders and by providing leadership training for the women and gender-sensitivity training for the men. 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.

Further Information

- Contact the researcher:
Nila Ardhianie: n_ardhianie@yahoo.com
- For a look at the situation in Klaten:
http://www.eng.walhi.or.id/kampanye/air/privatisasi/klaten_aqua/

Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

Indonesia

Separate Women's Meetings a Key to Participation in Water Management

Java

In Indonesia, the increasing population and the use of irrigation on 70% of paddy fields in Java is expected to create water demand problems by 2020. The water carrying capacity of the island is being outstripped. In the early 1990s, the Cidurian Upgrading and Water Management Project in Tangerang conducted a pilot programme for the inclusion of women farmers in the planning of a project. It had become clear by then that women's lack of participation was hampering water management projects from achieving their true potential.

Indonesian women have traditionally played a critical role in rice cultivation. But female farmers have seldom been involved in all the stages of irrigation development. Surveys conducted by the Cidurian Upgrading and Water Management project in the early nineties showed that, in fact, women were actively involved in irrigation. It was they who monitored water conditions in the fields to check illegal intake and outlet of irrigation water. They controlled the buffaloes that damaged the canals. They used tertiary irrigation water for household purposes. Special efforts were therefore made to integrate them into the upgrading and water management programme of the Cidurian project.

A pilot project was carried out from January 1991 to April 1992 in two tertiary units to identify the best method of achieving this objective. This showed clearly that, in a traditional society like Indonesia's, in the absence of formal women's organisations in villages and social barriers prevent women from attending extension meetings. Special agricultural information strategies had to be devised to take into account the low educational level of these rural women. Separate meetings and four special training sessions for woman farmers were therefore organised. The aim was to provide the women with basic information on the programme, overcome their initial shyness, make an inventory of their interests regarding participation, prepare concrete plans, and identify potential leaders and representative for water users associations.

A later evaluation by a team of agricultural extension and community development experts noted that separate meetings helped the women develop confidence and reduced their shyness when they eventually attended joint meetings with men. As a result of the separate meetings, women were well represented at later consultations when mutual agreement with the men was reached about the division of labour and payments. This further increased the women's confidence and led to greater participation in water users associations.

By the end of the pilot project, it was not difficult to encourage women to become members of the boards of water user associations. In fact, rural women soon began occupying important posts, such as treasurer, assistant treasurer, and secretary of such boards. They took on responsibility for the administration of male and female water users, the collection and registration of irrigation service payments, and the establishment and maintenance of a communication and information network among the female members of their associations.

The ultimate result was a reduction in the number of illegal off-takes from the irrigation canals. But the project also triggered other women's self-help activities. In one village, they organised female literacy classes. In two others, women's groups have been formed to start a collective saving scheme and dry field-crop cultivation on community-owned fields.

This case illustrates:

The utility of using a gender-sensitive participatory process in irrigation water management.
A simple strategy for increasing more viable irrigation water management processes.

Source: Unknown. If you the reader know the source of this case study, please do let us know.

Jordan:

Rural Women Securing Household Water Through Installation of Water Cisterns in Rakin Village

Introduction

If a country's fate is determined by its natural resources, then the future of Jordan will mainly depend on the optimal management of its scarce water resources. Jordan is one of the world's ten most water-scarce countries (World Water Development Report, 2003). The total water available in Jordan is around 180 cubic metres per capita per year, one of the lowest in the world.

Moreover, its location in the Middle East means that Jordan is part of an area characterized by volatile socio-political dynamics. Indeed, one of the major reasons behind Jordan's water scarcity lies in its rapid un-natural population increases due to the influx of refugees from the region's main military conflicts in 1948, 1967 and 1991.

Jordan's rural communities suffer most from lack of water, and they are being challenged on a daily basis by the difficulty of securing clean water and sanitation for households, farms and small businesses. Efforts to support community-based water management have been a major priority in Jordanian water policy. Experiences at the community level for the optimal use of water resources are spreading all over the country, based on successful demonstration projects.

One of the successful initiatives in community-based projects, which emphasizes gender mainstreaming in water management, is a joint activity of the local women's group in Rakin village with funding from the Small Grants Programme of the Global Environment Facility (GEF). The Rakin Women's Society manages a revolving loan system for construction of water cisterns and water harvesting systems in Rakin Village. The project benefited many women and provides secure water resources in households, with a great degree of sustainability.

Environmental Setting

Rakin is the centre of a cluster of villages and small towns located in the southwest of Karak Governorates in the south of Jordan. Rakin has a total population of 5500. Rakin is classified as a poor village on the basis of average income of the population, which relies heavily on army and government employment. The economy is based on services in the state's public institutions and agriculture. The basic services (water, electricity, telecommunication and roads) are available. Two secondary schools and one elementary school form the educational base of the area.

The topography of the region shows areas with slopes as steep as 23-30%. Rainfall is in the range of 250-300 mm annually. The main agricultural products of the village are:

- Fruit and nut orchards: mainly olives and almonds;
- Field crops: barely and wheat;
- Forest crops: combination of old and recently planted forests.
- Spice crops;
- Livestock: 15,000 heads of sheep and goats; and
- Apiculture (bee-keeping).

The Rakin Women's Society was established in 1991 as a charitable group that aims at improvement of the social, economic, cultural and health conditions of the rural women in Rakin.

The Challenge

The topography of the area, human pressure on land and inappropriate land use practices, are some of the reasons that contributed to the degradation of land and increased soil erosion, resulting in a rapid loss of productive lands. A large proportion of the annual rainfall is lost as run-off because of overgrazing

Women bear the responsibility for household management, including water collection and use. Most of the households depend on subsistence cultivation for their basic food supply, with the availability of water resources being the essential ingredient in household food security.

An insufficient supply of water for human consumption, livestock and irrigation is considered a major problem. Rakin receives piped water only once every two weeks for six hours, which does not even meet the inhabitants' most basic requirements. Water has to be purchased at a very high price. Without cisterns as storage facilities, the households are not able to store all the water that is delivered by tankers even though families have to pay for it all.

Project Evolution

The lack of water to meet basic needs provided the justification for the Rakin Women's Society to tackle this challenge. The Society obtained its first grant from the GEF Small Grants Programme to install water cisterns and water harvesting measures in households. The success of this project in the village was so evident that large numbers of applications for loans were presented to the Society's board. The project was based on a 66 per cent grant repayment system that eventually exhausted the financial resources provided in the first phase.

The second phase was initiated in 1998, also with the support of the GEF Small Grants Programme in Jordan. Technical assistance was provided to the Women's Society from the GTZ Watershed Management Project. This new project, however, was based on a revolving fund that required 100 per cent repayment to meet the needs of more than 150 households applying for such loans. A steering committee was formed to be responsible for the implementation of the activities, such as training, follow up on the loans and repayments, as well as selecting the beneficiaries according to certain criteria, and overall organization of the groups.

Project Results

The revolving loan system was structured to provide a 100 per cent repayment to ensure the sustainability of the project's resources, and seriousness of the individual projects.

The main impacts and results of the project were:

1. Securing a sustainable source of clean water in households to provide for irrigation and food security;
2. Reducing the cost of buying water from tankers, and the water consumption bill in households, while increasing actual water consumption;

3. Empowerment of women in the Rakin Women's Society through being responsible for bringing additional resources to households and families. This contributed to improving their status as decision-making partners in households;
4. Capacity development and knowledge acquisition by women in managing the grants.

Lessons Learned

1. The project proved that: the 100 per cent payback system for loans is sustainable; the available capital could be distributed to a wide range of beneficiaries and was not exhausted in a short term; and the high payback ratio could be attributed to the fact that women play a leading role in managing the household economy.
2. The project demonstrated a high efficiency of implementation and good management by rural women, provided that they had the basic support and capacity development needed for project management. Involving women directly contributed to enhancing the project's effectiveness and sustainability.
3. The project proved the immediate positive impacts and benefits for local communities at the household level. This has been manifested mainly in securing sustainable water resources in a water-scarce area.
4. The revolving loan system supported, in addition to water cisterns, bee keeping activities and solar cells installations. It is important always to diversify the income-generation activities to sustain the impact of the loan systems.
5. Community-based participatory water conservation projects are an essential component of any concerted effort to conserve water resources in a water-scarce country.

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Kenya

Gender Differences in Community Water Management

Machakos

Physical attack from thugs is only one of the problems experienced by women drawing water from the Yatta irrigation scheme in Machakos District, Kenya. Due to droughts, there is competition for water in Machakos. Most people don't get enough to irrigate their crops. The government has set up a community management system, involving user groups and water management committees. However 85% of respondents of an IDRC survey said women and children trying to draw water are the victims of harassment by men and attacks by thugs.

The survey reflected many general patterns found by researchers who collect gender-stratified data on water access in the developing world:

- While over 75% of the households were officially headed by men, a gendered data analysis showed that, in nearly 35% of cases, women were the actual economic heads, responsible for the support of between 5-10 people. A quarter of the households comprised over 11 members!
- In 76% of the households, the owners of the land were the males. Men made the major investment decisions such as purchases of land and cattle. Women were only allowed to make decisions on domestic water and general household investments including minor irrigation work.
- 96% of households irrigated their crops three or four times a week. 44% of the labour was provided by women, and only 29% by men. The other 12% was provided by children.
- Most (92%) of the households irrigated their fields at night. This exposed the women to the danger of attack by thugs, to difficulties in getting child-care while involved in irrigation activities, and to health dangers caused by the cold night air.
- Male farmers who irrigated illegally diverted the canal's water to their farms. They didn't do this if other male farmers were also irrigating, for fear of starting a fight. They only did it when the women were using the water. The women called this harassment directed at them, saying it severely disadvantaged them in their farming pursuits.
- 85% of the respondents belonged to a water access group, but few women sat on water management committees, since they were afraid of expressing themselves in front of men and were too busy with household chores to attend meetings.
- Women are the ones who did the washing and herding of livestock. However, they were not consulted during the design of the water supply system, so no provision was made for making facilities available for these activities - for example troughs for watering animals and facilities for washing and bathing.
- Respondents in the survey said those who got the most water during shortages were: those closest to the main furrow or canal (24%); the most aggressive individuals and lawbreakers (24%); the wealthy and influential (15%); men (15%).

- 99% of those who policed the water supply were men and the majority of respondents said these officials were corrupt and unfair.

The consultant hired to carry out the survey recommended that:

- Meeting times should be changed to accommodate to women's schedules.
- Women should be encouraged to attend meetings and vie for leadership positions in the management groups.
- The community itself should be given greater responsibility for the entire management of the system to prevent corruption by those with greater wealth.

This case illustrates:

The difference made by sex-disaggregated data;

The disadvantages women face due to traditional male-female power relations; and that

The lack of a gender approach leads to structural impoverishment of women.

Source: IDRC, Management of Water demand in Africa and the Middle East

Nicaragua:

Gender Equality as a Condition for Access to Water and Sanitation

Challenges

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 industrialization.

In the latter part of 1998, Hurricane Mitch hit Nicaragua, leaving in its wake more than 4,000 deaths. Leon and Chinandega, located in the northeastern 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 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 supported gender equality to accomplish these tasks or social recognition of the problems the women faced as they conducted these activities.

Programme/Projects

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 second phase of the project (PALESA II) and later continued with the implementation of the PALESA III project between 2002 and 2003. The goal of this project was to exercise the right and access to water for the 17,000 inhabitants living in the 45 communities of these two Nicaraguan departments. It sought to achieve this goal through the construction of latrines and new water systems.

PALESA II was characterized by an institutional commitment of both agencies to gender equality, which was deemed a priority in order to achieve the main project's goal of improving the rural population's quality of life. Gender inequalities were identified as a challenge to overcome in order to initiate community participation and to improve the project's sustainability.

Promoters of the project, both women and men, lived in the community three days out of each week in order to gain the trust of all community members. They waited for the time when men would be home (usually in the afternoon) and distributed invitations to the community assembly by sectors. Promoters also recorded the gender inequalities found in the use, transport, and management of water. A gender sensitization workshop was launched to teach both men and women about the importance of their integration into the planning, organization, direction, construction, and administration of water systems. After conducting three sessions (one consisting of only females, one of males, and one mixed), men's

perceptions about 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. They also accepted that household connections would benefit the community at large, both women and men.

Outcomes

- *Increased involvement:* The gender workshops conducted in 2001 and 2002 with women and men guaranteed greater women's participation (56 per cent). Women were elected to more than 70 per cent of the committees' posts and gained posts which were previously filled by men, such as coordinators, vice-coordinators and financial managers. Women's participation in training, operation and maintenance of the 276 water works was encouraged, resulting in a 37 per cent participation rate of women. Once the water systems were installed, the female leadership with its capacity and quality moved to other initiatives.
- *Education:* Discussions about sex, gender roles, self esteem, identity, rights and commitments benefited women directly. Moreover, the discussions 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.

Key Factors for Success

- *Community needs assessment with a gender approach:* This approach contributed to the men's acceptance of the construction of home water systems as a right. They continued to have power of expression within the community, but it was also demonstrated that the majority of people in the community preferred women to lead the Sanitation and Water Committees.
- *Institutional practices and methodologies:* 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. On the one hand, the coordination of the gender approach and policies of both COSUDE-AGUASAN and CARE-Leon consolidated the project's goal of providing equitable and participatory access to water in rural communities. On the other hand, the Leon project directors, the Social Area coordinator and the men and women promoters aided the realization of the goal.
- *Significant women participation:* 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.

Main Obstacles

- *Natural disasters:* In spite of underground water sources, Hurricane Mitch in 1998 followed by a drought in 1999 has made access to potable water difficult.
- *Disparity between men's and women's need for water:* In a traditionally male-dominated society in which men could list only two uses for water while women could list 11, an improvement in water supply had not been a priority for community leaders.

Looking Ahead - Sustainability and Transferability

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.

Further Information

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- For information about the Swiss Development and Cooperation Agency (COSUDE):
<http://www.deza.admin.ch/index.php?userhash?34814011&navID=1&l=e>
- To read about COSUDE's work in Nicaragua (in Spanish):
<http://www.cosude.org.ni/>
- For information about CARE International's work in Nicaragua:
http://www.careinternational.org.uk/cares_work/where/nicaragua/

Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

Nigeria:

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

Challenges

The Obudu plateau is one of two mountain ecosystems in Nigeria and is 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, the Obudu Ranch Resort, on the plateau. Large-scale construction of hotel and other facilities resulted in immense deforestation. 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 communities saw the development as a welcome source of income, conflicts arose due to the multiple demands on a limited water supply. The Becheve women complained about poor family health, wasted time in collecting water, and poor quality and quantity of water.

Programme/Projects

As a result of the deterioration in the water situation, the Nigerian Conservation Foundation (NCF), a non-governmental organization working on the plateau, started a Watershed Management Project. The NCF has mainstreamed gender concerns into its organizational policies and priorities nationwide. Using participatory approaches, the necessity of women's involvement was systematically championed throughout the project cycle. Women were included at every stage, in the design, implementation and monitoring of the project.

In January 1999 a multi-stakeholder management committee for the Obudu plateau was formed. Members were from the NCF, Development in Nigeria (DIN), Cross River National Park, the Obudu Ranch Resort, Becheve Nature Reserve, 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. 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 used the meetings as a forum to educate the communities about participatory watershed management and the dangers of unsustainable practices to ecosystems, as well as to sensitize the Becheve communities and Fulani herders on their gender biases and the important role of women in collecting water for families.

In the first stage, from 2000 to 2001, a watershed and watercourse mapping survey was conducted, concentrating on drinking water points on the plateau. Between 2002 and 2003, the second stage, 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 and siltation, and 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 also to participate actively in this predominantly male domain. In the third stage, from 2003 to 2004, discussions were held with the local health clinic on water-related health issues, especially diarrhoea, and the two reservoirs were built.

Outcomes

Impacts on women's empowerment and gender equality:

- Women's voices were heard for the first time as they contributed to the decision-making process within the community; women were encouraged not only to attend management committee meetings but to participate actively in this predominantly male domain. Electing women leaders on the management committee became a source of great pride for all women in the community;
- Women were involved in the construction and maintenance of the reservoir;
- Considerably reducing the time it takes for women to collect water allowed women to spend more time on income generating activities, farming and marketing;
- Women's healthcare burden was reduced with a 45 per cent reduction in cases of diarrhoea in 2004;
- The time available for both girls and women to go to school was increased;
- The community's men were sensitized to the necessity of women's participation and shown how it will benefit them directly; and
- The Fulani herdsmen and the Becheve women were able to accommodate each other's water resources requirements through a negotiated process.

Empowerment of the whole community:

- The project taught a greater awareness of sustainable watershed ecosystems and their importance to the environment and nearby communities;
- Community participation increased as the community felt they owned the process and the project;
- The community learned how to approach the government to aid community development; and
- The project led to improved health and cleaner and closer water resources.

Key Factors for Success

Volunteers:

- The four volunteers working with staff of the BNR had a very positive effect on the outcome. Two of the volunteers were Canadians (2000-2003) while the other two were Nigerian (2003-present). Three of them were women, which made access to the Becheve women easier for project leaders. The female volunteer presence also provided role models that demonstrated that women could be in positions of leadership and contribute to the decision-making process.

Gender sensitization:

- The male volunteer facilitated a process where the Fulani herdsmen realized 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.

Main Obstacles

- The traditional village system is patriarchal, and endows men with all decision-making powers.
- Conflict arose between the Fulani herdsman and Becheve women over water availability.
- Before the tourism development, water resources were already strained because of overgrazing and unsustainable agricultural practices.

Looking Ahead - Sustainability and Transferability

Women were encouraged to pass along their knowledge from the conservation clubs to their children so there are now school conservation clubs, which ensure the planting of approximately 1,000 tree seedlings along water courses.

Achievement of gender equity is a long process and, in planning programmes and projects, gender sensitization and community participation should be broken into different stages.

Further Information

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- For information about the Nigerian Conservation Foundation: <http://www.africanconservation.org/ncftemp/>

Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

Pakistan: From Purdah to Participation

This case illustrates that:

- Women can sometimes offer more practical solutions in water management.
- Involvement by women can dynamise community development.
- Traditional leaders can be won over through patient effort to include women.
- Success based on women's involvement can lead to changes in attitudes in both women and men.

Women follow a strict form of purdah in Hoto village, Baltistan. They are not allowed to meet with people, especially men, from outside the community. Though they are largely responsible for domestic water work and some irrigation work, men have traditionally been responsible for making decisions that affect the management of water resources.

In Hoto, the water is owned and managed by the community itself. Till 1994, village elders were responsible for its management and for ensuring that all members of the community received an equal allotment. However, this traditional organisation was ill-equipped to deal with the management of new technologies and the institutional structures required for improving the water supply.

A participatory Action Research team went to the village in 1994 and offered to help improve its water management system. For one year, the men of Hoto would not give permission for them to meet the women. However, after a long process of dialogue, the female PAR team member was allowed to meet them. Women were finally brought into the dialogue on drinking water.

'We did not know any information about the meeting,' they said. 'The men didn't tell us about the meeting, other than that we were free to come. Anyway, what are we supposed to do in the meeting? What concern is it of ours? This is the men's duty and not ours.'

There were many other difficulties. Hoto is spread out and has many internal divisions. It is a large village of 180 households divided into five *mohallahs*, based on family or clan membership. Eventually, the traditional leaders of each *mohallah* started organising *mohallah*-based water committees, which would be responsible for communicating with individual households. Separate women's committees were also structured on the bases of the *mohallahs*.

The younger and more educated members of the community eventually became the leaders of these committees –since the traditional leadership came to recognise that people with an education would be better prepared to take on these responsibilities.

This marked the beginning of the traditional leadership giving power to other people; something which was not easy for them to do. Two members from each committee were then appointed to be members of a wider *Pani Ki* Committee (Urdu for Water Committee) to co-ordinate the activities of the *mohallah* organisations.

The men accept the women's proposal

Eventually, the men allowed their women to participate in a joint meeting to develop strategies to solve the drinking water problem. The men suggested extending the distribution

pipes of an old government water supply scheme to all of the households in the unserved area.

The women put up a counter-proposal. What they felt was needed was a new water tank built on unused land, which would first provide water to the presently non-functioning public standpipes. 'What is the point of a new pipe if the present pipe is not already being used?' they asked. Theirs was a far more cost-effective solution, and the community adopted it.

This marked a major change in thinking in the village. Before, women had been passive in their attitudes towards improving the drinking water situation, while men had been uninterested since domestic water work was not 'their' problem. The women have now become active participants, and have observed that significant changes have been made in their lives.

'We do not have the burden of bringing water now,' one of them said recently. 'We can stay home and take care of our children.' They also feel that they are able to spend more time paying attention to personal hygiene. 'We are washing our clothes in the water now that the water is available from the *nulka* (water) system,' states one of the women members of the *Pani Ki* Committee.

These female members are making new demands on behalf of the women in the community, such as asking for hygiene education, and are themselves selecting the subjects that they are most interested in learning about. They are paying attention to the storage of water, they are taking care of personal hygiene, and they feel their knowledge and understanding about disease transmission has increased.

The women of the *Pani Ki* Committee later took it upon themselves to begin collecting money for an operation and maintenance fund for their water system. They went from house to house collecting Rs. 10. This money provided the basis of the fund. Today, the *Pani Ki* Committee members are exploring other ways to sustain the fund rather than collecting money from each household. They feel strongly that households in Hoto are too poor and will not be able to make monetary contributions on a regular basis.

'We are going to collect one kilogram of apricot kernels from each household,' the Committee President explains. 'This will be easy for every house to give because every house has apricots. We (the Committee members) will sell the kernels and the money will go to the fund '.

Probably the most significant effect is the demand by women for the education of their daughters.

'I wish my daughters could have got an education,' one of the *Pani Ki* members says. 'But there were no schools in the village when they were young. We know that the older girls cannot go to the school now so we are sending our young daughters to schools. We don't want them to live like us but much better than us'.

In 1998, a new school was opened in Hoto, to which girls are being sent.

Taking the approach to other villages

Local traditional leaders have been very impressed by the results. Sheikh Ali Ahmad, the traditional leader of Hoto, commented: ‘The PAR project has helped the community in solving the biggest problem, which was once impossible to think about. We have learned how to organise our resources and bring them together to put them to use’.

When Sheikh Agha Saheb, another traditional leader living outside of the village, visited Hoto and discovered that households were using tap water, and that the people themselves had solved their water problem, he formed the Al-Muntazeer Organisation aimed at taking the same approach to other villages and applying it to other issues of community development.

Source: Unknown. If you the reader know the source of this case study, please do let us know.

Pakistan:

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

Challenges

Banda Golra is a small village in Pakistan with about 120 households. Most men work as day labourers, while women have traditional roles in the household and take little part in decision making. Most of the families are large, as women are usually not allowed to use family planning methods. The majority of women are illiterate, while most men have primary education. Women work at home, manage livestock and do other household work. Access to water in this area has been a problem for decades. The village’s only water sources were two natural springs, which are used by the people as well as by village livestock and wild animals. Collecting drinking water is the women’s responsibility and they spend three to four hours daily just completing that task. Obtaining water for livestock and other household purposes traditionally required another full day every week. In the only communal government pipeline to this village, water only runs twice a week and is not sufficient to meet local water demands. Diarrhoea is a major health concern among the children. Given these circumstances, the need for improved access to water and sanitation was urgent.

Programme/Projects

In Banda Golra, the village women, through the leadership of Nasim Bibi, a poor woman with no land to cultivate and whose husband works in construction, motivated other villagers to organize their own water supply scheme. Nasim Bibi had formed a community-based women’s organization (CBO) in 2002 in order to be eligible for credit from the Sarhad Rural Support Programme (SRSP), a regional NGO which could lend money to community-based groups.

CBO members started a saving scheme and, over a two-year period, 21 women received loans from SRSP, 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 decided to develop a village water supply scheme. The project 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. This case study documents how the group succeeded in bringing water to their village, the individual leadership of Nasim Bibi, and the strategies women used to gain acceptance for the water scheme. Nasim Bibi’s role helped other women become involved as community leaders. She herself served as the water scheme project manager and three committees were formed to manage the project. Every participating household had to take turns providing food and accommodation for the labourers engaged in hand pump drilling. Village women also helped soften the ground for drilling and with construction of the hand pump platforms.

Outcomes

Sanitation and health:

- There is now increased frequency in bathing for families, particularly women and girls, and increased frequency of clothes washing from a weekly to an almost daily basis.
- The time needed for collecting water has greatly decreased, resulting in a large increase in time available for other activities.
- The sense of security regarding the cleanliness of their new water sources has significantly increased.
- The contamination of the new water sources due to animal waste has decreased.

Women's empowerment and recognition of women in leadership roles:

- An open discussion of health issues related to frequent pregnancies is now possible in this community. Many women up to 35 years report that they are now able to decide to keep their families smaller.
- The decision-making power at the household level has increased for the majority of women involved in the water and credit schemes, and the value of participation in public activities is increasingly recognized.
- There is a growing understanding of how these activities can benefit the women's families through gaining access to new services and an increased acceptance by men that women can be effective community leaders.
- Women's social relations outside their homes and sense of independence due to greater social mobility are significantly increased.

Education:

- Girls' access to education has improved. A non-formal school has now been established in the village that offers both primary and secondary classes, mainly to girls.

Community involvement and higher rate of participation:

- The number of new CBO members has significantly increased, with support from male family members. Villagers who did not participate in the scheme now perceive it as something that is being done on behalf of the entire community.

Key Factors for Success

- 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 the proven success of the credit scheme. The support of the husband of Nasim Bibi of his wife's leadership helped her considerably in the organization of both the credit and water schemes.
- Because the women were able to provide additional financial support for their families through the SRSP micro-credit scheme, women received increased respect from male family members as well as increased decision-making power at the household and community levels.
- CBO Members' male relatives realized that the women's participation was benefiting the entire family. 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.

Main Obstacles

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. The men in the village exercise greater decision-making power than women, although the majority of women involved in the water and credit schemes have found that members of the community are starting to listen to their views. More women are now receiving support for the CBO activity from male family members, rather than resistance.

Looking Ahead – Sustainability and Transferability

After the successful completion of the credit and water supply schemes, the community members now see Nasim Bibi as an informal leader and a person with strong linkages with NGOs, and often come to her for help seeking jobs and credit. Increased understanding of the importance of sanitation in the village is a long term result of this project. Women interviewed indicated that

they plan to propose a resolution to organize a village sanitation scheme at their next CBO meeting.

Further Information

- Contact the researcher: Johdah Bokhari
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- For information about the Rural Support Programmes:
<http://www.rspn.org>

Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

Senegal

Role of Women in a Model of Community Management of Fish Resources and Marine Environments, Cayar

This case study highlights the role of women in fisheries and coastal resource management in Cayar, Senegal. This has often been looked at from a post-harvest perspective. The model of fish resources and marine environment management in Cayar is the result of a long process, which draws its source from traditional fishing practices in which women are not just marginal players but active participants.

Introduction

Cayar is a fishing village about 50 kilometres north of Dakar, one of the most important artisanal fishing communities in the country.

Cayar, Senegal

During the last twenty years, especially since the years of drought in the mid eighties and the crisis in the agricultural sector, pressure on marine resources has increased so significantly that fish has become scarce. Particularly the demersal (deep-swimming) fish species and shellfish are considered over-exploited. The pelagic (shoal-swimming) species in surface waters are fully exploited in most fishing areas. The problem is exacerbated by fleets from northern countries which, after over-fishing their own waters, have moved to West Africa, where fishing is largely unregulated and interfere with coastal fleets of mostly traditional small canoes, thus rapidly increasing the total fishing pressure. In total some 400.000 tonnes of fish are caught annually in the Senegalese Exclusive Economic Zone (EEZ). Fishing is currently the most important economic sector of the country.

- The sector employs about 15 percent of the Senegalese working population (600.000 people).
- Fresh fish and fish products are Senegal's most important export product to Europe, Asia and neighbouring countries, with total annual revenues of about 300 millions Euros which account for about 30 percent of total exports.
- The Senegalese government draws revenue from granting access to European and Asian industrial fishing vessels to the Senegalese "Exclusive Economic Zone" (EEZ).
- 5 percent of animal proteins consumed by the Senegalese are derived from fish and fish products.

Women play a crucial role in fisheries. Their main activities are:

- Processing of fish products, and associated work such as collecting freshwater and fuel wood.
- Trade. Women are extensively involved in the buying and selling of fish products, through local markets, restaurants or other outlets.

The problems in the fisheries sector relate, therefore, not simply to conservation and biodiversity issues, but are closely linked to social, economic and political interests from the local to the national level.

Women fish processors

The first major initiative of the World Wildlife Fund (WWF) Western Africa office was their YAKAR Project ('hope' in the local Wolof language). "*Yakar, Community Management of Marine Resources and the Environment in Cayar*", outlined a plan of action to help to solve

the fisheries problems in the area. The objectives of the project were the conservation of fishery resources, the reduction of poverty among the fishermen, and the improvement of hygiene of marine products.

The YAKAR project started its activities in 2003. However, it was more focused on conservation issues and did not take into consideration other issues. There was a need to better take into account the linkage between natural livelihood resources and poverty alleviation.

This is when the *programme "Safeguarding Natural Marine Resources for Coastal Communities"* was initiated. This Programme is part of the larger programme on Natural Livelihood Resources and Poverty Alleviation initiated by WWF, the IUCN Netherlands Committee and Friend of the Earth. It began in January 2004 for a three-year period. The overall objective is "to contribute significantly and demonstrably to the well-being of natural marine resources and of the people that are directly dependent on those resources".

In the Programme three "modules" were developed with poverty reduction as the central issue. These were on: direct poverty alleviation of small-scale fishermen in coastal fishing communities; the creation of market opportunities for coastal fisheries through, among other means, local regulation in order to create stability of supply and higher prices and incomes of fishermen; and on strengthening the collaboration and exchange of civil society organisations in order to build capacity towards improved performance of fisheries.

The most important activities developing linkages between biodiversity conservation and poverty alleviation are:

- The micro-finance programme which started in March 2004 with the development of a "Mutuelle d'Epargne et Credit", which was operational about 6 months afterwards (October 2004). This activity was funded by the Programme on Natural Livelihood Resources and Poverty Alleviation
- The process of establishing marine protected area in Cayar through a participatory process including all stakeholders, mainly artisanal fishers and the women who preserve and sell fish.

Importance of the Issue

Knowledge of how people interact with each other and with their environment is a necessary component of effective resource policy. Policymaking, including for marine protected areas (MPAs), appears to be most informed and innovative when it is open to the views and experiences of all stakeholders. However, despite their involvement in the use of coastal and marine resources around the world, many women face barriers to participating fully in the planning and management of those resources. Such barriers can be institutional, educational, or cultural in nature, and can profoundly influence decision - making that affects the welfare of marine resources and coastal communities. This case study highlights the attempt to fully involve women in fisheries and coastal resource management in Cayar, Senegal.

The Case

Participation of Women in the Establishment of the Marine Protected Areas

In most countries, women are not involved or even overlooked in the planning, development or management of marine and coastal resources. Fortunately, the process of establishing an MPA in Cayar recognises gender and the participation of women in development processes as central for sustainable development.

Due to their different roles, MPAs affect women and men differently whether or not they are consulted or involved, and both men and women inevitably have an impact on MPA implementation and management. Recognition of gender differences and their integration into MPA planning increases the chance of both women and men participating in and benefiting from an MPA, which in turn contributes to its success.

Women as MPA Stakeholders

When planners consult only men in resource management, they're consulting only half the population. Due to this, they miss half the information. In the case of Cayar, at the onset, women with the men in the community have both been involved in the participatory process of establishing the MPA. Women's participation is not only seen in their numbers. Women frequently know more about certain aspects of the resources, because they often occupy different spaces in the landscape. For this reason, they were able to bring the "broader picture" and not just focus exclusively on men's needs and priorities.

The different women associations ("*Groupements de Promotion Feminine*", fish processing associations, coastal clean up committees, etc.) played a very important role. In line with this, the quality of women's participations can also be observed by their being elected in different key positions within the different committee and local co-management bodies.

The economic situation of the fishermen in Cayar seems to have improved. Due to better management, the size of fish is increasing along with the prices. The fishermen and fish processors (women) perceive the trainings received on how to add value to the products as very helpful. Although not all problems with co-management are solved, fishermen and women organisations feel empowered and are well aware of the quality of their management system.

Setting-up Micro-finance for Women

Reducing unsustainable pressures on marine and coastal resources is one tool for protecting biodiversity. But when the pressures come from subsistence or artisanal fishers, the situation becomes more complex since people's livelihoods are at stake. One technique is to encourage fishers to adopt more environmentally friendly gear and another is to help them and their families to switch from fishing to other employment. These are not necessarily expensive undertakings but they do take some money and small scale fishers rarely have access to capital. This is why WWF has become active in helping to establish gender-sensitive community based micro-finance systems. Experiences to date in Cayar have been extremely positive. The credit unions provide more than just money. They empower. Credit unions are one tool for reducing poverty and encouraging better environmental management. In Cayar, for example, women have used micro-credit funds to start vegetable farming, livestock, shop keeping, and to add value to fish products by initiating their own wholesale fish businesses instead of selling to "middlemen". Since the start of operations in 2004, 206 small loans have been granted. The fund was initially established with a loan from WWF of about 15,000 euros and a counterpart savings fund of the members of about 7,500. Currently, the credit union has generated more than 9,000 euros in interest payments and has reimbursed WWF nearly 4,000 euros. It is expected that all the funds given by WWF will be reimbursed by October 2007 by which time the credit union will be entirely self-sufficient.

Membership in the credit unions is limited to community members and since interpersonal and familial ties in rural communities are very close, social pressures ensure that monies are

properly lent and repaid. To date, no loan has been unpaid and only about 9% of the loans are being repaid more slowly than expected.

The main borrowing and lending rules are set by the Senegalese Central Bank but local communities can set additional regulations (e.g. what activities are eligible). A community council, made up of the members, and a General Assembly meet periodically. Every credit union must have agreed operational principles, developed by the communities, which clearly articulates how funds should be used and by whom. In Cayar, the community has decided only to permit loans that promote activities which are respectful of the environment, reduce poverty, and promote development.

Establishing and managing a credit union takes specific skills so WWF helps to organize communities and facilitates training of credit union employees. They are also involved with periodic audits to ensure that the facilities are operated within government standards and according to rules set by the communities.

Micro-credit programmes are potentially powerful tools to help communities, mainly women, near marine protected areas to expand and diversify their local economies. In addition to providing public awareness and technical support, the current proposal plans for several exchange visits between communities interested in establishing credit unions and those already operational. This will allow for fishers and their families who have had experiences in their own communities to work with people from others. This is a particularly powerful magnification tool as no one is more capable of explaining the systems to fishers than other fishers.

Results/Lesson Learnt

What worked and why?

A demand driven approach: Given the absence of alternative employment opportunities the Cayar fishermen are almost entirely dependent in their livelihoods from artisanal fisheries. The restitution and maintenance of this resource base is, therefore, the precondition for barring a further deterioration of their situation. In fact, it was the fishermen in Cayar themselves who started to establish sustainable fishing practices more than a decade ago in the wake of the monetary crisis in 1994. The approach of WWF was to define, in collaboration with the communities, what needs to be done and to consult the population in order to ensure that the interventions remain close to the needs of the community. The setting-up of a micro-credit system was one of the explicit demands of the village people. The women also expressed the need the construction of news ovens for fish processing and also the need to be trained on financial management (accounting, budgeting). WWF activities were geared to support the communities in the solution of problems that are still outside their reach.

In Cayar today the local fishery organisations are well organised. Cayar is the only fishing village in Senegal with community management. Often the organisations have an economic component, as in the numerous *Groupements d'Interêt Economique* (GIE) and women have a important stake. These play an important role in representing the fishermen at the governmental "Service de Pêche", the local branch of the Fisheries Department. In some villages there are inter-professional committees with representatives of each of these groups, which administer the jetty. Their quality and power vary significantly from one fishing community to another.

Right from the start in 2000, WWF was conscious of the close links between the exploitation of marine resources by fishermen and poverty reduction on the one hand, and the danger of over-exploitation and the difficulties of an exclusively conservationist approach on the other. The WWF intervention in Cayar developed and employed diverse and an overlapping strategy to influence traditional practices within the fishers community and address the gap between conservation and development needs of men and women in the community. The most immediate effects for livelihoods come probably from the support to the maintenance of the management rules in artisanal fisheries, the construction of ovens for fish processing by the women, and the establishment of a cooperative credit scheme the funds of which are used in both the fisheries sector (boats, outboard motors, gear) and outside of it (horticulture, commerce). Participation of the communities in the preparation and implementation of management plans, as supported by the project, is decisive for ownership of the measures and compliance. The women play an instrumental role in both the organizational planning and implementation of activities.

What did not work and why?

The Senegalese government views the Cayar model as an example for the rest of Senegal and beyond. However, for its extension it is indispensable that the respective communities and their organisations are given the legal status to allow them to enforce compliance with their management plans vis-a vis migrant fishermen and deviant community members. The provision of such legal instruments to Cayar is the main explanation of the seemingly mysterious fact that of all Senegalese fishing communities which have all more or less the same problem context and the same socio-cultural traditions, only this single community succeeded in turning the situation around.

In many instances, women's participation is limited to project activities (e.g. training and seminars, livelihood project development, participation in advocacy and lobbying efforts, etc?). From the result of their participation, there may be opportunities in pursuing gender equity issues (e.g. access to resources, access to factors of production (raw material, additional capital, market access) that still need to be pursued and developed. In this context it will be interesting to look into how women are able to participate in benefits distribution, decision making processes and resource management that ensure sustainable use, conservation/rehabilitation, and equitable benefits for men and women in the community.

Key points for sharing of knowledge and replicability

Learn about the gender structure of local communities and find out why women often cannot participate as much as men; address this by asking both women and men for solutions; proceed gradually and gain the support of men as well.

- Use the knowledge of women about biodiversity, as they interact differently with the marine environment than men (e.g. their role in post-harvest activities such as gutting fish, may give them greater knowledge about fish reproductive seasons).
- Ensure equitable participation in all activities, including training, of both stakeholders and staff (recognising that participation should never be mandatory). This may mean scheduling meetings that suit women (e.g. not at traditional male meeting places).
- Use participatory methods, such as single sex focus groups and separate meetings with men and women.
- Monitor how women and men participate in and benefit from coastal resource management.

- Keep sex-disaggregated data on all employment, training, enterprise group loans, and meetings, in order to determine trends in proportions of budgets spent on and participation of both genders.
- Create 'role-models 'and encourage leadership and responsibility in promoting gender equality.

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South Africa: Women in Sanitation and Brick Making Project, Mabule Village

Challenges

Mabule village in South Africa encompasses 450 households. Mabule's men are generally migrant workers. Their absence leaves women with the full responsibility for children, eldercare, feeding the family, as well as time consuming tasks such as firewood and water collection. In this village, the high prevalence of diseases such as cholera was due to an unhygienic environment and lack of suitable sanitation facilities. Little attention was paid to personal sanitation. The nearest water source was 10 kilometres away. For many women and girls, visiting the sanitation facilities had become very difficult because of the poor construction and hygiene. 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.

Programme/Projects

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 an NGO implementing water and sanitation projects in South Africa, focusing on women's empowerment. The strategy chosen was aimed at ensuring that women participate fully in service development, since it is women 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, educating people on issues such as preventative healthcare for children, but the programmes had not been effective in changing the community's behaviour towards good hygiene. A group of women in the village had brought up grievances about the village's deteriorating health and hygiene situation and expressed a wish to change this situation.

Impressed with the Mabule women's commitment to developmental change, the Mvula Trust and the DWAF provided project resources and material support for the sanitation project. At the government level, the DWAF made a decision to fund sanitation projects only where there was gender balance in terms of decision-making. The project was run by a 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. Moreover, a brick-making project was established to obtain materials for latrine construction and generate cash. Both the sanitation and brick-making projects faced challenges that were gender-based. An analysis of the gender division of labour was made as part of the project to help the community members understand the importance of women's contributions to the community and to the project in particular. Committee members raised awareness of the benefits of good hygiene.

Outcomes

Health and sanitation

- The community now has safe, hygienic and attractive toilets; and
- The community is experiencing improved health and hygiene, including more dignity and privacy for both women and men with regard to waste evacuation.

Women's empowerment

- There is increased acceptance of women's leadership roles by community members, local government and NGOs, as well as an increased collaboration between women and men; and
- The Committee's women have learned to manage the entire life cycle of a project.

Community development

- The brick-making project has employed up to 10 people, four of whom are men and six of whom are women, and the community has access to affordable bricks; and
- Other related income-generating activities have been established and now there is more money being retained in the community by both women and men.

Key Factors for Success

Assessment and mobilization of the entire community

- People were sensitized to gender issues in the context of their community;
- The interests and welfare of women and men were built into project design and management;
- Diverse approaches were used to draw wide participation to promote changes in hygiene behaviour; and
- The entire community, including city councillors and leaders, were involved in order to illustrate to community members that they are in control of the process.

Gender analysis and mainstreaming

- Time constraints that women and men face related to water and sanitation were assessed;
- Gender roles and responsibilities were explored in a sensitive and unthreatening manner to see how and if they could be altered;
- An enabling environment was created so that women could participate, e.g., meetings scheduled when women could attend and support provided at all stages of the project for women participants; and
- Opportunities were created for men and women to work together in diverse roles.

Main Obstacles

- The community did not initially support the idea of women leading the development project. The municipality did not want to let the women open bank accounts, because it was felt that the project committee did not have enough skills to manage funds.
- 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.

Looking Ahead – Sustainability and Transferability

Some committee members continued their health and hygiene promotion and training activities in the community after the latrines had been installed. Based on sound strategic project planning, training and capacity-building and the support of experienced institutions, the Mabule women continue to initiate other community development projects, in continuous dialogue with their male partners.

Further Information

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Source

Office of the Special Advisor on Gender Issues and Advancement of Women, *Gender, water and sanitation; case studies on best practices*. New York, United Nations (in press).

South Asia:

Addressing Water and Poverty at the Grassroots: A Case Study of Area Water Partnerships and Women and Water Networks in South Asia¹⁷

Introduction

In this decade extensive analytical work has been done on the idea of ‘entitlements’, and the linkages between poverty, population and environment (including water)¹⁸. This work shows clearly how women are consistently more disadvantaged than men.

Ownership of and access to land and water resources are key issues in preserving and using environmental assets and mitigating poverty. In South Asia, gender disparities distort access to land and water. While women continue to be responsible for much of the water collection and management of food production for household consumption, their limited access militates against food and water security.¹⁹ Existing social and cultural biases distort the intent of inheritance laws and the inadequacies of legal structures further limits ownership and control by women.²⁰

The poor, especially in rural areas, also tend to be more reliant on ‘common property’ resources to which everyone has access, e.g. forests, rangelands, water bodies and inshore fishing grounds. In south Asia where the worst poverty is concentrated, families draw heavily from the commons for their fuel, fodder and water. In dry land areas of India landless people derive a fifth of their annual income, together with a range of non-marketed goods, from the natural products of common areas²¹. The ‘gauchars’ (land left uncultivated for grazing in honour of the revered cow and accessible for local people as common property) across the Indian sub-continent are an ancient method of protecting and rehabilitating environmentally marginal lands.

For women across South Asia, access to common property resources has been crucial in maintaining household water and food security. For example the disappearance of mangroves have destroyed the livelihoods of women and impoverished many Bangladeshi coastal households. While women in the region have traditionally managed agricultural activities, and have proven time and again that they are more ‘credit worthy’ than men, they have access to only a tiny percentage of agricultural micro-credit.

It can be seen that most countries in South Asia have policies or strategies either on environment (which also covers water), water, or both. Countries also have strategies and plans for the advancement of women, where there is reference to women and water. Many countries have policies on poverty, but rarely are the three (water, poverty and women) addressed together. In cases where there is some mention of gender concerns and perspectives, these are general (or sometimes related to domestic water, water transport on foot and water rights). Specific gender provisions relating to water (for example the role that

¹⁷ This case study is adapted from a longer paper that was developed for the Gender and Water Alliance by Simi Kamal and Jasveen Jairath in 2002.

¹⁸ The concept of ‘Entitlements’ are best discussed in L Melissa & Mearns R, **“Poverty and the Environment in Developing Countries: An overview Study, ESRC Society and Politics Group / GECP and ODA, 1991**

¹⁹ For details see **“Rural Women and Food Security”** – Current Situation and Perspectives, FAO, Rome, 1998

²⁰ For details see **“Effects of the Interplay of Different Formal and Customary Laws on Women in Pakistan” 2002** Simi Kamal, et al

²¹ For details see **Poverty and Environment Chapter for: State of the Environment in Asia and the Pacific, 2000** by UNESCAP 2000

women could play in preserving, regenerating or managing water bodies) are rarely seen, nor is there much in terms of women playing a role (as beneficiaries, users and managers) in plans to address the poverty-environment nexus.

However, it may be needed that there have been instances of some projects across South Asia where women have played a proactive role in managing water in ways that have addressed poverty indirectly, but without reference to national or provincial policies and strategies. For example a university department near Bombay, in India, has created 17 artificial lakes through rainwater harvesting and ecological regeneration in a local area, using abandoned quarries. The designers and implementers are all women – from the university and local women. In the same way local women and children in a project in Sindh, Pakistan, regularly cleaned up and maintained the flow of drainage channels, helping to keep the irrigation and drainage channels separate.

Importance of the Initiative

For the poor in South Asia, ‘poverty reduction’ means water, food and livelihood security. Platforms for action that include women are needed to manifest and validate critical needs and priority areas for the promotion of water, food and livelihood security in the region (the three cornerstones for poverty alleviation) particularly at the grassroots level. The following two cases (one from Pakistan and one from India) illustrate how participatory platforms at grassroots level are attempting to tackle the issues of water, food and livelihood security

A Case from Pakistan: Addressing Poverty in a Delta Region:

Historically the River Indus discharged into the Arabian Sea via a huge delta with 14 main mouths known as creeks. The Indus Delta consists of 1.5 million acres of land (from Karachi to Run of Kachh), and a population of about 1.5 million people, of which 0.5 million are fishermen.

The drying up of the River Indus downstream from Kotri Barrage has permanently damaged the ecosystem. It is established that the sea has intruded up to 150 miles (about 225 km)²². Shrimp production has decreased to one-tenth. The mangrove forest which covered 0.6 million acres has been reduced to 0.25 million acres. The drying up of the Delta and the subsequent decrease in shrimp and fish production has affected the livelihood of a vast majority of nearly half a million fishermen in the region.

While the realities of water availability, its regime, the climate, weather, delta conditions and the market have changed, the way of managing farms and using water at farm level has not. About 45 % of the land area is under cultivation. Poor management and distribution of irrigation water has also rendered a large area of land uncultivable and resulted in low crop yield and thousands of local farmers whose livelihood depended on agriculture are facing economic hardship. Poverty is on the increase.

Findings of a recent research study²³ conducted in five districts of Sindh (including the case study areas) showed that all people earning Rs 6,954 (US \$ 117) or less per month can be

²² “*Vision and Programme Document*”, Indus Delta Partnership (IDP), December 2001

²³ “*Sindh Rural Development Project, Household Survey Report*”, P&D-GoS/The Asian Development Bank/Raasta Development Consultant/AGRODEV, February 2000

classified as poor²⁴. Table 1 shows the proportion of households in district Thatta (a large part of which is covered by the Indus Delta Area Water Partnership) that had annual average per capita incomes below the food poverty line²⁵, in five major categories: small farmers, haris, wage laborers, fishing and livestock families. It can be seen that 56 percent of all households were below the poverty line (that is more than half of the households).

Households with Average Annual per Capita Incomes Below the Food Poverty Line in Indus Delta Area (District Thatta)

	Small Farmers (%)	Share Croppers (%)	Wage Laborers (%)	Fisher Folk (%)	Livestock (%)	Total (%)
Households with average annual per capita income below in Pak Rs 6954 (US \$ 117) per month	67	48	63	49	100	56

Source: Sindh Rural Development Project, P&D, GoS/Asian Development Bank / Raasta / Agrodev, 2000

Using the US\$1 poverty line²⁶, for all households in the sample, gives an even higher proportion of poor households. When the US\$ 1/person/day formula (where US\$1 = Rs 59.25), was applied, it can be seen that all the households that earn up to Rs 5,000 (US\$ 84.38) per month were well below the poverty line. This means that 67 percent of the households (ie two thirds) were below the poverty line in the Indus Delta AWP area²⁷. In fact even the families earning Rs 10,000 (US\$ 169) per month (US\$ 0.8 /person/day) are just on the margins of the poverty line. The low proportion of earning members reinforces the dependency ratio, which is another indicator of poverty.

The Indus Delta Area Water Partnership was initiated in June 2001. as part of the work of the Global Water Partnership (GWP)²⁸. Its main objective is to promote water, food and livelihood security (and thereby tackle poverty). Its members include local NGOs, government departments and national-level support organizations as well as local farmers and stakeholders

²⁴ The food poverty line was calculated using the national minimum calories requirement of 2,550 calories per capita per day. This is approximately equivalent to Rs 6,954 (US \$ 117) per capita per annum for Pakistan. "Sindh Rural Development Project, P&D-GoS/ADB/RDC/AGRODEV", February 2000, pp 30-35

²⁵ There are many measures of poverty. The two most commonly used measures are the food poverty line (mostly used for establishing national poverty lines) and the dollar a day poverty line (mostly used for making international comparisons). The food poverty line is the level of private consumption per person at which minimum calorie requirements, plus a small allowance for non-food consumption, are just met. It is typically expressed in terms of per capita per annum.

²⁶ The dollar a day poverty line defines a minimum level of private consumption. It is typically US\$1 per person per day, adjusted for purchasing power parity.

²⁷ Given that the average family size works out to 6.8 in the sample household, the average monthly income per person ranges from Rs 147 (US\$ 2.48) /month to Rs 735 (US\$ 12.40) /month for those households that earn between Rs 1,000 – 5,000 (US\$ 16.87- US\$ 84.38)per month. The average **daily** income per person is in the range of Rs 5 to Rs 25 (US \$ 0.084 – US \$ 0.421).

²⁸ A global movement to all bring all stakeholders in water on a single platform is currently underway, called the Global Water Partnership (GWP) with headquarters in Stockholm. Within the context of the emerging partnerships in water sector in South Asia (which include a Technical Advisory Committee, an emerging Regional Water Partnership, Country Water Partnerships and Area Water Partnerships)

The long term vision of the partnership includes:

- Revitalizing of the Indus Delta: eco-system, coastal rejuvenation, agriculture, fisheries, economy and social development.
- Transformation of the water sector into an integrated sector with complete coordination between the various departments and agencies working in the sector and availability of institutions that addresses the water related problems of the area, thereby promoting water, food and livelihood security.

Some relevant components of Indus Delta AWP's 10-year Vision are:

- Development of model water management in the Indus Delta by using innovative and practical approaches under Integrated Water Resources Management (IWRM). Equity considerations will include the allocation of water head and tail users and to all sections of society (particularly the poor and landless).
- A system of cost recovery that not only pays for itself but also generates surplus revenue for economic and social development.
- A minimization of conveyance losses in the irrigation system, efficient irrigation practices and move to more efficient use of water through changes in the cropping pattern.
- Increase in crop production (while using lower inputs of water) to address water and food security.

The first milestone is a model distributory (Mirpur Sakro Command Area) that is planned and managed through full participation of the stakeholders. In this vision, farmers' institutions will be strengthened and farmers capacity for improved practices will be enhanced.

This grassroots effort at addressing food, water and livelihood issues (and thereby addressing poverty) is now attempting to 'genderize' its work, by institutionalizing Women and Water Network as a parallel and mainstream initiative.

Gender mainstreaming, is a necessity to ensure that the water issues (as well as poverty equity and justice issues), policies, strategies, programmes and actions are discussed, planned and implemented in ways that most support women and where the adverse impacts on women are minimized or curtailed.

The WWNs have been designed strategically as **women's only platforms** (that will also bring the strengthens of the institutions its members represent), until such time that there is 50 percent representation of women in all levels of GWP and its family of institutions in South Asia.

Within Indus Delta AWP the approach at gender mainstreaming remains strategic – a separate WWN to activate women's issues, and WWN members on the steering committee of Indus Delta AWP.

The WWN working with Indus Delta AWP essentially addresses the need for empowering women to effectively participate in Area Water Partnerships. It envisages networking of women and women's organizations working with water related issues, and their "capacity building" for handling water issues effectively, from a strong gender perspective. They are

also eventually expected to influence policies, plans and actions in the eater sector, and to promote gender-sensitive integrated water resources management (IWRM).

The WWN functioning with Indus Delta AWP has 15 members at present.

The functions of WWN programme at IDAWP level have been clearly laid out and reflects the functions of national WWNs at grassroots level:

- Identification of women members and women's organizations that can form a women's perspective on water, and highlight (as well as seek to address) those issues that particularly affect women in the area.
- Women leaders in water
- Gender and water specialists
- Active water professionals
- Women and water organizations
- Women with interest in the water sector
- Strengthening the role of women and women's organizations in the planning, development and management AWP
- Promotion and strengthening of empowerment of women in relation to water resource management at grassroots level.
- Institutionalization of gender analysis and gender audit at all in all of policy, planning programmes and project implementation works of AWP
- Ensuring the implementation of women focused approaches and budgetary allocations in AWP initiatives and programmes in water, food and livelihood security.

Conclusions and lessons Learnt

To focus on the needs and aspirations of women requires a re-examination of water, food and livelihood security issues within the poverty-environment nexus. Empowering women and men (and communities) to conserve the quantity and quality of freshwater and terrestrial ecosystems (that provide services to humans and all living things), must be the hallmark of all 'engendered' poverty-alleviation efforts at grassroots level. The instances of the Indus Delta WP shows that gender mainstreaming, strategic gender inputs, a focus on food and water management and capacity building within local participatory institutions can address poverty in South Asia.

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Tanzania: Gender and the Protection of Freshwater Resources

Men fished on the Tanga coast of Tanzania. Women caught small shrimps and planted rice. Men also planted crops - but coconuts and cashew nuts that could be sold for cash. Up to 1996, women were thus among the poorest people in villages studied by a team commissioned by the government and the IUCN - the World Conservation Union. Women owned and controlled few resources.

The study was part of an effort to help local people find more sustainable ways to use their coastal environment and protect the mangroves, which are vital for protection of freshwater resources.

At the beginning, the women did not attend meetings. Special meetings were thus held with women to analyze both the consequences and the causes of the lack of participation. They listed a number of reasons for their absence, the main one being that the men would not listen to them so they did not want to waste their valuable time. The second reason was that meetings occurred at times that were not suitable for them. They also complained that they were not properly informed about the meetings.

A new meeting was convened with both the women and the men to discuss the women's absence, and, after some discussion and promises from the men that they would listen to them, the women finally agreed to attend the meetings.

Women are now engaging in planning, monitoring and evaluation activities and they are apparently actively participating in the formulation of a fisheries management agreement. Illegal mangrove cutting and destructive fishing practices, including dynamite fishing, have declined through the enforcement efforts of the villagers themselves, and there is a voluntary mangrove replanting and weeding program.

Despite the potential conflict between the gender equity objective and the objective of reducing fishing pressure by developing alternative livelihoods, the program has in general had positive results. In the pilot villages, both the environmental committees and village management committees are more gender balanced today.

What the case illustrates:

Levels of gender awareness, participation and motivation have increased women's self-confidence and some are now even actively participating in typical male activities like village patrols. The situation improved gradually as the women gained self-confidence after participating in training courses, workshops, and study tours and seeing the results of their activities.

Source: Involvement of Women in Planning and Management in Tanga, Region, Tanzania, IUCN, The World Conservation Union.

Togo:

Integrating Gender into the Promotion of Hygiene in Schools SSHE

Challenges

In the rural village of Effumani, in the province of Est-Mono, Togo, 15 year old Gentil Weleke was attending 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 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.

How Gentil used to spend her days reflects some general statistics of Togo, and the province of Est-Mono in particular. In Est-Mono, one of the ten 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. While five 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 two per cent of the population of Est-Mono has access to sanitation at home. Men usually use nearby forests for sanitation, whereas women walk to distant farms.

Plan Togo, an international NGO, sought to address the lack of water and sanitation facilities in Gentil's village as well as two others, 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 network CREPA (Regional Centre for Cost-Effective Fresh Water and Sanitation), to identify the original project's limitations and correct them in a pilot project. They identified lack of consultation and a lack of gender perspective to be the problems.

Programme/Projects

Given the problems identified in the original water and sanitation project for schools, CREPA encouraged the participation of all villagers 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. Their work included visiting households; advocating a high level of participation of boy and girl students, as well as men and women teachers and administrators; and diagnosing the water and sanitation situation 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 villages' 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 construction 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 for 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 change. Students who are unclean are sent back home. Those who do not wash their hands are requested to do so and unclean students are punished.

Outcomes

Income Generation

- By selling water considered to be sacred, not only are the schools now endowed with the status of nurturing life, they are also generating an income. The three Water Committees have already saved 182,000 F CFA (about US\$ 330); and
- Women now have more time to dedicate to income-generating activities.

Impact on Health

- Villagers now understand that the source of many diseases is unclean water and inappropriate sanitation; and
- The health of the community, especially school-attending children, has improved and students are absent less often due to illness.

Impact on Gender Equality

- Many people can identify sources of gender imbalances; and
- Women had been empowered and they wanted to organize public debates to address gender inequality issues.

Impact on the Communities:

- Community members have changed their behaviour to adopt hygienic practices with water, food and waste; and
- There are now stronger social ties among the four ethnic communities of Agan.

Key Factors for Success

Addressing gender imbalances among students and ensuring the participation of the entire community has led to impacts far beyond the immediate results. For example, girls have increased their self-esteem and they are respected as leaders. Gender-balanced School Health committees control the equipment and oversee hygiene.

Main Obstacles

- Poor sanitation habits and facilities; and
- Lack of access to clean water.

Looking Ahead – Sustainability and Transferability

CREPA and Plan Togo instilled in the communities the belief that gender mainstreaming contributes to the success of any project. CREPA and Plan Togo have signed contracts for similar projects in other areas of Togo.

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- For information about CREPA: <http://conference2005.ecosan.org/abstracts/a2.pdf>

Source

Office of the Special Advisor on Gender Issues and Advancement of Women,
Gender, water and sanitation; case studies on best practices. New York, United
Nations (in press).

Uganda:

Mainstreaming Gender into Policy: Examining Uganda's Gender Water Strategy

Challenges

Although Uganda is known for having a 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) published an explicit strategy to help mainstream gender into its plans and activities. This study uses the case of the DWD to measure the commitment of the Ugandan government to mainstreaming gender in its policies and plans, as outlined in the National Gender Policy.

Programme/Projects

The Water Sector Gender Strategy (WSGS) is an initiative of the DWD that aims to enhance gender equity, participation of both women and men in water management, and equal access to and control over water resources in order to alleviate poverty. The Strategy sets out clear aims, rationales and targets. It 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.

All four DWD Departments have technical staff who handle water sector 'hardware' activities, as well as social scientists who handle the 'software' activities. Gender falls under the software activities, while the hardware activities include engineering and physical infrastructure. The Strategy outlines DWD's gender targets for 2003-2007 and gives specific measures and targets to manage the integration of gender into both the software and hardware sides. The targets include:

- Women and men will be represented in all decision-making forums of the sector.
- Commitment will be secured from top management and investors in the sector to work towards greater gender equality.
- Institutions feeding personnel into the sector will collaborate to incorporate appropriate gender curriculum and improved admission targets by 25 per cent. Recruitment criteria and procedures will be altered for gender sensitivity.
- The Participatory Hygiene and Sanitation Transformation (PHAST) tool will be adopted to integrate hardware water supply with awareness building on gender at the community level, hygienic use of water and community based monitoring of water supplies.

Outcomes

The work plan from the Rural Water Department reflects how gender mainstreaming 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 the software activities which formerly had only been done in an ad hoc manner. "The sector guideline for 2005/6 also specifies 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 because women within the communities are to 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.

Key Factors for Success

- **Gender integration in planning:** The gender perspective planning has helped develop a highly gender-responsive approach. The objectives of the related action plan have clear gender-integrated activity profiles, time frames and actors for each activity. The officials in charge in each department are also held accountable for integrating gender according to the guidelines.
- **Gender-sensitive monitoring:** Prior to the Strategy, the DWD used eight indicators to measure performance in the water sector. 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.
- **Collaboration:** The collaborative approach used by DWD in working with multiple NGOs and institutions throughout the country was a critical part of the DWD’s new approach to water and sanitation service development and delivery.

Main Obstacles

- *Lack of guidelines:* The DWD realized there were not any clear guidelines as to how to mainstream gender in this sector, despite the fact that gender cannot be divorced from effective water management and use.
- *Lack of trained women:* At the time of the study, there were only a small percentage of women employed by the DWD. This was mainly due to the fact that until recently, water issues focused primarily on technical skills related to science and engineering. In Uganda historically there have been few women in the sciences so this created a significant gender imbalance within the DWD.
- *Lack of control over recruitment:* The DWD does not have control over other arms 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 had negative implications for the Directorate’s plans to improve their male/female staff ratios.

Looking Ahead - Sustainability and Transferability

The Water Sector Gender Strategy sets a good example of how gender can be strategically mainstreamed into policy and plans at the national level. The Strategy demonstrates that national level policies and plans can be linked effectively and 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 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 sector

gender strategy has also dispelled the misconception that gender mainstreaming only occurs due to donor conditionalities and agendas.

Further Information

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Source

Office of the Special Advisor on Gender Issues and Advancement of Women, Gender, water and sanitation; case studies on best practices. New York, United Nations (in press).

United States: Refusing to Back Down²⁹

by Maureen Taylor, Michigan Welfare Rights Organization

During the summer of 2002, while protesting gas and electricity cutoffs in Detroit, the Michigan Welfare Rights Organization (MWRO) was informed of something very disturbing: tens of thousands of residents had been cut off from the basic necessity of water. The MWRO (which is an advocate union for welfare recipients, the low income bracket, and the homeless) sounded the alarm, agitated, solicited partners, and revealed this practice for what it was – a human rights violation which bears most often on the backs of poor women.

According to the Detroit Water and Sewage Department (DWSD), between July 1, 2001, and June 30, 2002, the utility cut off water to 40,752 residences in the Detroit area. As of Jan. 13, the DWSD reported that it had cut off water service to 4,523 residences over the past 79 business days.

In Detroit, as in other affected Michigan municipalities and communities across America, women-led households are often poor. This is the dynamic of the country. Men earn more money. When the layoffs come, women – often black women – are the first to go.

Thus, it was fitting that in the case of Detroit, organizations led by women (and the many individual women who joined them) were those who stepped up to oppose human rights violations in Detroit. The Sweetwater Alliance (a coalition dedicated to keeping essential resources out of corporate control) joined the MWRO in pickets, and then the two set off on a circuitous journey through the Detroit water bureaucracy which would eventually reveal the malevolency at hand. Their first step was to go to privately scheduled meetings of Detroit's water commissioners with the information about cutoffs in-hand, where they were greeted with ignorance to the problem. So the MWRO and Sweetwater took up their cause with the powerful Detroit city council. The council president – Maryann Mahaffey, a woman – was outraged. She convened an emergency utility task force, with representation from the MWRO, the Sweetwater Alliance, and other organizations. At a televised session of the task force, MWRO head Maureen Taylor and others spoke of the obscene number of people without water. They also met their nemesis. Joining them at the session was the new chief administrator of Detroit's water department, Victor Mercado. Mercado, it turned out, was newly arrived from high-level positions with the Thames Water corporation, one of the largest private water companies in the world. He had recently instituted the aggressive policy of debt collection and cutoffs for non-payment, which included the practice of DWSD workers cementing areas around the shut-off valves to prevent residents from turning their water back on. The women fighting the cutoffs now realized their fight would be about more than cutoffs.

It now seemed, with the water cutoffs, that after years of starving city services and infrastructure, the goal was to improve DWSD's revenue stream just enough to place it on the auction block for a corporate takeover; Detroit water rates rose nine percent in 2002 accordingly. Meanwhile, the water company had been starving its own capacity at the rank-

²⁹ This case study was produced by Food & Water Watch. Prior versions of this case were published by Public Citizen and the Women's Environment and Development Organisation (WEDO) in "Diverting the Flow: A resource guide to Gender, Rights and Water Privatization" (November 2003; www.wedo.org). It is reproduced here from the web page of Public Citizen at: <http://www.citizen.org/cmep/Water/gender/articles.cfm?ID=10795>

and-file service level – opting instead for less efficient subcontracts – and inflating its management ranks, creating an atmosphere ripe for public divestiture. The crisis over cutoffs was now accompanied by the specter of privatization.

The plotters of privatization were counting that the citizen angst over the state of the water company would translate into an anything-would-be-better attitude concerning the fate of their water, at which time the privateers and their advocates would be able to jam privatization down Detroit's throat. The women at MWRO, Sweetwater, and other organizations were not going to stand for that. They instituted a campaign of education, a part of which was the Resurrection Marches. On three Mondays, citizens were invited to join pickets around water department offices, to come with their water bills in hand, and go into the building with a MWRO or Sweetwater representative to get their water turned back on or avoid having it turned off. This developed a civic conversation which shamed water officials.

Today, the campaign continues. Many are still without water, and Michigan Governor Jennifer Granholm is proving an unresponsive leader with regards to this human rights issue. But for the women involved with this effort, everyday is a lookout.

Uruguay: Privatisation with Protest³⁰

by Juan Berhau, Dirigentes de la Federacion de Funcionarios de las Obras Sanitarias del Estado (FFOSE) and Carlos Santos, Friends of the Earth Uruguay (REDES)

In two economically and socially different Uruguayan communities, women are leading two different fights against one common enemy: water privatisation.

In the department of Maldonado, water service was not considered a problem until it was privatised in a process that faced popular resistance, lacked any formal public consultation, and was supported only by the hotel industry, large landowners, and big government. The decision to privatise the water in Maldonado was made by the authorities responsible for the management of the water resources (Administracion de las Obras Sanitarias del Estado – OSE) and the municipality (Intendencia Municipal de Maldonado – IMM). Foremost, though, the decision to privatise followed executive branch policy which has been shaped by agreements with international financial institutions, such as the International Monetary Fund (IMF).

Two companies took part in the privatisation: in the city of Maldonado the private operator is URAGUA (subsidiary of the Spanish company Aguas de Bilbao), and in the beach zone (on the Atlantic coast) the private operator is Aguas de la Costa (subsidiary of the gigantic multinational, Suez). The majority of the population in the city of Maldonado is composed of workers, while the beach zone is populated mostly by wealthy, property-owning tourists (who live there for three or four months during the summer season).

Due to the differences between these two populations, the reactions to privatisation have been somewhat different. In the beach zone the complaints of the population have centred on the quality and price of the water. The motto of the neighbourhood organisation is “Water Yes, Robbery No!”. In the poorer areas of Maldonado the action of the neighbourhood organisations has centred on the fight to defend the community standpipes.

The community standpipes were installed in different zones around the country by the public water and sanitation ministry (OSE) to assure that potable water was available in areas that lacked piped water to households. The cost of the community standpipes (whose installation is the responsibility of OSE) is assumed by the municipalities. In both of the zones in Maldonado where the private companies operate, their first action was the elimination of the community standpipes. This was a strategy designed to make people pay the high fee demanded by the private companies for the installation of a household connection. In the wealthier beach zones, the private companies managed to remove the community standpipes without many problems, but in the poorer areas citizens were unable to pay the connection fees and were faced with the loss of water service.

The solutions of the inhabitants of the two zones have been based to some extent on their respective socio-economic situations. In the wealthier zones some have excavated their own

³⁰ This case study was produced by Food & Water Watch. Prior versions of this case were published by Public Citizen and the Women’s Environment and Development Organisation (WEDO) in "Diverting the Flow: A resource guide to Gender, Rights and Water Privatisation" (November 2003; www.wedo.org). It is reproduced here from the web page of Public Citizen at: <http://www.citizen.org/cmep/Water/gender/articles.cfm?ID=10796>

artesian wells (with some degree of insecurity, since the legalities of “self-supply” of water are unclear) and others have chosen to develop a system of rainwater harvesting as their primary source of supply. In these cases, women came to the fore as those responsible for an affordable water supply. The use of wells and rainwater harvesting has required complementary work between men and women. However, the maintenance and cleaning of the rainwater tanks has primarily been the work of women. And, in cases where there is not sufficient water, when water must be transported from other zones, this has primarily been the work and responsibility of women and children.

In the poorer areas in the city of Maldonado the reactions have been different. Women have put up fierce resistance to the elimination of the community standpipes. In the District San Antonio III, an establishment located to the north of the city of Maldonado, the elimination of the community standpipe was announced almost immediately after the private company took over. The neighbourhood commission of San Antonio, which is run primarily by women and has provided nearly ten years of valuable community work, successfully lobbied the local authorities to maintain the community tap, and the water supplies to the district were continued even though the cost of the service is the responsibility of the municipality (IMM).

In the District San Antonio III, there are approximately 90 families, 60 per cent of which have female heads of households. The community standpipe in the neighbourhood not only supplies water to these families, but also to neighbours from other districts where the community standpipes have been removed or household water connections have been cut off due to the inability to pay the high water rates.

Norma Bentin, one of the members of the commission of San Antonio, and an activist due to the harsh conditions of her own life, runs a food programme for the children in the neighbourhood. She commented that many people rely on the community standpipes, and even with the community standpipes, there are many water-borne diseases and hygiene problems due to the lack of potable water. However, she recognized that she had not realized the importance of the installation of these community standpipes until they received the notice from the private company that they were going to be shut down.

Here, the communities women have come together to organise informal piping from the community standpipe to some of the other homes. Thus, the community succeeded in managing its own water, but due to a lack of resources the quality of the service has still been very low. The service supplied by the water company ends at the community standpipe, and the people of the neighbourhood must organise themselves to ensure that all the neighbours get water.

The examples in the neighbourhoods of Maldonado, and the different situations in the beach zones, illustrate the necessity of incorporating the vision and the needs of the sectors most directly and urgently affected by water management changes before planning privatisations of this type. When water management policies are being discussed, decision makers must address the issue of ensuring equitable access to water as well as what constitutes a sustainable use of this resource.

Zimbabwe:

Gender mainstreaming in water supply and sanitation in Manzvire Village, Chipinge District

Challenges

Water supply systems installed soon after Zimbabwe gained independence in 1980 were often based on a supply-driven approach and not sustainable. Women lost much of their productive time travelling long distances to fetch water for their families. This also adversely affected girls' school enrolment – a trend further exacerbated by high dropout rates at puberty due to the lack of sanitary facilities at most schools.

In recognition of the imbalances which existed in the water sector and the question of sustainability of facilities, Zimbabwe embarked on a water sector reform in 1993. Women's participation in project activities was encouraged in line with global trends given the critical links between gender, water and sanitation. Four years later, the Chipinge district adopted a Community-based Management approach to water resource management and introduced it into some of its wards, including the village of Manzvire.

Manzvire village has a population of just over 5,500, with 514 households. About 290 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, with the closest source the Save River, approximately 15 kilometres away. People use boreholes and shallow wells as water supply sources. The village has 10 bore-holes with at least eight reported to be functional. HIV/AIDS and rural/urban migration contribute to at least 80 per cent of the households being female or orphan-headed.

Programme/Projects

In 2003, the United Nations Children's fund (UNICEF) contributed approximately US\$ 4,000 to the Chipinge Rural District Council (RDC) for rehabilitation of water supply systems, mainly bore-holes. Given high external contracting costs, the RDC adopted a community-based approach and targeted funds for community mobilization and training workshops for local well sinkers and latrine builders.

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, the women selected 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."

The women also established savings and credit with revolving funds to purchase the locally available spare parts and greasing materials. In Manzvire, women established a cooperative garden. Their male counterparts and husbands were asked to make contributions to the fund when required. The women opened a Post Office Savings Bank account to deposit these community funds.

Outcomes

- Women are actively involved in decision-making and now feel strongly that they are equally effective agents of change with men;
- Since the women's maintenance work is done on a voluntary basis, the work costs significantly less;
- The financial resources provided by UNICEF were targeted to rehabilitate 15 boreholes, but with active women's participation in operation and maintenance, 60 boreholes were rehabilitated;
- Women have more time for productive activities such as market gardening, which apart from giving them some cash, improves their nutritional base;
- Women are using interest charged from the savings and credit clubs to maintain boreholes;
- Girls stay at school longer since they do not have to spend so much time collecting water;
- Better hygiene behaviour is practiced, including use of rubbish pits in local households;
- The health of the village has improved, including a significant decrease in diarrhoeal disease; and
- The village of Manzvire will act as a role model for other communities in UNICEF's documentary.

Key Factors for Success

Health educators:

- The Ministry of Health was instrumental in training Village Health Workers, who took up the daunting task of educating and information dissemination to the general public on health and hygiene good practices.
- As a result, in Manzvire, health clubs and other community-led initiatives have been initiated.

Role of elected and traditional leaders:

- Much of the project's success can be attributed to the effective leadership of their dedicated councillor, Mrs. Chirimambowa, and to traditional leaders who were called upon to resolve disputes.

Main Obstacles

Males felt their roles were threatened:

- Initially, in the male-headed households, the husbands felt threatened and disapproved their wives' involvement in project meetings. A UNICEF workshop raised awareness of the benefits of training both men and women, which helped the men accept that their wives were equally important agents of change. The men demonstrated their acceptance by assisting with other household tasks while their wives were attending related community meetings and training.

Traditional dress:

- The long traditional dress worn by Zimbabwean women inhibited work for the latrine builders, and initially overalls and work-suits were considered inappropriate.
- Women can now freely wear work-suits and overalls during latrine construction and repairing of bore-holes.

Looking Ahead - Sustainability and Transferability

For future projects, it is important to remember that:

- Gender mainstreaming in itself is not a panacea for solving water and sanitation problems;
- Poverty carries with it limited access to safe water and sanitation and poverty needs to be addressed if true empowerment is to be achieved;
- Labour involved in community-based management must be divided equitably between men and women so that the women do not wind up with even heavier workloads that offset the benefits of the improved water and sanitation facilities; and
- There is a need to invest heavily in capacity building at village, district and national levels. There is also need for institutional set-up to spearhead and assist with the research, documentation and distribution of findings on gender mainstreaming for implementation.

Further Information

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Source

Office of the Special Advisor on Gender Issues and Advancement of Women, Gender, water and sanitation; case studies on best practices. New York, United Nations (in press).

Zimbabwe:

The initiative on gender mainstreaming in water and sanitation projects through the well sinking programme

Introduction

Zimbabwe has been implementing integrated rural water supplies and sanitation programme (IRWSSP) since the late 80s. The programme focuses on three components - water supply, sanitation and hygiene. It was initially largely implemented through inter-ministerial committees that are found at national, provincial and district level. The inter-ministerial committee at the national level known as the National Action Committee is a policy formulating body, defining standards, operational approaches and monitors the national programme. The broad objectives of the integrated rural water supply and sanitation programme have been:

- ❑ To improve coverage and access to safe portable water.
- ❑ To improve access and coverage to sanitation.
- ❑ To improve livelihoods of the communities through engagement in water and sanitation related work as well as through skills development.

The integrated rural water supply and sanitation programme implemented throughout the 58 districts of Zimbabwe was funded by a number of donors through bi-lateral and multilateral agreements. Some of the cross-cutting issues that the programme has tried to address have been gender, HIV and AIDs, poverty reduction, and decentralization.

The case study describes some of the initiatives that have been undertaken under the IRWSSP to try and improve the role of women moving them from performing unpaid, unskilled labour to paid water related employment. The gender task force of the national action committee recommended a set of interventions that would ensure gender mainstreaming. One of these interventions was the training and utilization of women as well sinkers and latrine builders. The pilot training and use of women as well sinkers was undertaken in Mt Darwin while women latrine builders were in Zvimba.

Importance of the issue

Women and men should share the benefits and burdens that come with improved water supplies and sanitation. The common feature has been that women usually perform unpaid, unskilled labour while the male counterparts perform the paid semi-skilled to skilled labour related to water and sanitation. Poverty eradication will depend on improving the livelihoods of both men and women. Assumptions that look at household as a singular unit tend to mask differences within the household. Women normally do not have access to financial assets and yet are the ones responsible for paying water bills and for other communal obligations. Programmes that do not pay attention to improving the lives of women risk alienating women from the mainstream development.

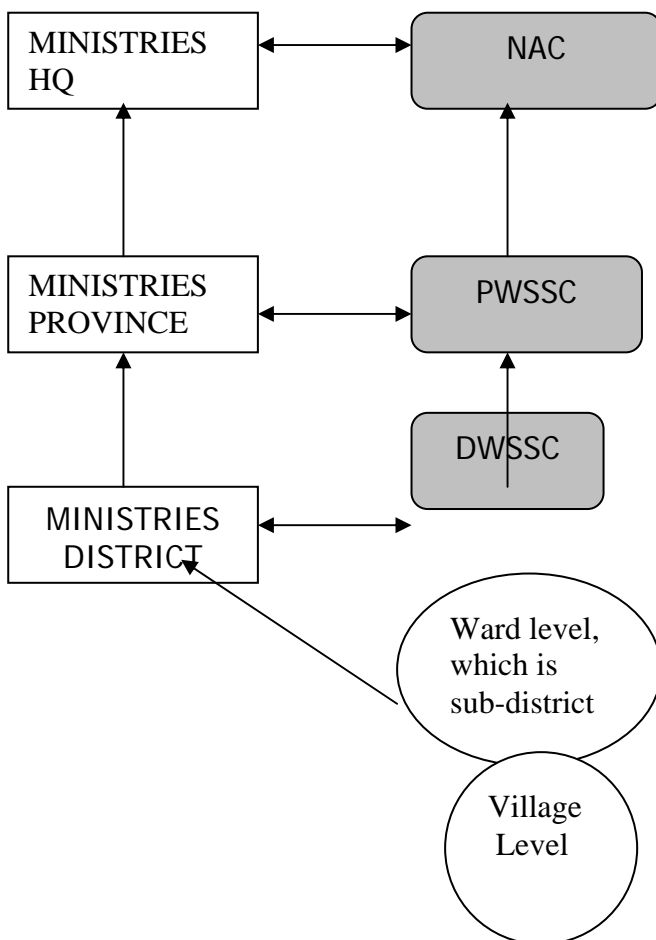
The case presents valuable and interesting lessons for approaches to gender mainstreaming. Mainstreaming is in itself a learning process that should involve local and national institutions. There is no scientific answer to it and will evolve as a process, a process in which there is self-evaluation and course correction. Gender mainstreaming should not be viewed as women's issues as this isolates and sometimes antagonizes men. In this case study, women were treated as a special group and the use of single women further stigmatized the initiative with men viewing it as a "an initiative of divorced women"

The case

Background to mainstreaming gender

In the late 90s the National Action Committee (NAC) through its gender task force decided to come up with strategies as to how they could mainstream gender within the national programme of water supplies and sanitation. The national action committee comprised of different ministries that were implementing water and sanitation and is responsible for policy formulation research setting standards monitoring of the programme and sourcing of funds. Below the NAC are the provincial and district committees who implement the projects. At the ward level there are extension services that assist in the implementation of community monitoring and offer extension services

ORGANISATIONAL FRAMEWORK IRWSS PROJECTS



One of the problems that were identified was that women were performing unskilled and non-paying jobs at the water point level. To address this anomaly, the NAC decided that women should be trained as well-sinkers. The first experiment was carried out in Mount Darwin where four women were trained as well sinkers. Well sinking is a semi-skilled job that earns a salary. The trained women were paired off with men and sent out in the project areas. Ideally well sinkers spend up to three months without visiting their homes and are generally paid on completion of the given number of wells. The well sinking teams were also provided with protective clothing – an overall and tents (which are generally shared).

Challenges

When the NAC went to review the initiative, they found that women were now performing the roles of cooking and cleaning the tent and the men were digging. Challenges that were faced were as follows:

- ❑ Women were issued with overalls, which traditionally are meant for men and therefore would not accommodate the female structure of hips and breasts. During digging, the wells get very hot especially from 15 meters and diggers usually half strip their clothing and in this case this could not happen, as the groups were mixed male and female.
- ❑ The salary is depended on completion of a task and not weekly or monthly remuneration. This caused problems with families and women needed their salaries to maintain families that have remained back home.
- ❑ Shared accommodation also posed challenges as the tents were issued to teams and not individuals.

The NAC went back to the drawing board and decided then to form an all women team. Soon allegations arose that the all woman team (who were all single) had been selected for their beauty and not their ability. Furthermore, the supervisor who happened to be a man was also accused of visiting the women team more regularly than other teams. On the part of the women, they also felt that they still did not have privacy as the supervisor could visit any time when they are not fully clothed.

The NAC again went back to the drawing board and they decided to form an all women team comprising of married and widowed women. These were expected to spend three months sinking wells away from their families. This was the first milestone. Secondly, the women were then given work suits, which again were traditionally designed for men and therefore are tight around the hips. The women flatly refused to wear these. The NAC then decided on overcoats which when buttoned up are tight around the breast, are short and therefore not suitable for bending. Because the women had to visit families regularly, it took them long to finish the wells and therefore it also took long for them to get paid. Consequently the women dropped out of the well sinking teams. The NAC perceived that their experiment had been a failure and dropped it.

Consultations with communities

The NAC finally decided to consult with the local committees and communities and asked how women could be involved in paid jobs. The communities indicated that training them as latrine builders would ensure that they stayed within the village, would be paid faster and the skills would extend to benefiting areas other than sanitation. Previously women had been excluded from training as latrine builders because the recruitment requirement needed “people with experience in building” which excluded a lot of women. It was then agreed that the NAC would relax its requirements and allow women with interest even if without experience to train as latrine builders. To date, some of the latrine builders in Zvimba area who have received prizes for the best quality of work are women. In fact, Zvimba district boasts a lot of successful women builders and the community feels that women were more compassionate towards the less privileged even accepting payment in kind.

Lessons learnt

There are several lessons that emerge from this case.

- ❑ The initiative on gender mainstreaming in water and sanitation projects through the well sinking programme had very good intentions of increasing the income of women through paid employment. However, the initiative neglected to provide an enabling environment that would offer psychological and physical comfort and well being. Consequently shelter while out on site became a problem, clothing was inappropriate, and the system of rewards not beneficial to families. It is important therefore to review the environment and create one that would allow men and women to participate in water and sanitation projects as equal partners.
- ❑ Another key lesson is on the approach that was taken to mainstreaming gender which was more or less that of an engineering formula without adequate consultation from the affected people.
- ❑ Contrary to the belief that women are not interested in taking up, paid jobs, it is the conditions of the paid jobs, the social norms and pressure that discourage them from participating. Furthermore, the demands on their times through their triple roles of reproductive, productive and community management means their participation has to be closer to their homesteads to allow them to juggle all these roles. This has implications within the sector that seeks to promote improved livelihoods through productive use of water. If irrigation sites are located faraway from homes, it may compromise women who may not be able to take up that irrigation if it means neglecting some of their other chores.
- ❑ Women latrine builders were more acceptable to the community as the latrine building jobs are performed at the lowest unit i.e. the village. The women are therefore able to look after the family and because payment is done per completed toilet unit, income is regular. This lesson has implications even for capacity building initiatives in that if venues are far away from the homes then women may not be able to attend.

Key points for sharing Knowledge and Replicability.

National level policies for gender mainstreaming are important. These must be backed by support from the local level and this support is through consultations. Prescriptions from above, even with good intentions may sometimes have negative impacts on the culture and social fabric of the community.



Gender mainstreaming should not be seen as a science which has formulas for its application, rather it is both an art and a learning process.

Recognizing the triple roles that men and women perform is important. Women need to attend to reproductive, community work and productive activities. Projects that take women away from their homes are bound to fail .

Photo by Fungai Makoni

Both men and women can perform water and sanitation jobs. It the environment that either enables them or discourages them form participating. Women builders confirmed that they had more disposable income for use within the household. They also acknowledged that they tended to be more understanding towards those who could not pay up front and thus could be losing some money. On the other hand, they were also using the newly acquired skills to improve their homesteads thus contributing to the national vision of better housing infrastructure.

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