

Mainstreaming gender in integrated water resources management strategies and plans: practical steps for practitioners

The water sector has been a pioneer in putting gender mainstreaming approaches into place at the program level in the area of domestic water supply and sanitation. Water professionals were among the first to realize that community development projects that failed to take into consideration the reality of women's lives—their roles, responsibilities, sources of power, needs and aspirations—were themselves doomed to failure. Now is the time to expand this understanding beyond community water supply and sanitation and to move it "upstream" to the development of Integrated Water Resources Management (IWRM) plans and strategies as called for by the Johannesburg Plan of Implementation and reinforced by the 2005 World Summit.

This brief is designed to provide water professionals with an overview of how to mainstream gender in the development of integrated water resources management strategies and plans. A companion brief for policy makers is also available.

Most water professionals recognize that women and men have different interests in, and derive different benefits from, the availability, use and management of water, and ample evidence supports the need to involve women in the design and management of water supply and sanitation plans and projects if they are to succeed. To date, gender mainstreaming efforts in the water sector have focused primarily on increasing the number of female project staff, providing gender training to staff members, ensuring that women are among project beneficiaries, inducting women as participants and service providers at the grassroots level, and supporting women's role in domestic water management.

Although the water community has made significant strides in designing programs and policies that take into account the differing roles and responsibilities of men and women, most of the progress has been in the area of domestic water supply and sanitation. Much remains to be done on the broader questions of water resources management, development and productive use. Evidence from other development fields as well as a substantial body of experience in water supply and sanitation has shown conclusively over the last decades that involving women in development initiatives:

- leads to effective new solutions to problems,
- helps governments avoid poor investments and expensive mistakes, and
- maximizes the social and economic returns of investments in infrastructure.

Gender mainstreaming is not rocket science. Nevertheless, applying the approach in water resources development and management is more difficult than in water and sanitation for several reasons. One is that while water and sanitation services are delivered through discrete projects, integrated water resources management is a process of change involving multiple stakeholders and areas of intervention. Incorporating women into the

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management and design of a specific, often community-based, water and sanitation project and ensuring that they benefit, though not easy, is at least more straightforward than finding meaningful ways for both women and men to participate in and benefit from the broad, multi-stakeholder processes that govern water management and use. Another reason is that, historically, development planners have privileged women’s domestic or reproductive roles as mothers and caretakers over their productive roles as farmers, workers, and entrepreneurs. Thus water and sanitation, which is associated with the domestic sphere, seems like a “natural” area for women’s involvement to many planners, whereas questions of water management and productive use, which turn largely on questions of power and control and have serious implications for production and income generation, do not.

Key issues and concepts

Involving the people who are directly engaged in collecting, using, managing and developing water resources from the household level on up makes sense, both in terms of short-term effectiveness and long-term sustainability. At least half of those people are women—women managing domestic water supply, women farmers and entrepreneurs using water resources for production (see box 1), and women acting in their socio-cultural roles as community natural resource managers and guardians of traditional knowledge. Yet women and their concerns remain mostly invisible in decision-making and governance structures, planning, policy-making, infrastructure and technology development, as well as in the institutions that control and manage water across the world. This invisibility persists despite widespread recognition—at least at the rhetorical level—that women must be involved in water resources management and development¹.

Box 1: Women farmers produce most of the food in developing countries

Women produce 60 percent to 80 percent of food in developing countries, yet women's role as farmers is frequently overlooked by agricultural extensionists, including those working for irrigation agencies, and by policy makers. One reason is that “farmers” are often defined as landowners, with landownership then serving as a proxy for water rights. Where women's ownership of land is curtailed by custom or law, women farmers are not recognized as such and consequently face problems getting the water they need.

¹ The central role of women in water resources management and the need for women to be more involved in decision-making at all levels clearly informs the Dublin Principles, and was also cited, *inter alia*, in Principle 20 of the 1992 Rio Declaration, in the 1995 Beijing Platform for Action, in the 2002 Johannesburg Plan of Implementation, and in resolution 58/217 of the General Assembly, which proclaimed 2005 to 2015 as the International Decade for Action, ‘Water for Life.’

Gender equality and the participation of women is not only a *means* to more effective policy-making and programming, but also a key *goal* of IWRM approaches. Indeed, the defining element of such approaches is their quest for advancing and reconciling the triple goals of social equity and participation (by and between men and women as well as among different groups in society), environmental sustainability and economic efficiency.

Mainstreaming gender in IWRM strategies and plans: Three key entry points

The development of IWRM strategies and plans presents unique opportunities for enhancing the equal participation, representation, and rights of women in the water sector—and thus for improving the effectiveness and sustainability of those strategies. Gender mainstreaming can improve the degree to which stakeholders are involved in the strategy formulation process, the soundness of the knowledge base, and the effectiveness of monitoring and evaluation.

Gender mainstreaming in the formulation of strategies and plans in practice therefore essentially entails three steps: (1) carrying out a good gender analysis as a strong part of the process of creating a knowledge base for decision-making, (2) involving women as key

stakeholders and anchoring them in the decision-making process, and (3) developing sex-disaggregated indicators and incorporating them in monitoring and evaluation systems. Practical approaches to gender mainstreaming in each of these three areas are outlined below. While the suggestions do not provide all the answers, they represent a starting point in terms of questions to ask, people and groups to involve, and mechanisms to put into place to increase the likelihood that women will be involved in, and benefit from, water management in a meaningful way, rather than just on paper.

Box 2: Definitions

Gender refers to the socially constructed rather than biologically determined roles of men and women as well as the relationships between them in a given society at a specific time and place. These roles and relationships are not fixed, but can and do change. They are usually unequal in terms of power, freedom, agency, and status as well as access to and control over entitlements, resources, and assets.

Gender mainstreaming was defined by the United Nations in 1997 as "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 the policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated."

Creating a knowledge base

Of the three entry points for mainstreaming gender in the development of water management strategies, perhaps the greatest impact can be achieved during the process of creating a knowledge base to identify water-related challenges, determine where change is needed, and set a baseline for monitoring progress and impact. Gender analysis, an examination of women's as well as men's roles, status, resources, needs and priorities in relation to water, is the backbone of gender-sensitive knowledge-gathering. It should be a routine part of assessment and planning at all levels (box 3).

Box 3: The Gender Analysis Framework

The Gender Analysis Framework is now widely used for situation analysis and pre-project research, especially in project-based development interventions. It has the following elements:

- Activity profile: who does what in the target sector.
- Access and control profile: who has what (power, clout, assets).
- Analysis of factors and trends: which factors influence gender differences.
- Institutional analysis: how and by whom the policy will be implemented and managed.

Women and men differ in their responsibilities; for instance, women the world over are primarily responsible for household water collection, transport, use and management, and the priority they place on water for domestic use can put them into conflict with men, who may want water for productive purposes. Women and men also differ in the ways in which they use water as a productive resource (for instance, to irrigate household gardens vs. cash crops); in their access to and control over water resources; in their priorities for water resources development; and in their ability to bargain, negotiate, and voice their needs, both at home and in the community at large. In addition, women, particularly women living in poverty, disproportionately bear the brunt of inadequate services and environmental degradation, which can translate, for instance, into longer treks to

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sources of water (which in turn reduce the time available for work and school and can expose women and girls to harassment and assault).

To be useful as the basis for sound strategies, *water resources assessments* must identify these critical gender differences, as they have a significant impact on whether such strategies succeed or fail in their social and economic goals. Without gender analysis, planners do not have a full and accurate picture of the current situation, and incomplete information makes for bad planning. Key areas for attention are the relationship between domestic and productive uses of water, who participates in community decision-making around water issues, and who stands to benefit from infrastructure and service improvements.

Creating a socioeconomic profile of key stakeholder groups in the target population; disaggregating data by sex; examining gender differences in practices, roles, status, needs, constraints, knowledge and attitudes; and assessing the capacity of both men and women to participate: these are key elements of a gender-sensitive water resources assessment. The types of questions that can elicit this sort of information can be found in box 4.

Involving stakeholders

Involving stakeholders—women as well as men—is a cornerstone of the IWRM approach. Several steps are important in anchoring women in the decision-making process:

- Among the first steps of strategy development is establishing a steering group—an inter-ministerial team of qualified professionals that can create joint ownership of the strategy. A critical mass of qualified, sufficiently senior women should be part of this steering group. Quotas have been found to be among the most effective ways of ensuring the participation of a critical mass of women in decision-making structures of all sorts (from village councils to parliaments) the world over. Making quotas work often requires capacity building and empowerment training. A 30 percent target should be a minimum.
- Core stakeholders in the development of a water strategy, such as Government ministries, water utilities, local leaders, private sector actors such as service providers, and sectoral interest groups should also be required to take steps to ensure the active and meaningful participation of both women and men in their own leadership structures and on their negotiating teams.
- An immediate step governments can take is to set up a unit on gender mainstreaming, headed by a senior gender-and-water specialist, within the Ministry of Water department or agency responsible for water plans. It is important that the gender-and-water specialist is senior enough to be on the management team, to assume a leadership position, and to command authority and respect. He or she also needs an independent, earmarked budget to support the gender analysis and other activities. This unit should produce a detailed plan of action for gender mainstreaming within the specific context of the country's national IWRM and water efficiency strategies or plans. This unit should be assisted by and work in tandem with civil society organizations, research institutions, donors, activists, private organizations, professionals and conservation groups.
- Participatory platforms should be established and run in such a way that women's groups, particularly those that represent women living in poverty, are not just “heard” but rather that what they say has an actual *impact* on the decisions that are made.

Box 4: Sample questions for a gender-sensitive water resources assessment at the community or district level

Current situation with regard to water use, access and control

- Who in the target areas has access to water resources and for what purposes?
- Who in the target area has control over water resources? If community groups have control, what is the position of men and women (as well as different socio-economic groups) in terms of decision-making and negotiating power within those organizations?
- What laws or policies affect questions of ownership and control in relation to water (for instance, inheritance laws)?
- What traditional structures exist to mediate conflict over water use? What is the status/power of women in these structures?
- Who is responsible for the operation and maintenance of current infrastructure? What technical skills do women and men possess?
- How does water pollution (agricultural run-off, industrial waste, human excrement) affect the health of women, men and children?
- Who is currently benefiting from employment opportunities created by water resources infrastructure and management?
- How much time do women and men spend hauling water and participating in users' and management groups?

Productive vs. domestic uses of water

- What is the relationship between domestic and productive uses of water?
- Is it possible to assign an economic value to non-productive uses of water (for health, nutrition, sanitation)? Such an economic valuation can allow non-productive uses to be accurately compared with productive uses of water in terms of return on investment.

Institutional context

- Do women have the time and the "right" to take part in water users groups?
- What, if any, mechanisms exist to ensure that women's voices are heard, given that in many communities women are not able to express themselves freely when male family members are present or when they are in large or mixed-sex groups.
- What government agencies, NGOs, community-based groups and women's organizations operate in the water arena in the target area? What is their interest in, commitment to and capacity for gender analysis and gender-sensitive planning and programming?

Looking ahead: priorities for water management, development and use

- What are the priorities of women in terms of water management, development and use?
- What are the priorities of men in terms of water management, development and use?
- When these priorities conflict, how are the conflicts resolved?
- How have past water initiatives in the target population or area involved women and men, and what lessons can be learned from those experiences?

Monitoring and evaluation

Monitoring and evaluation are critical to determining whether implementation is on track and if actions taken are having the desired social, economic and environmental impacts². The most critical step from the gender mainstreaming perspective is to develop sex-disaggregated indicators, both for ultimate goals as well as for the specific change processes entailed in moving towards more integrated approaches. Sex-disaggregated indicators reveal the sometimes different impacts of implementation on women and men.

² For more information on defining indicators to monitor and evaluate IWRM strategy implementation, see Technical Brief 3 of this series.

For instance, a specific provision of an IWRM strategy or action plan may involve increasing the allocation of water available to subsistence farmers through deep tube well irrigation development, which could affect the availability of safe water for domestic use—a development that will most likely impact men and women differently. This discrepancy could be revealed in indicators on access to improved sources of safe drinking water, or more specifically on indicators on the distance traveled or time spent collecting water for household use, or on girls' school enrollment.

Stakeholders need to be involved in monitoring and evaluation in order to ensure that the assessment is accurate. In addition, assessment can be a powerful tool for mobilizing support for the implementation process when it is going well or for prompting a change of direction if needed. Involving women is critical to obtaining an accurate picture of the degree to which the interventions in question are actually achieving their development goals and ameliorating (rather than entrenching) social and economic inequities.

Better late than never: What can be done when gender-blind water policies and IWRM strategies are already in place

In an ideal world, gender considerations would be taken into account from the earliest days of water policy and strategy development and reflected in decision-making structures, information-gathering, selection of entry points, and monitoring and evaluation. In practice, however, many countries have water policies and laws and/or IWRM strategies and plans in place that are “gender blind.” Although not the optimal approach, gender-sensitive strategies and mechanisms to boost the participation of women can still be developed—even after policies, laws and strategies are finalized. The knowledge base can be enhanced through the collection of data disaggregated by sex, gender-sensitive indicators can be developed, marginalized stakeholders can be brought into the process, strategy objectives can be modified, and capacity for mainstreaming among the key institutional actors can be shored up. Box 5 lists several questions that are useful in assessing the gender sensitivity of national water policies and strategies that are already formulated.

Key lessons

- Involving the people who are directly engaged in collecting, using, managing and developing water resources from the household level on up makes sense. But gender equality and the participation of women is not only a means to more effective policy-making and programming—it is also a key goal of integrated water resource management approaches.
- Gender mainstreaming in the formulation of strategies and plans in practice essentially entails three steps: (1) carrying out a good gender analysis; (2) involving women as key stakeholders and anchoring them in the decision-making process; and (3) developing sex-disaggregated indicators and incorporating them in monitoring and evaluation systems.
- Gender analysis is the backbone of gender-sensitive knowledge-gathering. It should be a routine part of assessment and planning at all levels

Box 5: Questions for gender-sensitive IWRM policies, strategies and plans

- Have sex-disaggregated databases been developed, and can they be used to monitor policy impacts on women and men? If not, they should be designed and used?
- Is planning based on authentic data on and an integrated analysis of productive and domestic uses of water by both men and women? (If not, such data should be collected.)
- Does the policy design recognize the different needs and priorities of women and men?
- If demand mechanisms are part of water efficiency plans, have they been analyzed from a gender perspective? Often women do not have sufficient community power or voice for their demands to be heard; for instance, they may not have control over household expenditures in situations where household ability or willingness to pay for water is being used as a proxy to measure demand.
- In assessing the tradeoffs among competing demands for water, have the different capacities of women and men to express their needs been taken into account?
- How have women's groups and advocacy groups for the poor been involved in the design process?
- Are there measures in place to ensure that women's perspectives, needs and priorities inform policy implementation?
- Does the intervention include measures to ensure equality of opportunity and outcome in terms of technical and administrative training, managerial and supervisory opportunities, and all levels of employment for women and men?
- In environmental protection initiatives, do the changes in production foreseen affect the responsibilities and time burdens of women and men differently? Are industrial pollutants that affect the health of women, men and children adequately regulated?
- Do the institutions responsible for carrying out the policy or intervention have the necessary technical capacity and organizational commitment required to mainstream gender? If not, what provisions have been made to build that capacity in the long-term and address the current weakness, for instance by recruiting gender experts, in the short-term?
- Do the skills required for technical staff include gender analysis?

- Involving stakeholders—women as well as men—is a cornerstone of the IWRM approach. A strategy development steering group should include a critical mass of qualified, sufficiently senior women. Core stakeholders should also be required to take steps to ensure the active and meaningful participation of both women and men in their own leadership structures and on their negotiating teams.
- Monitoring and evaluation systems should include sex-disaggregated indicators, both for ultimate goals as well as for the specific change processes entailed in moving towards more integrated approaches. Sex-disaggregated indicators reveal the sometimes different impacts of implementation on women and men.

Resources and further reading

Gender and Water Alliance (GWA) – a network of more than 500 member institutions and professionals that is an Associated Programme of the Global Water Partnership, supports knowledge-sharing and advocacy. Its website is a source of useful materials and contacts and includes a Gender and IWRM tutorial for water managers developed by GWA and Cap-Net. It can be found at: <http://www.genderandwater.org>

Mainstreaming gender in water management, a practical journey to sustainability – a recently updated resource guide developed by the United Nations Development Programme (UNDP) and the GWA that identifies several excellent checklists and other resource materials for incorporating gender in water supply and sanitation initiatives. It can be found at:

http://www.undp.org/water/docs/resource_guide.pdf.

Documents drawn on in the preparation of this brief that may provide useful further information include:

1. *Integrated Water Resources Management*. TEC Background Paper 4, GWP, 1998.
2. *A Gender Perspective in the Water Resources Management Sector, Handbook for Mainstreaming*. Department for Natural Resources and the Environment, SIDA, Stockholm, 1997.
3. *Gender Briefing Kit*. UNDP, 1995.
4. *Gender Mainstreaming: What it is, how to do it, a resource kit*. UNDP, 2005.
5. *Gender Planning and Development: Theory, Practice, and Training*. Moser, Caroline O. N. London: Routledge, 1993.

This brief was prepared by Kristen Lewis under the direction of the GWP Technical Committee, drawing extensively on the concepts outlined in “Gender Mainstreaming in IWRM” by TEC member Simi Kamal, the documents listed under “further reading”, and materials and comments received from the Gender and Water Alliance and the UN’s Interagency Gender and Water Task Force.

About the Catalyzing Change Series

The brief is part of a series of policy and technical briefs designed to help countries accelerate their efforts to achieve the action target for the preparation of IWRM and water efficiency strategies and plans set by the 2002 World Summit on Sustainable Development (WSSD) and reinforced by the 2005 World Summit. The series tackles key issues and potential stumbling blocks and attempts to give countries at the beginning of the process the benefit of lessons learned from those further down the path.

The series complements *Catalyzing Change: A Handbook for Developing Integrated Water Resources Management (IWRM) and Water Efficiency Strategies*. The handbook and all associated briefs can be downloaded from www.gwpforum.org or hard copies can be requested from gwp@gwpforum.org.

The briefs in this series are intended to be dynamic rather than static documents. We will continue to update and improve them based on your input. Please send comments and questions to Christie Walkuski at walkuski@iri.columbia.edu.