



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, 2003

The Gender and Water Alliance

The Gender and Water Alliance is a network of 200 organizations and individuals, to date, from around the world with an independent steering committee. It is an Associated Programme of the Global Water Partnership (GWP) funded by the governments of the Netherlands and United Kingdom. Because of the pooled experience and skills contained in this network, the GWA offers a mix of information and knowledge sharing activities such as electronic conferencing, a web site, advocacy leaflets, manuals and videos, annual facts and figures on gender and water, capacity building and pilot programmes.



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Contents

Preface	5
Acknowledgements	7
List of Acronyms	8
A note on the Paper	9
I. INTRODUCTION	11
Millennium Development Goals	14
Taking on the Challenge of Gender Mainstreaming	15
II. MAJOR ISSUES & TRENDS - Water and Sanitation	21
a. Ecosystems and Integrated Water Resources Management (IWRM)	23
b. Agriculture	30
c. Drinking Water	36
d. Sanitation and Hygiene	43
e. Water - A Public Good or a Commodity for Profit?	46
III. MAJOR ISSUES & TRENDS - Methods and Tools towards Mainstreaming Gender	55
a. Gender Analysis and Mainstreaming	57
b. Capacity Development	60
c. Tools for Gender Analysis and Mainstreaming	62
Gender-Disaggregated Data and Gender-Sensitive Indicators	62
Gender-Sensitive Assessments and Indicators	68
Gender Analysis	69
Gender Mainstreaming	70
Gender-Budgets	71
Gender Audits	72
IV. IMPLEMENTATION PRIORITIES	73
APPENDIX:	79
Matrix of International Commitments to women's empowerment, gender equity, poverty eradication, and water and sanitation.	
REFERENCES	91



Preface

The Minister's Declaration of The Hague

in March 2000 on Water Security for the 21st Century recognized the link between integrated water resources management and poverty alleviation. It urged, "...special attention should be paid to the poor and to the role, skills and needs of women". The Ministers expressed their commitment to advance the process of collaboration based on partnerships and synergies among the government, citizens and other stakeholders; to identify good practice based on enhanced research and knowledge sharing between individuals, institutions and societies at all appropriate levels. A large number of organizations (some 110 organizations from 7 regions) present agreed to take this challenge forward. They formed themselves into the Gender and Water Alliance.

Since March 2000, the Gender and Water Alliance and partners have strived to put into practice the commitments made. Partnerships and synergies have indeed been built with more than 200 organizations and individuals representing a range of stakeholders from governments, to NGOs, research centers, universities, and to community based organizations'. This document gives you a glimpse of the work that has taken shape in gender mainstreaming at all levels through shared knowledge and action of this wide stakeholder group. It also provides an analysis of the remaining gaps for increased gender mainstreaming, as not all has been achieved.

Despite 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 effective, more powerful



in linking the important issues of gender with development, and in truly integrating and mainstreaming these issues into our daily work?

As a contribution to that development, this document and the Gender Session at the 3rd World Water Forum will suggest general compass points to orient future action rather than a fully developed roadmap of how to proceed. In the end, our hope is that this contribution will inspire, motivate, and provide concrete tools to integrate gender in water management, and foster leadership in this area.

Jennifer Francis
Executive Secretary, GWA



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not have
been
possible

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List of Acronyms

CBOs	Community Based Organizations
CEDAW	Convention for the Elimination of All forms of Discrimination Against Women
GWA	Gender and Water Alliance
GWP	Global Water Partnership
IMF	International Monetary Fund
IRC	International Water and Sanitation Centre
IUCN	The World Conservation Union
IWMI	International Water Management Institute
IWRM	Integrated Water Resources Management
MDGs	Millennium Development Goals
NGOs	Non-governmental Organizations
NIS	Newly Independent States
NVR	The Netherlands Council of Women
UN	United Nations
UNDP	United Nations Development Programme
WECF	Women in Europe for a Common Future
WEDO	Women's Environment and Development Organization
WSSCC	Water and Sanitation Collaborative Council
WSSD	World Summit on Sustainable Development



A note on the Paper

The
Gender
and
Water
Alliance¹

(GWA) developed this paper for the Gender and Water Session of the 3rd World Water Forum 2003, Kyoto, Japan. This day-long session is being organized by the GWA in collaboration with several other organizations working to promote gender mainstreaming within the water and sanitation sectors. The Session expects to show and discuss concrete examples of “how to” mainstream gender in organisational policies, structures, and practices, and how these changes can result in new and effective initiatives and services.

The paper briefly examines the key areas in the water and sanitation sectors by identifying major issues, achievements, and gaps. These are illustrated with case studies from numerous communities and countries. The paper also identifies available tools and resources as well as the challenges ahead, and lists the implementation priorities for gender issues at the 3rd World Water Forum and beyond.

1 ... The GWA is a network of organisations working to achieve equity and equality amongst women and men, irrespective of age, colour, religion, culture, language or income, regarding sustainable water resources development and management at all levels. Since 2000 the Alliance has grown to encompass 200 members representing governments, institutions, women’s groups, NGOs, individual feminist and water activists, and academics, researchers and practitioners from a variety of disciplines in 49 countries.
The GWA’s objective is to mainstream gender in the water and sanitation sectors and to encourage and enable the incorporation of this understanding into all aspects of the sectors - institutions, policies, programmes and projects.



I INTRODUCTION







In
the
twenty-six
years

since the UN Water Conference in Mar del Plata, Argentina, to the 3rd World Water Forum in Kyoto, Japan, the global freshwater crisis has grown to the point where its impact is now felt in every corner of the planet. There are growing concerns over water scarcity, ill-health and death associated with contaminated water, increasing competition for water across sectors and geo-political regions, the sustainability of irrigation systems and water quality, and ecosystem destabilization. However, global knowledge and understanding of the current state of the planet's freshwater and oceans and of human use and mis-use of them has also increased significantly in the past twenty-six years. This period has seen numerous international conferences on water, the environment, social conditions, and economic, financial and trade regimes. The 1990s in particular were a decade of building global consensus on the state of the world and on the actions necessary to create a sustainable and equitable planet.

The time to turn around the clock of ecological, social and economic disasters is long overdue. Unsustainable economic policies, over-production, consumption and wastefulness in the North, poverty, pollution, ecosystem degradation, declining quality and depletion of water sources such as aquifers, ground water, rivers, lakes and rainwater, and the economic, gender and social inequalities in the distribution of water and sanitation services need to be addressed urgently.

To respond to the challenge of sustainable development, poverty eradication, and water and sanitation provision - to realize the international commitments that governments have made over the years- requires a holistic, sustainable and equitable approach to water and natural resources management. This approach needs to incorporate a gender, social justice

and human rights perspective. (See the Appendix for a Matrix of International Commitments to women's empowerment, gender equity, poverty eradication, and water and sanitation from UN and international conferences.)

For the water and sanitation sectors, the UN Millennium Summit 2000, and the World Summit on Sustainable Development (WSSD) 2002, have launched the 21st century with a challenge and a promise - to halve the proportion of people without access to sanitation and also to halve the proportion of people who are unable to reach or afford safe, drinking water by 2015. The drinking water target is also part of the UN Millennium Development Goals' (MDGs) for poverty eradication in this century.

The Millennium Development Goals²:

- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education
- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability
- Goal 8: Develop a global partnership for development

The Millennium Development Goals, adopted by 189 governments, are significant as they are a composite of development goals of the international community. They reflect the consensus of international summits and conferences as well as the objectives and aspirations of international and local civil society organizations.

A quick reading of the MDGs points to the need for a recognition of gender as a cross-cutting theme because the issues of the MDGs are intrinsically linked to the empowerment of women and gender equity. And the issue of readily accessible and affordable water and sanitation is also fundamentally linked to these goals. For example, access to safe and affordable water within cartage distance and culturally and ecologically appropriate sanitation and hygiene will assist in the eradication of poverty and hunger; universal primary education (particularly for girls); the promotion of gender equality and the empowerment of women; improvements to

2 ... For a complete list of MDGs' targets and indicators see <http://www.undp.org/mdg/Millennium%20Development%20Goals.pdf>

maternal health; combating HIV-AIDS, malaria and other diseases; and ensuring environmental sustainability.

Acknowledging the links and interdependence of the MDGs points once again to the need for a holistic approach to the MDGs. For the water and sanitation sectors, as well as national governments, donor agencies and the international community, the challenge of the MDGs and the WSSD is clear: the provision of improved and sustainable water supplies to an additional 550 million people and improved and sustainable sanitation services to an additional 1.2 billion people by 2015. Actual numbers will be higher to compensate for the increase in population in those years. The 3rd World Water Forum provides governments, international agencies, civil society and the private sector a unique opportunity to concretize actions to realize these commitments.

The water sector, to its credit, has been aware of the indispensable role of women in water and natural resources management. Water sector commitments to gender and social equality and equity can be traced through various water meetings. Refer to the Appendix for the Matrix of International Commitments for a detailed listing. Change, however, has been slower than words.

Taking on the Challenge of Gender Mainstreaming

The Gender and Water Alliance (GWA) was created at the 2nd World Water Forum (WWF) in 2000. This was in recognition of the fact that the water sector had been a technically-driven engineering project that did not recognize and incorporate the different social relationships and roles of women and men, poor and rich communities, and minority and majority cultures in the provision of water and sanitation services.

GENDER:

The term gender refers to the roles and responsibilities of women and men and the relationship between them. Gender, therefore, does not simply refer to women or men, but to the way these qualities, behaviors and identities are determined through the process of socialization. These roles and expectations are culturally specific and they can and do change.

The provision of sustainable water and sanitation services that incorporate an integrated water resources management approach would require a special emphasis and focus on gender, social justice and human rights.

GWA Programme Areas

- a. **Collect, share and use - in electronic and hard copy version - key existing policies and practices in the water sector.**

This comprises the information placed on the GWA website as well as the information collected from a series of three e-conferences held in 2002. The e-conferences had more than 1000 participants from Asia, Africa and the Americas and were run in English, Spanish, French, and Portuguese. They analysed key existing policies and practices and identified gaps in policies in the sectors.

- b. **Analyse and share key elements of success and failure in the gender mainstreaming practice of Alliance members and others, and develop new strategies.**

Based on information collected under (a), this activity will produce a series of three reports on “facts and figures” regarding gender mainstreaming. The first report will be released in March 2003. It will review policies in those countries where the water sector has linkages to gender.

- c. **Develop and implement targeted advocacy on good practice of gender mainstreaming in national, regional and international fora.**

Advocacy products such as leaflets, brochures, videos, posters, postcards, checklists, etc. are being developed to guide politicians, sector staff and professionals on how to effectively mainstream gender.

- d. **Develop and implement new, improved and tailored methodologies and tools for training and capacity building.**

A “training of trainers” manual on gender and water is being developed to support practitioners in implementing gender and water strategies and to provide tools which enhance better gender inclusion within policies, programmes, projects and community activities. The

“training of trainers” is designed for various sector professionals. Tools produced will enable demand-oriented use based on the needs of sector professionals at each level. A large number of trainers able to support organisations will be made available in each region with relevant material in English, Spanish, French and Portuguese.

e. Test and replicate good practice in gender mainstreaming through pilot initiatives developed by Alliance members.

A number of pilots will be launched in 2003 to initiate new “learning by doing” at the field level, thus enhancing skills and knowledge of project staff as well as communities. These pilots will be based on successful examples from other countries and be adapted to suit the needs of the pilot country and community involved.

Fortunately, the GWA is not alone in taking on the daunting task of gender mainstreaming in the water and sanitation sectors. Along with numerous local, national, regional and international women’s groups and networks, there are also several governments and multi-lateral and bi-lateral organizations that have been actively supporting and implementing the integration of gender in development policies and programmes. Additionally, water supply and sanitation networks such as the Global Water Partnership (GWP), the International Water Management Institute (IWMI), International Water and Sanitation Centre (IRC), the Water and Sanitation Collaborative Council (WSSCC), and many others have been critical in their support for active engagement of gender mainstreaming in water and sanitation.

However, the most significant force challenging gender inequality and inequity is women. As women organize for their rights, they have formed women’s groups and NGOs that have further organized women and presented win-win alternatives demonstrating the benefits of gender equity for all members of the community. In the water and sanitation sectors there is a growing convergence of regional women’s coalitions. Much of the incentive for regional coordination has come from not only the benefits of collective efforts and synergies especially in terms of lobbying governments for policy changes but also from the need for equity in the development and implementation of Integrated Water Resources and Management (IWRM) programmes and projects.

Women in Water Network, India

The Women In Water Network, India is an evolving network of recent origin. The formation of an independent and dedicated WWN as a national network is seen as a vehicle that can carry forward a clear and forceful articulation of gender issues in the water sector, and that can make an impact on national policy-making. It emerged as a reaction to three major ground realities: (a) the prevailing fractured and gender-blind conceptualization of water resources development that obscures the essentially interlinked uses of water across sectors, the crucial roles that women play in both productive and domestic spheres, and the vital ways in which women's lives are affected by water resources policies and management; (b) the overemphasis on technical aspects to the exclusion of the principles of equity and social justice that affect both women and men; and (c) the invisibility of women in the arena of water policy, management and distribution, due to the lack of political will to address issues of building women's technical, financial and managerial skills.

If the gender and social justice lens has to be accorded primacy in the movement towards sustainability, we need to experiment with alternative fora. In this sense, the new network does not seek to substitute others who are working on these issues; but rather, to build bridges with them and invite them into the network. It is to be a decentralized structure, drawing in a wide range of constituents who share a common vision of gender, equity and social justice as the guiding principles for water policy and management. The national WWN will only be a federation of these zonal/state level/local level constituents. Hopefully, it will disband itself when it has fulfilled its purpose. At present, the group is far from being representative, so the immediate agenda is to identify as comprehensive a list as possible of potential allies, and prepare a position paper. The medium term agenda is to make the structure more broad based, build capacity at all levels of the network, engage in research on local level ground realities through grass roots constituents, and engage in advocacy at local, state/zonal, and national levels on key policy issues.

Source:

Radhika Ramasubban, with Shantha Mohan and Jasveen Jairath, Women In Water Network, India, December 2002.

Women for Water, Netherlands

The Netherlands Council of Women (NVR) is the umbrella organization of 50 national women's organisations representing approximately one million organized women in the Netherlands. Although women in the Netherlands de jure have equal rights and opportunities, de facto gender equality is far from complete³ and the NVR continues to work towards this goal. The increased involvement of women in all spheres and at all levels of public life does not automatically imply that the specific interests and views of women are integrated in policy design and implementation. To voice women's concerns and priorities in all policy-making areas is a major goal of the NVR, especially in traditionally male domains such as the water sector.

In 1996 member organisations adopted sustainable development as a central theme for concerted action by the NVR. Additionally, Dutch women are involved in a wide range of sustainable development issues at the policy and implementation levels nationally and internationally.

NVR Water Programme

In the Netherlands, water management is a highly technical matter and traditionally the domain of men. The Netherlands has a long tradition of local and regional water boards in which the major stakeholders are represented. At present between 15 and 25 % of the board members are women⁴ and women's organisations continuously campaign to increase these numbers.

-
- 3 ... At the turn of the century the Netherlands, with four women ministers, including both deputy prime ministers, had almost reached a 'critical mass' of 30% women in ministerial posts. However, only 9% of all directors and secretary-generals in the various ministries are women, 5% of university professors and only 1% of the board members of private lending companies. Statement by the representative of the Kingdom of the Netherlands, ms. Alice Bouman-Dentener at the 54th session of the UN General Assembly, 12 October 1999.
- 4 ... Bouman, Maarleveld & Cornelis: Sustainability and Women's Participation in Water management in the 21st Century. Netherlands Council of Women 1999.

Mainstreaming gender in the water sector is not only about increasing the number of women water professionals. It is equally important to voice women's interests and views on sustainable water management to policy and decision makers⁵. At the international level, the NVR and its member organisations continue to emphasize gender sensitive sustainable water management as a key issue for sustainable development and poverty eradication. The main goal is to put principles into practice and enable women to take action at all levels.

Women for Water Initiative

Many Dutch women's organisations work with women's groups in developing countries. Exchange projects with rural women in Benin, Costa Rica and Sierra Leone are good examples. Donations and small fundraising activities contribute to the activities and costs, which are small-scale and hampered by the lack of funds. Nevertheless, experience in the Netherlands, Benin, Costa Rica and Sierra Leone points to the need for an international Women for Water Initiative. This Initiative will build a critical mass of women to implement Dublin Principles 2 and 3. During WSSD and towards WWF-3 Business & Professional Women International, Women in Europe for a Common Future and the NVR have joined forces to prioritize the Women for Water Initiative.

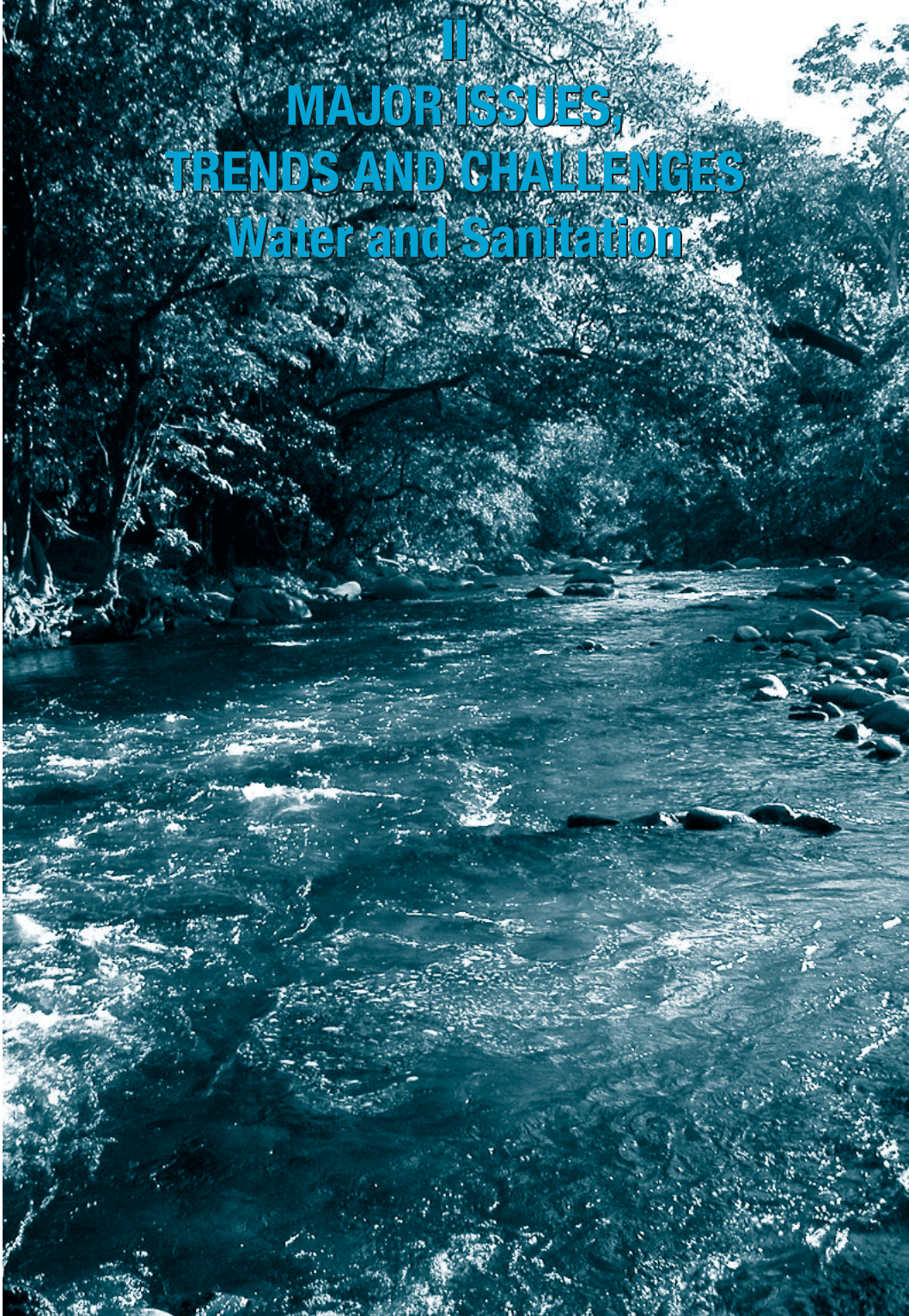
The idea of the Women for Water Initiative is to use the vast and extensive networks of women worldwide to support women's grassroots organisations engaged in Integrated Water Resources Management (IWRM). The network will reach out to local groups of women to assess what is needed and already known, and to set up an alliance of women's organizations to be the link between local women groups and international partnerships on IWRM. The network will ensure that women will be partners in this process and not target groups. It will empower local women's groups so that they are able to participate successfully at any level of IWRM that they wish.

Source:

Alice Bouman-Dentener, NVR, January 2003

5 ... The NVR has contributed to the national water policy formulation process and commented on the No Water No Future document, which in its final version contains several references to gender and women's and community participation in IWRM.

II MAJOR ISSUES, TRENDS AND CHALLENGES Water and Sanitation





a. Ecosystems and Integrated Water Resources Management (IWRM)

With the continuous competition for available water and the contaminating impact of economic development, nature is a constant loser. Although it is the effective functioning of ecosystems that safeguards the quality and quantity of our freshwater, our use and abuse of that water has been progressively destroying wetlands, fish species, upland forests and the estuarial habitats that make nature our most powerful ally. It is expected that by 2025, almost two-thirds of the world's population is likely to experience some type of water stress, and for over a billion of them the shortage will be severe and socially disruptive. Wetland, floodplain and coastal ecosystems may not be able to sustain additional withdrawals and loadings of polluted return flows without irreversible degradation.

Mis-management of water resources and narrow sectoral approaches to water development are causing loss of freshwater and coastal biodiversity. Local communities suffer as a result of diversions of water, canalization, diking of floodplains, wetland drainage, dams and agricultural chemical discharges. This has profound effects on people who depend on fisheries and wetlands for their survival. It is generally estimated that between six and seven million hectares of irrigated land are going out of production each year due to soil erosion, water logging and salinization. Deforestation, degraded rangelands, depleted soils, salinized land and depleted aquifers impair the lives of 100 million people and threaten another 900 million people. Dry-land degradation is a moderate to serious concern on every continent. Desertification is estimated to affect about 3.6 billion hectares on 70 percent of all dry lands as a result of excessive livestock grazing, cropping methods, irrigation schemes and fuel wood harvesting.

Loss and degradation of ecosystems has enormous social and economic implications and currently, most negative trends are not being reversed.

Women, Oil and Livelihoods in the Niger Delta

The Niger Delta in Southern Nigeria is the biggest oil-producing region in Sub-Saharan Africa. Although oil exports from the region pump billions of dollars into the Nigerian economy, the actual oil extraction activities in the Niger delta have been anything but a boon to the local economy and the environment.

“Oil extraction by western-based multi-nationals have caused considerable environmental damage in the Niger delta including serious water and soil pollution, collapse of delta fisheries, deforestation, destruction or out-migration of wild life and overall drinking water scarcity. Each of the environmental impacts has had serious social and economic impacts, e.g., loss of agricultural productivity, loss of fishing and hunting opportunities and, most importantly, massive male out-migration. In this particular case, the women of Ibeno are not only impacted by the obvious impacts of: water pollution, firewood scarcity and impacts on public health, but also indirectly through male out-migration. The male out-migration has thrust women in the role of the main agriculturists in the region. The previous female domestic responsibilities have now been expanded to include agricultural productivity. As a result, women are working more degraded land, with fewer labour resources and with polluted water. Also, in order to provide labour for agricultural work many women in the area reported pulling their female children out of school earlier to help with agricultural work, as well as retaining high fertility rates to keep a steady supply of labour.⁶”

The following major themes emerge for gender, water and nature from the Ibeno case study. Water quality and environmental quality in general can have complex impacts on gender roles mediated by a multiplicity of resources, e.g. water, soil, forests, fisheries, etc. and social processes, e.g. declining agricultural productivity and male out-migration. Women are quite aware of the complex chains of causation that lead to their increased work loads and assumption of

6 ... Okoko, Eno, 1999. Women and environmental change in the Niger Delta, Nigeria: Evidence from Ibeno. *Gender, Place and Culture: A Journal of Feminist Geography*. 6:4, pp. 373-378.

non-traditional roles. In this case, most women do point to the international oil companies as the main culprits for their problems. But the women are also quite politic. They want to avoid conflict with the oil companies in the hope that those companies will provide investment in basic local amenities like clean drinking water, schools and hospitals.

Women adapt in creative ways to challenges thrown up by environmentally driven threats to their livelihoods, e.g., in this particular case the women increased their reliance on forest resources in order to compensate for declining agricultural productivity. The case study illustrates that when looking for the interaction between gender, water and nature, one must be cognisant of secondary impacts of water pollution and degradation, through which water quality and quantity issues are experienced. Secondly, livelihood is a pivotal factor in any experience of water resources and the environment. Lastly it must be borne in mind that the experience of environmental stress can also evoke creative adaptive responses, drawing upon previous gender-related experiences of the environment. In this case, the women's cultural knowledge of botany facilitated their more efficient extraction of forest resources.

Addressing gender issues can also assist in solving some long-term and entrenched problems.

Gender Equity and the Protection of Water 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 the protection of water 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 mangroves 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. 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:

Van Ingen, T. and Kawau, C. *Involvement of Women in Planning and Management in Tanga, Region, Tanzania*, IUCN, The World Conservation Union (undated).



The balance between preserving nature (including both land and water) and using it for the sustenance of human beings is not easy to achieve. The key issues in terms of water and ecosystems are therefore quite complicated:

- How much water should be used for agriculture, industry and urban settlements, as compared with maintaining minimum flows and seasonal volumes in water bodies?
- How can these flows and volumes of water be maintained and protected from further loss?
- How can the ecosystems supported by seas, rivers, lakes, underground water and other water bodies be maintained and protected from further degradation?
- How can this be done in a way that allows the growing population of the world to continue to feed and water itself?
- How can this be done in an equitable manner?
- How can women receive both equitable benefits and entitlements from the products of water and land, and how can they best participate in preserving and maintaining water systems?

A significant trend in the water sector is the Integrated Water Resources Management (IWRM) approach to water. IWRM is a cross-sectoral policy approach to respond to the growing demands for water in the context of finite water supplies. It is an approach that aims to ensure the coordinated development of water, land, and related resources to optimize economic and social welfare without compromising the sustainability of environmental systems (UNDP: 2003). IWRM is premised on a number of principles:

- that water is a finite and vulnerable resource and engagement with it should be guided by economic efficiency in its use, equity and access for all, and sustainability of vital ecosystems;
- that it is vital to look at the entire hydrological cycle and the interaction of water with other natural and socio-economic systems. Engagement needs to be guided by a focus on integration, participation, consultation, gender awareness and consensus;

- the need to highlight the economic value of water with an emphasis on demand management, and attention to cost recovery with concern for affordability and securing access for the poor (Adapted from Global Water Partnership Tool Box).

Fortunately, there is a shift to an environmentally sustainable and equitable approach to natural resources with a focus on water as the organizing catalyst. Consider the following example from Jhabua District in Madhya Pradesh, India.

A Sustainable and Equitable Approach to Ecosystems, Jhabua District, India

In Jhabua District, a watershed programme on water and soil conservation has brought amazing changes to the ecosystem and the economic situation of the rural poor. Beginning with a new governance paradigm, the Madhya Pradesh State government developed this programme on the basis of decentralization and local control and autonomy. Popular participation with local control of decision-making and funds, and extensive involvement of poor rural women in all committees (1,748 women's groups with 25,506 participants were created in 374 villages) has changed a landscape verging on desertification to a healthy and biodiversity-rich ecosystem that it once was. A study of 18 micro-watersheds in Jhabua district revealed that within 4 years, the following benefits were obtained:

- With increased water availability, the irrigated area increased to 1115 hectares, which is nearly double the irrigated area of 1994-95.
- The flow, intensity, and duration of natural streams has also increased.
- With increased irrigation, agricultural productivity is increasing.
- Estimates show that over 2 million trees have regenerated.

- The regeneration rate has been far more rapid as compared to lands where only forest protection programmes have been implemented because the water conservation efforts increase soil moisture and, therefore, plant growth. In turn, there is a more rapid increase in economic returns to the poor people involved in watershed management. The biggest and earliest benefit to the local people has come from the rapid regeneration of grass and, therefore, increased fodder availability. Some estimates suggest a 5-6-fold increase in grass from these generated lands.
- The watershed programme is already having a substantial social impact. Dependence on local moneylenders has gone down. In the 18 micro-watersheds studied, loans from moneylenders had gone down by 22 per cent. Grain banks have resulted in increased food security. And distress migration has reduced considerably.

Source:
Agarwal and Narain, 1999:23-7.

Challenges

Governments are urged to involve interest groups in all levels of decision and policy making, and to establish and strengthen mechanisms at national, regional and international levels to facilitate the required participation of all stakeholders and particularly poor women and indigenous peoples.

Sustainable development principles such as participation and inclusiveness, equity and justice, transparency and accountability, the precautionary principle, a systems approach and respect for ecological limits should inform the development and implementation of water policies.

All governments, inter- and intra- governmental organizations, institutions, agencies, businesses, and non-governmental organizations need to demonstrate a greater commitment to environmental sustainability, gender equity and social justice in IWRM. It is time to move from principles to action.

Broad-based participation at the community level underpins sustainability and this participatory approach should be mirrored in the development of IWRM approaches at all levels.

Development of water-allocation models, decision-support criteria, specific policies and indicators should be created in a participatory manner.

Move from a competition-based approach where ministers and more powerful stakeholder groups lobby for water rights to a more integrated approach to water resources allocation and management. The competitive approach tends to focus on issues of legal water rights, often associated with land rights. With most land rights residing with men, water rights are accordingly awarded to men. A more strategic approach through participatory IWRM recognises these associations and develops water resource policy to address this imbalance.

b. Agriculture

Agriculture is by far the largest user of freshwater. Irrigated agriculture provides some 40 percent of the world's food and in doing so consumes about 75 percent of the world's renewable freshwater resources. Agriculture and irrigation are under increasing pressure from competing uses as populations increase and higher living standards create greater demands for water for domestic, industrial and leisure uses. The negative impacts of climate change such as flooding also add to the complexity of sustaining freshwater systems.

In assessing the gender-sensitivity of water for agriculture and irrigation, a number of other policies must be taken into account, such as those governing access to land, credit and markets, and central policy governing rights and access to water. Failure to address the needs of poor men and women and other disadvantaged groups threatens the sustainability of water projects and programmes. Typically, in agriculture, water management is poor and often wasteful, contributing to environmental degradation. New large-scale developments often diminish the amount of common resources, such as rivers or wetlands that provide the only livelihood for very poor people.

Poor people are likely to suffer, particularly poor women who constitute over 70 percent of the world's poor. Access to water depends on access to land, control of resources and development of capacity and social networks.

Such access is often more severely restricted for women than men. There is little evidence of fundamental change in the balance of power in relation to land and water. Because women lack control over land in communal areas, they often have no other option but to seek employment as agricultural workers under highly exploitative and insecure conditions. Male biases in labour market regulation, in property rights and inheritance laws continue to restrict and shape the activities of women.

While it is slowly being recognized that policies to promote inclusion, participation and equity are needed, the inequities in this sector cover an extensive range of issues. These include:

- Land tenure, in which men and women have different expectations regarding inheritance of land, and the social reality of their claims to communal property.
- Access to water in which women have low expectations and influence.
- Participation in which men and women have different expectations and experience, juggle different responsibilities, and respond to different time schedules, social networks and meeting places.
- Resource control that accepts and reinforces stereotypical roles and social norms, directing technical and financial control to male farmers.
- Capacity and skill development influenced by established social roles and reinforced by gender-insensitive educational and economic policies and established civil society structures.
- Marketing and commercial linkages that follow well-established, male-dominated paths.

Consider the following Latin American experience of land reform and the implications for women farmers.

Gender, Land, and Water in Latin America

Carmen Deere and Magdalena Leon conducted a study of the impacts on gender of land and water rights from the land reforms of 1960s and 1970s to the neo-liberal counter-reforms of the 1990s in nine countries of Latin America⁷. The reforms broke up the large farms and redistributed land to rural farm workers and peasants. Despite the salutary effect on rural poverty, they served to accentuate women's economic dependency and marginalisation. The requirements that beneficiaries be heads of households (generally male) and permanent agricultural workers (again mostly male) excluded most women from land ownership. Water in Latin America is mostly tied to land ownership or legally-recognised community ownership. Women thereby lost any legal claim to water and their voice in its management.

In the present day phase of neo-liberal driven counter-reforms, most countries, with the exception of Costa Rica and Colombia, have put an end to state redistribution of land and have vigorously started moving towards parcelisation of cooperative or communal land. The consequence of this parcelisation is that women, who were poor and already generally not in ownership positions, lost their existing stake in communal land (and therefore water as well), as a result of being disadvantaged in the land markets⁸. Costa Rica and Colombia stand as fine examples of bucking the trend and maintaining some of the most progressive, gender-sensitive land reform policies.

The prominent themes that emerge from the case study are:

- In Colombia, the existence of a national level association of rural women with local level support drew attention to the discriminatory aspects of the land reform laws and through political pressure coaxed the government into making a very progressive reform law. The law provides for transfer of land titles to couples, prioritised access of women to unused public land, special provisions for female heads of households and equal membership

7 ... Deere, Carmen D. and Magdalena Leon, 1998. Gender, land, and water: From reform to counter-reform in Latin America. *Agriculture and Human Values*. 15: pp. 375-386.

8 ... Ibid. p. 379.

of peasant women groups in regional committees of the national agrarian reform agency⁹.

- Costa Rica implemented similar reforms to Colombia with the difference that it did not have a strong rural women's association. In this case, international feminism played a pivotal role in pushing for progressive legislation. The international feminist discourse was also a factor in Colombia, but there the national women's movement provided most of the impetus.
- The impact of counter reforms on women's access to land and water in other countries - Honduras, Mexico, Peru, Nicaragua, Chile, Ecuador and El-Salvador - is mixed at best. There is some evidence that women will be affected negatively, but overall it seems that the counter-reforms will not improve the pattern of women's marginalisation in land ownership set by the previous period of land reforms.

One advantage of using the gender lens to understand resource use and conservation is that it allows us to see a wider variety of resource uses and so facilitates a more accurate accounting of productivity¹⁰. Property regimes and concomitant resource management regimes may give a false sense of maximizing economic and social returns, but when other uses determined by gender and other factors are taken into account, the benefits ratios may change altogether¹¹. The present day neo-liberal reforms in Latin America are based on a narrow concept of economic efficiency precisely because they lack an explicit gender perspective. The counter-reforms have a mixed record with respect to gender.

Water rights and land rights are typically very closely linked. The case of Latin America illustrates that sometimes interventions and policies directed towards strategic resources with important linkages to water can be pivotal in realising gains in gender equity. Both indigenous civil society and international feminist discourse have useful contributions to make in this regard.

9 ... Ibid. p. 381.

10 .. Meinzen-Dick, Ruth S., Lynn R. Brown, Hilary Sims Feldstein and Agnes R. Quisumbing, 1997. Gender, property rights, and natural resources. *World Development*, 25:8, pp. 1303-1315.

11 . Ibid. p. 1305.

Gender relations, land and water need to be addressed together to avoid costly and environmentally detrimental consequences.

Gender and Water Rights

In Burkina Faso, women and men each have their own organization with rights to water and land for agriculture: the women in the river valleys, the men on the higher grounds. When the state took over the land for irrigation it only gave out plots and water rights to male heads of households and only male water users' groups were created. The men did not maintain the water supply system because, unlike the women, they were used to dry agriculture. The women lost their production and harvest rights, saw their traditional organization not recognized and lost motivation to spend much energy in agriculture. When the government realized this, new plots were given out also to women. Productivity, as well as operation and maintenance of the watercourses, improved.

Source:

Barbara van Koppen Waterbeheer en armoedeverlichting. Wageningen, the Netherlands, Department of Irrigation and Soil Conservation, (1997) .

Research in South America, Africa and Asia reveals that women are good farmers (Agarwal: 1994; Merry and Baviskar:1998). When compared with men and matched in resources and skills, women perform well, often obtaining better results from their more conscientious labour inputs and attention to detailed management. However, their poor resource position and social inequity mean that the majority of women produce less and suffer higher production risks than men. Sector and national economies could improve dramatically if policies enabled women to contribute better. Given that women constitute the greater proportion of the poor, and that savings are low among poor people, money in the hands of poor women will be spent and will contribute significantly to the economic activity of developing countries. It is therefore a benefit to the whole of society that policies pay particular attention to poor women in the distribution of water for food. Women are central to development and sustainability.

Gender Equity in Land Distribution

In Dakiri, Burkina Faso, the current study shows allocating smaller plots separately to men and women instead of allocating bigger plots to household heads has positive production and social benefits. When both men and women have irrigated plots, the productivity of irrigated land and labor is higher than that in households where only men have plots. Women are equally good, or even better, irrigation farmers than men, and those who have obtained irrigated plots are proud of their increased ability to contribute to the needs of their households. Women prefer to contribute to their households by working on their own plots rather than providing additional labor to their spouses or to the collective plots. As they become economically less dependent upon their husbands, they can help support their relatives and increase their own opportunities for individual accumulation of wealth in the form of livestock. Having an individual plot significantly improves the bargaining position of a woman within a household and is a source of pride in the household and the community.

Source:

[Mainstreaming Gender In Water Resources Management: Why and How, 1999.](#)

Challenges

- Immediately ratify the Convention for the Elimination of All forms of Discrimination Against Women (CEDAW), the Beijing Platform of Action and other international commitments. See the Appendix for the full list. Countries that have ratified CEDAW should ensure its implementation to the fullest.
- Promote and support efforts and initiatives to secure equitable access to land tenure and to clarify resource rights and responsibilities, through land and tenure reform processes that respect the role of law and enable women producers to become decision makers and owners in the sector.
- Promote and support women's right to inherit land.
- Ensure that women farmers have access to land, water, credit, technical inputs and training, and marketing, with a focus to developing sustainable agriculture.

c. Drinking Water

Tremendous gains have been made worldwide in the provision of drinking water. According to the WHO's and UNICEF's Global Water Supply and Sanitation Assessment, the percentage of people served with some form of improved water supply rose from 79% in 1990 to 82% in 2000 (2000:1). The drinking water sector has made considerable efforts to incorporate a gender analysis in local water services provision, but not gender mainstreaming in engineering and technical services, design of water systems and management of the sector at all levels. One key reason for the exclusion of women from water services management is due to their engagement with water in the domestic sphere and the "care" economy. Women's management, knowledge and use of water are not valued or given recognition. The "care" economy is not considered productive, nor given monetary value. However, the engagement of men with agriculture and irrigation, with livestock and with industrial and commercial uses are considered priorities and so is their involvement in decision-making.

Water, Women and Economics

Unfortunately, it is not often that the link between water, women and economics is made when considering the development and provision of drinking water infrastructure. Women's relationship to drinking water is only acknowledged in the domestic sphere along with health and hygiene, even though research has demonstrated the reality to be otherwise. Consider the fact that rural women in Africa are the primary producers of food.

Women and Economic Production

In Tanzania, women produce 60-70% of all food consumed. Though they make up 52% of the total population, they account for 70% of the agricultural labor force. About 98% of rural women classified as economically active are engaged in agriculture. This situation is typical. Hundreds of studies have shown that the food security of poor regions is often dependent on women's agricultural work. While men are involved in cash-crop production, it is the women

who grow vegetables and maintain livestock to feed their families or sell in local markets. Their use of water is therefore two-fold: for domestic purposes and for economic benefit. And, all over the developing world, poor women are involved in small-scale agro-industry as a means of subsistence for themselves and their families.

Source:

[Mainstreaming Gender In Water Resources Management: Why and How. 1999.](#)

For many women, the time is long overdue for a recognition of the role of women in all economies: - care, productive, formal, informal, export, and domestic; and of their involvement in decision-making in these economies. The following example from the Self Employed Women's Association (SEWA), India shows the intimate links between the "care" economy and the "productive" economy.

SEWA has used a multi-issue and multi-dimensional approach in its work to empower poor women for personal and economic self-sufficiency. SEWA's work with poor women in rural areas has also focused on addressing the problems of water access, cost, supply, quantity and quality.

Economic Benefits of Domestic Water Supply

A research project on the gender and economic benefits of domestic water supply with the SEWA, International Water and Sanitation Centre (IRC), and the Foundation of Public Interest (FPI) demonstrated that improved water-supply with micro-enterprise development has much potential to alleviate poverty in semi-arid areas. The study examined how domestic water projects may be adjusted to maximize benefits from productive uses of water and time. Additionally, it sought to assess the economic value of improved water supply especially for women and study the impact on gender relations in households and communities. The water management approach used here combined piped water supply with traditional water sources.

The study found that improving the domestic water supply not only improved health, hygiene, and sanitation, but also yielded significant economic returns. The calculations were made in terms of the costs of reduced water collection time and the potential benefits of reduced collection time. Just one set of results from the study indicates that 1) the maximum additional income a woman can earn assuming time saved is devoted to economic activities and she has the options, could be between Rs. 750 - 5520 per woman; 2) the maximum time that is freed for personal, domestic, social or development activities could be calculated to between 45 and 152 eight-hour days annually. On the whole the outcomes have been positive for the women because the households and the communities benefit from the economic contributions of the women and the reduction in vulnerability in this semi-arid area.

Source:
GWA, undated.

The growing crisis of drinking water supply and quality as well as international pressure to address gender and social injustice is forcing the sector to modify its traditional sectoral and technical approach to water and instead develop a sustainable and equitable approach to water resources management.

Still, drinking water continues to be a pre-occupation for women in the North and the South. Poor women throughout the world have an especially difficult time obtaining safe, affordable and adequate water. And an increasing number of women in the North are faced with the reality of dealing with toxic chemicals in their water supply.

Women in the United States of America Challenge Water Quality

In a study of the United States of America, Rita Schmidt Sudman points out that educated women have recently been deliberately entering the field of water management because the quality of water

supplied is so vital to their children's health. She cites the case of Susan Seacrest, who founded the Groundwater Foundation when she began suspecting that her child's illness was a result of pesticide pollution in ground water. 'The Groundwater Foundation is an example of an NGO run entirely by women. It has grown to become a nationally known, well-respected voice for public groundwater education. Many studies show that the majority of people who work, or volunteer, for these organizations are women. Of the 52 state and territory co-ordinators of the national environmental teacher training program - Project WET (Water Education for Teachers) 69% of the co-ordinators are women and 31% are men... Many of the US Environmental Protection Agency (EPA) managers are women with science and political policy backgrounds.'

Source:

[Mainstreaming Gender In Water Resources Management: Why and How. 1999.](#)

Projects and programmes that neglect indigenous management and treat women as beneficiaries and users instead of as water and waste managers hamper their own results and diminish women's positions.

Many women are active and leaders in the struggle for safe, affordable and accessible drinking water. International alliances between women, environmentalists, human rights activists and professionals in the water and sanitation sector are yielding quantifiable results for sustainable management of water resources.

East and West: Women's Solidarity for Drinking Water

Women in Europe for a Common Future (WECF) is a network of women's environmental organisations in 18 countries across Eastern and Western Europe and the Newly Independent States (NIS). Members of WECF are implementing projects to improve drinking water. For example, MAMA-86, a network of 12 NGOs in the Ukraine launched a clean drinking water campaign in 1998. In Romania,

Uzbekistan and Russia, women's environmental organisations are working to improving drinking water in cooperation with their partners from Western Europe. These projects show that women in these countries are particularly concerned about the health and social effects of unsafe water as well as the inaccessibility to water.

Women's organisations are working to reduce nitrate and microbiological levels in drinking water, a reason for widespread problems of diarrhea, hepatitis and acute metahemaglobania. Women are also concerned about the high levels of pesticides in water such as Atrazine used in growing corn. In Uzbekistan, DDT has been used intensively for 30 years and a WECF medical study of 50 mother-child pairs has shown unacceptably high levels of this pesticide in placenta and breast milk. Both DDT and Atrazine have been known to affect the hormone-system, cause birth defects, learning problems, and certain types of cancer.

Projects to address water problems include the rehabilitation of Sebastopol's infectious diseases hospital in the Ukraine. Waste water from the hospital was going directly into the Black Sea coastal zones and causing infectious diseases such as Hepatitis A. MAMA-86's work in this area has included conducting a feasibility study with a Dutch engineering firm, public education and discussion on the issue, and direct involvement in fundraising for a new waste water treatment facility for the hospital. This was accomplished with assistance from NOVIB to the local government.

In Romania, Medium&Sanitas, an NGO set-up by two women is tackling the high nitrate and microbiological pollution in rural villages. Eight million rural people drink polluted well water in Romania. This is the norm for most rural areas in Eastern European and the NISs. The primary causes of the nitrate and bacteriological pollution are pit-latrines in people's gardens. In a pilot-project, the women of Medium&Sanitas tested the wells and discovered that none had clean water. Nitrate levels average 120 mg/l with peaks over 500 mg/l, fecal coli-bacteria with levels of 1720/liter and fecal-streptococci 5420/liter. The women of Medium&Sanitas are working to eliminate the

sources of pollution of the wells - the pit-latrines - and address issues such as the lack of waste management and intensive agriculture. Women are building dry-toilets with separate collection of urine and fecal material in the village school as an example of how easy, low-cost and comfortable a solution can be. This system has 3 major advantages over flush-toilets; it's cheap, it doesn't use (drinking)-water for flushing, and it prevents fecal material from getting into ground-water. For the villagers in Romania, it is a great step forward as the dry-toilets do not smell, don't attract flies and can be built inside the house where it is warm in the cold winters. The women are also installing filters to filter out nitrates, bacteria and pesticides. A village-committee is designing and implementing this project.

A gender-study was carried out in Romania to better understand the role of women and men in water provision, in the maintenance of water infrastructure, and in decision making. The study also helped to design a financing plan as it showed that 20% of the 3500 villagers have no revenue at all. These 20% are older women who are subsistence farmers and do not receive any state pensions. The water payment scheme has to take this into account and include cross-subsidizing to ensure that older women can obtain a basic amount of safe drinking water.

The projects in Ukraine and Romania involve extensive educational activities well as multi-sectoral debates and cooperation. The projects are carried out and supported by local communities and address the immediate and urgent needs of the local populations. The women who lead the projects have become well-known public figures in their communities and have greatly helped to increase public participation in decision-making in the water and sanitation sectors. Cooperation with partners of the WECF network in the East and West has helped these women and their NGOs to access the latest eco-technologies through cooperation with universities in Germany, Holland, the USA and Sweden and to be able to present their concerns and solutions to the highest political levels.

Source:

Sascha Gabizon, WECF Germany, with Anna Tsvetkova MAMA-86 Ukraine and Michaela Vasilescu Medium&Sanitas Romania, December 2002.

Challenges

- Use sound economics in water management. Water and water services should be provided at fair and reasonable rates and with a payment system that is flexible to reflect that women and men in different socio-economic groups have different income patterns and mobility.
- Whenever possible, link proposed rate increases with agreed-upon improvements in service based on consultations with women and men users in the different user categories.
- Subsidies, if necessary, should be economically and socially sound and take into account the power relations within families. For example, sometimes cash subsidies for latrines given to men are not used for installing latrines, which are a female and not a male priority.
- Government should retain or establish public ownership and control of water sources.
- Public agencies and water-service providers should monitor water quantity, quality and reliability of delivery and convenience of service hours for women and account for their services to male and female heads of households. Governments should define and enforce water quality laws, and set and enforce standards for service delivery. If the contractors do not deliver accordingly, an agreed lower tariff will be charged to the consumers for the period concerned (GWA 3rd e-conference, September 2nd - 27th, 2002).
- An integrated and holistic approach should inform rural development in which women influence the design and operation of the service so that it meets their domestic and economic requirements.
- Involve CBOs and NGOs and other institutions with experience in improving water supply and supporting micro-enterprise development in the re-formulation of current policies.
- De-link water and poverty by providing income-generating opportunities that depend less, not more, on water and are demand-driven.
- Promotion of private sector development of natural resources should take into account women's knowledge and subsistence activities for economic development (GWA, undated).

d. Sanitation and Hygiene

In recent history, sanitation and health are two subjects that have been intimately associated with water and women. Globally, more people have access to water than to sanitation facilities. According to the WHO's and UNICEF's Global Water Supply and Sanitation Assessment 2000, 2.4 billion people do not have access to any form of sanitary means for excreta disposal. As a result, 4 billion cases of diarrhoea were reported each year between 1990 and 2000, resulting in an annual toll of 2.2 million deaths. Most of these deaths were infants and young children, which makes prevention an important gender concern.

In fact, few development issues demonstrate the gender divide in human society more graphically than sanitation. As the traditional water bearers and custodians of family health, women shoulder a huge burden in coping with the lack of basic sanitation services. Lack of facilities and poor hygiene behaviours all contribute to the poor health and indignities that women and their families suffer. The lack of sanitation facilities has significantly different impacts on women than men. For example, due to deforestation and the expansion of cultivation, women and girls in rural areas have to get up even earlier in the morning than they already do to attend to their needs. Similar societal pressures for privacy do not put the same onus on men. And in both urban and rural areas, innumerable women and girls have been raped and assaulted when attempting to go out to defecate in the dark in insecure places far from their homes.

Sanitation is a women's issue but it impacts on both genders. Yet, societal barriers continually restrict women's involvement in the improvement programmes intended to alleviate their situation. Key issues in the health and sanitation sector include:

- It is important that hygiene promotion is perceived as a concern for women, men and children, instead of as only a women's responsibility.
- Leaders should be targeted for gender sensitization as this will facilitate mainstreaming gender in hygiene promotional activities. Otherwise, hygiene promotion could easily be an area relegated as a women's activity in light of their household responsibilities.

- Women are more interested in having improved sanitation, but do not have control over resources to assert their demand. Cost recovery strategies can have a greater impact if income-generating activities are linked to sanitation and targeted at women.
- Women should have equitable access to income-generating opportunities that come with sanitation projects, e.g. brick-making, toilet construction, etc.¹²
- Sickness, death and the social and economic costs to human well-being and livelihoods are well documented. Unfortunately, more money and resources are spent in treating water-related sicknesses than on sanitation provision and hygiene education. For example, consider the cost of cholera epidemics in Latin America and Africa over the last decade. The costs of health care and loss of life, productivity, exports, and tourism revenue are in the millions of dollars. Comparable funds for sanitation services are not forthcoming. Additionally, the burden of caring for the sick falls on women.
- Urban sanitation is an increasing challenge due to the shift in urban/rural population balances. Urban problems tend to be more complex and involve many issues beyond the traditional aspects of water supply and basic sanitation. For example, many women 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 hence can afford only wholly inadequate facilities.
- Particular attention and funds need to be focused on sanitation and hygiene in schools. Schools are both a place of easy transmission of water-related diseases as well as a centre for hygiene and health education. For example, a survey carried out in India among school children revealed that about half of the ailments found were related to unsanitary conditions and lack of personal hygiene (UNICEF and IRC:1998). A study in Senegal of over 5000 schools showed that 53 percent had no water supply and 46 percent had no sanitation facilities. Only half of the schools had separate facilities for girls and boys (République du Sénégal and UNICEF, 2002).

12 . These recommendations are from the Gender Ambassadors who attended the African Sanitation and Hygiene Conference, Johannesburg, South Africa, July 29th - August 1st 2002.

Divergent Gender Interests

When invited to state the three main problems with their sanitation installations for excreta disposal, respondents from Guinea and Burkina Faso capital city surveys complained above all about smells and flies. Importantly, more women than men mentioned these sources of discomfort, while their husbands, who didn't actually have to do the disposal work, complained that they did not find enough water in the toilet to wash after defecating. Other causes of discomfort were the emptying of the latrines and lack of privacy. Women complained more than men about privacy, and many of them said they avoid using the latrines for that reason.

Experiments conducted in Nigeria, Kenya and Zambia suggest that the success or failure of sharing collective sanitation blocks depends mainly on the extent to which there is agreement about who should use them, under what conditions, what is to be done if neighbouring users have no installations and how to prevent unauthorized use. The other gender dynamic of this is that women from minority groups have no access to the latrines because they simply have no right to use shared installations. This phenomenon has been observed in India, Sudan and Egypt. Widely-reported problems with communal latrines also include the high incidence of attacks on women using them and the difficulty of ensuring the facilities are kept clean and hygienic.

Source:
D. Allely et al. 2000

Challenges

- Provide support for the establishment of national targets for sanitation within the framework of the Millennium Development Goals, and provide a guide to the level of investment required.
- While promoting an integrated approach, separate policies should be designed addressing gender-sensitive hygiene promotion and sanitation improvements. This will ensure that sanitation is given the attention it

deserves. Separate sanitation strategies should be prepared for rural and urban informal settlements and should include clear gender commitments.

- Legal instruments related to the provision of sanitation services should ensure that policy is translated into law. Governments, NGOs and donors should ensure that gender is addressed in the formulation process and that legislation and bylaws (such as service standards, tender guidelines, building standards and land tenure) go through a gender review before they are passed.
- Governments should ensure that national sanitation policies are gender sensitive, by enabling the participation of women in the policy formulation process. Gender provisions should address both practical and strategic needs.
- Create an enabling environment that will stimulate public and private sector investment and ensure that gender requirements in relation to sanitation are explicitly included.
- Improved sanitation is a process, not a top-down decree. People must be meaningfully consulted and involved in sanitation programme planning, implementation and follow-up.
- Governments should ensure that schools have adequate sanitation and hygiene facilities and that there are separate and private facilities for girls.

e. Water - A Public Good or a Commodity for Profit?

The increase in corporate globalization in the 1990s has also been witnessed in the water sector. Inarguably, the forces behind the growing trend for privatization of water services are the World Bank and other international financial institutions (IFIs), along with bi-lateral agencies such as USAID. Privatization of water and other essential public services has been tied to IFI loan conditions, structural adjustment programmes, poverty reduction strategies as well as development assistance.

It could be argued that when the International Conference on Water and Environment, held in Dublin in 1992 recognized water as an economic good, it also provided a seminal moment to launch the campaign for the commodification of water and to tie it to water sector reforms. Since then, trans-national water corporations have also been actively lobbying for the privatization of water provision.¹³

The primary argument for privatization is for efficiency - the “discipline and efficiency” of the market and for full-cost recovery, financial viability, management acumen and customer service. These are presented as functions that only large private businesses can provide. Other arguments include: the inefficiency and the financial un-viability of public water utilities, the lack of capital to maintain and develop new water and sanitation infrastructure, waste and higher costs due to mis-management, and the lack of services for the poor.

That water is a natural resource, and the right to water a human right - especially for the vast numbers of poor women and children who have limited access to safe and affordable water - is often lost in the market and financial transactions of large water corporations and banks. Also getting dismissed are public sector utilities or publicly-owned companies providing water and sanitation services. Proponents of water as a public good and a human right have argued that the attempt to reform the water sector has by-passed the public sector utilities and companies as a viable and desirable option. Furthermore, they point out that there are numerous public water service providers that operate with efficiency, effectiveness, transparency, accountability and financial viability. Lobina and Hall present the cases of Stockholm Vatten AB in Sweden, the Debreceni Vizmu in Hungary, Servico Nacional de Aguas y Alcantarillados (SANAA) from Honduras and the

13 . According to Public Citizen, <http://www.citizen.org/cmep/Water/general/majorwater/articles.cfm?ID=7564> the two largest water corporations in the world are French trans-nationals Vivendi and Suez. Ranked 91st and 118th among Fortune's Global 500 List, these two water giants capture nearly 40 percent of the existing water market share, providing water-related services to over 110 million people each. Suez operates in 130 countries and Vivendi in over 100; their combined annual revenues are over \$70 billion (including \$19 billion in water and wastewater services).

German RWE follows the two frontrunners, having acquired British water giant Thames Water and completing the purchase of American Water Works, the largest U.S. private water utility. This expands its customer base from 43 million to 56 million people. Other major water corporations include Bouygues/Saur, U.S. Water, Severn Trent, Anglian Water, and the Kelda Group.

Cooperativa de Servicios Publicos “Santa Cruz” Ltd from Bolivia, amongst others, as examples of successful public sector water and sanitation delivery and management (August, 1999:8-15). However, it is also true that many water utilities and publicly-owned companies could benefit from better business and management practices as well as additional funds for maintenance and expansion of services.

It is also important to acknowledge that millions of poor people in urban settlements and villages are already buying water from local private water providers. Where governments have failed to provide water to the poor, the poor have had to purchase water at five to ten times the price paid by higher income households. When trans-national water corporations claim that they can expand water and sanitation infrastructure and also provide affordable water to poor households and communities, it is important to critically examine this claim.

As it is primarily women who are managers of domestic water, and poor women who are the first to face the consequences of water mis-management, they are frequently on the front line when it comes to exposing the problems associated with water privatization and mis-management. For example, consider the now well-known actions of indigenous women who were the key force behind the water revolts in Cochabamba, Bolivia in early 2000. Due to privatization, the cost of drinking water had skyrocketed to the point that women had to choose between feeding their families or paying the water bill.

Mama-86, a woman-led national environmental NGO in the Ukraine, successfully exposed the secretive and corrupt behaviour of Suez Lyonnaise des Eaux in its efforts to privatize water in Odessa. Failure to operate in a transparent and accountable manner defeated the privatization bid.¹⁴

Women, Water and Privatization - Odessa, Ukraine

MAMA-86 Odessa, Ukraine is an environmental NGO led by women who for 5 years have been working to improve drinking water

14 . Presentation by Svitlana Slesarenok of Mama-86 Odessa at the Water Dome, WSSD, Johannesburg, September 2002.

in Odessa. MAMA-86 attempts to foster a sense of responsibility in both the local authorities and water consumers. A major issue for Odessa is the enormous loss of water due to leaks in the city's water pipes. In the drinking water campaign, MAMA-86 has successfully implemented a water-saving campaign, launched educational activities, installed water meters, and negotiated with local authorities to make repairs and plumbing services financially attractive.

However, MAMA-86 also had to take legal action against the local water utility when it increased water-bills for consumers involved in its water-metering programme. Water bills went up by 100 percent. MAMA-86 successfully defended the consumers against the utility by demonstrating that water was being "consumed" by leaks.

MAMA-86 also won a case against the city's oil container washing station, which regularly flooded the ground floors of houses in a nearby residential area with highly-polluted waste water.

The results of MAMA-86's initiatives in Odessa indicate that even though citizens are often faced with inefficient water utilities and local authorities, they can get improved services through dialogue and demonstrations. The water solutions that MAMA-86 works on are replicable, low-cost, efficient, sustainable and supportive of local democracy. That was the case until a multinational water company became interested in Odessa.

Governments of Eastern Europe and Newly Independent States (NIS) are under pressure from the IMF to increase charges for municipal services. While consumers should pay for basic services, services should be affordable. However, the IMF wanted to increase basic service fees by 100 percent. According to a survey by MAMA-86 the new water-pricing system would have meant that low-income citizens would have to pay 8 - 33 % of their income for water! Because of high divorce rates and almost no alimony the Ukraine has many poor, women-headed households that cannot afford such price hikes.

In 1998, together with the World Bank, the Odessa water utility "Vodokanal" was involved in a feasibility study for improvements to

the water infrastructure. The feasibility study indicated that US \$64 million was needed and 14 million of this was allocated for foreign experts. The “Vodokanal” requested these credits from the European Bank for Rehabilitation and Development (EBRD). The EBRD wanted a warranty from the Ukrainian government for the loan that the government could not give. In response, the Vodokanal formed a closed joint-stock company in order to provide a warranty based on its assets. Despite the warranty, the Vodokanal was refused the loan. However, the EBRD was immediately prepared to give US \$200 million for the same infrastructure developments to the French firm Suez Lyonnaise des Eaux!

Negotiations between the local authority of Odessa and Suez Lyonnaise des Eaux were conducted in secret. MAMA-86, other NGOs and state organisations could not get any information about this privatisation initiative. Additionally, on several occasions the mayor of Odessa was invited to Paris by Suez-Lyonnaise. MAMA-86 lobbied for open and public tendering for the contract. But the tendering conditions were not transparent and the time for responding to the tender was too short. So, only Lyonnaise who had been planning for months could bid on the tender. According to MAMA-86, even though the local Vodokanal is an inefficient and non-transparent company, it is better for Odessa’s citizens if the utilities remain in local hands. This way the citizens can influence them for reforms. It is almost impossible for citizens from Odessa to influence decisions taken by a company with headquarters in Paris, London or Duesseldorf.

The case of Odessa shows why concessions given to water multinationals often reduce public participation and don’t lead to good governance. The solutions proposed by the multinationals are often too expensive for people in Eastern Europe and NIS. A further reason to work with local companies is that the water multinationals are used to high-tech, high-cost, end-of-pipe technologies. Eastern Europe cannot afford to make the same investments as Western Europe. These investments are often unsustainable and economically unviable. Eastern Europe needs a combination of preventive measures and low-cost technology. Water multinationals have no real interest in a low-cost sustainable solution. For example, it is too

complicated for the water multinationals to engage local farmers to use less pesticides and fertilizers and to protect water sources. It is also too complicated for them to promote eco-waste water treatment plants or dry separation toilets. Long-term sustainable solutions are cost effective. They require a certain amount of education and capacity development and strong public participation. Water multinationals are not interested in strengthening local stakeholders in participatory decision-making.

Source:

Sascha Gabizon, WECF Germany, Svetlana Slesarenok, MAMA-86 Odessa, Anna Tsvetkova, MAMA-86 Kiev, Ukraine. January 2003.

In Monterrey, Mexico, poor and lower middle-class women organized to demand quality water from both the water company and their government.

Water Shortages and Poor Women in Monterrey, Mexico

The main problem in Monterrey was that owing to a long-standing rift between the local private sector elite and the federal government, the City's water supply system was massively under-funded by the federal government and thus inadequately developed from 1940 to 1980, despite record-breaking population, industrial and commercial growth. In fact, in the 1980s, across the entire city, water was supplied only during limited hours each day. It was the low-income and lower-middle income women who, through their massive public protests, forced the government planners to consider how the crisis could be solved over the long run. The lack of major infrastructure in an industrial city as large and as important as Monterrey was partially solved only in 1985, when a major dam for urban water use was constructed, and the water distribution system was extended to all the houses in poor neighbourhoods that did not have access to direct water service earlier. After women tried to negotiate with the authorities and to initiate a media campaign on the water scarcities, both unsuccessfully, they finally decided to block roads and "kidnap"

vehicles and personnel associated with water services. Because of the female protesters, Monterrey's water problems became a political concern and a national priority. Additional investments were allocated to construct new infrastructure. The entire population benefited because of the protests.

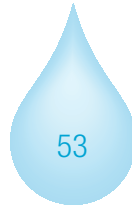
Source:

From the work Vivienne Bennett as quoted in Cecilia Tortajada, *Contribution of Women to the Planning and Management of Water Resources in Latin America, 2002.*

Along with the privatization of water provision there has been a corresponding increase in corruption charges and convictions against transnational water corporations as well as construction companies bidding for large construction contracts in the water sector. Consider the recent accusations and charges against the Canadian multi-national Acres in Lesotho (Globe and Mail, Oct 28th 2002). Also see the accusations and the ongoing case against the French firm Vivendi, (Globe and Mail, Oct 30th 2002). Senior managers of Vivendi, Suez-Lyonnaise and Bouygues have been convicted of fraud and still have outstanding charges and investigations against them in France (Hall: 2002).

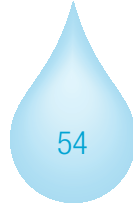
Challenges

- Water and sanitation sector reforms need to begin with the transparent, objective, and participatory analysis of data examining the state and performance of existing providers.
- The option to privatize should be discussed publicly with all relevant stakeholders. All stakeholders should be informed about developments in advance of any negotiations for privatization. All discussions should take place in an open, transparent, and inclusive manner.
- All relevant information and documents should be public documents and easily available to all interested parties and especially poor women and poor communities as they are the ones who lack these services and are supposed to benefit from privatization.
- Companies should be required to publicly disclose details of their operations including information on turnover, profit, number of



connections, average price charged, capital expenditure, transactions with parent company and outstanding debts. The information should enable policy makers in the host country and those proposing privatization elsewhere to assess whether and how any efficiency gains have been achieved (Bayliss, 2002:15).

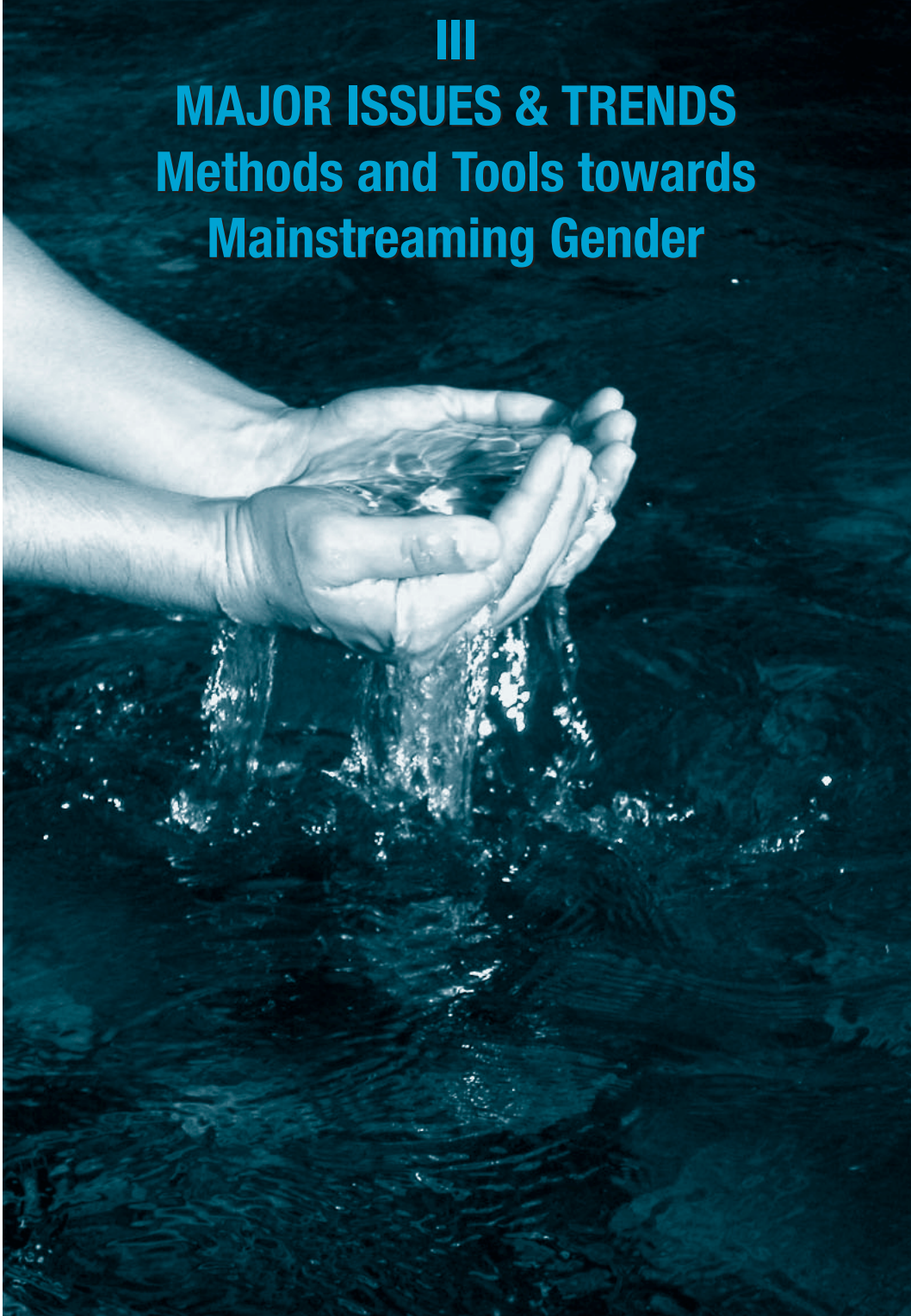
- Private companies should be required to demonstrate that new water-supply projects are less expensive than projects to improve water conservation and water-use efficiency before they are permitted to invest and raise water rates to repay the investment.
- The “polluter pays” principle should be legislated and enforced.

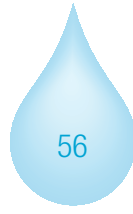


III

MAJOR ISSUES & TRENDS

Methods and Tools towards Mainstreaming Gender





a. Gender Analysis and Mainstreaming

Social-Cultural-Political Barriers - Patriarchy, Sexism and Racism

A key area to address in terms of a sustainable and equitable planet, including the water and sanitation sectors, is the cultural, political, economic and social discrimination that women face daily.

Patriarchal values, attitudes and customs manifest in culturally-specific ways and exist in all societies and socio-economic groups. They permeate the cultural, political, economic and social institutions and practices of every society. This has resulted in discrimination against women and girls and particularly poor women and girls in all aspects of life. These include violence against women and girls, the denial of choice and freedom of movement, thought, and action, exclusion from economic endeavors, political engagement, and the public sphere in general, exclusion from decision making, and denial of their full potential and capabilities as human beings.

The following is an example of how patriarchal attitudes operate in the water and sanitation sector.

A Study about Gender Mainstreaming in rural villages in South Africa showed that:

- In all villages men were perceived by both men and women as leaders and decision makers. In most cases, women were unwilling to take leadership positions because they believed they lacked ability and training necessary to be leaders.

- Cultural norms and values played a major role. In some villages women were not allowed to address men in a public forum. Women were not willing to interact with people from outside the village. Men were expected to interact with outsiders because they were seen to be more educated and capable of handling the challenge.
- Literacy and education were highly valued by both men and women, but most women could not read or write. Women who were educated were more confident and willing and able to participate in water project committees. However, men often treated these women disrespectfully. This led to their withdrawal from participation in decision making.
- The main barrier to gender mainstreaming was women's low self-esteem and lack of confidence in their abilities. This was exacerbated by the attitude of men, which was closely linked to the traditional belief that men are inherently superior to women and therefore natural leaders.
- Women were overburdened by domestic chores and lacked access to resources such as money, time and transport, so they could not attend project meetings and training courses.
- Another study looked at gender and sanitation in an informal settlement area. It showed that both men and women believed that any work that required voluntary contribution was women's work. However, where there was payment associated with the work, it suddenly became men's work.

Source:

1st GWA e-conference, Jan 28th - Feb 24th 2002.

The complete Report is available on the GWA web page.

Also of significance here is the violence and discrimination based on caste, ethnicity and race. Many GWA members in South Asia have consistently raised the issues related to the negative and debilitating effects of the combined impacts of gender, poverty, and caste in water and sanitation projects. For example, in the case of drinking water in Nepal, the following comments are illustrative of the scope of the problems as well as possible solutions.

Nepal and Caste discrimination

“Caste discrimination has adversely affected the optimum distribution of drinking water to all the populace. Social tensions, and occasional cutting of the pipeline by the upper caste people are also not unusual... just having social empowerment as a conditionality or goal of the project cannot eliminate such deep-rooted and complex structures of inequality... In such a situation, instead of common taps for all the settlements, few more taps can be set up for different caste groups, together with few common taps as well. Train the people particularly from the lower castes on operation and maintenance, so they will automatically come into the picture, and reduce the discriminatory process on a gradual and amicable basis. The other measure is to form the users committees on a proportionate basis representing people from all the caste groups and minorities...”

Source:

2nd GWA e-conference, April 8th- May 31st 2002.
The Report is available on the GWA web page.

Racial discrimination is yet another practice dis-empowering people and limiting their full potential to engage in their lives and communities. The impact that race and racism has had in terms of access to water services is most blatantly illustrated in the case of apartheid South Africa. While apartheid may now be over, the legacy will remain for some years to come. For example, while whites in South Africa have First World water and sanitation facilities, many black South African have limited access to water and sanitation services. Currently, the per capita water consumption of a black South African is less than one-twentieth of the typical white (Hamann and O’Riordan). However, the situation is slowly changing and the post-apartheid government in South Africa has made considerable efforts to develop gender, race and poverty-sensitive policies and programmes for water and sanitation as demonstrated in its new legislation.

Issues of racism and discrimination also need to be addressed in Northern countries such as Canada and the United States, where indigenous communities often live in deplorable conditions lacking adequate shelter, water and sanitation.

Challenges

- All governments should immediately ratify the Convention for the Elimination of All forms of Discrimination Against Women (CEDAW). Countries, which have ratified CEDAW, should ensure its implementation to the fullest.
- Implement the Plan of Action of the World Conference against Racism, Racial Discrimination, Xenophobia and Related Intolerance.
- All actors in the water and sanitation sector need to ensure that their policies, plans, projects and actions are vigilant of the gender differentiation and social inequalities in the communities they work with. Addressing gender and social inequalities in water and sanitation is part of the larger commitment to social justice and sustainable development.

b. Capacity Development

Capacity development should be a constant agenda and action item for all genders, social groups, institutions, programmes and projects engaged in water and sanitation.

Capacity development has various aspects, and needs to be envisioned as a life-long learning and knowledge-based process that is intrinsic to human development. For example, capacity development for sustainability is an issue for both the North and the South. The North has to particularly address its extravagant consumption and waste of drinking, irrigation and industrial water. However, user education for demand management and curtailment of water use, water metering, waste water treatment, sewerage treatment, agricultural, livestock and industrial pollution control and regulations enforcement, rainwater harvesting, protection of water sources, ecosystem restoration, and greater public participation in water and sewerage management are all capacity development issues that are relevant to both the North and the South. Actions on this front will also assist in the implementation of several Chapters of Agenda 21 and other international agreements on wetlands, cross-boundary water, toxic chemicals and Persistent Organic Pollutants (POPs).

Experience in gender mainstreaming in water and sanitation indicates the need for capacity development in a range of issues and at various levels of the sectors. For example, when raising awareness about gender and social inequalities, training materials about gender and poverty should be developed and targeted to senior managers and staff in national ministries and water utility boards, to municipal councillors and staff, to engineers and engineering colleges, to finance departments, as well as to personnel in operations and maintenance. The development of gender and poverty sensitive policy should be an interactive process that engages all relevant stakeholders. A process that combines gender awareness and training can be part of the process of policy analysis and development.

Furthermore, if strategies to mainstream gender in the water and sanitation sector and in anti-poverty programmes are to be truly effective on the ground, more resources need to be allocated to the capacity enhancement and development of poor women and girls, and to women's organizations. As the UNIFEM's Progress of the World's Women 2000 points out, women's empowerment also includes: "...Acquiring knowledge and understanding gender relations in ways in which these relations may be changed (p.7).

A greater depth and breath of gender analysis and mainstreaming education and training is needed for programme and project implementation, monitoring and evaluation. The collection of gender disaggregated data and the development and monitoring of gender and poverty-sensitive indicators is of the utmost importance.

Challenges

- There is need for governments, NGOs and donors to develop tools for gender mainstreaming at the institutional level. All institutions involved in the provision of sanitation services in both rural and urban areas should have internal gender policies. The policies should address gender in recruitment, training programmes and the general practice of the institutions. Indicators should also be developed to monitor progress towards achieving gender-related goals.
- Women should be supported to develop technical and engineering training in water and sanitation. Affirmative action hiring policies can be a first step to change the male dominance of the sector.

- Training materials about gender and poverty should be developed and targeted to senior managers and staff in national ministries and water utility boards, to municipal councillors and staff, to engineers and engineering colleges, to finance departments, as well as to personnel in operations and maintenance.
- Resources should be allocated for the capacity enhancement of poor women and girls, and to women's organizations to enable their engagement in decision making at all levels.

c. Tools for Gender Analysis and Mainstreaming

Gender-Disaggregated Data and Gender-Sensitive Indicators

For effective analysis and planning in the water and sanitation sector it is crucial that data is collected at all levels and that it is disaggregated by sex (female and male) and age (girls and boys) as well as by caste, ethnicity, or race as the situation requires. Insufficient and faulty data will impact negatively in the planning and management of water and sanitation services.

The following table illustrates why it is important to collect gender-disaggregated data and the qualitative difference in analysis it permits.

Table To Illustrate The Distinction Between Sex-Disaggregated Statistics And Gender Data¹⁵

School with Total Enrollment of 100 Children		
Girls	Boys	Implications ...
Statistics disaggregated by sex		
40	60	There are more boys than girls in the school
Gender Data		
10 of 40 are from poor households (25 %)	35 of 60 are from poor households (55%)	Poor households make more effort to educate their sons.

15 . UNDP Gender in Development Programme, Learning and Information Pack, Gender Analysis, January 2001.

School with Total Enrollment of 100 Children

Girls	Boys	Implications ...
Of the ten girls from poor households, 1 girl is from a Muslim family.	Of the 35 boys from poor households, 22 are from Muslim families.	Must be correlated with proportion of Muslim families in the population at large. Indicates that Muslim families place additional importance on boys' rather than girls' education. Special measures may need to be taken to educate parents about the value of girls' education and support girls' access to school.
Girls are absent from school when babies are born	Boys are absent from school in the dry season, to dig ditches	The dry season happens at the same time every year. Teachers can therefore plan the curriculum around those absences. Pregnancies and births are random, so girls are at a disadvantage, even if the total days absent are equivalent.
30% are malnourished	20% are malnourished	This tells us how girls are treated at home relative to boys. Nutritional level affect learning and retention. Boys and girls may both be able to attend school, but they cannot access the opportunity equally if girls are malnourished relative to boys.
Domestic work 4 hrs before and after school, including water, firewood, cooking, cleaning, sibling child care, selected agricultural tasks	Domestic work 30 minutes after school, cattle	This has implications for homework. It has implications for discussion of entitlements, in relation to leisure time as a resource. Men's privilege is often embedded in their position, invisible to the men who experience it. Making this privilege visible is a characteristic outcome of gender specific data and its use in development decision-making.
Parents not supportive of progress of girls onto high school (e.g. 38% of girl students' parents interviewed responded positively)	Parents are determined sons will go to high school (e.g. 77% of boy students' parents interviewed responded positively)	Without family support, social policy interventions or development project-specific inputs may not be long-term or yield lasting change. Work with parents is a possibility; so is work with village/ community leaders. Multiple strategies are usually needed to make the necessary structural changes - building on the concept of social relations, the network of community relationships.

Data disaggregated by sex should be collected and documented at the policy, institution, programme and project level.

The **value of data disaggregated by sex** cannot be underestimated, but is not sufficient on its own. Increasingly it is being recognised that gender issues need to be mainstreamed into the production and dissemination of all statistics. The very categories of data collection need to be challenged to ensure they reflect the realities of both women's and men's lives and relations. There is therefore a need to create new indicators, for example to more accurately record and value women's unpaid labour and their work in the informal sector. These are areas that standard official statistics have tended to ignore, hence underestimating women's economic contribution.

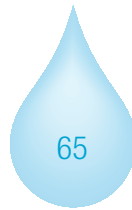
Source:

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

Related to the issue of the collection of gender-disaggregated data is the question of the gender-sensitive indicators. Effective gender analysis to monitor progress on gender equity and sustainable development requires gender-sensitive indicators and gender-sensitive monitoring and evaluation procedures. Gender sensitive indicators will enable the monitoring of change and the measurement of benefits to women and men of policies, programmes and projects.

For example, depending on the policy or project, gender sensitive indicators can enable the measurement of:

- 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 role in 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).

Indicators are both quantitative and qualitative and it is important to identify and monitor both kinds of indicators. Quantitative indicators focus on subjects and themes that are easy to quantify, i.e. to count or measure. These can include the ability to monitor and count the increase in the flow of water through a pipe or a tap, or the hours of increased water availability at a standpipe.

Qualitative indicators are defined by peoples' perception of the change they feel is brought about by a given action or impact. For example, lets say 65% of the women surveyed in village X are satisfied that the watsan (water and sanitation) committee is now composed of equal numbers of women and men. This is a subjective response and difficult to measure and compare. However, qualitative indicators are important to document in terms of people's perceptions of the changes in their lives. Their subjective experience of the change is also a valid measurement.

WaterAid¹⁶ has developed the following preliminary list as an example of gender sensitive indicators for sanitation programmes and services.

16 . <http://www.wateraid.org>

Variables	Indicators and sub-Indicators
Effective Use	<ul style="list-style-type: none"> - Degree and nature of access for rich and poor - Change in disposal practices by and within households by men and women, rich and poor
Demand-responsive Service	<ul style="list-style-type: none"> - User contributions during implementation, by men and women - User voice and choice in planning and design, by men and women, rich and poor - Satisfaction of user demand for men and women, rich and poor - Ratio of user-perceived costs-benefits for men and women, rich and poor
Division of Burdens and Benefits	<ul style="list-style-type: none"> - Nature of payments - Cost sharing in community and households - Division of labour between men and women, rich and poor households - Division of functions and decision making between men and women, rich and poor
Participation in Service Establishment	<ul style="list-style-type: none"> - Degree of informed decision making by men and women on: <ul style="list-style-type: none"> - Service initiation - Choice of technologies and service levels - Location of facilities - Choice of local service management organization - Choice of local maintenance system - Type and proportion of contribution between men and women - Local monitoring and control between men and women - Type of management skills created among men and women

Successful Impact Assessment Methodologies for GM: participatory evaluation of water projects in the Andean region

Carried out by Cinara of Colombia. This project was implemented at the end of 1998 in 16 communities in Bolivia, Ecuador, Peru and Colombia. It evaluated projects developed with community participation, but without a gender focus. It established that men with higher incomes, who usually exercise community leadership, dominated the discussions conducted by the Water Committees. Women were not involved in activities related to O&M [operations and maintenance] in treated water projects. In addition, women did not hold important positions in those committees. Seven committees consisted of only men. Water systems have been used to satisfy the reproductive and productive needs of men and women (home vegetable gardens and animal rearing).

The NGO “Mujeres en Desarrollo Dominicana” is working on the development of an empowerment measuring scale. They are also trying to adapt the Rosenberg Scale on self-esteem, in order to measure changes in women who have participated in water management projects.

Source:

GWA Synthesis Report of the 1st and 2nd e-conferences, 2002.

Challenges

- While recognizing that local and national gender and poverty-sensitive indicators are more immediately relevant for performance and progress measurement; it would be useful to get global agreement on a number of criteria that must be met as a minimum in the different water sub-sectors if scaling-up of equity between women and men and social justice for the poor are to be achieved.

Gender-Sensitive Assessments and Indicators

Definition

A gender-sensitive indicator can be defined as an indicator that captures gender-related changes in society over time. Thus, whereas a gender statistic provides factual information about the status of women, a gender-sensitive indicator provides “direct evidence of the status of women, relative to some agreed normative standard or explicit reference group” (Johnson, 1985). Gender-sensitive indicators compare the situation of males to females and show an aspect of their relative advantage or disadvantage.

Resources

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

<http://www.thecommonwealth.org/gender/index1.htm>

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 and equity.

METGUIDE:

methodology for participatory assessments with communities, institutions and policy makers:

linking sustainability with demand, gender and poverty.

Dayal, R; Wijk-Sijbesma, C.A. van; and Mukherjee, N. UNDP-World Bank Water and Sanitation Program, Washington, DC, USA, 2000.

<http://www.irc.nl/themes/gender/resources.html#METGUIDE>

The Methodology for Participatory Assessments (MPA) presented in the Metguide is a product of the Participatory Learning and Action initiative, which investigated the links between demand-responsive, gender-sensitive approaches and sustainability in 18 large projects in 15 countries. The new ground broken by the methodology concerns the way in which it attempts to mainstream gender and poverty indicators into a participatory methodology that can be used to monitor key aspects of sustainability. In addition it offers a means for stakeholders at various levels - community, project and service provider, and policy - to clearly visualise how their actions can contribute to the goal of sustainability. Finally, it uses quantitative statistical methods to analyse qualitative data obtained from communities through participatory techniques.

UN Women’s Indicators and Statistics Database (WISTAT)

<http://www.un.org/Pubs/whatsnew/e00013.htm>

The most comprehensive source of data on the situation and status of women at the national level. Data is mainly gathered from official national sources, such as national population and housing censuses and household surveys.

Gender Analysis

Definition

Gender-based analysis is a process that assesses the differential impact of proposed and/or existing policies, programs and legislation on women and men. It makes it possible for policy to be undertaken with an appreciation of gender differences, of the nature of relationships between women and men and of their different social realities, life expectations and economic circumstances. It is a tool for understanding social processes and for responding with informed and equitable options. It compares how and why women and men are affected by policy issues. Gender-based analysis challenges the assumption that everyone is affected by policies, programs and legislation in the same way regardless of gender, a notion often referred to as “gender-neutral policy”. Gender-based analysis leads to informed policy-making and good governance.

Source: Status of Women, Government of Canada. Gender-Based Analysis. A Guide for Policy Making. 1996

Resources

Navigating Gender: A framework and a tool for participatory development

by Arja Vainio-Mattila

Published by Ministry for Foreign Affairs, Department for International Development Cooperation, Helsinki, Finland (1999)

http://global.finland.fi/julkaisut/taustat/nav_gender/index.html

This manual assists in applying the often-theoretical understanding of gender issues in practical work. It includes key concepts and definitions, as well as introductions to alternative gender analysis frameworks. It uses a case study to illustrate the use of these frameworks and for analyzing programmes that you are involved in preparing, implementing or evaluating. Navigating Gender can be used both as an individual study guide, and as a basis for discussion in groups.

Gender-Based Analysis: A guide for policy-making.

Status of Women, Government of Canada, 1996.

http://www.acdicida.gc.ca/cida_ind.nsf/8949395286e4d3a58525641300568be1/a09305fd3bfc0784852568fc0067579f?OpenDocument#8

This simple, short and useful guide describes the methodology involved in undertaking gender analysis for policy.

Gender Mainstreaming

Definition

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)

Source: UN Economic and Social Council, 1997

Resources

UNDP Gender Mainstreaming Learning and Information Packs

http://www.undp.org/gender/capacity/gm_info_module.html

The Information Packs are intended as resources both for self-training, and for use in workshop situations devoted to gender mainstreaming. They may also be incorporated into workshops on other topics, to strengthen their gender mainstreaming potential. Each Information Pack gives summary information, together with speaker's notes, and also provides handouts, exercises, further reading and linkages to relevant Internet resources. The material is presented in a logical sequence for a complete presentation, and can also be mixed and tailored according to the needs of a particular learning situation.

A Gender Perspective in the Water Resources Management Sector: Handbook for Mainstreaming.

Helen Thomas, Johanna Schalkwyk & Beth Woroniuk prepared in close Co-operation with the Department for Natural Resources and the Environment. Publications on Water Resources: No. 6. 1996: Sida Available from: Info@sida.se or 105 25 Stockholm, Sweden

Mainstreaming Gender In Water Resources Management: Why and How.

Background Paper for the World Vision Process. World Water Vision. October 1999.

<http://www.iiav.nl/knowhow/water.html#listserv>

The paper discusses why a gender approach is essential in the development of effective, efficient and sustainable water systems and strategies. Examples from initiatives in India, Tanzania, Guinea Bissau, and Bangladesh, etc. demonstrate the benefits of gender mainstreaming.

Working on Gender in Water and Sanitation: Gender Toolkit Series No. 2.

Monica S. Fong, Wendy Wakeman and Anjana Bhushan. UNDP-World Bank Water and Sanitation Program. 1996.

<http://www.worldbank.org/gender/know/wstlkt4.pdf>

The toolkit provides practical tools to incorporate gender issues into water and sanitation programmes and projects. The toolkit also covers lessons from concrete experiences as well as "good practices".

Gender Mainstreaming in Disaster Reduction.

<http://www.crid.or.cr/crid/PDF/Docs.%20PDF/ISDR%20CSW%206%20March%2002-vers2.pdf>

The paper describes main aspects and outlines possible directions on how to mainstream gender concerns into disaster risk reduction in the framework of the International Strategy for Disaster Reduction.

Gender Budgets

Definition

'Gender-sensitive budgets', 'gender budgets', and 'women's budgets' refer to a variety of processes and tools aimed at facilitating an assessment of the gendered impacts of government budgets. In the evolution of these exercises, the focus has been on auditing government budgets for their impact on women and girls. This has meant that, to date, the term 'women's budget' has gained widest use. Recently, however, these budget exercises have begun using gender as a category of analysis so the terminology 'gender-sensitive budgets' is increasingly being adopted. It is important to recognise that 'women's budgets' or 'gender-sensitive budgets' are not separate budgets for women, or for men. They are attempts to break down, or disaggregate, the government's mainstream budget according to its impact on women and men, and different groups of women and men, with cognizance being given to the society's underpinning gender relations.(Sharp, Rhonda:1999)

Resources

How to do a gender-sensitive budget analysis: Contemporary research and practice.

Budlender, Debbie and Rhonda Sharp with Kerri Allen. AusAID and Commonwealth Secretariat. Canberra, 1998.

<http://www.thecommonwealth.org/gender/index1.htm>

A Quick Guide to Gender Mainstreaming in Finance.

Gita Sen. Commonwealth Secretariat, 1999.

http://www.unifem.undp.org/economic_security/macro_gender.html

Gender Audits

Definition

A “gender audit” is one aspect of what is referred to as “mainstreaming”- analyzing mainstream public policy, including legislation, regulations, allocations, taxation and social projects, from the point of view of their effect on the status of women in a given society. The basic assumption of gender audits is that public policy impacts differently on men and women. The variance stems from the different roles of women and men in the family and society and from the lower economic status of women. The purpose of gender audits is to lead to changes in public policy that contribute to gender equality.

Source: Barbara Swirshi, What is a Gender Audit? August 2002.

Resources

SNV Participatory Gender Audit, By the Gender & Development Training Centre. 2000.

http://www.snvworld.org/gender/snv-documents_1.htm

This participatory gender audit is a self-assessment methodology for SNV Netherlands Development Organization programmes that focuses on improving the organization’s performance with respect to gender equality and women’s empowerment. Its aim is to help participants learn to assess their work, their functioning, and their collaboration with others, as well as to find ways to improve and contextualize what they are doing. This process can lead to proposals for change, thereby translating learning into action. Unlike a regular evaluation, the participatory gender audit is based on self-assessment and not on external evaluation. Also available in French and Spanish.

First ILO Gender Audit

<http://www.ilo.org/public/english/bureau/gender/newsite2002/about/audit.htm>

The International Labour Office (ILO) began conducting its first Gender Audit beginning in October 2001 through April 2002. Using a participatory and self-assessment approach to promote organizational learning about gender mainstreaming, the main objective of the audit was to promote organizational learning at the individual, work unit, and Office levels on how to effectively implement gender mainstreaming in the policies, programmes and structures of the Secretariat of the ILO.

For additional resources on gender mainstreaming in IWRM see the forthcoming toolkit, “A Practical Journey to Sustainability: Resource Guide for Mainstreaming Gender in IWRM.” produced by the UNDP and the GWA.

IV IMPLEMENTATION PRIORITIES





We demand that:

- Governments must recognize and enshrine water as a common global natural resource and the right to water a human right.
- A gender analysis and approach should inform all institutions, policies, programmes and projects in the water and sanitation sector. A gender analysis should also analyze needs, priorities, access and control of water and other resources as well as service provision. Gender-sensitive tools such as the use of gender budgeting, gender audits, gender and water indexes should be supported.
- A gender and water focus should be integrated into Poverty Reduction Strategies (PRSPs) and National Sustainable Development Strategies.
- Governments must abide by the principle of subsidiarity and enable water resources ownership and management locally.
- Governments must involve interest groups in all levels of decision and policy making, and establish and strengthen mechanisms at national, regional, and international levels to facilitate the participation of all stakeholders and particularly poor women.
- Governments must to commit resources towards the establishment of local, regional, and national women's water networks, such as Women's Water Watch Committees, who will define their own operational mandates based on specific local and national contexts.
- Governments must negotiate specific commitments for implementation with poor women's groups, CBOs, NGOs, and other stakeholders in a transparent, accountable, and equitable manner.

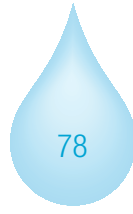
- There should be gender balance in water and sanitation related institutions. Resources for all aspects of capacity development, technical and managerial training, literacy and numeracy, etc. must be allocated to women's organizations to enable their equal engagement in decision making and management of sustainable water and sanitation services.
- Governments and the water and sanitation sectors should disaggregate all data collection in agriculture, irrigation, drinking water provision, sanitation, etc. by gender. This would include data on management and administration, engineering, operations and maintenance, operating and capital budgets, access and control of resources such as land, water sources, forests, common lands, livestock, credit, and service users. Gender and poverty sensitive indicators, and time-bound targets must inform all water and sanitation institutions, policies, programmes and projects.
- Governments must encourage the effective protection and use of the knowledge, innovations, and practices of women of indigenous and local communities.
- CBOs, NGOs, and other civil society partners should also integrate gender mainstreaming in their organizations, policies, programmes and projects.
- The water and sanitation sectors should incorporate a systems approach and analysis for the water cycle. This approach will also enable the incorporation of wastewater treatment in the water cycle.

Specifically, we call on:

- At least five (5) water and sanitation sector institutions such as a national ministry, a state or provincial ministry, a parastatal, a local government, a local water utility, a municipal water and sewerage company, etc. to commit to gender mainstreaming (including addressing poverty to reduce vulnerability of communities) of their organizations and operations at this WWF and to report back on progress at the next WWF or equivalent international water meeting.



- All UN agencies, governments, inter- and intra-governmental organizations, international agencies, civil society, etc. to mainstream gender in the MDGs.
- Local governments, utilities and public sector unions should make a commitment to poor women by developing projects for the implementation of ecologically sustainable, equitable, and affordable water and sanitation services. Poor women themselves should define the priorities for implementation.
- All ministries, utilities and relevant organizations in water and sanitation sectors to commit to gender and pro-poor budgeting.
- Environmental organizations and NGOs should commit to gender mainstreaming and build alliances with poor women's organizations for the implementation of ecologically sustainable and equitable water and sanitation projects.

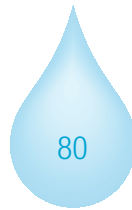


APPENDIX:

International Commitments with reference to Women's Empowerment, Gender Equity, Poverty Eradication and Water and Sanitation¹⁷

Conference	International Commitments with reference to Women's Empowerment, Gender Equity, Poverty Eradication, and Water and Sanitation
Committee on Economic, Social and Cultural Rights 29 th session, November 2002, General Comment www.citizen.org/documents/therightwater.pdf	The human right to water entitles everyone to sufficient, affordable, physically accessible, safe and acceptable water for personal and domestic uses.
World Summit on Sustainable Development Johannesburg, September 2002, Political Declaration and Plan of Implementation www.johannesburgsummit.org	<p>Political Declaration Principle 18: We are committed to ensure that women's empowerment and emancipation and gender equality are integrated in all the activities encompassed within Agenda 21, the Millennium Development Goals and the Plan of Implementation of the Summit</p> <p>II Poverty Eradication 6. (d) Promote women's equal access to and full participation, on the basis of equality with men, in decision-making at all levels, mainstreaming gender perspectives in all policies and strategies, eliminating all forms of violence and discrimination against women, and improving the status, health and economic welfare of women and girls through full and equal access to economic opportunity, land, credit, education and health care services.</p>

17 . The Matrix is excerpted from Prabha Khosla and Rebecca Pearl (2003) Untapped Connections: Gender, Poverty and Water. WEDO. New York.



10. By 2020 achieve a significant improvement in the lives of at least 100 million slum dwellers...

(a) Improve access to land and property, to adequate shelter and to basic services for the urban and rural poor, with special attention to female heads of households.

IV. Protecting and managing the natural resource base of economic and social development

24. ...achieve the millennium development goal of safe drinking water and basic sanitation

(a) Mobilize international and domestic financial resources at all levels, transfer technology, promote best practice and 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.

(b) Facilitate access to public information and participation, including by women, at all levels in support of policy and decision-making related to water resources management and project implementation.

VI. Health and sustainable development.

47. Strengthen the capacity of health-care systems to deliver basic health services to all...and to reduce environmental health threats, in conformity with human rights and fundamental freedoms and consistent with national laws and cultural and religious values...

(l) Transfer and disseminate...technologies for safe water, sanitation and waste management...taking into account country-specific conditions and gender equality including specific technology needs of women;

VIII. Sustainable Development of Africa

61. Achieve significantly improved sustainable agricultural productivity...

(b) Promote and support efforts and initiatives to secure equitable access to land tenure and clarify resource rights and responsibilities, through land and tenure reform processes which respect the role of law... and enable women producers to become decision makers and owners in the sector, including the right to inherit land."

International
Conference on
Freshwater
Bonn, December 2001
Ministerial Declaration
and Bonn
Recommendations for
Action
<http://www.water-2001.de/documents/conferences.asp>

Ministerial Declaration: Gender

Water resources management should be based on a participatory approach. Both men and women should be involved and have an equal voice in managing the sustainable use of water resources and sharing of benefits. The role of women in water related areas needs to be strengthened and their participation broadened.

Bonn Recommendations for Action - Action in the Field of Governance

3. Promote gender equity

-Water management policies should distinguish between water users by gender and should allow men and women equitable access to water resources,

including safe drinking water and sanitation.

-Water resources management should be based on a participatory approach. Men and women should be equally involved in managing the sustainable use of water resources and sharing of benefits. To achieve equity, in many parts of the world the role of women in water management needs to be strengthened and their participation broadened.

-Water experts and policy makers should be trained to work in a gender-inclusive manner. In many places, specific support is also needed to empower women to take up leadership and managerial roles in water resources policies and management.

-Water policies and water management systems should be gender-sensitive. They should reflect the division of roles and labour - paid and unpaid - between men and women in all settings related to water. Data relating to water should be disaggregated by gender.

2nd World Water Forum
The Hague, March
2000,
Ministerial Declaration
of the Hague on Water
Security in the 21st
Century
www.worldwaterforum.net/

3. The Main Challenges:

Meeting Basic Needs: to recognize that access to safe and sufficient water and sanitation are basic human needs and are essential to health and well-being, and to empower people, especially women, through a participatory process of water management

5. The Actions

The actions advocated here are based on integrated water resources management...special attention should be paid to the poor, to the roles, skills and needs of women...

Securing the Food Supply

-The important role of women in food production, the storage and preparation of food and improvements to the nutritional value of food

-The key role of governments in empowering communities and fostering the involvement of different stakeholders, especially women, in policy-development, and implementation in rural areas, thereby enhancing the transparency and accountability of institutions that are involved in the development and implementation of those policies.

-The need to secure equal access for all farmers, especially women, to productive resources, such as water, land, propagating material, technology and the results of applied research.

Protecting Ecosystems

-The best approach is integrated land and water use planning, at the basin level, within a broader ecosystem context, in which all sectors assume their responsibility, and all stakeholders, especially women, who bear the brunt of poor water management, are involved...

Managing Risks

- Consultation with the public should take place at all stages. Raising public awareness is essential in taking management decisions, as is the involvement of local communities, with men and women on an equal footing.
- Women and children are usually the most vulnerable to water-related disasters.

Governing Water Wisely

- The participation of all stakeholders at all levels of IWRM, with special attention to gender and youth.
 - More involvement of women in water management as important stakeholders, especially in developing countries.
 - The formation of an inter-ministerial committee on gender. The reallocation of budgets in water projects and representation of women was discussed.
- Meeting the Challenge: The Ways Forward - it is recommended that:
- The important role of women in water management is recognised and that an international ministerial committee to develop practical proposals for addressing gender issues at the 3rd World Water Forum in 2003 is formed.

Millennium Summit
General Assembly 55th
session, New York,
September 2000,
Millennium Declaration
www.un.org/millennium/

Millennium Development Goal 1: Eradicate extreme poverty and hunger

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than US \$1/day.

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer hunger

Indicator 1: Proportion of population below US \$1/day.

Indicator 2: Poverty gap ratio (incidence x depth of poverty).

Indicator 4: Prevalence of underweight children (under 5 years of age).

Millennium Development Goal 3: Promote gender equality and empower women

Target 3: Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels of education by 2015.

Millennium Development Goal 4: Reduce child mortality

Millennium Development Goal 5: Improve Maternal Health

Millennium Development Goal 6: Combat HIV/AIDS, malaria and other diseases

Millennium Development Goal 7: Ensure environmental sustainability

Target 10: Halve the proportion of people without sustainable access to safe drinking water.

Beijing+5
23rd Special Session of
the General Assembly,
New York, June 2000
[www.un.org/
womenwatch/daw/
followup/
as2310rev1.pdf](http://www.un.org/womenwatch/daw/followup/as2310rev1.pdf)

ICPD+5
21st Special Session of
the General Assembly,
New York, July 1999
[www.un.org/popin/
unpopcom/32ndsess/
gass/215a1e.pdf](http://www.un.org/popin/unpopcom/32ndsess/gass/215a1e.pdf)

Commission on
Sustainable
Development
6th session, New York,
April 1998,
Strategic Approaches
to Freshwater
Management
[www.un.org/esa/
sustdev/csd.htm](http://www.un.org/esa/sustdev/csd.htm)

Habitat II,
Istanbul, June 1996,
Habitat Agenda
[www.unchs.org/unchs/
english/hagenda/](http://www.unchs.org/unchs/english/hagenda/)

Further actions and initiatives to implement the Beijing Declaration and Platform for Action

Actions to be taken by governments at the national level

72. (e) Ensure universal and equal access for women and men throughout the life-cycle, to social services related to health care, including education, clean water and safe sanitation, nutrition, food security and health education programmes;

II. Population and development concerns

A. Population, economic development and the environment

18. (a) Continue to support declines in infant and child mortality rates by strengthening infant and child health programmes that emphasize...clean water sources...and improvements in household sanitation...

C. International migration

29. In planning and implementing refugee assistance activities, special attention should be given to the specific needs of refugee women, children, and elderly refugees. Adequate and sufficient international support should be extended to meet the basic needs of refugee populations, including the provision of access to...clean water, sanitation...

CSD 1998. Decision 6/1: Strategic Approaches to Freshwater Management.

10.(a) The CSD urges: Governments to ...(x) mobilization of financial resources and mainstreaming of gender issues into all aspects of water resources management.

11. ...Because women have a particular role in utilizing and conserving water resources on a daily basis, their knowledge and experience should be considered as a component of any sustainable water management programme.

13. ...It is particularly important to broaden women's participation and integrate gender analysis in water planning.

Chapter III. Commitments: D. Gender equality

46. We commit ourselves to the goal of gender equality in human settlements development.

(c) Collecting, analysing and disseminating gender-disaggregated data and information on human settlements issues, including statistical means that recognize and make visible the unremunerated work of women, for use in policy and programme planning and implementation;

(d) Integrating a gender perspective in the design and implementation of environmentally sound and sustainable resource management mechanisms, production techniques and infrastructure development in rural and urban areas;

(e) Formulating and strengthening policies and practices to promote the full and equal participation of women in human settlements planning and decision-making.

Fourth World
Conference on Women
Beijing, September
1995,
Beijing Platform of
Action
[www.un.org/
womenwatch/daw/
beijing/platform/](http://www.un.org/womenwatch/daw/beijing/platform/)

Strategic objective K.2.

Integrate gender concerns and perspectives in policies and programmes for sustainable development

Actions to be taken

256. By Governments:

(f) Promote knowledge of and sponsor research on the role of women, particularly rural and indigenous women, in...irrigation, watershed management, sanitation...focusing particularly on indigenous women's knowledge and experience;

(k) Support the development of women's equal access to...safe water...through participatory needs assessments...and policy formulation at the local and national levels;

(l) Ensure that clean water is available and accessible to all by the year 2000 and that environmental protection and conservation plans are designed and implemented to restore polluted water systems and rebuild damaged watersheds.

Strategic objective K.3.

Strengthen or establish mechanisms at the national, regional and international levels to assess the impact of development and environmental policies on women

Actions to be taken

258. By Governments, regional and international organizations and non-governmental organizations, as appropriate:

(a) Provide technical assistance to women, particularly in developing countries, in the sectors of...fisheries...to ensure...the development of environmentally sound technologies and of women's entrepreneurship;

(b) Develop gender-sensitive databases, information and monitoring systems and participatory action-oriented research, methodologies and policy analyses, with the collaboration of academic institutions and local women researchers, on the following:

(i) Knowledge and experience on the part of women concerning the management and conservation of natural resources for incorporation in the databases and information systems for sustainable development;

(ii) The impact on women of environmental and natural resource degradation, deriving from, inter alia...drought, poor quality water...desertification...

(iii) Analysis of the structural links between gender relations, environment and development, with special emphasis on particular sectors, such as... fisheries... water resources and sanitation;

World Summit for
Social Development
Copenhagen, March
1995

[www.un.org/esa/
socdev/docs/
summit.pdf](http://www.un.org/esa/socdev/docs/summit.pdf)

C. Commitment 2

We commit ourselves to the goal of eradicating poverty in the world...

(b) ...efforts should include ... safe drinking water and sanitation...Special priority will be given to the needs and rights of women and children, who often bear the greatest burden of poverty, and to the needs of vulnerable and disadvantaged groups and persons;

Chapter II - Eradication of Poverty - Basis for action and objectives

19. ... Women bear a disproportionate burden of poverty...Absolute poverty is a condition characterized by severe deprivation of basic human needs, including...safe drinking water, sanitation facilities...

21. Urban poverty is rapidly increasing...It is a growing phenomenon in all countries and regions, and often poses special problems, such as...contaminated water and bad sanitation...An increasing number of low-income urban households are female-maintained.

32. Rural poverty should be addressed by:

(b) Promoting fair wages and improving the conditions of agricultural labour, and increasing the access of small farmers to water..., including for women,... on the basis of equality;

International
Conference on
Population and
Development
Cairo, September 1994

[www.un.org/popin/
icpd/conference/
offeng/poa.html](http://www.un.org/popin/icpd/conference/offeng/poa.html)

Principle 2

Human beings are at the centre of concerns for sustainable development...They have the right to an adequate standard of living for themselves and their families, including...water and sanitation.

3.13. Widespread poverty remains the major challenge to development efforts. Poverty is often accompanied by ...low status of women...All these factors contribute to high levels of fertility, morbidity and mortality...Poverty is also closely related to...

to unsustainable use and inequitable distribution of such natural resources as land and water...

4.11 ...Greater investments should be made in appropriate measures to lessen the daily burden of domestic responsibilities, the greatest share of which falls on women. Greater attention should be paid to the ways in which environmental degradation and changes in land use adversely affect the allocation of women's time. Women's domestic working environments should not adversely affect their health.

8.2. ...large segments of many populations continue to lack access to clean water and sanitation facilities...Large numbers of people remain at continued risk of infectious, parasitic and water-borne diseases, such as tuberculosis, malaria and schistosomiasis...

8.10. All countries should give priority to measures that improve the quality of life and health by ensuring a safe and sanitary living environment for all population groups through measures aimed at...ensuring access to clean water and sanitation...

UN Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, particularly in Africa
Paris, June 1994
<http://www.unccd.int/main.php>

Prologue:

Stressing the important role played by women in regions affected by desertification and/or drought, particularly in rural areas of developing countries, and the importance of ensuring the full participation of both men and women at all levels in programmes to combat desertification and mitigate the effects of drought...

Part II: General Provisions - Article 5

(d) promote awareness and facilitate the participation of local populations, particularly women and youth, with the support of nongovernmental organizations, in efforts to combat desertification and mitigate the effects of drought; and

Part III, Section 1: Action programmes - Article 10

(f)...provide for effective participation at the local, national and regional levels of non-governmental organizations and local populations, both women and men, particularly resource users, including farmers and pastoralists and their representative organizations, in policy planning, decision-making, and implementation and review of national action programmes...

Part III, Section 3: Supporting measures - Article 19

Capacity building, education and public awareness

1. The Parties recognize the significance of capacity building - that is to say, institution building, training and development of relevant local and national capacities — in efforts to combat desertification and mitigate the effects of drought. They shall promote, as appropriate, capacity-building:

(a) through the full participation at all levels of local people, particularly at the local level, especially women and youth, with the cooperation of non-governmental and local organizations;

3. ...to promote understanding of the causes and effects of desertification and drought and of the importance of meeting the objective of this Convention. To that end, they shall:

(e) assess educational needs in affected areas, elaborate appropriate school curricula and expand, as needed, educational and adult literacy programmes and opportunities for all, in particular for girls and women, on the identification, conservation and sustainable use and management of the natural resources of affected areas...

Commission on Sustainable Development
2nd session, New York, April 1994,
www.un.org/esa/sustdev/csd.htm

CSD 1994: Chapter ID; Health, Human Settlements, Freshwater.
The Commission recommends that countries give priority attention to the integrated management, mobilization and use of water resources in a holistic manner, while stressing the importance of the involvement of local communities, in particular women.

UN Conference on Environment and Development
Political Declaration and Agenda 21
Rio de Janeiro, June 1992
www.un.org/esa/sustdev/agenda21text.htm

Political Declaration - Principle 20
Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

Agenda 21
Chapter 3 - Combating Poverty
Programme area: enabling the poor to achieve sustainable livelihoods
38 (p) Provide the poor with access to fresh water and sanitation

Chapter 18 - Protection of the quality and supply of freshwater resources: application of integrated approaches to the development, management and use of water resources
Programme Area A: Integrated water resources development and management
18.9. ...To design, implement and evaluate projects and programmes that are both economically efficient and socially appropriate within clearly defined strategies, based on an approach of full public participation, including that of women....in water management policy-making and decision-making;
18.12. ...Development of public participatory techniques and their implementation in decision-making, particularly the enhancement of the role of women in water resources planning and management;
18.19. The delegation of water resources management to the lowest appropriate level necessitates educating and training water management staff at all levels and ensuring that women participate equally in the education and training programmes. Particular emphasis has to be placed on the introduction of public participatory techniques, including enhancement of the role of women...

(d) Capacity-building
18.22. ...International agencies and donors have an important role to play in providing support to developing countries in creating the required enabling environment for integrated water resources management. This should include, as appropriate, donor support to local levels in developing countries, including community-based institutions, non-governmental organizations and women's groups.

Programme Area B: Water resources assessment

(c) Human resource development

18.33 ...Establishing and strengthening education and training programmes on water-related topics, within an environmental and developmental context, for all categories of staff involved in water resources assessment activities, using advanced educational technology, where appropriate, and involving both men and women;

(d) Capacity-building

18.34. ...Strengthening of the managerial capabilities of water-user groups, including women...to improve water-use efficiency at the local level.

Programme Area C: Protection of water resources, water quality and aquatic ecosystems

(c) Human resource development

18.45. ... establishment of ... education/training courses on water resources protection and conservation for laboratory and field technicians, women and other water-user groups.

Programme Area D: Drinking Water supply and sanitation

18.48. The New Delhi Statement...Institutional reforms promoting an integrated approach and including changes in procedures, attitudes and behaviour, and the full participation of women at all levels in sector institutions;

Activities

18.50. b. People and institutions:

-Human resource development at all levels, including special programmes for women;

-National and community management:

ii. Encouragement of the local population, especially women, youth, indigenous people and local communities, in water management;

(c) Human resource development

18.53. ... countries provide adequate training for women in the sustainable maintenance of equipment, water resources management and environmental sanitation.

(d) Capacity-building

18.54. The implementation of water-supply and sanitation programmes is a national responsibility...a high degree of community participation, involving women, in the conception, planning, decision-making, implementation and evaluation connected with projects for domestic water-supply and sanitation.

Programme Area E: Water and Sustainable Urban Development

Activities

18.59. f. Provision of enhanced access to sanitary services:
 iv. Mobilization and facilitation of the active involvement of women in water management teams;
 Means of implementation
 (c) Human resource development
 18.62. ...Special provision should be made for mobilizing and facilitating the active participation of women...in water management teams and for supporting the development of water associations and water committees.... Special education and training programmes for women should be launched with regard to the protection of water resources and water-quality within urban areas.

Programme Area F: Water for Sustainable Food Production and Rural Development

Objectives

18.68. The key strategic principles for holistic and integrated environmentally sound management of water resources in the rural context may be set forth as follows:

- b. Local communities must participate in all phases of water management, ensuring the full involvement of women in view of their crucial role in the practical day-to-day supply, management and use of water;
- d. It is necessary to recognize and actively support the role of rural populations, with particular emphasis on women.

Means of Implementation - (c) Human resource development

18.80. d. Train staff at all levels, including farmers, fishermen and members of local communities, with particular reference to women;

CHAPTER 24 - Global Action for Women Towards Sustainable and Equitable Development

24.3. Governments should take active steps to implement the following:

- d. Programmes to promote the reduction of the heavy workload of women and girl children at home and outside...and to promote the provision of environmentally sound technologies which have been designed, developed and improved in consultation with women, accessible and clean water, an efficient fuel supply and adequate sanitation facilities

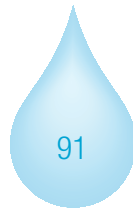
International Conference on Water and Environment, Dublin, January 1992, Dublin Statement and Principles on Water and Sustainable Development
www.wmo.ch/web/homs/documents/english/icwedece.html

Principle 3 Women play a central part in the provision, management and safeguarding of water.
 This pivotal role of women as providers and users of water and guardians of the living environment has seldom been reflected in institutional arrangements for the development and management of water resources. Acceptance and implementation of this principle requires positive policies to address women's specific needs and to equip and empower women to participate at all levels in water resources programmes, including decision-making and implementation, in ways defined by them.

CEDAW
Convention on the
Elimination of All Forms
of Discrimination
against Women,
December 1979,
[www.un.org/
womenwatch/daw/
cedaw/](http://www.un.org/womenwatch/daw/cedaw/)

Article 14 (2). ...eliminate discrimination against women in rural areas in order to ensure, on a basis of equality of men and women, that they participate in and benefit from rural development and, in particular, shall ensure to such women the right:

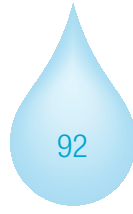
(h) To enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications.



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