

Mainstreaming Gender in Water Resources Management

Why and How

Background Paper for the World Vision Process

The objective of water projects is not to build a dam or to install a pump. It is to ease the burden and drudgery of those who have to draw water from unsafe and far-away sources. It is to improve health, boost production, stabilize income etc. And for that to happen and for the positive results not to wither away quickly, the projects must function, be used, and perhaps most important, they must be part of a more general process of social change.

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Mainstreaming the Gender Perspective in Water Resources Management

Benefits of Gendered Water Management

Towards a Vision of Equity and Sustainability

Safe, adequate and sustainable water supplies for all is one of the main social goals enunciated at global level in the past few years. One-quarter of the developing world's population still lacks clean water while millions die annually from water related diseases. As the world population continues to grow, the need and demand for water escalates. Water has become a strategic resource: its control is a source of power, a key to economic development, and a trigger to socio-political stress. The multiple uses of any water source in any given area can be incompatible, both in terms of the amount of water people require and the effect on the resources they have. Conflicts are brewing over the use and preservation of the globe's increasingly scarce supplies of water, while it is increasingly being recognized that improved management of water is imperative to sustainable development, poverty alleviation and biodiversity preservation.

To resolve these issues in humane ways, we have to take a hard and critical look at the way we have managed freshwater resources in the past, and find new solutions that will be sustainable in the long-term. These must guarantee:

- Basic services for all
- Integrated water and land management for multiple uses
- Equity across gender and class
- Sustainable ecosystem management practices
- Public standards on service quality, set in all countries
- Accountability for sustainable use and management of freshwater resources

Current approaches to water management are highly segregated, focusing on technical improvements and sectoral solutions without sufficient attention to their basic social and sustainability goals. Recent research has shown that shifting the emphasis to the social base has major implications for strategy and the technologies employed. More technology is not always better. A reorientation of the technological approach may be more effective in delivering water services where they are needed, when they are needed, at a cost that is realistic and acceptable, and with consideration of the larger time frame and scale necessary to ecosystem sustainability.

Within this social re-orientation, most recent policy documents have recognized, a gender approach is essential to the development of effective, efficient and sustainable systems and strategies. This paper outlines why. It also provides some simple guidelines for putting a gender approach into action. It is meant for policy-makers in international and national institutions, professionals within water-sector organizations, and individuals working on sustainable development and conservation strategies.

We, the writers, hope that the paper will stimulate thinking among all actors in this crucial field, and will contribute to the development of greater equity and sustainability in this sector, so that safe and adequate water supplies is no longer an issue for humanity in the decades to come.

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The Mainstreaming Gender in the Vision Project Team:

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- ◆ International Information Centre and Archives for the Women's Movement (IIAV)
- ◆ International Water Management Institute (IMWI)

meetings were held, they sat at the front of the room and elected each other to the committees. The women remained silently at the back and hardly participated because of: a feeling of powerlessness; fear of overstepping customary roles by speaking in group meetings; lack of experience in working with groups; and lack of skills in planning and problem solving.

Tap committees thus comprised 90% men, who were often away from the district. Collection of payments was haphazard, and carried out in an aggressive fashion. The men also mismanaged the money, while agreed times for opening and closing taps were not adhered to. Tap committees rarely met, while user groups kept changing water points to try and find one that functioned better. Membership in most communal water points dwindled. Leaders failed to utilize extension support or attend leadership courses. Thus hygiene education and sanitation promotion activities, which had be

Why a Gender Approach

Black Holes in the Practice of Community Participation

'Participation of users in decision-making produces more efficient and more sustainable projects. When communities influence or control the decisions that affect them, they have a greater stake in the outcomes and are more committed to ensuring success. Participation helps to break down the cycle of dependence which characterizes much top-down development work.'

Poor housewives from the small town of Felidia, in Valle Province, Colombia, initiated and built a biological treatment system for water piped from a nearby mountain stream. They wanted to have a clean supply for household needs, and the local water committee collaborated in setting a low tariff

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40% of the water supply infrastructure built during the Water Decade (1981-1990) was not working by 1998, states a World Bank report published that year. The reasons cited? Lack of community participation and the use of inappropriate technologies.

We are now one decade further on. Many efforts have been made to reconsider technologies, and to take into account the experience, knowledge, needs and expectations of local water users. Conservation agencies are increasingly recognizing the need to involve and negotiate with different stakeholders and establish joint management systems to protect and rehabilitate degraded or vulnerable ecosystems.

'Community participation' has become a catchphrase.

But there are black holes in the practice of community participation. A community is not a collection of equal people living in a particular geographic region. It is usually made up of individuals and groups who command different levels of power, wealth, influence and ability to express their needs, concerns and rights. Communities contain competing interest groups. The rich and the poor. Farmers with fields and livestock to water. Landless farmhands with children to care for. Marginalized groups and members of minority religions, tribes or castes. Businessmen who own industries which require water. Conservationists committed to protecting freshwater ecosystems. Housewives who need water for drinking and washing. Women and men.

Where water is a scarce and vulnerable commodity, there will be competition for supplies and those at the lowest end of the power spectrum will go without. That means the poor.

'Of the 1.3 billion people in absolute poverty,' states UNDP's 1995 Human Development Report, 'the majority are women.' Poverty is growing among women partly as a result of an increasing absence of men from the household unit. In Sri Lanka, official census data show that one in five homes is now female-headed due to male deaths as a result of civil conflict. There, 70% of female agricultural workers work without pay or profit.

'Water consumption measurement and price increase are important regulating tools to decrease water consumption. However they have the risk that lower income groups are excluded from basic water services. Single women heads of households are an important category in these groups, especially in urban areas. Another risk is that it forces poorer women to reduce certain water uses, for example domestic water use for hygiene. In a study in the United Kingdom, Cunningshame and Laws found that 70% of the low-income families interviewed in the outer London area had cut their water bill by reducing use for hygiene. Colleagues working in water supply in Asia, Africa and Latin America voiced their concerns about the effect of water metering on hygiene habits.'

United Kingdom, Asia, Africa, Latin

In parts of Latin America, researchers say, the majority of households are now female-headed due to migration of men in search of work.

'Experiences in the rural areas related to water resource management, the value given to water for irrigation and domestic use, the politicization of water in the peri-urban areas, etc, show how water relates to power and results in power struggling,' states Norah Espejo. 'Therefore water is not just a vital element people need for life but also an element that can lead them to economic resources. Power issues place women in a very disadvantaged position. Their limited

access to formal power reduces their negotiation capacity to get water supply systems required for their practical needs.'

Blanket 'community participation' is therefore insufficient to mediate between the various needs of water users in any given situation. The power hierarchy within communities will ensure that water distribution follows its patterns. Disadvantaged groups will always lose out.

Instead, strenuous efforts have to be made to ensure that community participation is based on democratic principles that increase social stability and create conditions whereby all stakeholders within communities are ensured fair rights, access to information and an adequate share in decision-making processes.

In the past two decades, many strikes and roadblocks over empty water taps have taken place in the Bogota Savannah of Colombia. Rivers have been drying up and drinking water is scarce. Yet gigantic supplies of fresh water are being channeled to greenhouses where 100,000 women and children work for just 65 US cents per day. These greenhouses earn foreign currency. They grow roses and carnations for shipping to the US.

Colombia

Traditional Water Management and Women's Domestic Roles

Current thinking in the water sector states that management systems must be user oriented.

Amongst users, one of the largest visible groups can be identified by gender. In most societies, the provision of water for fulfillment of fundamental human needs has always been a woman's responsibility. Women are responsible for preparing food, washing clothes, cleaning. Family hygiene is in their hands - and caring for the ill when hygiene is insufficient. In developing countries, women and girls spend an estimated 40 billion hours every year hauling water from distant and frequently polluted sources. Women have been reported to spend as much as 8 hours per day carrying up to 40.8 kg of water on their heads or hips.

Yet when technology is improved, women's needs tend to be overlooked. In the early eighties in Mexico, for instance, housewives in low-income districts of Monterrey had to resort to kidnapping water officials before they were provided with sufficient water. For a decade, they had sent delegations to the governor's office and the water authority, and mounted telephone campaigns to plead for regular supplies. Later, they took to the streets, disrupting traffic with tubs and barrels, an

perch was introduced into the Lake to boost export quotas for the local fishing industry. Nile Perch grow to 200 kg, and are predators that consume enormous quantities of small fish.

Today, Lake Victoria has lost 200 taxa of endemic cichlids and the remaining 150 are listed as endangered. Processing companies dominate the fishing scene; local people have lost employment opportunities. Fish prices have gone up, and many local people are denied access to fish. The

day). No wonder, then, that female representation in irrigation systems management committees was only 7%. The women had no time to attend meetings.

'Due to a lack of irrigation facility and related low productivity in 52.6% of the households,' the ministry noted, 'there is a high possibility of negative impacts on the nutritional status of women in particular. This is heightened due to cultural factors which dictate that men should be served before women of the household.'

Nutrition has an impact on energy levels. Women simply have no energy to spare for talking. The Nepal study concluded, 'in order to improve productivity and nutritional status of households, additional irrigation facilities have to be provided. Women should be encouraged to get involved in planning, decision-making and implementation of such projects.'

The question is how?

2. The cards are culturally stacked against women's participation in public decision-making bodies.

'In certain villages,' writes Leelamma Devasia in a report of a study conducted in Maharashtra, India, 'the men were antagonistic towards the idea of women acquiring more facilities in their day-to-day life. The men thought that from early morning to late at night women must be kept occupied with household responsibilities such as looking after children, cooking, cleaning, washing, attending other members of the family and animals and rendering a helping hand on the farms. If running water was provided, what would the women do with the time saved on fetching water daily, they asked. They also expressed the fear that if women had more time and space for themselves, they might become beyond the control of men, and that may disturb the rural social fabric.'

India

At community meetings in Africa and Asia, men outnumber women even though they may never have hauled a milliliter of water in their lives. Community meetings are a man's domain. They sit at the front while the women sit at the back where they can hardly hear. Men elect each other to management committees, since that's their proper role, according to cultural norms. The women, by contrast, are shy and diffident to speak up or take active roles, even though, according to numerous studies, they are usually keenly interested in any discussion to do with water, and willing to contribute knowledge, labor and time to participate in projects aimed at

improving supplies, quality and freshwater protection.

'In segregated and secluded societies' van Wijk has observed, 'it is often difficult or impossible for them to attend predominantly male meetings, especially in male meeting places. Men heads of household represent the family and it is assumed that the women are informed and influenced by their husbands, even though research shows that much communication is gender-segregated, and so male family members will keep the information to themselves.'

Water Administrators is an association of the highest drinking water officials in each US State. Of the 50 states in the association, three state administrators are women.'

'Tanzanian women's capacity to have input into the decision-making machinery concerning water resources planning and management is partially hampered by their lack of exposure to scientific and technological fields related to the development of the water sector in general,' states Benedict P. Michaels. 'Though there has been a considerable number of educated women in Tanzania since independence in 1961, most of them are in non-technical fields, and the few who have been trained in technical fields do not hold positions which give them the privilege to influence decisions favoring them in the water sector development process. They simply implement what is decided by their senior male bosses.'

Table 3.1 (a)
Decision Makers of Top Management by Institutions, Status & Sex, (Sri Lanka)

Types of Institution	Policy Makers		Administrators		Scientist		Total Decision Makers	
	Male	Female	Male	Female	Male	Female	Both Sexes	Female %
Ministry of Agriculture	07	0	08	0	0		15	0

Sustainable Water Management – A Note

A sustainable development program is 'a development project/program which is able to deliver an appropriate level of benefits for an extended time period after major financial, managerial, social and technical assistance from external donors is terminated (OECD/DAC)'. Water resource services that are developed as part of sustainable development are thus not dependent on ongoing service delivery and use. Rather, the services should be developed and established in such a way that they meet demands of the users while addressing the five components of sustainability:

- * Technical sustainability: user involvement in the choice of appropriate and affordable technology
- * Social sustainability: user recognition of the benefits of water resource provisions through stakeholder participation and gender sensitive approaches
- * Financial sustainability: user management of financial resources (e.g. cost recovery, maintenance systems, etc)
- * Environmental sustainability: user resource management
- * Institutional sustainability: user involvement as stakeholders in devolved power, capacity building and local autonomy

The Gender Approach

The 1992 Convention on Biological Diversity mentions, 'the vital role that women play in the conservation and sustainable use of biological diversity and affirming the need for the full participation of women at all levels of policy making and implementation for biological diversity conservation.'

Agenda 21 calls for the 'development of public participatory techniques and their implementation in decision-making, particularly the enhancement of

Even a people-centered approach does not automatically ensure that women and men's different needs and interests are reflected in development or conservation programming. If there is no explicit confrontation of gender equality issues, there will be no guarantee that women will receive the resources needed to contribute to development or conservation of the environment. True sustainability of these programs will only be achieved when women receive an equitable share of development and environmental resources and benefits.

Development resources include human resources. Indeed, the most important under-utilized resources we have are human resources. If half the world's population is prevented from developing its capacities -mental, physical and social- then we are severely restricting our potential to effectively manage our increasingly scarce reserves of water.

' The absence of women in official roles has delayed progress in improving water quality in the United States.'

'If a quantitative assessment of women's productive potential was to be carried out in Tanzania, it would reveal the negative socio-economic impact which is derived from the gender imbalance in water resources management.'

The gender approach

This approach, developed and refined through trial and error in many projects in developing countries, has proven to be the most efficacious in harnessing the human resources of local and national communities for the delivery of safe, reliable

The gender approach implies that attitudes, roles and responsibilities of men and women are taken into account, that it is recognized that both sexes do not necessarily have the same access to, or control over, resources, and that work, benefits and impacts may be different for both groups. The gender approach requires an open mindedness and aims at the fullest possible participation of both women and men.

It highlights the:

- * Differences between women and men's interests even within the same household and how these interact and are expressed.
- * The conventions and hierarchies which determine women and men's position in the family, community and society at large, whereby women are usually dominated by men.
- * Differences among women and men based on age, wealth, ethnic background and other factors.
- * The way gender roles and relations change, often quite rapidly, as a result of social, economic and technological trends.

her awareness of her situation and her capacity to take decisions and influence change. A gender approach also seeks to prevent further overburdening of women

The Gender Approach in Action: Examples from the Field

Gujerat, India

Initiated and managed by extremely poor women, this decade-long program leads to increased watershed sustainability, rehabilitation of ecosystems, and sustainable livelihoods for participants

Patan District is arid. Average annual rainfall is 7 inches. Frequent droughts, severe salinity in land and water, high temperatures and sandstorms reduce communities

of land, which formerly had only rain-fed agriculture, have an irrigation facility, and drinking water is now assured.

The key messages of the rural women in the program:

1. The most important method of mainstreaming women is enhancing their financial and managerial powers.
2. Unless women watershed users groups manage their own watershed resources, the watershed will remain unbalanced, in favor of men and vulnerable to overuse.
3. Equity, not only between women and men, but also between poor women and better-off women, is important. This means recognizing the poor women as watershed users in an individual capacity as well as in a group.

A new meeting were 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.

1993, a total of 177 village mechanics, including 98 females, had been trained and were maintaining their handpumps.

Bangladesh

Irrigation is usually regarded as man's work. But once women in Bangladesh got their hands on equipment for increasing their access to water, agricultural productivity rose. It shot up further, when the women gained access to other inputs – land, credit, seeds and fertilizer.

In 1987, the Grameen Bank and its sister organization, the Grameen Krishi Foundation (GKF), purchased 790 deep tube wells from public organizations. Management of this irrigation equipment and the supply of agricultural inputs and credits to farm households became the core activities of GKF. The approach was to explicitly link agricultural productivity and efficiency objectives with poverty alleviation and women's empowerment, targeting the so-called "land-poor" who owned between 0.5 and 3 acres of land.

The GKF began to recognize that women would be able to make much more income if given adequate support, compared with "land-poor" who
Irrigation, the Grameen Krishi Foundation (GKF) (240es of 15 5msho

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professional farmer, doing all men's work. I am no longer interested in household work."

Mainstreaming the Gender Perspective in Water Resources Management

The examples in this paper demonstrate that a gender approach results in greater efficiency, greater effectiveness, improved environmental sustainability and greater equity. ***How this approach is applied varies from case to case and circumstance to circumstance.*** What is essential, however, is a commitment to the process of gender mainstreaming in the entire system of freshwater management.

Gender mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation policies or programs, in all areas 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 programs in all political, economic and societal spheres so that women and men benefit equally, and inequality is not perpetuated.

At the United Nations Fourth World Conference on Women, held in Beijing in September 1995, participating governments undertook to carry out a comprehensive platform for action intended to ensure "that a gender perspective is reflected in all our policies and programs", and recognized gender mainstreaming as the principal means to achieve these objectives. (The Beijing Declaration: Source OECD/DAC, 1998)

A. At Global level

1. Mainstreaming gender in the development of global efforts: the latest global movement towards developing international policy to guide the long term vision on water, life and the environment in the 21st century has been launched recently by the World Water Council. The vision process, which seeks to raise awareness among the civil society and decisions makers in order to foster political will and leadership for future action, should ensure that gender equity concerns are voiced during consultations at all levels. More importantly, these concerns should be integrated into the design and implementation of the Framework of Action affirming appropriate follow-up.

B. At International level

2. Policy changes in bilateral and multilateral organizations to mainstream gender as part of the strategy of water management. This requires taking gender equity concerns in all policy, program, administrative and financial activities, and in organizational procedures, thereby contributing to a profound organizational transformation. Specifically, it brings the outcome of gender socio-economic

and policy analysis into all decision-making processes of the organization, and tracks the outcome.

Many different departments with SIDA work on SIDA's policy for promoting equality between women and men, both in the context of bilateral projects and programs and in specific targeted inputs through NGO's and other institutions. Details of their mainstreaming strategy are included in the individual action plans of these departments.

This policy is clearly established as an important criteria for overall country strategic development, influencing the choice of sectors to support in a country, the choice of interventions within sectors and the approach taken in provision of support.

SIDA –Swedish Development Cooperation Agency, 1997

the skills to enter water management at a senior level. This involves an increase in technical and scientific education offered to women.

'US women make up less than a quarter of the science and engineering labor force: only 8% of engineers are women, according to the National Science Foundation. One of the encouraging signs that the future may be different is the emergence of a number of organizations formed to encourage girls to get involved in mathematics and science... A mother with a Ph.D., Corinna Lathan, founded Keys to Empowering Youth, designed to interest middle school girls in science and engineering. To find real role models in science and technology, girls can also turn to a program called Advocates for Women in Science, Engineering and Mathematics. In this after-school club, girls from 11-18 years old meet college students majoring in science, mathematics and technology. Teen Women in Science and Technology is another program, developed by the Oregon Institute of technology, to encourage teenage girls to discover mathematics, science and technology in a unique hands-on summer residential program. In 1996, the theme of 'water' sent the group on a problem-solving quest and discussion of careers from a water-related perspective. Teenagers were asked to investigate a water pollution problem scenario.'

United States of America

6. A proactive effort to gender sensitise water management approaches at senior policy making levels in national structures as part of a strategy to ensure equity and increased women's involvement in these processes.

Engendering the development paradigm involves radical change in the long-standing premises for social, economic and political life. The free workings of economic and political processes are unlikely to deliver equality of opportunity, because of the prevailing inequities in power structures. When such structural barriers exist, government intervention is necessary -both through comprehensive polity reforms and through a series of affirmative actions.

UNDP, 1995

b

7. Gender training for men and women working in water-related national and regional bodies, non-governmental organizatio

Draft National Water Resources Policy, Sri Lanka

'Recognizing the principal role of women in water supply and sanitation, gender equality will be given adequate attention. Increasing women's participation and reflecting women's interests in the project development will be two major strategies to implement principle of gender equality. Detailed work procedures will be guided by the principle of gender equality.'

National Water Supply Sector Policy and Strategy, Nepal

Sri Lanka, Nepal

D: At project/local/community level:

9. Gender stratification in research and planning. Most current investigations of users and their needs fail to collect data differentiated along gender lines. This results in faulty assessment of levels of need and patterns of need. When information is gathered that takes into account specific gender needs, users are often more willing to pay the costs involved in supply, infrastructure and maintenance.

'In Ghana, Nigeria, Tanzania, India, Thailand and Indonesia, only male heads of households and authorities were interviewed, even about women's issues such as water needs, water transport and use, laundry provisions, and preference for a foot or handpump. Nor is a distinction between the sexes always made in analysis and reporting. In a number of cases males heads of households were consulted on topics which are outside their sphere of knowledge, views and influence, or topics were discussed on which women have different knowledge, views or demands from those of men.'

Ghana, Nigeria, Tanzania, India, Thailand, Indonesia

10. In-depth gender-sensitive consultation processes that allow participation of both women and men in decisions regarding location of water installations, technology and price implications. This may require separate meetings to ensure that women feel free to offer their opinions, and the use of female as well as male project staff.

'Wells often run dry after a few years and pumps frequently break down. Although it is the women who stand to lose most, they are rarely involved in the construction of wells or trained in the operations and maintenance of pumps. A project in the Upper Volta dug wells to inadequate depths because only men were involved in its design and implementation. Village women were not consulted, although they were responsible for collection of water from the well and had better knowledge of the depth to be dug to retain water year-round.'

Ghana

11. Care in ensuring gender balanced participation in management at community levels. Since the provision of water has so long been a women's responsibility in many societies, there is a great danger that efforts to increase community participation can have the grotesque effect of increasing the work women are expected to undertake. Women continue to provide unpaid, manual work, while men secure any managerial or decision-making roles that become available.

'Failure to address gender biases in community organizations can undermine project performance, as shown by the Macina Wells Project in Mali. An evaluation of this project in 1994 found both women's and men's work to be substandard. Women, assigned the tasks of well cleaning by older, authoritative male caretakers, neglected this task because it was added on to their already overloaded work schedules and because many of the male imposed rules of the well were impractical and illogical. Women were given minimal influence over project planning, kept out of key decision-making responsibilities, and excluded from all technical aspects of the project. The allocation of men to high status also proved to be counterproductive since men lacked the incentive to carry out work related to water provision and sanitation which they felt to be in the women's domain.'

Mali

12. Capacity building so that women are able perform managerial functions. This includes the development of skills in financial management, decision-making, community participation, leadership, confidence building and communications.

'The effects of female participation in management on the women and men in communities are manifold. Recognition of women's management tasks and training for new tasks and skills has increased their status and self-confidence. Women in Visayayas in the Philippines reported that their views are increasingly met with respect and their needs met with regard to time of meetings, design of water supply and design of latrines. They now believe that they can really contribute something for the good of the community and be 'partners in progress' and not 'for decorative purposes only'. In a project in Indonesia women grew in knowledge, self-confidence and leadership, and autonomous management of water systems increased.'

Philippines, Indonesia

13. Gender training for both men and women at local levels, so that men understand and support the changes taking place in social organization. This requires also tr

program area. The workshops have led to a greater gender consciousness of staff and also to some changes in their own practices. Acceptance and pursuit of gender measures in the program - organizing separate meetings with women; shared committees; conscientization of men on responsibilities in water payments- have increased.'

Niger

14. Capacity building to equip women to perform technical functions.

'...Available research tends to indicate that women perform technically as well or better, and that the costs of maintenance to the agency are lowered. This is reported, for example, by projects in Tanzania, Bangladesh, Zimbabwe and Uttar Pradesh in India. In the case of Rajasthan, both frequency and duration of handpump breakdown were lower for female than for male mechanics. However, the opportunity costs are high. The amount of time the women spent on preventive maintenance was almost seven times higher than men. Having still to carry out their domestic work, they also face a double workload.'

Tanzania, Bangladesh, Zimbabwe, India

15. Strategies to ensure that both women and men share the benefits of changes in water supply management.

'The imbalance increases when work done by women is voluntary while the same or similar work by men is paid. In Samoa, indigenous water sources were managed by women's groups on a voluntary basis, under the supervision of an older public health nurse. When the public health policy was changed, the women's work was not recognized but taken over by salaried male health inspectors. The result was that environmental conditions deteriorated, at a higher cost to the government. Similar tendencies are reported in Kenya and India. In Western Province, Kenya, the project replaced paid repairmen by voluntary women pump attendants for reasons of misconduct and because the men moved to town. In Rajasthan the project trained male mechanics, but also 72 female mechanics. The women did not get the same working and payment conditions as the men and the local councils have not agreed to take on the payment of their salaries. Similar reports on women trained and doing the work but not being recognized comes from Karnataka, India.'

Samoa, Kenya, India

Benefits of Gendered Freshwater Management

'A new development paradigm is needed that puts people at the center of development, regards economic growth as a means and not an end, protects the life opportunities of future generations as well as the present generations, and respects the natural systems on which all life depends.

Such a paradigm of development enables all individuals to enlarge their human capabilities to the full and to put those capabilities to their best use in all fields –economic, social, cultural and political.

Human Development Report 1994

People who have a stake in something, work at it. This is the case where women are household and community managers of water. They conserve supplies, invest time and labor in improving supplies, and monitor quality and quantity.

Clearly, the time has now come for this long-standing interest and concern to be optimized. But, women cannot be expected to play effective roles as managers and decision-makers if their position is undermined by the wider society. Hence, their status in society, their self-confidence as managers, the development of their technical skills and their autonomy to act as independent, capable members of the human race, has to be supported.

For this to happen, a gender approach in integrated freshwater resources management is essential. This will lead to greater:

- *Effectiveness*: the infrastructure, as well as valuable freshwater resources, will be more widely and optimally used and sustained by all user groups, rich and poor, women and men
- *Efficiency*: with limited funds and resources, the sector agency can reach more individuals
- *Development*: the service and its social processes will not only bring water, it will increase consumption, production, income, environmental security, health and overall family welfare.
- *Sustainable use in freshwater ecosystems*: Women's and men's direct and fair participation in research and project implementation can increase the potential

flexibility and creativity in responding to environmental insecurity and changes in resource systems.

- *Equity*: Burdens and benefits will be shared more equitably between women and men in the household and in the community at large.

The benefits that will accrue to society, to the environment, and to the water sector are many.

Economic: If women have a more effective role in water management, it will boost economic production both in agriculture and small industry. Use of irrigation methods will increase and be improved, and both food security and cash crop production will benefit. Increased services (in beer brewing and provision of refreshments, for example) will result.

Nutrition and health: Since women are generally more concerned with family nutrition hygiene than men, their greater autonomy over water use will boost health. A gendered approach will also spread concern for nutrition, child-care and health among men.

Social: A larger share of community responsibility for women tends to increase mutual respect within communities and families. It unlocks creative potential currently imprisoned by the pressures of maintaining artificial hierarchies, and relieves men of the stress of sole responsibility for the family vis-à-vis the wider community. It allows natural skills and talents to flow to the surface, where they can contribute to community and national development. Skills levels in general increase,

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