General Introduction for All Modules/Workshops

1. Welcome and Participants Introduction

Procedure

- Start the session by welcoming participants to the workshop
- Introduce yourself and ask participants to introduce themselves by stating their names and their organizations they are representing. They may briefly state the activities of their respective organizations.
- Proceed with an ice breaking activity.

Ice-Breaking Activity

- ask the participants to introduce themselves with reference to a fruit or vegetable which they can identify their personality characteristic with.
- Use an example to further explain and give them five minutes to think of a fruit or vegetable.
- start the introduction process by starting with yourself first to make it easier for participants to explain their choices.
- ask each participant to give their choice and explanation and come back to any participant who was not ready earlier.

2. <u>Introduction to the Workshop</u>

Procedure

- State the major topics that will be dealt with in the workshop (this will include topic of Module A2 and/or those of (selected) modules B1 – B13 for the workshop).
- explain the workshop schedule
- state the method of training that will be used during the course of the workshop
- ask participants to participate fully so as to lead to a better learning experience
- emphasize the role of the participants in the overall success of the workshop

3. <u>Introduction to the Module</u>

- Each Module has its own introduction, procedures and main training points
- Each Module may be used stand-alone or in various combinations

Module A1

Background and Concept of Gender Mainstreaming in IWRM

Time

1 day workshop

Note: There are 4 training points in this module; each training point will take approximately one and a half hours. This module can therefore be delivered in a one-day full workshop or broken up by training points into 2 hr sessions to be carried through over a period of days.

Material

The teaching aids required for the session are:

- Whiteboard
- Whiteboard markers
- Flipchart and markers

Examples/Handouts

International Examples

Examples from Pakistan

Framework of Assessment – Handout 1 (handout as appropriate)

Area to target for Change – Handout 2 (handout as appropriate)

Gender web – Handout 2 (chart and/or handout as appropriate)

Note: depending upon the target group of participants either use the examples to illustrate training points or explain concepts or give these as a handout.

Guideline / Procedures and Main Training Points

1. Introduction to Module A

Procedure

• Start the session by stating the topic and objective of the module

Topic: Background and Concept of Gender Mainstreaming in IWRM

Objective: providing conceptual clarity and a framework for gender mainstreaming in

IWRM initiatives; specifically to understand the concept of IWRM and gender mainstreaming and the framework of gender mainstreaming in

IWRM

Introduce and state the main training points of Module A1

Main Training Points

- 1. Concept of IWRM
- 2. Concept of gender and evolution of gender approaches
- 3. Concept of gender mainstreaming in IWRM

- 4. Framework of gender mainstreaming in IWRM
- State that 3 concepts need to be explained to understand the concept of gender mainstreaming in IWRM:
 - i) IWRM
 - ii) Gender and gender approaches
 - iii) mainstreaming

Introduction

- Integrated Water Resources Management (IWRM) "is a process, which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems".
- Gender refers to the social roles of men and women as well as the relationships between them in a given society at a specific time and place. These roles and relationships are not fixed, but can and do change. They are usually unequal in terms of power, freedom, agency, and status as well as access to and control over entitlements, resources and assets.
- Gender approaches in development have evolved over the past five decades into the Gender and Empowerment (GEM) approach that attempts to transform existing gender relations through more equal access and control of resources, more equal sharing of work and a move towards gender equity and equality.
- Using a gender mainstreaming approach systematically within the overall framework of IWRM can make water policies and programs better i.e. more effective and more sustainable. Evidence shows that the meaningful involvement of women in water resources development, management and use can:
 - Lead to the design of effective new solutions to water problems;
 - Help governments avoid poor investments and expensive mistakes;
 - Make projects more sustainable;
 - Ensure that infrastructure development yields the maximum social and economic returns;
 - Further development goals, for instance the Millennium Development Goals on hunger, child mortality, and gender equality.

1. <u>Training Point 1</u>

Concept of IWRM

Procedure

- Before explaining brainstorm with the participants and write down their responses on the whiteboard
- ask 1 or 2 participants to summarize on the whiteboard each training point as you go along

Training Points

IWRM is the natural and human system interaction in contrast to 'traditional', fragmented water resources management. At its most fundamental level IWRM is as concerned with the management of water demand as with its supply.

IWRM is a flexible tool for addressing water challenges and optimizing water's contribution to sustainable development. It is not a goal in itself. IWRM is not a dogmatic set of prescriptions but a flexible common-sense approach to water management. The IWRM framework is a problem-solving approach for rationalizing water resources management to address key water-related development challenges in ways that balance economic efficiency, equity and environmental sustainability.

- Economic efficiency in water use refers to making scarce water resources go as far as possible and to allocate water strategically to different economic sectors and uses
- Equity and participation, refers to ensuring equitable access to water across different social and economic groups and between rich and poor, both within' and across countries, which involves issues of entitlement, access and control
- Environmental sustainability refers to ?????

IWRM and the three principles take time to become established and implemented.

IWRM explicitly challenges conventional water development and management systems and recognizes that traditional approaches to water management are imposing high economic, social and ecological costs on human societies and on the natural environment.

From top to bottom: In order to achieve efficient, equitable and sustainable water management within the IWRM approach, both top-down and bottom-up approach for the participation of all stakeholders, needs to be promoted - from the national-level down to the catchments or watershed level. Decision-making in this context needs to be governed by the principle of subsidiary, which drives down action to the lowest appropriate level.

From organizations to communities: In addition to government agencies and private companies, water development and management should involve NGOs, community-based organizations that have full participation of women and disadvantaged groups, and other sections of civil society. All these organizations and agencies have an important role to play in enhancing access to water, in bringing about a balance between conservation and development, and in treating water as a social and economic good.

These general principles need to be applied to specific contexts and situations such that decision-makers (both men and women) can make informed choices between alternative actions, based on gender analysis of impacts and benefits. These choices need to be based on agreed policies, available resources, environmental impacts and the social and economic consequences.

An enabling environment for instituting IWRM is determined by national, provincial and local policies and legislation that facilitates all stakeholders (individuals as well as public and private sector organizations and companies, women as well as men, the poor as well as the better off) to play their respective roles in the development and management of water resources. It also includes the forums and mechanisms, information and capacity-building, to facilitate and exercise stakeholder participation.

2. <u>Training Point 2</u>

Concept of Gender and Evolution of Gender Approaches

Procedure

- read through or ask a participant to read through the summary of training point 1 on the whiteboard and ascertain that the concepts are largely understood
- Before explaining brainstorm with the participants and write down their responses on the whiteboard
- ask 1 or 2 participants to summarize on the whiteboard each training point as you go along

Training Points

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

Gender approaches in development have evolved over the past five decades. In the 1950s and 1960s, the welfare approach saw women as passive recipients of benefits, through approaches referred to as Women in Development (WID). In the 1970s and 1980s, the equity approach challenged women's subordinate position and attempted to increase women's participation in the development sectors through Women and Development (WAD) and Gender and Development (GAD) approaches. In recent years, a Gender and Empowerment (GEM) approach has attempted to transform existing gender relations through more equal access and control of resources, more equal sharing of work and a move towards gender equity and equality.

Gender and development concepts distinguish between **practical gender needs** the needs women identify within their socially accepted roles in society. Actions designed to address these needs do not challenge the current gender biases, although they arise out of gender divisions of labour and women's subordinate position in society. **Strategic gender needs** arise because of women's subordinate or disadvantaged position in society and addressing them requires more fundamental changes in laws, policies, the mind-set of groups of people and conscious proactive lobbying and political pressure.

In **gender analysis** focus is placed on the gender differences in terms of rights, responsibilities, access to resources and products, stereotypes of both (that determine their power and clout in

society and professional lives) and on identifying the **gender discrimination**, the **gender gaps** and **gender inequalities**. Since gender issues are usually about power, subordination and inequality, **gender mainstreaming** is about **changing** these to secure greater equality for the disadvantaged members of society (especially women and sometimes poor men).

Although the water community has made significant strides in designing programmes and policies that take into account the differing roles and responsibilities of men and women, most of the progress has been in the area of domestic water supply and sanitation. Much remains to be done on the broader questions of water resources management, development and productive use.

Specific gender provisions relating to water (for example the ownership or access to water resources, and the role that women could play in preserving, regenerating or managing water bodies) are rarely seen. Given that water bodies are considered 'outside' the purview of women as such, there are few women who have become prominent in the water sectors as visionaries, scientists, planners, managers, technicians and water professionals. Those that have ventured in this arena have had a tough fight on their hands.

Meaningful women's involvement and gender equality has yet to be achieved at many levels of water management. The recognition of women's major role as farmers and producers of food is recent. Attempts to extend women's roles in the areas of irrigation, drainage and agriculture face other difficulties including broader issues of land and access rights and land rights as a proxy for water rights. There are problems with incorporating gender analysis in irrigation drainage, municipal supplies, industrial wastewater and urban water supply, which have long been highly technical sectors

3. <u>Training Point 3</u>

Concept of Gender Mainstreaming in IWRM

Procedure

- read through or ask a participant to read through the summary of training point 2 on the whiteboard and ascertain that the concepts are largely understood
- Before explaining each term, brainstorm with the participants and write down their responses on the whiteboard
- After explaining each term ask 1 or 2 participants to summarize and write the summary concept on the whiteboard against each term

Training Points

Evidence from other development fields as well as a substantial body of experience in water supply and sanitation has shown conclusively over the last decades that involving women in development initiatives:

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

Gender mainstreaming in IWRM may be a long process requiring careful planning, patience and persistence. Gender mainstreaming is an implicit and built-in part of the 'integration' in IWRM. A gender perspective in IWRM in important because of the following concerns:

- Equality and equity between men and women, and their role in supporting sustainable human development are not yet fully appreciated or established in the water sectors (and in other sectors)
- The 'integration' in IWRM would be incomplete without gender mainstreaming
- Current participatory processes in IWRM initiatives do not necessarily recognize gender gaps and the differences between women and men in terms of their needs, aspirations and benefits
- The role of women in environmental sustainability and in conserving water bodies has been underrated
- Accurate analysis of natural resources use (including water use and reuse), management and sustainability requires gender disaggregated data
- There is need for meeting gender commitments in the water sectors, as laid out in the Dublin, Rio and Johannesburg declarations
- There is widespread concern for programme and project effectiveness and for obtaining results in IWRM initiatives

Specific women-focused actions are a recognized tool for reducing inequalities. However these women-focused actions are part of gender mainstreaming only if they are designed consciously for closing the gender gap.

Gender mainstreaming also implies strategic actions to anchor women in the decision-making echelons at all levels, and the practical actions to encourage their participation and employment in IWRM related initiatives and institutions, and to ensure that they benefit from the outcomes.

The practitioners of gender mainstreaming in IWRM initiatives, therefore, need thorough grounding in both water and IWRM, as well as gender concepts, practices, experiences, pitfalls and impacts, so that the gender analysis, solutions, policies and plans are substantive.

A gender mainstreaming framework specific to water and IWRM is a very useful analytical, strategic and practical tool. Such a framework will be particularly helpful to women working in the water and IWRM sectors and water professionals (both men and women) who want to attempt gender mainstreaming in IWRM policies, initiatives, programmes and actions.

4. Training Point 4

Framework for Gender Mainstreaming in IWRM

Procedure

 read through or ask a participant to read through the summary of training point 3 on the whiteboard and ascertain that the concepts are largely understood

- Brainstorm for the elements of the framework and write down the relevant responses on the whiteboard. This will provide an important link between the introductory module and the modules B1-B13 selected for a workshop.
- ask 1 or 2 participants to summarize main training points on the whiteboard as you go along
- If target audience is appropriate, show the chart of the gender web and give handouts

Training Points

There are very few people who would not agree to the need for gender mainstreaming in IWRM initiatives – the idea being usually understood in the sense of ensuring that women benefit from and participate in IWRM initiatives and interventions, and that they are present on stakeholder fora. But there are few gender practitioners and even fewer water professionals who could say how it is to be done in a comprehensive way.

Gender mainstreaming in the formulation of strategies and plans in practice essentially entails three steps: (1) carrying out a good gender analysis; (2) involving women as key stakeholders and anchoring them in the decision-making process; and (3) developing sex-disaggregated indicators and incorporating them in monitoring and evaluation systems.

On more micro levels, gender mainstreaming refers to design, management, organizational and project strategies and practices that lead towards the same objectives. On a macro level, gender mainstreaming refers to a strategy for translating and integrating gender equity and gender equality objectives into existing policies, systems and programmes. This has implications in terms of political, institutional, policy, budgetary and sometimes legal reforms. Gender mainstreaming strategies may focus partly on women (rather than men and women) to close the gender gap.

Gender mainstreaming also **includes gender institutionalization**, which is the process of making the changes permanent. Gender mainstreaming and gender institutionalization in IWRM initiatives require conceptual and analytical rigor to conduct a situation analysis in particular contexts, then define concrete actions, followed by monitoring.

The first step of meeting this challenge is to develop an appropriate framework to facilitate such analytical rigor, actions and monitoring. There are 13 elements of gender institutionalization, which are usually presented in the form of a web and have the potential to provide a framework for gender mainstreaming in IWRM these 13 elements are:

- 1. Women and men's experience and interpretation of their reality
- 2. Research and investigation
- 3. Codes of conduct, norms and procedures (participation, decision-making)
- 4. Laws, policies and planning
- 5. Pressure of political constituencies and groups
- 6. Representative political and governance structures
- 7. Political (and ideological) commitment

- 8. Resources (physical, financial and human)
 9. Location and sharing of responsibility
 10. Methodology (and technology)
 11. Capacity development
 12. Delivery of programmes and projects
 13. Theory building

Examples of Module A1

Background and Concept of Gender Mainstreaming in IWRM

INTERNATIONAL EXAMPLES

Evolution of Gender and IWRM Concepts

The importance of involving both women and men in the management and governance of water has been recognized at the global level since the 1980s. The Four Dublin Principles, endorsed at the International Conference on Water and the Environment in 1992, have been the basis for much of the subsequent water sector reforms across the world. One of these four principles recognized that women play a central part in the provision, management and safeguarding of water and that the pivotal role of women as providers and users of water and guardians of the living environment. It is further stated that 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.

Of the four Dublin Principles on IWRM, Principal III recognizes that women's participation as decision-makers is interwoven with gender hierarchies and roles within different cultures leading to the existence of communities that ignore or impede women's participation in water management. It is widely acknowledged that women play a key role in the collection and safeguarding of water for domestic and in many cases agriculture use, but that they have a much less influential role than men in management, problem analysis and in the decision making process related to water resources. The fact that social and cultural circumstances vary between societies suggests that the need exists to explore different mechanisms for increasing women's access to decision-making and widening the spectrum of activities through which women can participate in IWRM.

The Dublin principles also recognize that IWRM requires gender awareness and that in developing the full and effective participation of women at all levels of decision-making, consideration has to be given to the way different societies assign particular social, economic and cultural roles to men and women.

These principles are further reinforced by Principle 20 of the Rio Declaration which states that women have a vital role in environmental management and development and their full participation is therefore essential to achieve sustainable development.

In 2000, the Millennium Declaration called on all member countries to stop the unsustainable exploitation of water resources by developing water management strategies at the regional, national and local levels which promote both equitable access and adequate supplies. The Summit set eight key goals, many of which depend on effective water management strategies. Goal 3 refers specifically to the promotion of gender equity and empowering women.

In the Johannesburg Plan of Implementation of the 2002 World Summit on Sustainable Development (para 24), governments agreed to support capacity-building for water and sanitation infrastructure and services development, ensuring that such infrastructure and services are gender-sensitive. The participating countries also agreed to adopt national IWRM Strategies and

Water Efficiency Plans to address the weaknesses in water allocation, protection, supply and distribution.

In 2003 the UN General Assembly proclaimed 2005 to 2015 as the International Decade for Action on Water for Life to start on World Water Day on March 22, 2005. It called for a greater focus on water-related issues and implementation of water-related programmes and projects, whilst striving to ensure women's participation and involvement in the water-related development efforts.

The Global Water Partnership (GWP) has been a key player in the development of the concept of IWRM and IWRM strategies, and is now working at all levels for the development of IWRM plans, guidance, implementation and capacity development. GWP stresses the need to ensure that the water sector as a whole is gender aware, a process that should begin with the implementation of training programmes for water professionals and community or grassroots mobilizers. It is, therefore important that a rigorous framework for gender mainstreaming be available to practitioners.

GWP has stated that while gender issues have been reflected in all statements on IWRM since the Dublin and Rio conferences, there is still a long way to go before rhetoric is replaced by operational mechanisms and actions to ensure an equitable participation of women in IWRM. Special efforts are needed to ensure women's participation at all organizational levels.

NATIONAL EXAMPLES

In the present Constitution of Pakistan (1973), Article 25 in the 'Chapter on Fundamental Rights of the Citizens' states as follows:

- All citizens are equal before law and are entitled to protection of law
- There shall be no discrimination on the basis of sex alone
- Nothing in this Article shall prevent the State from making any special provision for the protection of women and children

Pakistan is also a signatory to the relevant declarations and commitments covering parts of the international agreement that pertain to women and water, these are listed below:

- The Convention for the Elimination of All Forms of Discrimination against Women (CEDAW)- 1979 signed by Pakistan
- Beijing Platform for Action (1995)
- International Conference on Water & the Environment held in Dublin in 1992
- Principle 20 of the Rio Declaration (to which Pakistan is signatory)
- Millennium Declaration (2000)
- Plan of Implementation of the 2002 World Summit on Sustainable Development in Johannesburg
- UN General Assembly proclamation in 2003: International Decade for Action on Water for Life (2005 to 2015) to start on World Water Day on March 22, 2005
- Part of Global Water Partnership (GWP)

The Gender Reform Action Plan (GRAP) Vol – I, Ministry of Women Development, Social

Welfare and Special Education Government of Pakistan, June, 2004, explains that Pakistani women face many gender inequalities and some advantages in the social context, which often determine their access to water and their participation in water related debates, policy, programmes and community-based initiatives.

According to the *National Environment Policy of Pakistan*, Ministry of Environment, Islamabad, 2005 (pt. 5.2 gender & environment); it will be ensured that all environment related policies, projects and programs are gender sensitive and promote empowerment of women. To this end, the government shall:

- Compile statistics of gender-disaggregated environmental goods and services.
- Ensure effective participation of women in all phases of environmental projects and programs.
- Mainstream gender in all relevant policies and plans.
- Launch targeted interventions to address the environmental issues which impact more adversely women such as indoor air pollution and lack of access to water supply sources.
- Include "gender and environment" in the curricula of education and training programs on environment.

The *National Drinking Water Policy*, September 2009-chapter 6: Policy Guideline point 6.5 on Community Participation and Empowerment states:

- Participation of communities, especially women and children, in planning, implementation, monitoring and operations and maintenance of water supply systems will be encouraged to promote community ownership and empowerment as well as sustainability.
- Every public sector project will have special allocation for community mobilization.
- Community mobilization units will be established in water supply related institutions.
- Special focus will be placed on gender training programs for the staff of water supply related institution at all levels so that they are able to respond in a sensitive manner to the gender differentiated needs in the drinking water sector.
- Special efforts will be made to recruit and induct women in water supply related institutions and other relevant agencies to ensure that the needs of women are adequately addressed in design and operation and maintenance of water supply systems and
- Representation of women councilors in all review and decision making forums regarding drinking water supply at the district, tehsil and union council levels will be ensured.

INTERNATIONAL EXAMPLES

Evolution of Gender Approaches

Gender approaches in development have evolved over the past five decades. In the 1950s and 1960s, the welfare approach saw women as passive recipients of benefits, through approaches referred to as Women in Development (WID). In the 1970s and 80s, the equity and efficient approach challenged women's subordinate position and attempted to increase women's participation in the development sectors through Women and Development (WAD) and Gender and Development (GAD) approaches. In recent years, a Gender and Empowerment (GEM) approach has attempted to transform existing gender relations through more equal access and control of resources, more equal sharing of work and a move towards gender equity and equality.

The importance of international agreements and declarations brokered by the UN remain crucial providing the overall goals with which governments can be lobbied to make the necessary policies and strategies for gender mainstreaming. The *Convention for the Elimination of All Forms of Discrimination Against Women* (CEDAW), signed by most UN member countries, together with the Beijing Platform for Action (1995) have proved powerful in the efforts for gender empowerment in both developed and developing countries. *The Beijing Platform for Action* promotes gender mainstreaming as the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. The UN has endorsed gender mainstreaming throughout its operations. The Beijing follow-up process still continues, and has been successful in many countries in terms of developing national policies for identifying and addressing at least some gender gaps, and developing plans for gender mainstreaming (or at least women's development). Combining international gender commitments with IWRM goals, can give a solid boost to gender mainstreaming in IWRM.

NATIONAL EXAMPLES

The importance of empowering women across the board and mainstreaming women in the management and governance of water, have been recognized at the national level since the 1980s, including gender approaches like Gender and Development (GAD) approach and in recent years, a Gender and Empowerment (GEM) approach.

Pakistan is also a signatory to the relevant declarations and commitments, including those international agreements that pertain to women and water like CEDAW and Beijing Platform for Action.

Despite the above initiatives and the NEP (2005), gender inequalities can be seen through some human and social indicators for men and women in Pakistan, which show that, in spite of improvements in some indictors, in comparison to men, women are still lagging behind; sources: (1) Human Development Report 2004, UNDP 2004 (2) Social Development in Pakistan, annual review 2002-03, the state of Education, Social Policy and development Center (SPDC) (3) Economic Survey 2002-03, (4) Facts & Figures Pakistan 2002 (Ministry of Education, UNICEF), National Plan of Action on Education for All (2001-201) (5) Pakistan (Ministry of Education), (6) United Nation Development Programme 1998, (7) Statement of Gender in Pakistan.

The most recent National Drinking Water Policy (2009) has specific policies on community participation and empowerment of women which can give a solid boost to gender

mainstreaming in IWRM approaches in Pakistan.

INTERNATIONAL EXAMPLES

Progress on Gender Mainstreaming in Water and Environment

According to the Gender and Water Development Report 2003: Gender Perspectives on Policies in the Water Sector, GWA, 2003, based on international commitments, many countries have policies, strategies and plans on environment, and or water, as well as policies, strategies and plans for the advancement of women (where there may or may not be reference to women and water), but rarely are the three (ater, environment and women) addressed together. In cases where there is some mention of gender concerns and perspectives, these are general. Specific gender provisions relating to water (for example the ownership or access to water resources, and the role that women could play in preserving, regenerating or managing water bodies) are rarely seen. Given that water bodies are considered 'outside' the purview of women as such, there are few women who have become prominent in the water sectors as visionaries, scientists, planners, managers, technicians and water professionals. Those that have ventured in this arena have had a tough fight on their hands.

The recent increase in the number of women appointed as water and environment ministers is an exciting trend which may provide an impetus to gender and water programmes. In late-2005, there were 40 women ministers of water or environment, representing every region and level of development in the world. H.E. Maria Mutagamba, Minister of State for Water of Uganda, is currently the chair of the African Ministerial Council on Water (AMCOW) and of the African Ministers Initiative on WASH (Water, Sanitation and Hygiene), supported by the Water Supply and Sani- tation Collaborative Council (WSSCC). The Women Leaders for WASH are championing the role of women in deci- sion-making, capacity building, educating children on sanitation and hygiene, and mobilizing political will around other priorities such as the linkages between water, sanitation, hygiene and HIV/AIDS (see www.wsscc.org).

However, there have been instances of some projects across the water sectors where women have played a proactive role in managing. So far the efforts in the water sectors in terms of gender have been largely to increase the number of women in project staff, provide gender training to staff members, enhance women's share as beneficiaries, induct women as participants and service providers at grassroots levels, and focus on their role in domestic water management. Women and their concerns remain mostly invisible in governance structures, policy-making, decision-making, planning, infrastructure development, technology development and technology structures, and in the institutions that currently control and manage water across the world.

In many cases, showing that water projects work better when women are involved has a greater impact on mobilizing finance for gender-biased projects than showing that access to water has an impact on gender equality. A study by the International Water and Sanitation Centre (IRC) of community water and sanitation projects in 88 communities in 15 countries3 found that projects designed and run with the full participation of women are more sustainable and effective than those that do not. This supports an earlier World Bank study that found that women's participation was strongly associated with water and sanitation project effectiveness.

NATIONAL EXAMPLES

There are reportedly several women ministers in federal and provincial governments (one advisor and one minister at federal level, five provincial ministers), and six women are members of parliamentary standing committees on water, women and related areas. In local councils many women are reported as members of committees and development projects to do with women's development and/or water, but there is no formal compilation of this data.

There are 3 women at senior level posts in Ministry of Environment; Deputy Secretary (CC), Section Officer (Water) and Deputy Director (Media). The EPA at federal level includes a woman Deputy Director (Research & Investigation) while there is also a woman Deputy Director at provincial level (Punjab – EPA). Also there are 2 women deputy directors and 2 assistant directors at the National Bio-safety Center.

Given that the water sector is considered outside the purview of women as such, there are few women in Pakistan who have become prominent in this area as visionaries, scientists, planners, managers, technicians, researchers and professionals. This is evident from the fact that the Pakistan Public Works Department at the federal level and Works & Services Department at the provincial levels has no women at senior level positions.

While water is crucial to Pakistan, the nexus of women and water is largely seen in terms of romantic depiction and some attempts at addressing women's practical needs in domestic water management and small scale water projects.

INTERNATIONAL EXAMPLES

The Importance of Gender Mainstreaming Concepts in IWRM

Gender mainstreaming is an implicit and built-in part of the 'integration' in IWRM.

A gender perspective in IWRM in important because of the following concerns:

- Equality and equity between men and women, and their role in supporting sustainable human development are not yet fully appreciated or established in the water sectors (and in other sectors)
- The 'integration' in IWRM would be incomplete without gender mainstreaming
- Current participatory processes in IWRM initiatives do not necessarily recognize gender gaps and the differences between women and men in terms of their needs, aspirations and benefits
- The role of women in environmental sustainability and in conserving water bodies has been underrated
- Accurate analysis of natural resources use (including water use and reuse),
 management and sustainability requires gender disaggregated data
- There is need for meeting gender commitments in the water sectors, as laid out in the Dublin, Rio and Johannesburg declarations
- There is widespread concern for programme and project effectiveness and for obtaining results in IWRM initiatives

IWRM initiatives should, therefore, incorporate women's and men's perspectives, needs and interests and, where possible, proactively promote the advancement of women (as a means of reducing gender inequalities in relation to water). Specific women-focused actions are a recognized tool for reducing inequalities. However these women-focused actions are part of gender mainstreaming only if they are designed consciously for closing the gender gap. An example would be a proactive quota for women's recruitment, special training and mentoring in an IWRM programme, such that women may have the rights, opportunities and support structures to move at par with men in a specific context. Gender mainstreaming also implies strategic actions to anchor women in the decision-making echelons at all levels, and the practical actions to encourage their participation and employment in IWRM related initiatives and institutions, and to ensure that they benefit from the outcomes.

According to *TAC Background Paper No 4 - Integrated Water Resources Management*, GWP/TAC, GWP defines the integration in IWRM as the natural and human system interaction. It holds the view that the concept of IWRM - in contrast to 'traditional', fragmented water resources management - at its most fundamental level is as concerned with the management of water demand as with its supply and that the natural and human systems integration in IWRM require an understanding not only of social and economic aspects, but also of the natural system, its capacity, vulnerability and limits. The practitioners of gender mainstreaming in IWRM initiatives, therefore, need thorough grounding in both water and IWRM, as well as gender concepts, practices, experiences, pitfalls and impacts, so that the gender analysis, solutions, policies and plans are substantive. **A gender mainstreaming framework specific to water and IWRM would, therefore, be a very useful analytical, strategic and practical tool.**

NATIONAL EXAMPLES

According to Integrated Social and Environmental Assessment for a Proposed Sindh On-Farm Water Management Project, AEWM, GOS, 2003, land ownership by women has increased since the various land reforms by the government that fixed ceilings for personal holdings. Studies have shown that while many women in economically better-of families now own land on paper, they do not exercise control.

In *The Role of Women in the Rural Economy of Pakistan*, paper presented by Kamal S in the seminar on FAP Vision about Sustainable Growth of the national Economy and its linkages with Rural and Agricultural Sector, May 1995, 73 percent of women in rural areas were economically active, and that in agricultural households, 25 percent of fulltime workers and 75 percent of part-time workers were women. A full-time worker is defined as one who does only agricultural work and thus most women fall into the part-time category as they do household work also therefore; there are probably mare full-time female agricultural workers than suggested by the Census. However, they earn much lower wages than men in all types of agricultural labour, usually Rs 20-30 per day, compared to Rs 70-80 per day for men as quoted in the *Integrated Social and Environmental Assessment for a Proposed Sindh On-Farm Water Management Project*, AEWM, GOS, 2003. Women also perform a variety of agricultural tasks.

Pakistan ranks 120 on the Gender-related Development Index, while its Gender Empowerment Measure is only 0.416 (*Human Development Report 2004*, UNDP 2004). Considering that the global commitments covering water do not specifically address the issues of equitable division of power, work, access to, or ownership of, environmental entitlements (including water) between men and women. Combining the gender equity and equality commitments with the water-related goals can, however, give a solid boost to gender mainstreaming in the water sector in Pakistan and ensure that the specific needs and concerns of, and impact on, men and women from different social and economic groups, are identified and addressed.

In order to carry out a systematic assessment of the gender situation in the water sector of Pakistan, an appropriate analytical framework is required, covering both conceptual and analytical rigor and provides guidance for action.

There are specific examples of a situation analysis of women and water in Pakistan using an internationally recognized gender analysis framework, which has been adopted and interpreted as the gender and water web from Levy C, *The Process of Institutionalizing Gender in Policy and Planning*: The "Web" of Institutionalizing, Development Planning Unit (DPU), University College, London, 1996

INTERNATIONAL EXAMPLES

Challenges in Implementing Gender Approaches in IWRM

Through the 1990s and into this decade, there have been reports of projects in which women appear to be participating and reaping the benefits of increased and/or improved services, especially in water supply and sanitation. Cleaver and Kessler 1998, quoted in the *Gender and Water Development Report*, GWA, 2003 that where this is happening women are learning new technical and managerial skills, being increasingly involved in decision-making at household and community level and turning water related projects into income generating or development opportunities that benefit themselves and their families. Much of the progress has been in those areas perceived by planners as more 'naturally' associated with women including domestic water supply and sanitation.

Meaningful women's involvement and gender equality has yet to be achieved at many levels of water management. The recognition of women's major role as farmers and producers of food is also recent. In a document shared by UN Office of the Special Advisor on Gender Issues (OSAGI) during workshop on Women and Water, Addis Ababa, December 2004 *Women 2000 and Beyond: Women and Water* and in Kamal S *Effects of the Interplay of Formal and Customary Laws on the Lives of Women and Men*, Volumes I – V, Raasta/ RNE, 2002, attempts to extend women's roles in the areas of irrigation, drainage and agriculture face other difficulties including broader issues of land and access rights and land rights as a proxy for water rights

There are problems with incorporating gender analysis in irrigation drainage, municipal supplies, industrial wastewater and urban water supply, which have long been highly technical sectors, for the following reasons:

- Irrigation, drainage, municipal and urban planning is dominated by infrastructure and engineering approaches and there are few women professionals in these sectors
- Overriding concern with the construction of systems, their operation and maintenance, by institutions where women have little representation or voice
- Concern with distribution of water and minimization of losses within water systems on technical basis (where access and equity concerns are not the primary consideration)
- Emphasis on water users as farmers, and on the outputs in terms of increased agriculture production (where women may not be counted as farmers, though they work the land, because they are not owners of the land)
- Irrigation and drainage management transfer programmes that encourage farmers and rural communities to become the managers of such supplies, do not usually recognize or include those who do not own land (women and landless men)
- Local management often conducted through water user associations usually dominated by men.
- Women farmers have to employ strategies such as taking water at night and using male relatives as champions to secure access to irrigation water
- Access to irrigation water is also heavily dependent on land rights (in which women often have disadvantageous positions)
- Many irrigated fields are worked by women and children, but the men dominate decision making about the distribution of water, often market the proceeds and have control of the cash generated.
- Industrial and urban water supply and sewerage systems are dominated by large government institutions or private utilities, most of whom employ very few women

However, the rural water supply, urban water supply, sanitation, and water conservation sectors

have seen much more proactive action for and by women, and women have pioneered and recorded achievements through lobbying and pressure groups. These experiences have shown that what can be done in different water related sectors can also be done within IWRM approaches, where there is likely to be more synergy, because of the innate gender concerns within IWRM concepts. While the issues of gender mainstreaming in the water sectors remain world wide, the subsequent sections focus more on developing countries.

NATIONAL EXAMPLES

Across the world in less developed countries, including Pakistan, women's use of common property resources has been crucial in maintaining household water and food security, but gender disparities distort access to land and water. Existing social and cultural biases, inequitable inheritance laws and the inadequacies of legal structures further limits ownership and control by women. They remain largely invisible in water institutions, and are not much in the picture in terms of water policies, strategies, programmes and conservation initiatives.

As Pakistan faces a bleak future in terms of water availability, high population growth rates and the depletion and pollution of its water bodies and systems, women are not generally recognized as an especially vulnerable group in terms of impacts, nor as a legitimate group to engage in the efforts to ward off the impending water-related difficulties. Women are not recognized as a party to the current debate in the country on dams, water distribution and competing demands.

Handout 1 Module A1

A gender-sensitive water resources assessment at the community or district level

Current situation with regard to water use, access and control

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

Productive vs. domestic uses of water

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

Institutional context

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

Looking ahead: priorities for water management, development and use

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

Handout 2 Module A1

Areas to target for change:

- Policies setting goals for water use, protection and conservation. Policy development gives an opportunity for setting national objectives for managing water resources and water service delivery within a framework of overall development goals.
- Legislative framework the rules to follow to achieve policies and goals. The required water laws cover ownership of water, permits to use (or pollute) it, the transferability of those permits, and customary entitlements. They underpin regulatory norms for e.g. conservation, protection, priorities, and conflict management;
- Financing and incentive structures allocating financial resources to meet water needs. Water projects tend to be indivisible and capital-intensive, and many countries have major backlogs in developing water infrastructure. Countries need smart national and international financing approaches and appropriate incentives to achieve development goals. Financial resources need also be allocated to public sector financing .g. for the management of the resource, not only the water services. This requires comparatively small budgets, which give huge benefits because proper resource management minimizes the risk of misallocations by applying IWRM, securing sound data acquisition etc.
- Institutional roles The principles for effective water governance require policies and actions that are coherent and integrative and institutions that are open and transparent (whether public sector entities or private concerns), such that their operations are neither hidden nor difficult to access by the public. Each institution in the process must explain and take responsibility for what it does. Both policies and institutions need to be inclusive and communicative such that improved participation is the result at different levels. To be equitable and ethical both men and women, various interest groups, stakeholders, users and consumers need to be part of the process through formalized channels, wherever possible.
- Management Instruments Management instruments are the elements and methods that enable and help decision-makers to make rational and informed choices between alternative actions. These include a wide range of methods, both quantitative and qualitative, based on disciplines such as hydrology, hydraulics, environmental sciences, system engineering, legal sciences, sociology and economics. To make progress in IWRM it is necessary to select the group of instruments that better suit a specific reality, considering the existing social and political consensus, available resources, and geographical, social and economic contexts; and applying them properly.
- Water resources assessment: Considers the collection, analysis, and mod ling of the information from the physical (specifically hydrological), biological and human medium related to the management of water,
- Plans for IWRM: Includes planning process, integrating environmental, social and economic aspects of the management of hydrological resources.

- Demand Management: Refers to actions that are oriented to improving the efficiency in use, conservation, recycling and reuse of water,
- Social Change: Seek to improve water management through a change in the behaviour of the different parties that are involved in its management.
- Conflict Resolution: Seeks to foresee, prevent and manage the conflicts, avoiding ending
 up in an impasse and favouring the construction of win-win solutions.
- Regulation: Consider the regulatory standards that require or allow for certain actions, or prescribe a number of results in relation to water management, services associated to water, or usage of the laud.
- Economic: Economic mechanisms: Such as the development of markets, pricing systems, fines and subsidies oriented to obtaining a greater efficiency in water allocation, seizing and conservation of the hydrological resources by the users, or the correct provision of services associated to water.
- Information Management and Exchange: Seeks to place the information in the power of the different stakeholders, specialists and general public, in order to improve the participation and the decision making process.