

GENDER AND INTEGRATED WATER RESOURCES MANAGEMENT



Cap-Net



Global Water Partnership

25 YEARS



Integrated Water Resources Management and Gender Training Course

About this course

Fresh water is becoming increasingly scarce across the world, while remaining a daily basic need for all. Decisions about the different uses of water are overshadowed by men, while the actual use of water is mostly by women for their families, exacerbating this disparity. Being aware of this reality makes it difficult to ignore the need for integrated water resources management (IWRM) through a gender-inclusive approach.

As the effects of climate change worsen globally, the importance of integrating gender perspectives when applying an IWRM approach to climate change adaptation initiatives becomes ever more pressing. Using this as an opportunity to address existing gender norms can in turn build more inclusive and resilient societies.

Over the last 40 years, evidence shows that simply including women and other vulnerable participants in decision-making processes is not sufficient to ensure their meaningful participation. Women and vulnerable people of any society face a set of obstacles (social, cultural, economic, even physical) that can prevent them from fully participating. Participatory water management and development gives women and men opportunities for empowerment and decision-making power over their own lives, livelihoods, and surroundings. To effectively manage initiatives, progress needs to be monitored, using qualitative and quantitative indicators. Inclusive monitoring is a participatory exercise with the involvement of all who benefit and suffer from the activities, allowing for opportunities to learn and adjust the course of the work that we do.

Gender and water resources are intrinsically linked. As such, we need to learn how to apply sustainable and inclusive water resources management to ensure resilience in a world of changing climate, with meaningful participation of all stakeholders. Guided by the [Why Gender Matters in IWRM](#) training manual, this course unravels the existing challenges faced by vulnerable groups when dealing with water, demonstrates how the two are connected, explains the benefits of addressing them in an integrated way, and presents comprehensive tools on how to achieve this. An abundance of case studies and lessons learned are shared to provide concrete examples which can be tailored and adapted to suit practitioners' needs.

Objective

The course aims to improve practitioners' understanding of the benefits of integrating gender meaningfully through integrated water management practices.

The course discusses the tools required to fully integrate women and vulnerable participants, and the potential negative impacts of ignoring gender components when planning for water and

sanitation, climate resilient measures, and inclusive participation in the water sector. The modules provide examples of tools and practical ways forward, as well as real-life case studies. The various monitoring and gender-specific indicators are also discussed.

By the end of the course, participants will be able to design and implement integrated and inclusive interventions in the water sector which ensure strong recognition of marginalised groups, leverage their knowledge towards adaptive measures to climate change, and work towards inclusive representation and access for sustainable management practices.

Learning objectives

The course will enable participants to:

- Understand different water uses through an IWRM approach, the need to integrate gender and diversity, and how to do so.
- Understand the basic gender concepts and the four interacting elements of empowerment.
- Implement IWRM using a gender-integrative approach.
- Understand the adverse effects of climate change on water and specifically on vulnerable groups.
- Grasp the benefits of incorporating a gender-inclusive approach to climate change adaptation in the context of water resources management.
- Integrate gender into water and climate change adaptation responses.
- Acquire a basic overview of the history and types of participatory approaches in the context of development interventions and decision-making processes in both natural and water resources management.
- Understand the obstacles that women and vulnerable groups face in order to participate in any decision-making processes.
- Understand the positive impact of inclusive decision-making processes on development and on IWRM more particularly and how to use existing guidelines for ensuring meaningful participation.
- Understand the need for gender-disaggregated data collection in water-related programmes or projects, and how to develop inclusive indicators.
- Understand the importance of participatory monitoring, and how to do so effectively.
- Apply different tools for gender-inclusive monitoring, know where to find them, and which one(s) to select.

Course structure and contents

The course contains the following modules:

1. Introduction to Gender and Integrated Water Resources Management.
2. Gender, Water, and Climate Change.
3. Gender, Water, and Meaningful Participation in Decision-making Processes.
4. Gender-disaggregated Data and Monitoring IWRM.

Each module consists of mandatory readings based on the training manual and is complemented by additional resources: videos, websites, case studies, and suggested readings. Participants are invited to share their experiences and questions through dedicated discussion forums in each of the modules. Answering multiple-choice questions at the end of each module is a prerequisite to completing each module and advancing to the next module.

Course participants will interact with their peers in rich forum discussions to connect the course contents with their own experiences and challenges.

Course contents

The contents of modules 1 and 2 are guided by the training manual, "[Why Gender Matters in IWRM](#)" developed by Cap-Net and GWA.

Among other readings, participants will also be introduced to:

- [Empowerment](#) (GWA, 2016).
- [The gender dimension of water and climate change](#) (SIWI, AGWA, 2018).
- [Gender and the Environment and Climate](#) (UNEP, GWA 2018).
- [Gender Equality and Inclusion in Water Resources Management](#) (GWP, 2017).
- ["Natural resources, people and participation"](#) (Pimbert, 2004).

Participants

Participants representing various stakeholder groups from the entire water sector globally are invited to take this course:

- Stakeholders and professionals forming part of water management, civil society, river basin, or international organisations; development programmes, members of UN organisations, and representatives of the private sector.
- Sustainable Development Goals focal points and facilitators within national governments.
- Decision-makers, policy-makers, and high-level professionals and managers active in governmental bodies.
- Capacity developers active in the fields of integrated water resources management, climate action, gender mainstreaming, stakeholder engagement, monitoring and evaluation among others.

Participants are expected to have previous knowledge of the basic concepts of integrated water resources management. A basic understanding of the impacts of climate change on water resources is expected. No previous knowledge of gender or its interactions with water is required.

Time requirements

Estimated between two and four hours per module, including attendance and preparation. Participants who wish to access other suggested readings and related videos will require additional time.

Course approval criteria

Approval requires 70 percent correct responses on the set of multiple-choice questions in each module. Participants who complete all modules receive a certificate granted by the course organisers.

Answering the multiple-choice questions at the end of each module is a condition to move on to the next module, completing the course, and receiving a course certificate. Participants have up to three chances to obtain at least 70 percent correct responses, and in all cases the platform will indicate the wrong answers.

After completing the four modules, participants are invited to answer a short feedback survey on the course. Once this survey is answered, participants may download their certificate. Participation in the course, as well as the download of the certificate, is free to the participant.

GENDER AND INTEGRATED WATER RESOURCES MANAGEMENT



Glossary: Integrated Water Resources Management and Gender Training Course

Bias

Attitude for or against something, someone, or a group of people based on prejudices. Gender bias refers to prejudiced actions or thoughts based on the perception that women and men are not equal and mostly that women are inferior. Implicit biases in particular can play a crucial role, for example in the workplace, in research, or in the planning of development programmes.

Ecofeminism and the nature-culture debate

When women are singled out as caretakers of the planet and the environment, this is based on the idea that women more personify nature, versus men who more personify culture. However, all people are responsible for the planet and to conserve the environment and biodiversity, not just women. Both men and women have natural and cultural characteristics, interests, knowledge and responsibilities.

Empowerment

People – both women and men – taking control and having power over their lives: setting their own agendas, gaining skills, building self-confidence, solving problems and developing self-reliance. People have to empower themselves, whilst institutions including international cooperation agencies can support processes that can nurture self-empowerment of individuals or groups. Empowerment consists of the four integrally linked aspects of physical empowerment, economic empowerment, political empowerment and socio-cultural empowerment.

Female-headed household

A woman-headed household in which an adult female is the decision-maker and sole or main income producer, predominantly headed by lone mothers. Sometimes a disabled husband is part of the household.

Gender

Refers to largely culturally and socially determined characteristics that men and women are given in their society – assumed from the sex assigned at birth, often expressed in terms of masculinity and femininity. Gender relations and differences are historically, religiously, economically and culturally defined, built on norms and roles and perceived as static. Gender differences are not biologically determined and change with circumstances and over time. Gender deals with the division of work, the different responsibilities, tasks and skills and the different rights men and women have. It also deals with the access to and control over resources, the expected behaviour, taboos and privileges and the connected status of men and women. Gender interacts and

reinforces power differences in age, ethnicity, socio-economic status, etc. Therefore, gender refers to power relations between women and men and girls and boys, as well as the relations between women and those between men. Gender is important in water management because women and men have different responsibilities, interest, knowledge and needs related to water.

Gender analysis

The collection and analysis of gender-disaggregated information. Men and women both perform different tasks; this leads to women and men having different experience, knowledge, talents and needs. Gender analysis explores these differences so policies, programmes and projects can identify and meet the different needs of men and women. Gender analysis also facilitates the strategic use of distinct knowledge and skills possessed by women and men.

Gender awareness

Gender awareness is the opposite of gender blindness. To be gender aware means that one notices the different access to resources, different power position, different tasks, etc., that women, men, girls and boys of different categories of people have.

Gender blindness

The existing differences between men and women are not recognised or distinguished. Gender blindness can hinder gender mainstreaming.

Gender budgeting

Gender responsive budgeting ensures that men and women benefit equally from project activities and interventions. It is a budget that makes provisions for benefits to reach both men and women equally. Gender budget refers to a separate budget for gender-mainstreaming activities, a separate budget line for undertaking specific activities related to gender mainstreaming.

Gender budgeting also means scanning budgets of various levels, including national, to see how much of the totally available funding will benefit women, children, minorities, elderly, etc. By screening the budget, it can be seen what the real priorities are of the policies, more so than by reading often presumptuous texts.

Gender-disaggregated data

In every situation where social information is being collected, it is important to obtain separate data on men and women. If interviews are being done, efforts should be made to interview men and women separately and in some cases, depending on local customs, it is best to ask women to interview women and men to interview men. Politicians need valid quantitative data with distinction between the numbers for women and those for men.

Gender discrimination

The practice of granting or denying rights or privileges to a person based on their sex.

Gender and diversity or gender+

Gender refers to relations between women and men, but not all women or all men are in the same position. Women are not equal to one another, nor are men. As explained in the subject Intersectionality, people have their sex, but also ethnicity, race, religion, richness and poverty, economic class, caste, ability (physical or mental challenge) and age. All these aspects interact with and influence the gender power position of people. This is called gender and diversity or gender+ (gender plus).

Gender equality

Equality between women and men refers to the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female. Equality recognises the diversity between different groups of men and women. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centred development.

Gender equity

The process of being fair to men and women. To ensure justice, measures must often be put in place to compensate for the historical and social disadvantages that prevent women and men from operating on a level playing field. Equity is a means; equality is the result.

Gender ideology, mind-set and stereotyping

Gender ideology or gender mind-set refers to the fact that all people individually have certain ideas and convictions on what men's and women's identities are supposed to be, partly shared with society in general. Notions on what is the appropriate and expected behaviour, feelings and responsibilities for being a woman or a man and how they should relate to each other, according to their position, age, class, etc., are internalised and passed on through upbringing. Also, gender stereotyping (gender ideology) is culture- and context-specific, and gender roles for women and men differ a lot from one culture to another. What is women's work in one society might be exclusive to men in another society. In a gender mind-set, unequal gender relations are often seen as natural or prescribed by religion. We are hardly aware of our own mind-set; it is a set of usually unwritten rules we stick to, even those we are trying to change.

Gender and inclusion

Where "gender and diversity" describes the situation, "gender and inclusion" relates to the development activities to be done, when the development is sensitive to gender and diversity.

Gender mainstreaming

A process rather than a goal. It is a process to achieve gender equality and improve the relevance of development agendas. A gender-mainstreaming approach shows that the cost of women's marginalisation and gender inequalities are borne by all.

The UN defines gender mainstreaming as the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.

Gender-neutral development and language

Words or language that do not refer to either the male or female sex are considered to be gender neutral. Gender-neutral language is often used to indicate that gender is included, but in fact gender-neutral language does not serve to improve the understanding of gender issues; it rather serves to "hide" gender issues. Gender-neutral language cannot be used in gender analysis.

It is often said or written that particular development projects are gender neutral, so there is no need for gender mainstreaming in these projects. But wherever development is meant to benefit people, and these people are men, women, elderly, children, poor and rich, etc., the project will affect or impact these different categories differently. Therefore no project for people is gender neutral.

Gender power relations

The way gender influences the power balance at any level of society. Inequality between women and men is most entrenched in the distribution of power. Power relations at intimate, household, community to political levels are directly related to roles and behaviours attributed to women and men. They can be both the cause and the consequence of unequally distributed power. Social structures and institutions play a decisive role in whether these patterns are reinforced or broken.

Gender responsive

Taking actions to correct gender bias and discrimination and creating an environment that promotes gender equality and gender equity.

Gender sensitive

To be gender sensitive is to recognise the differences, inequalities and specific needs of women and men and act on this awareness.

Gender transformation and gender-transformative approaches

Gender transformation is the change towards more equal gender relations, in a structural sustainable way. Development activities aiming at improved water management do not automatically benefit all people. For example, men may gain with more access to irrigation water, while women lose out at the same time from the resulting lower groundwater level. If transformation of gender relations or more equal gender relations is the objective, the approach is called a gender-transformative approach.

Intersectionality

The idea that people's identities are multi-layered and diverse according to their gender, class, caste, race, sexuality, disability, religion, nationality, age and more. Intersectionality is an analytical tool as well as sociological concept that acknowledges that people are members of more than one category, have unique individual experiences that result from this, and can experience oppression and privilege at the same time. It aims to uncover the different types of discrimination that occur as a result of these diverse identities and takes historical, social, political and power relations into account.

IWRM and gender (see Manual Gender and IWRM, Module 1, Session 3)

Integrated Water Resources Management (IWRM) is a process which promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems and the environment. Gender is a central part of IWRM.

IWRM responds to the four principles laid out in 1992 at the Dublin Conference on Water and the Environment and Rio Conference on Environment and Development:

- Water is a limited and vulnerable resource.
- Development and management of water, land and related resources should involve different water users, service providers and policy makers at all levels. A sectoral approach should be avoided, because it leads to fragmented and uncoordinated development and management of water.
- Women play a central role in the provision, management and safeguarding of water.
- Water is a public good and has economic, social, environmental and cultural value in its competing uses.

IWRM, economic efficiency and gender in water projects

Economic efficiency refers to the financial sustainability to build, operate and maintain the diverse projects and facilities required to improve water access and assure water quality and quantity over the long term through cost recovery and payment systems. It also refers to sectoral and cross-sectoral actions for cleaner production, water reuse and recycling, recognising that freshwater is

a limited resource and investment in water projects must be viable. Because overall men make decisions regarding access to water, it is crucial for water projects to involve women. Women are mostly responsible for drinking and domestic water, which is the first priority for all creatures. Agriculture and industry may use and pollute too much of the scarce fresh water available.

IWRM, environmental sustainability and gender

Environmental sustainability means assuring the capacity of nature to support life. Within the context of IWRM this means a healthy water cycle, adequate water for nature, and less water pollution. Long-term water availability requires that ecosystems are able to continue to regulate water quality and quantity. With reducing quantities of fresh water and increasing pollution, it becomes harder for women and girls to find water for their families, which is still their responsibility in large parts of this world.

Social equity in IWRM and gender

This requires that a fair share of water benefits and responsibilities are transmitted to women and men, poor and rich, young and old. This means fair opportunities to access, use and control water resources, as well as equitable acceptance of responsibility for the negative side effects produced so as to avoid placing higher burdens on the poor or disadvantaged members of society. (See Gender equity and Gender equality.)

IWRM, water governance and gender

Water governance is the management of water and water systems. It is defined by the political, social, economic and administrative systems that are in place, which directly or indirectly affect the use, development and management of water resources and the water service delivery at different levels of society. Decision-makers are mostly men, at all levels, but interests and responsibilities in water use are different for men and for women; therefore, it is crucial that women are involved in governance and decision-making. This is to the benefit of all people, not just women.

Participation

There are different levels of participation, from being informed up to the right to make decisions. From a gender perspective it is important that different categories of women and men can participate in projects and activities which have impact on their position and well-being. Men should not participate for their wives, or the other way around.

Patriarchy

A society controlled by men due to the men having a privileged position compared to women and using it to their own advantage. Patriarchy is underlined by societal structures that institutionalise and reproduce male power in physical, social and economic terms. This applies to most modern societies.

Sex versus gender

In contrast to the widely held assumption, sex and gender mean separate things (see Gender). Sex is usually based on a person's primary and secondary sex characteristics and refers to biological traits (such as genitals, hormones or chromosomes). Sex is assigned to us at birth and is historically decided between male and female.

Tokenism

A practice that either superficially and without real effort, or even only symbolically, attempts to include members of underrepresented groups, for example through voluntary quotas or the recruitment of people from minority groups, to give the appearance of equality in the organisation while leaving the overarching unequal power structures untouched, not initiating positive change for those symbolically addressed.

Violence: gender-based violence, domestic violence

Gender-based violence (GBV), violence against women, domestic violence and sexual harassment are all forms of violence with the sex of the victim as a main reason. While 90% of victims are women and children, at most 10% are men. This violence has to be noticed and taken seriously, and not considered as a legitimate part of certain cultures. GBV is a cause of great misery worldwide, often handed down to the next generation. The fight against GBV has to be mainstreamed in all development activities.

Women's rights, human rights

Women's rights are human rights. We, both men and women, are all entitled to them – including the rights to live free from violence and free from discrimination; to vote; to be educated; to own property; to earn a fair and equal wage; and to receive the highest attainable standard of healthcare. Equality between men and women is one of the most fundamental guarantees of human rights. Sexual and reproductive rights are an essential part of this. Securing rights for women also means changing the way countries and communities function and involves changing laws, policies and mind-sets. This is also closely linked to intersectionality.

Women and vulnerable groups

Vulnerable indicates that an individual or group is thought to have a particular status that may adversely impact upon their well-being, and that this implies an ethical duty to safeguard that well-being because the person or group is unable to do so adequately themselves. Marginalisation is a major cause of vulnerability, which refers to exposure to a range of possible harms, and being unable to deal with them adequately. It is sometimes also called social exclusion and refers to the relegation to the fringes of society due to a lack of access to rights, resources and opportunities. People don't see themselves as marginal; therefore, care is required when using marginal instead of vulnerable.

Work and gender: unpaid versus paid work, productive versus reproductive work

Work is everything that needs to be done: unpaid or paid, formal or informal, productive or reproductive. Because all over the world more women than men are responsible for unpaid household work, care of children and family members, hygiene management, fetching water, it is crucial that in development projects and in situational analysis, the unpaid work of women is taken seriously and not ignored or neglected as is the custom. Unpaid work is as important as paid work, and needs to be recognised.

Productive work yields production, which is either money or goods. Reproductive work enables families and communities to have sustainable livelihoods.

From time-analysis we learn that women overall work many more hours than men, and have fewer hours of sleep and rest. Further we learn that if men do a certain task it is considered productive, and when women do the same, it is labelled as reproductive. This must be avoided to be clear about the importance of all work, for example with gender analysis, but also in value chains of products.

Other glossaries

- <http://genderandwater.org/en/gwa-products/capacity-building/tutorial-for-water-managers-why-gender-matters/completetutorial/tutorial-for-water-managers-why-gender-matters/view> (Tutorial for Water Managers by GWA Cap-Net, Chapter 1: Gender concepts)
- <https://eige.europa.eu/thesaurus/overview>
- <https://www.unicef.org/rosa/media/1761/file/Gender%20glossary%20of%20terms%20and%20concepts%20.pdf>
- http://www.peacewomen.org/assets/file/AdvocacyEducationTools/genderglossary_migs_aug2005.pdf
- <https://www.brook.org.uk/your-life/gender-a-few-definitions/>
- <https://www.women2030.org/women2030-training-master-manual-building-capacity-for-change/> (Manual for Training of Trainers in the #Women2030 project by GWA, Module 1, Session 1)

GENDER AND INTEGRATED WATER RESOURCES MANAGEMENT



Module 1: Introduction to Gender and Integrated Water Resources Management

Introduction

Integrated water resources management (IWRM) and development links the different uses of water to the needs and available resources. Water, and especially fresh water, is an increasingly scarce good in this world, and at the same time a daily basic need for all beings. Decisions about the different uses of water are dominated by men at high levels, while the actual use of water is mostly by women for their families. Male farmers have more access to water for irrigation than their female counterparts. This shows the need for integrated water resources management, and for mainstreaming social aspects, such as gender and diversity: gender power relations are a crucial part of IWRM.

In this module, the participants get a recap of the four aspects of IWRM: **environmental sustainability, economic efficiency, social equity, and good governance.**

It goes on to address gender: the basic gender concepts in relation to empowerment and to water management. This section is also important preparation for the other three modules.

Empowerment of women and men, minorities and vulnerable people is analysed in four interacting elements: economic, political, socio-cultural and physical empowerment. Each of these four by themselves are not very helpful, but together they are.

Participants will learn WHY to integrate gender and diversity and also HOW to do this in their work, in water management, for WASH, agriculture, environment, and climate-related activity.

Module goals

1. Recapitulate inclusive IWRM.
2. Learn WHY gender is a crucial part of IWRM, and why to mainstream gender in your work.
3. Learn basic gender concepts and empowerment: the four components that interact.
4. Form fundamental awareness and acquire knowledge for the remaining modules.
5. Learn HOW to mainstream gender in water management work.

Learning objectives

By the end of this module participants are expected to:

1. Remember information about IWRM, with a focus on the social aspects.

2. Understand that in IWRM the differences between water users have to be taken into consideration: by integrating gender and diversity (gender+), and why to do so.
3. Understand basic gender concepts and the four interacting elements of empowerment.
4. Be ready for the following modules by having sufficient fundamental gender-related understanding.
5. Demonstrate ways to mainstream gender in their work.

Content

Part 1: IWRM

Integrated water resources management (IWRM) aims for the sustainable use, management and development of water, land, and related resources. It seeks to balance the use of these resources for economic and social welfare with the protection and conservation of water, based on sustainable development principles (see www.gwp.org). In this module, we explain four aspects of IWRM that contribute to the sustainable use of water resources: **environmental sustainability**, **economic efficiency**, **social equity**, and **water governance** (See Figure 1).

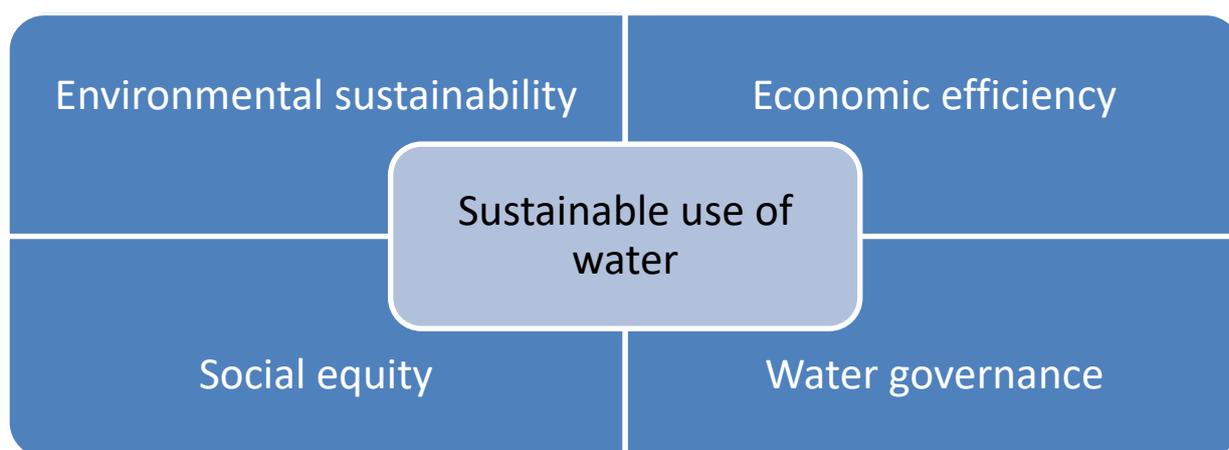


Figure 1. The four contributors to sustainable use of water resources in integrated water resources management

Environmental sustainability ensures the capacity of nature to support life. Within the context of IWRM this means a healthy water cycle, adequate water for nature, and reduction of water pollution. Forests and wetlands, among other ecosystems, help regulate water flow and quality. Efforts to manage water resources and ensure long-term water availability must include integrated actions to protect ecosystems and ensure environmental sustainability. Long-term water availability requires that ecosystems are able to continue to regulate water quality and quantity.

Economic efficiency. Water is vital for economic and social development and is integral to sustaining and increasing urban and rural livelihood activities. Given increasing water scarcity, the choice as to how each drop should be allocated and managed becomes central to maximising

social and economic benefits and ensuring sustainability. This effort includes sectoral and cross-sectoral actions for cleaner production, water reuse, and recycling.

Economic efficiency also refers to the financial sustainability necessary to build, operate, and maintain the diverse projects and facilities required to improve water access, and assure water quality and quantity over the long-term through cost recovery and payment systems.

Social equity. Water is a basic human need. Not only is it a central part of the basic rights for all people under the Universal Declaration of Human Rights, but in 2010 access to safe drinking water and sanitation was also recognised by the UN General Assembly as a **human right**, essential to the full enjoyment of life. Social equity is embedded in actions that support the sustainable management and use of water resources. It requires that a fair share of water benefits and responsibilities be transmitted to women and men, poor and rich, young and old. This means fair opportunities to access, use, and control water resources, as well as equitable acceptance of responsibility for the negative side effects to avoid placing higher burdens on poor or disadvantaged members of society.

Water governance is the management of water and water systems. It is defined by the political, social, economic, and administrative systems that are in place, and which directly or indirectly affect the use, development, and management of water resources, and water service delivery at different levels of society. Water governance addresses principles such as equity and efficiency in water resource and services allocation and distribution, the need for integrated water management approaches and the need to balance water use between socio-economic activities: domestic use and drinking, sanitation, agriculture, industries, and ecosystems. It also includes the formulation, establishment, and implementation of water policies, legislation, and institutions and clarifies the roles of government, civil society, and the private sector with respect to ownership, management, and administration of water resources and services. (<http://www.watergovernance.org/whatiswatergovernance>)

IWRM has its basis in four principles derived from the 1992 Dublin-Rio principles (source: <http://www.gwp.org>). These are:

- Water is a limited and vulnerable resource.
- Development and management of water, land, and related resources should involve different water users, service providers, and policy makers at all levels. A sectoral approach should be avoided, because it leads to fragmented and uncoordinated development and management of water.
- Women play a central role in the provision, management, and safeguarding of water.
- Water is a public good and has economic, social, environmental, and cultural value in its competing uses.

For more details on IWRM, see other [Cap-Net training manuals](#).

Part 2: Gender

Gender equality is a human right, but it is also a prerequisite for sustainable development. Principle 20 of the Rio Declaration, 1992, highlights that gender inequality is an obstacle for sustainable development by stating: “Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.”

The last decades show some progress towards achieving women’s rights, however, many gaps remain. Therefore, it is essential to address, not only in development interventions, structural causes of gender inequality, such as violence against women (VaW) or gender-based violence (GBV), poverty, unpaid care work, limited control over assets and resources such as water and land, and unequal participation in decision-making¹.

Gender and sex

The difference between sex and gender is that sex is biologically defined, and gender is a socio-cultural concept. Sex is given by birth and cannot change (except nowadays through surgery, plus medical hormonal treatment) and refers to the body e.g. men’s ability to provide sperm/impregnate, women’s ability to give birth, men’s ability to grow stronger muscles and women’s ability to breastfeed, etc.

Gender

Gender refers to the socially ascribed roles, rights, responsibilities, and opportunities associated with women and men. Gender denotes not only the social and power relations between men and women, but also among men and among women. These relations are context specific and are different in different places, but also change over time. The different positions of women and men are influenced by historical, religious, economic, and cultural realities. Gender essentially refers to how men and women are expected to behave and what they can do and cannot do. This leads to differences between men and women in tasks and taboos, rights, and responsibilities, etc. Because of their different tasks and responsibilities, men and women also have different knowledge and interests. Different tasks have different status (e.g. decision-making has high status and cleaning a low status) and tasks performed by men tend to have a higher status than tasks performed by women.

Gender interacts with age, ethnicity, class, race, religion, urban or rural location, ability/disability, etc. creating differences in groups of women and men. Women and men are not just two homogeneous groups and for example, age differences greatly influence the position of a person. In many cultures, older women and mothers in law will have a large say in what younger women of the household should do or not do. Also a wealthy woman might be much better off than a poor, indigenous man. Therefore gender is not about women only.

¹ UN Women, see: <http://www.unwomen.org/en/what-we-do/post-2015/un-women-position>

Gender differences are rooted in power relations, which are usually not equal, but asymmetric. The meaning of asymmetric power relations is that there is a difference in power between people – such as men and women (i.e. husband and wife), or men (i.e. father and son), and even between women (i.e. mother-in-law and daughter-in-law).

Unequal gender relations are often considered normal and static, but as perceptions and societies change, our values change too. Gender relations can change and do change, like culture – if people themselves want change, for example if there is an urgent need felt by all. Individual people can fight against such cultured gender relations, thus empowering themselves. Women challenging cultural norms can become role-models for others.

Gender plus or gender and diversity

Women and men are not homogenous groups with the same interests, needs, and power. Factors such as income, age, ethnicity, caste, religion, rural/urban location, and occupation can interact to create big inequalities in different women's and men's access to resources, e.g. to land and to safe and adequate water and sanitation.

Gender ideology, gender mind-set and stereotyping

Gender ideology or gender mind-set refers to the fact that all people individually have certain ideas and convictions on what is supposed to be men's and women's identity, partly shared with society in general. Notions on what is the appropriate and expected behaviour, feelings, and responsibilities for being a woman or a man and how they should relate to each other, according to their position, age, class, etc. are internalised and passed on through upbringing (e.g. a family where the daughter is always asked to wash the dishes after dinner, whereas the son is never asked to do so. This conveys the idea that washing dishes is women's work and is passed on in the family). Also, gender-stereotyping (gender ideology) is culture- and context-specific, and gender roles for women and men differ a lot from one culture to another, but also from one social group to another within the same culture. What is women's work in one society might be men's exclusive task in another society. In a gender mind-set, unequal gender relations are often seen as natural or prescribed by religion. We are hardly aware of our own mind-set. It is a set of usually unwritten rules we stick to, even those we are trying to change.

In development programmes even more gender imbalances can be created by assuming that an intervention, or technology, or policy is gender neutral. After a lot of gender analysis, it appears that any kind of intervention is not gender neutral, this means that every policy, programme/project, technology, will always affect/impact women and men in different ways.

Gender equality

All human beings, both men and women, should be free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles, or prejudices. Gender equality means that the different behaviours, aspirations, and needs of women and men are considered, valued, and favoured equally. It does not mean that women and men have to become

the same, but that their rights, responsibilities and opportunities will not depend on whether they are born male or female.

Gender equity

Women and men should be treated fairly, according to their respective and differentiated needs. This may include equal treatment or treatment that is different but considered equivalent in terms of rights, benefits, obligations, and opportunities. In the development context, a gender equality goal often requires equity activities. Only by ensuring marginalised groups receive extra resources, can equality eventually be reached.

Gender-responsive

Gender-responsive actions identify, understand, and implement interventions to address gender gaps and overcome historical gender biases in policies and interventions. Gender-responsiveness contributes, pro-actively and intentionally, to the advancement of gender equality. More than 'doing no harm', a gender-responsive policy, programme, plan or project aims to 'do better'.

Agents of change or actors

Women and men who are limited by culture in their free choices still always have some power to increase their space for manoeuvre. Although the concept 'gender roles' refers to societal norms, suggesting people can only follow rules and behave as they should, it is important to see women and marginalised people not just as victims, but also as agents of change, who will not only try to empower themselves, but also improve the position of their families and society.

See more gender concepts and terms in the separate [Glossary](#).

Empowerment

While women's rights are determined at high levels, empowerment can be achieved by individual people themselves. To understand gender relations better the four interacting dimensions of empowerment can be applied for gender analysis:

Economic empowerment. This aspect of empowerment depends on the gender division of tasks and of access to resources, such as land, water, assets, income (with its persisting gender pay gap), information, and education. It covers decision-making power about one's education, and about spending the income one earns. It also influences the right to decide about the use of water.

Socio-cultural empowerment. Cultural, religious, and traditional patterns and norms towards women and men differ from society to society, from one ethnic group to another, and from culture to culture. How is the category to which one belongs valued by society at large? And how does one see oneself? Self-confidence is an important aspect of socio-cultural empowerment. Is fetching water and cleaning work including toilets appreciated, valued and considered important for health, as it should be?

Political empowerment. Access to participation in decision-making processes and access to leading positions and power is not gender neutral. The consequences are that women's voices are not equally represented in the political and other decision-making structures, which is reflected in water and climate policies and practices, for example, the water users' committees. The right to vote and be elected, to take an active part in democratic processes, is a factor of empowerment. Also, legally the status of women and men differs, e.g. in unequal inheritance rights. In some countries the laws are equal for men and women, but not necessarily implemented accordingly.

Physical and biological dimension. To be empowered, one's physical needs also have to be fulfilled, such as the need for accessible, safe water, proper sanitation facilities, trusted, local healthcare, decision-making rights about one's sexuality, the number of children to bear and the spacing between them. A very important aspect is the ability to resist violence such as gender-based and domestic violence. Child marriage is one form of GBV (gender-based violence).

These interacting dimensions of empowerment help to demonstrate the different sides of gender inequalities, and the ways in which gender discrimination can be resisted. Real, sustainable change can be reached if minorities, vulnerable groups, and women are empowered in each of the four dimensions, and able to reject discrimination. This empowerment approach is used for gender analysis, but it is also an objective of gender-sensitive development. Empowerment is to be reached by all people, women, girls, boys, and men of all categories.

Part 3: Gender and IWRM, linkages

Gender and environmental sustainability

- Water is essential to the environment. People's use of water is mediated through their social and economic activities. Poor people may pollute water at the local level (e.g. through the use of plastic and pesticides); however major pollution occurs through industries and mining activities, and through overconsumption by richer people. Although both poor women and men are negatively affected by the polluted water, women (and children) suffer the brunt of the pollution, because they are responsible for fetching water for consumption and cooking. They are also in charge of washing clothes, the hygiene of the household and other cleaning activities.
- The impact of flood and drought events is often felt most severely by women because they lack various means that men have access to, to cope with disaster.
- Women are often at the frontline with respect to climate change impacts and are hardest hit by the negative consequences.
- In many places, during drought women remain responsible for water in the house, while men have access to groundwater for their crops. When they come home, they expect women to have water for their bath, , but low groundwater level, resulting from agricultural use, means the wells for drinking water are empty.
- During the Covid-19 crisis women became more at risk of illness, as it is their role to care for patients in the family or outside.

Gender and economic efficiency

- Increasingly, and especially in urban areas, with the privatisation of drinking water infrastructure, water users are asked to pay for drinking water. However, many poor people find it difficult to make large monthly payments. Allowing users to pay smaller amounts, more frequently, makes water more affordable for them.
- Technology choice affects affordability. Consulting female and male users may result in a more acceptable, user friendly and sustainable service. For example, poor people, for financial reasons, may prefer to access water from a community standpipe rather than to have taps in their homes.
- Increasingly water from rural villages (located in the upper part of a basin) is diverted to benefit large-scale irrigation and agro-export production, leaving the inhabitants without resources to develop their agricultural activities. Men may be pressured to migrate to search for alternatives to sustain their family's livelihood, leaving behind their wife and children who have to confront the family situation and rearrange roles to cope with everyday livelihood needs.
- An economic crisis can also deepen gender inequalities within households and negatively impact the health of family members. Women are often the first to cut down on food and water in the event of income loss and financial problems. Violence against women tends to increase during times of economic crisis, as a result of the ongoing stress on families and communities.
- The Covid-19 crisis is also an economic crisis, which deepens gender inequalities. No paid work is available while the household needs more water: for sick people, for improved hygiene, and for washing hands. Water has to be fetched. This is all unpaid work of women and girls.

Gender and social equity linkages

- In rural areas, when water is not supplied by a piped system, the burden of water collection usually falls on women and children, who must spend considerable time and energy on this activity. They lose opportunities to pursue activities that can help them to become empowered. For instance, girls may be pressured to drop out of school because of the need for water collection.
- Poor women and children are the most susceptible to water borne disease due to their responsibilities of water collection, clothes washing and other domestic activities. Giving birth, and menstruation also makes them physically more vulnerable.
- It is clear from the gendered impact of the economic crisis on employment, welfare, income shocks, and austerity measures that women's prime responsibilities for unpaid domestic work, and their concentration in the informal economy (with lower earnings and less social protection) places them in a weaker position to survive crises.
- Water scarcity or lack of access to water disproportionately affect poor male and female farmers. They have to sell their labour for lower wages, but usually women's work is valued less (even half) than that of men. Besides, if women work for wages, they still have to do their domestic duties, and look after the children.

Gender and water governance

- Often only land title holders are asked to participate in water users' associations' (WUA) irrigation schemes. They tend to be men, which means that women farmers often have no voice in decision-making, leaving them with less or no irrigation water.
- In most rural communities, water is governed by the official system (government water laws) and by communities' traditional systems (customary laws). Sometimes official norms are implemented in a biased way by water authorities by excluding women users from the membership of WUA. In other cases, the customary system may exclude women from accessing land and water. In both cases women are denied participation in local water governance.
- Water corruption and accountability can be the result of a lack of input from well-informed male and female users.
- Water planners have to choose among competing demands: industrial, agricultural, and domestic. Frequently domestic needs are given lower priority and women must spend more time accessing sufficient water to meet household needs.

Part 4: The WHY and the HOW

Why integrate gender in your water work?

Gender is an integral part of IWRM, not only for equity and efficiency reasons, but also for sustainability. Women are central to the provision, management, governance, and safeguarding of water, because:

- Women are primary stakeholders in household water and sanitation. Yet, decisions on water supply and sanitation technologies, locations of water points and operation, and maintenance systems are mostly made by men.
- Women make up to half of the agricultural labour force in developing countries, but lag far behind men in their access to land and water rights.
- Formal water policy-making and management is male dominated. Women are typically left out of decision-making on WRM, even though millions of women are affected by them on a daily basis.
- Women and men are affected differently by the way water resources are allocated and managed. Women's social and economic disadvantages make them more vulnerable to marginalisation due to privatisation of water services, and harassment by corrupt service providers.
- Seventy per cent of the world's poor are women and they are the worst affected by water insecurity due to climate change (CC). They lead in adaptation strategies but are seriously under-represented in decision-making on CC at all levels.

The success of your technical or management water work is dependent on the inclusion of all stakeholders. Do not leave out the most vulnerable: women and other marginalised groups.

How to integrate gender in your water work?

Ways to mainstream gender in specific IWRM plans:

- Use participatory methods and gender analytical tools to collect gender-sensitive and disaggregated data to understand how women's and men's activities impact the economy, society, and environment: listen to all categories of stakeholders.
- Allow sufficient budgets for gender-aware planning, capacity building, institution building, and programme management.
- Ensure relevant gender expertise is available to advise on planning, institution building, and programme management.
- Build capacity of project management and field staff for gender planning, implementation, and monitoring.
- Consult with different women and men stakeholders (users, service providers) to make sure that policies, institutions, and projects address the needs of the most affected, vulnerable women, and men).
- Flexibility of approach and timely gender-sensitive monitoring is important to ensure that the management is responsive to the changes in the political, socio-economic, and environmental spheres.
- Ensure a system of accountability in institutions (build ownership of vulnerable groups in local institutions such as WMG, WASH committees, farmer groups; redressal systems in public and private organisations).
- Make empowerment of poor women and vulnerable groups an objective of water projects and create a framework for gender analysis of how projects, technologies, services have empowered these groups.

Tools and methodologies

Many tools and methodologies have been developed to assist the technical water professional with mainstreaming gender, so as to make your work more effective, efficient, and sustainable, apart from equitable. Depending on the objectives of mainstreaming gender in your work or your organisation you can use some of the following tools.

Gender analysis

At various levels, from household to national level, gender analysis can be conducted to assess gender needs and areas where commitment and action is needed, so that policies, programmes, and projects meet the different needs of different people, and the implications for women, men, girls, and boys of an intervention. It analyses the differences between men and women in terms of rights, responsibilities, access to resources, and power. A wider explanation of gender analysis and different matrices for analysis can be found in the following link:

<http://genderandwater.org/en/gwa-products/capacity-building/empowerment-for-gender-equality>

Gender policy assessment and gender action plan

This methodology is meant to focus attention on gender issues in the organisation and to ensuring positive change. A gender policy is formulated by an institution or organisation and outlines its commitment to taking gender issues seriously. It relates to the organisation's work and specifies the involvement of women and men in the project cycle and other work. It also relates to the staffing and organisational culture, and therefore addresses the issues affecting female and male staff like recruitment, promotion, and training opportunities for female and male staff, available gender budgeting, levels of salaries, shared gender vision, access to gender-representative mechanisms of decision-making, etc. Setting up support structures that enable women to work such as childcare facilities, flexible working hours, etc. A gender policy also should include a gender action plan (GAP) which describes the way the gender policy will be implemented, within a specified time period, with specific activities, budgets, responsibilities, and indicators for monitoring and evaluation. Mainstreaming gender into the policies, practices, procedures, and services of the organisation will lead to better services (or projects and programmes) and to a more diverse, dedicated, and loyal workforce. Services will become more equal, but also more sustainable, effective, and efficient.

Gender audit or scan

This approach will assess the relevance of gender to day-to-day work and effectiveness in an institution. A gender scan is a (self-) assessment methodology for organisations that assists with improving the performance of the organisation with respect to gender equality and women's empowerment. It can be used as a starting point to formulate a gender policy but can also be used to assess if an existing gender policy is implemented effectively and successfully. The overall objective is to assess an organisation's performance and potential to successfully develop and implement a gender-inclusive policy, to strengthen its activities, services, and products.

Gender-sensitive budgeting

This is to ensure that there are appropriate budget allocations to address gender needs, and that funds are available for addressing gender issues in a project, programme, or policy as this cannot be done without an adequate budget. A gender-sensitive budget ensures that women and men benefit equally from the investments of the project, programme, or policy, or that disadvantaged groups benefit more from the project than others. For more information check pages 120–125 of the following link for many references which are available in various languages:

<http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/resource-guide-on-gender-and-iwrm/download-complete-gender-and-iwrm-resource-guide>

Gender-sensitive indicators and gender-disaggregated data

See Module 4 of this Manual.

Individual gender action plan (IGAP)

This tool for development practitioner professionals helps to mainstream gender in one's work, without directly being involved in the gender action plan for the whole project or programme. It is usually made for one year. IGAP helps to ensure commitment by each individual person to contribute to improving gender relations and enhancing equality. It also contributes to self-monitoring of work for improving gender relations and enhancing equality by individual staff members, showing how they personally can contribute to gender mainstreaming, which can make them proud of really making a difference in one's own space. An IGAP can go beyond project activities, as it can also address the office environment, or gender relations within the organisation.

The IGAP can address issues of:

- Gender balance: equal numbers of women and men participate in activities, or equal numbers of boys and girls.
- Recognition of women's work.
- Recognition of special and different needs of men and women.
- Making poor women's voices heard.
- Giving women engineers (colleagues) equal say and chances in the work.

The IGAP matrix

What do you want to achieve in the area of gender relations and gender equality in and with your work (objective)?					
Why it is difficult to achieve? Causes of the problem	Possible solutions (plans) to overcome the difficulties	What will be your concrete and specific activities?	What is your expected result after implementing the activities (outcome)?	Time frame	Budget and needs for resources (time)

An individual gender action plan is a road map to follow and monitor individually.

For further tools, see: <http://genderandwater.org/en/gwa-activities/gwa-tools-and-methodologies/view?searchterm=methodologies>

Take home messages

- Scarcity of fresh water makes it imperative for water practitioners to address gender and IWRM, linking social and technical aspects, both equally important in different water uses.
- By mainstreaming gender and diversity, the water practitioner recognises that people are all different and that all have equal necessities for water, which needs to be given consideration in all IWRM work. If water technology does not consider the different users, the technology fails.
- Participatory water management and development supports women and men in their empowerment and increases decision-making power over their own lives, livelihoods and surroundings.

Case studies

1. Guatemala: Meeting women's and men's water needs in the "El Naranjo" River Watershed Organization
<http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/case-studies/Ench38Guatamala.pdf/view> (2 pages)
2. Brazil: Rainwater harvesting in semi-arid region helps women
<http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/articles-in-source-bulletin/brazil-rainwater-harvesting-in-semi-arid-region-helps-women-1> (2 pages)
3. Uganda: Water vendors versus women water users
<http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/articles-in-source-bulletin/water-vendors-versus-women-water-users> (2 pages)
4. Rwanda: Integrating gender and environment aspects in water, sanitation and hygiene for rural populations
<http://genderandwater.org/en/other-resources/case-studies/integrating-gender-and-environment-aspects-in-water-sanitation-and-hygiene-for-rural-populations-in-rwanda/view> (5 pages)

Go to <http://genderandwater.org> for many more case studies. Enter the country of your interest in the search function and choose cases that are relevant to your work.

Orientation video

1. CWS: Women and water in Rural Kenya.
 A short film of how women practice IWRM, without knowing the term.
<https://thewaterchannel.tv/videos/women-and-water-2/>
2. Gender and IWRM: A presentation by Nazmun Naher, former Gender and IWRM Specialist in GWAPB:
<https://www.youtube.com/watch?v=gcjLauYNdzE>

Mandatory reading

1. Gender concepts
Glossary: Gender and IWRM
2. IWRM and gender
Tutorial: Gender and Water GWA-Cap-Net, pages 7–8
<http://genderandwater.org/en/gwa-products/capacity-building/tutorial-for-water-managers-why-gender-matters/completetutorial/tutorial-for-water-managers-why-gender-matters/view>
3. Empowerment and water
Empowerment: Four Interacting Elements for Analysis and as an Objective for Development, a document with explanation of empowerment, pages 2–4, and examples of how to use the methodology, including cases (GWA)
<http://genderandwater.org/en/gwa-products/capacity-building/empowerment-for-gender-equality/empowerment-four-interacting-elements-for-analysis-and-as-an-objective-for-development/view>
4. Gender and WASH (water, sanitation, and hygiene)
Water a Global Challenge. Women and Men have different roles, rights and responsibilities, pages 24–27 (ID4D, OAFD)
<http://genderandwater.org/en/water-sectors/domestic-and-drinking-water/women-and-men-have-different-roles-rights-and-responsibilities/view>
5. Gender and agriculture
Complete Minimum Agenda for gender mainstreaming in water management in agriculture: 4 pages (Comprehensive Assessment, BothENDS and GWA)
<http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/factsheets/a-minimum-agenda-on-gender-mainstreaming-for-researchers-practicioners-and-gender-experts/flyer-about-the-minimum-agenda-on-gender-mainstreaming/view>
6. Gender and the environment and climate
Steering toward a Better Future for People and Planet: Learning from global experiences of mainstreaming gender in coastal and marine ecosystems management, pages 1–6 (UNEP, GWA 2018)
<http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/gender-and-eco-based-marine-management/view>

Recommended reading

1. The introduction and Chapter 1 of the Tutorial for Water Managers, Why Gender Matters, 2014. By Cap-Net and GWA (Gender and Water Alliance).

To keep the number of suggested readings limited we suggest you look into the GWA website, and:

1. Choose your region.
2. Choose your sector of work.

3. Select those papers, case studies, documents or tools, which are most relevant and interesting to you.

Recommended websites

1. <http://genderandwater.org/en/>
This is the website of the Gender and Water Alliance, where everything you find is related to gender and IWRM.
2. <http://www.thewaterchannel.tv/>
MetaMeta, Nymphaea, UNESCO -IHE, and Cap-Net:
Find films from The Water Channel.
3. http://www.zaragoza.es/ciudad/medioambiente/onu/en/listadoPer_Onu?sub=gender
UNDESA UN - Documentation Centre on Water and Sanitation-Gender
4. <http://www.unwater.org/activities/task-forces/water-and-gender/en/>
UN-Water Gender taskforce

Module discussion forum

Discuss the following issues:

1. In a rural village of India, different inhabitants took part in a project for drinking water supply. Each family could choose between different options, some were cheaper than others. They have to pay a fixed percentage themselves. It was remarkable that the poorest people, women and men of an indigenous minority, chose the most expensive form of water supply. Think of reasons to explain their choice.
2. Empowerment has four interacting dimensions. Give an example of empowerment in the water sector, which shows this interaction, and also that each one of the dimensions does not necessarily mean empowerment.
3. Which reasons can you think of why solid waste management is part of IWRM?

Module quiz

For most of the following questions you will find the answers in your reading texts.

Gender and power relations are context specific, so the answers are not so obviously yes or no, as in some technical subject courses.

1. Water is a human right
 - a. because the UN General Assembly decided so and many countries ratified this.
 - b. because water is also a basic need.
 - c. because all beings and our planet need water daily, it has to be a right, as the right to life.
 - d. but not in the countries that did not ratify it.
2. Women are not included in decision-making regarding water at national level because

- a. few women have the knowledge about water to do so.
 - b. women are bound to have wrong priorities.
 - c. women have fewer opportunities to reach the level of decision-makers.
 - d. women spend their time caring for children, for the family, the elderly and the ill, so they do not have time for high level jobs.
3. Transboundary water management is important because rivers cross country borders. Problems can only be solved at high inter-governmental level
 - a. while water users at the grassroots' level are not influenced by the river crossing the border.
 - b. and nationalist feelings are no obstruction for the solutions.
 - c. but it remains a fact that men and women downstream always suffer from what people upstream do.
 - d. with genuine participation of water users, men and women, at all levels and at both sides of the border, upstream and downstream.
4. Women and men all suffer from climate change effects, such as floods and droughts. Still women suffer more because
 - a. in many countries women have not learned to swim, and they stay in the house to guard the belongings.
 - b. 70% of the poor are women, and the poor are more vulnerable for disasters.
 - c. women remain responsible for the food and water of household members, even in times of disasters.
 - d. of all three of these reasons.
5. In IWRM water is seen both as an economic good (commodity) and as a social good, or a right, so
 - a. poor people get their water for free.
 - b. richer people with piped connections pay more for their water than poor people in slums.
 - c. privatised water companies are often reluctant to give poor people connections because they assume that they cannot pay for the water.
 - d. water is the responsibility of women, so water supply bills have to be paid by women.
6. Training related to water management and use is best focused on
 - a. men, because as heads of the household, they know what happens and what their wives and children do. In fact they know all about the household water availability and problems.
 - b. men, because they represent their families and carry their voices, needs, and knowledge, this simplifies participation and ensures representation.
 - c. those who are responsible for water in the house, mostly the women and girls. Teaching and training people who don't do that particular work is a waste of money and time, because the new knowledge will not be used.

- d. the children, because they are the water users of the future.
7. Which of the following four statements (gender stereotypes) is usually true?
- a. Farmers and fishers are male.
 - b. Men are stronger, so they do the heavy work, women help with lighter tasks.
 - c. Agricultural work with the help of a tractor is heavier work than to till the land by hand.
 - d. Men help sometimes with fetching water, but only if using some sort of vehicle.
8. Water projects do not automatically lead to empowerment of women. It is not always possible for women to use the time that they save by having to walk less far in an economically productive way.
- a. The alternative may be even worse drudgery (physical (dis-) empowerment).
 - b. The alternative work may be seen as of a lower level (social (dis-) empowerment).
 - c. Women can always decide about the way they spend their time (political empowerment).
 - d. Women can always decide how to spend the money they earn (economic empowerment).
9. Solid waste management is also part of integrated water resources management. The following statement is not true.
- a. Solid waste, thrown away anywhere, is taken to the river and then to the sea during the first heavy rain shower: the town is clean, but the ocean is dying.
 - b. Women and men have different attitudes when throwing away things from the household, so both need to be made aware of the waste problem as related to water in a different way, by reducing waste.
 - c. Poor women and men, especially in an urban context, can make a living with reuse and recycling of waste.
 - d. Solid waste management is not really important, as solid waste and water are not connected at all.
10. Good governance and integrity also need a gender perspective, because outcomes will be different for men than for women.
- a. Where men often have to get their way by paying bribes in money, women are forced to offer sex or are raped.
 - b. Women have more household money in their control, so they may be forced to pay for services which are supposed to be free, such as water connections.
 - c. Participation means the head of the household attends group and village meetings about water for different uses.
 - d. The environment cannot speak up for itself, so integrity does not apply in this case and environmental water pollution can continue.

Quiz key

1. Water is a human right
 - c. because all beings and our planet need water daily, it has to be a right, as the right to life.**
2. Women are not included in decision-making regarding water at national level because
 - c. women have fewer opportunities to reach the level of decision-makers.**
3. Transboundary water management is important because rivers cross country borders. Problems can only be solved at high inter-governmental level
 - d. with genuine participation of water users, men and women, at all levels and at both sides of the border, upstream and downstream.**
4. Women and men all suffer from climate change effects, such as floods and droughts. Still women suffer more because
 - d. of all three of these reasons.**
5. In IWRM water is seen both as an economic good (commodity) and as a social good, or a right, so
 - c. privatised water companies are often reluctant to give poor people connections because they assume that they cannot pay for the water.**
6. Training related to water management and use is best focused on
 - c. those who are responsible for water in the house, mostly the women and girls. Teaching and training people who don't do that particular work is a waste of money and time, because the new knowledge will not be used.**
7. Which of the following four statements (gender stereotypes) is usually true?
 - d. Men help sometimes with fetching water, but only if using some sort of vehicle.**
8. Water projects do not automatically lead to empowerment of women. It is not always possible for women to use the time that they save by having to walk less far in an economically productive way.
 - a. The alternative may be even worse drudgery (physical (dis-) empowerment).**
 - b. The alternative work may be seen as of a lower level (social (dis-) empowerment).**
9. Solid waste management is also part of integrated water resources management. The following statement is not true.
 - d. Solid waste management is not really important, as solid waste and water are not connected at all.**

10. Good governance and integrity also need a gender perspective, because outcomes will be different for men than for women.
 - a. **Where men often have to get their way by paying bribes in money, women are forced to offer sex or are raped.**

GENDER AND INTEGRATED WATER RESOURCES MANAGEMENT



Cap-Net



Global Water Partnership

25 YEARS



Module 2: Gender, Water, and Climate Change

Introduction

When disaster strikes, it often strikes through water. It alters the predictability of water availability, compromising the quality of water, sanitation, and hygiene. This leads to increased water stress and competing water uses. Globally, climate change has a greater impact on those most reliant on natural resources for their livelihoods, threatening not only lives, but also vital water resources, economic, and social development. Climate change exacerbates pre-existing inequalities and vulnerability of those lacking access to water and sanitation.¹ Despite increased recognition of the diverse and unique experiences and skills that all members of society bring to sustainable development and environmental efforts, vulnerable groups continue to have less economic and decision-making leverage, making them less equipped to cope with the adverse effects of a changing climate. This underlines the importance of integrating gender perspectives into any IWRM approach when dealing with climate change adaptation initiatives. Existing gender norms can be challenged, progressing towards building more inclusive and resilient societies.

Module goals

Module 2 aims to improve practitioners' understanding of the adverse impacts that climate change has on water resources, and more specifically on women, children, and vulnerable groups. The module discusses various management solutions and the benefits of implementing inclusive adaptation responses through policy, capacity development initiatives, and investments, which deal with water as social and economic public goods. Part 3 explains how to implement IWRM as a solution for adaptation, providing practical tools, methods, and examples of lessons learned for inclusive and sustainable practices. This module is accompanied by case studies giving examples of how gender has been incorporated into climate resilient approaches.

Learning objectives

By the end of this module participants are expected to:

1. Understand the adverse effects of climate change on water and specifically on vulnerable groups.
2. Grasp the benefits of incorporating a gender-inclusive approach to climate change adaptation in the context of water resources management.
3. Integrate gender into water and climate change adaptation responses.

¹ https://english.elpais.com/spanish_news/2020-12-07/climate-smart-water-management-is-fundamental-for-sustainable-development.html

Content

Part 1: Adverse effects of climate change on water and specifically on gender

Disasters and pandemics, such as Covid-19, further expose the deep inequalities and fragilities of societies, poignantly illustrated through access to water. **While hand washing remains one of the most critical lines of defence against the spread of the disease, 3 billion people do not have a handwashing facility at home.** One in four healthcare facilities lacks basic water services.² Covid-19 is presenting new threats to the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs).

Likewise, the impacts of climate change are most dramatically experienced through changes in water, with devastating effects on societies and the environment. **More than 90% of climate manifestations, rising sea levels, droughts, and floods occur through water.** Climate change-induced disasters affect us all, but not equally. **Women's lives are disproportionately affected: 80% of people displaced by climate change are women.**³ A vulnerability analysis would suggest that inequalities in exposure and sensitivity to risk as well as access to resources, capabilities, and opportunities, systematically disadvantage certain groups, rendering them more vulnerable to the impact of natural disasters. **Successive climate change-fuelled disasters reveal that women and children are 14 times more likely to die in a disaster than men.**⁴ Climate change exacerbates water scarcity and the social impact of disasters, increasing both investment of time and effort needed for water collection, which has a higher toll on women and girls all over the world. Overall, **climate change amplifies gender inequalities.**

Numerous studies have established that women, children, and vulnerable groups are disenfranchised from economic opportunities through laws that limit their abilities to own assets. In turn, they tend to depend more on natural resources for their livelihoods.⁵ Access to water is essential for survival from subsistence farming to a meagre source of livelihood income. Improving the rights of women, children, and vulnerable groups is critical for poverty reduction, food security, and development. The impacts of climate change not only threaten all these sectors, but also adversely affect vulnerable groups because of discrimination and inequality that limit their access to water. **Addressing these inequalities requires gender considerations that are fundamental to any successful adaptation effort.**

² <https://www.who.int/news/item/03-04-2019-1-in-4-health-care-facilities-lacks-basic-water-services-unicef-who>

³ <https://www.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/UNDP%20Linkages%20Gender%20and%20CC%20Policy%20Brief%201-WEB.pdf>

⁴ <https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-13-climate-action>

⁵ <https://openknowledge.worldbank.org/bitstream/handle/10986/32639/9781464815324.pdf>

The latest report from UNICEF concluded that “climate change is the greatest threat facing the world’s children and young people”. The impacts are destroying futures and violating rights, as children are unable to go to school or enjoy safe environments at home, as they increasingly experience devastating famine, conflict, and diseases due to climate-induced shocks. As a result, the world’s youngest, poorest, and most vulnerable children are driven further into poverty, decreasing their adaptive capacities when facing the next disaster. The Children’s Climate Risk Index (CCRI) ranks countries based on how vulnerable children are to environmental stresses and extreme weather events, placing children living in the Central African Republic, Chad, Nigeria, Guinea, and Guinea Bissau at the highest risk. “Almost every child on earth is exposed to at least one climate and environmental crisis, be it heatwaves, cyclones, air pollution, flooding, or water scarcity. Globally, approximately 1 billion children – nearly half of the world’s children – live in countries that are at an “extremely high-risk” from the impacts of climate change, according to the CCRI. These children face a deadly combination of exposure to multiple shocks with high vulnerability resulting from a lack of essential services. **“The survival of these children is at imminent threat from the impacts of climate change”.** (UNICEF, 2021; see also case study 5).

It is important to understand the role of gender and disproportionate impacts when dealing with water and climate change, through an **intersectionality** lens. Analysis requires understanding that gender is not the only aspect of identity that influences how people experience the effects of climate change. **Social inequality results from a multiple of factors, such as age, race, ethnicity, and education, and how they work together to affect participation, access to water, adaptive capacity, as well as control opportunities to influence decision-making.** Taking a multi-dimensional approach provides a holistic understanding of the barriers to accessing and managing water, and uncovers the challenges resulting from gender-blind infrastructure and adaptation policies, which may compromise self-determined adaptive capacities. By applying such a multi-dimensional approach, practitioners are equipped to design and implement inclusive and sustainable water and climate change adaptation responses.

When it comes to climate financing, inequalities are persistent between women and men, and vulnerable groups, in terms of access to financial services, and particularly credit availability. Women do not always enjoy the same rights as men to land, a crucial resource for poverty reduction, food security, and rural development. Although women make up more than 40 percent of the overall agricultural labour force in the developing world (ranging from 20 percent in Latin America to 50 percent or more in parts of Africa and Asia), they only own between 10 and 20 percent of the land.

High transaction costs, collateral requirements, limited education and awareness, and other socio-economic and cultural barriers, all impact women’s inability to obtain credit. Unequal access to financial assets puts them in unfavourable positions where they experience higher costs for the same services as men. Vulnerable groups continue to face a restricted selection of insurance products and allocation of resources, critical to adaptation measures under a changing climate. Their under-representation when it comes to financial decision-making only broadens the gender gap in economic positions. **As such, resource allocation for climate financing remains inefficient due to underlying gender biases.**

For gender to be integrated successfully in adaptation efforts, recognition of the unique effects of climate on vulnerable groups, their needs as well as the conditions in which they live, (migrants, the poor, elderly, and prison population) are all factors to be considered. The discourse must promote equality and inclusion, but it is also necessary to develop an implementation plan that identifies specific actions, tasks, and roles and responsibilities. The plan must also detail modalities for monitoring, reporting progress on the execution, review, and possible future updates of the implementation plan, including budgetary implications. Further details on how to effectively collect and monitor data are discussed in Module 4.

Part 2: Benefits of incorporating a gender-inclusive approach

Three main international frameworks related to global water governance outline the need to integrate gender in adaptation to climate change: [The Paris Agreement on Climate Change](#), the [2030 Agenda for Sustainable Development](#) and the [Sendai Framework for Disaster Risk Reduction](#). They require inclusive and sustainable practices to reach the ambitious goals, which can be achieved through implementing integrated management of water resources.

Actions, technologies, and strategies for adaptation need to be gender-responsive in their design, implementation, monitoring, and evaluation. Looking forward, NDCs, as well as other climate-related global and national endeavours such as the Nationally Appropriate Mitigation Actions (NAMAs) and National Adaptation Plans (NAPs), provide opportunities to operationalise effective national climate change policy and programming that is co-beneficial to women and other marginalised segments of society.

These global frameworks create the backdrop onto which national and local climate action planning, policy development, and management solutions must be implemented. They should be leveraged to legitimise and promote women's empowerment and inclusive multi-stakeholder dialogues at social, political, and organisational levels.

The Sendai Framework highlights that effective disaster risk reduction, including effects of climate change on water,

requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible, and non-discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective (*intersectionality*) should be integrated in all policies and practices, and women and youth leadership should be promoted.

(Sendai Framework for Disaster Risk Reduction, 2015 (italicised text added))⁶

⁶ https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf

The lack of inclusive participation in decision-making processes coupled with the predominately male-dominated water sector and imbalanced employment opportunities, augment these inequalities, and often prevent women from fully contributing to climate and water-related planning, decision-making, and implementation. (Further elaboration in Module 3.) Yet, due to their wealth of local knowledge and skills in leading sustainable practices of water resources management, women and vulnerable groups continue to play a critical role in responses to climate change and provide practical solutions. Their participation at the political level has resulted in greater responsiveness to citizens' needs, often increasing cooperation across ethnic lines and delivering more sustainable solutions and recovery plans. At the local level, inclusive leadership has led to improved outcomes of climate-related projects and policies. Likewise, when interventions are implemented without inclusive participation, there are disproportionate effects on existing inequalities, impacts on effectiveness and in some cases, development gains can be reversed.

Evidence shows that women's empowerment and advancing gender equality can deliver results across a variety of sectors, including water, food, and economic security and health. It can also lead to more environmentally friendly decision-making at household and national levels.⁷ However, the wealth of knowledge remains a largely untapped resource. Restricted land rights, lack of access to training, technology, and financial resources, along with limited access to political decision-making spheres, often prevents them from playing a full role in tackling climate change challenges. Unleashing the knowledge and capabilities of under-represented groups through targeted capacity development efforts and investments, presents an important opportunity to design and develop effective water and climate change solutions that leave no one behind.

Climate change actions need to be designed in consultation with women, to build and incorporate their skills and knowledge, and to provide opportunities for improving health, education, and livelihoods. Inclusive participation would result in more environmental and productivity gains, creating mutual benefits and greater returns across the SDGs, including SDG 5 (gender equality and women's empowerment) and SDG 13 (action to combat climate change). Women's issues, needs, and contributions should be integrated across the planning and execution cycles of climate change policies and projects.⁸

⁷ <https://www.iucn.org/resources/issues-briefs/gender-and-climate-change>

⁸ <https://www.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/PB1-AP-Overview-Gender-and-climate-change.pdf>

Part 3: How to integrate gender into water and climate change adaptation responses: seven key approaches⁹

1. **Conduct a gender analysis** of the different roles people have in the water sector, the different ways they are impacted, and strategies in place for coping with climate change. Mapping the different knowledge, skills, roles, and abilities of women and men will facilitate informed decisions for resource allocation and create policy and programmes developed to strengthen water-related measures that address climate change impacts. A gender analysis will highlight the differences between and among women, men, girls, and boys in terms of distribution of resources, opportunities, constraints, and power in relation to water and dealing with the impacts of climate change. Outcomes should feed into responses that are better suited to address gender-based inequalities and equip all sections of society when dealing with climate change. A gender analysis can also be a useful tool to “break procedural habits that marginalise persons, peoples, and communities, with the objective of transforming the broader political and economic trends to enable adaptation practices at the macro level, as well as across local realities and conditions”.¹⁰
2. **Ensure adaptation actions address pre-existing sources of gender-based vulnerability and promote equality.** To be effective and long-lasting, climate change actions need to address politically and socially ingrained barriers at the design stage. Empowerment and inclusive representation are beneficial at the household and community levels and are key factors in promoting the resilience of livelihoods, economies, and communities. As such, the central role of vulnerable groups in environmental, social, and economic development needs to be placed at the forefront. Innovative adaptive technologies and actions need to be gender-responsive throughout the lifecycle of any initiative. **Looking forward, national and global adaptation initiatives provide opportunities to operationalise effective climate change policy and practices that fully incorporate the knowledge, skills, and needs of women and vulnerable groups.**
3. **Develop targeted capacity development opportunities for all stakeholders (decision-makers, practitioners, and vulnerable groups) to enhance adaptive efforts.** Targeted capacity development is key to ensuring gender-inclusive efforts are mainstreamed in daily work and to cultivating alternative views of gender norms. As assets largely determine the extent to which people are affected by climate change and can respond to it, developing adaptive capacities of vulnerable groups needs to incorporate interventions that support productive and generative resources, including land ownership, access to credit, and education. Capacity development to enhance inclusive opportunities should target specific groups, providing tools and ways in which knowledge can be applied and contributions recognised.

⁹ This list is not exhaustive, but includes the most commonly applied and relevant actions.

¹⁰ <https://gca.org/wp-content/uploads/2020/12/GenderTransformativeClimateChangeAdaptation.pdf>. See also case study 1.

4. **Encourage inclusive participation in adaptation actions.** Climate change adaptation efforts should leverage the skills and knowledge of women and vulnerable groups. Interventions should be designed to promote and potentially provide opportunities for improving livelihoods, health, and education. Vulnerability to climate change is enhanced due to intersectionality, where diverse variables that contribute to gendered inequalities, need to be considered when designing adaptive approaches. For example, a gender-inclusive approach to decision-making would result in more environmental and productivity gains, resulting in greater returns across the SDGs, including SDG 5, 6, and SDG 13. The needs and contributions of vulnerable groups should be integrated across the planning and execution cycles of climate change adaptation policies and projects. (Climate-induced) disasters have also demonstrated that the recovery, rehabilitation, and reconstruction phases, which need to be prepared ahead of the disaster, present an opportunity to “build back better”. Disaster risk reduction measures should address gender. Encouraging women and vulnerable groups to publicly lead and promote gender-equitable and universally accessible approaches during the response and reconstruction phases (Sendai Framework, 2015). High quality and measurable monitoring should be in place to track progress and allow for revision in cases of exclusion or unforeseen harm (see also case study 2).
5. **Strengthen the role of gender and water to support countries’ proposed emission reduction measures.** Strengthen the role of gender and water to support countries’ proposed emission reduction measures. Nature-based solutions such as green infrastructures can boost carbon sequestration and replenish water resources. What needs to be considered is that water resources can also be negatively impacted by climate actions if not planned efficiently and inclusively, by taking all segments of society into account. For example, the shifts in the energy mix towards hydropower or biofuels may face limitations posed by availability of water and competing resource demands. The shifts may also negatively impact some parts of society, especially the most vulnerable, if their needs such as the distance required for access, are not considered during the inception phase.
6. **Address inefficiencies of water and wastewater management, supply, and distribution through a gender-integrated approach.** Address inefficiencies of water and wastewater management, supply, and distribution through a gender-integrated approach. Water and wastewater utilities directly and indirectly contribute between 3% and 7% of countries’ greenhouse gas emissions¹¹. The direct emissions are caused by methane and nitrous oxide released from wastewater treatment and especially waste and wastewater that is not adequately treated. Indirect emissions are generated through the energy used in water abstraction, transmission, and treatment. This is not only driven by the high demand for water in global economic activities, but also by the massive inefficiencies in water supply and distribution. According to the World Bank, around 45 million cubic metres of water are lost daily with an economic value of over US\$3 billion per year in developing countries. Addressing these inefficiencies would not only allow improved access to water for millions of people, especially the most vulnerable who

¹¹ <https://iwa-network.org/can-the-water-sector-deliver-on-carbon-reduction/>

depend heavily on this scarce resource, but also save water and energy and reduce the respective emissions generated through water and wastewater management activities.¹²

7. **Support gender-inclusive financing and investments.** Combined with other human-driven processes, such as urbanisation and deforestation, the ways in which climate affects our socio-economic and ecological systems are changing. Gender-inclusive investments are needed to address the underlying economic, demographic, political, and environmental factors that increase vulnerability to these changing climate risks. Climate change financing, access to financial services, and particularly credit availability, need to be gender inclusive. Barriers such as high costs and limited awareness need to be addressed to ensure equal ability to obtain credit. Equal representation of women in financial decision-making is required to bridge the gender gap in economic positions, allowing for accessible resource allocation to climate change financing.

Take home messages

- Climate change impacts men and women differently, largely due to their unequal powers, roles, and responsibilities at the household and community levels, impacting adaptation capacities.
- Climate change does not only compel joint action but also requires careful considerations on how gender-inclusive approaches through integrated water resources management (IWRM) can effectively contribute to addressing the climate crisis, by capitalising on the knowledge and skills of all stakeholders.
- Integrating gender perspectives into adaptation responses and investments provides opportunities to tackle existing barriers and gender norms, in turn contributing to more resilient and inclusive societies.
- Gender-inclusive adaptation is an iterative process shaped by multiple feedbacks and lessons learned in addressing power relations across sectors. This practice is inherently political and cultural, where a dynamic set of measures and strategies need to be tailored to specific situations, with strong monitoring in place to track progress and any unforeseen harm created.

Mandatory reading

1. Cap-Net, GWA, 2014, *Why Gender Matters in IWRM*, pages 47–57.
2. SIWI, AGWA, 2018, The gender dimension of water and climate change.

Recommended reading

1. Resurrección, B.P., Bee, B.A., Dankelman, I., Park, C.M.Y, Halder, M., and McMullen, C.P., 2019, “Gender-transformative climate change adaptation: advancing social equity”. Global Commission on Adaptation.

¹² <https://www.unwater.org/publications/world-water-development-report-2020>

2. UNESCO, 2020, "International policy frameworks", in United Nations World Water Development Report (WWDR), Water and Climate Change, pages 38–45. <https://digitallibrary.un.org/record/3892703/files/372985eng.pdf>
3. Gender and Water (2019) Gender CC.
4. FAO, 2011, The State of Food and Agriculture.
5. World Bank, 2020, World Development Report 2020: Gender Equality and Development. Washington, D.C.: World Bank.

Overview of links between gender and climate change

1. <https://www.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/PB1-AP-Overview-Gender-and-climate-change.pdf>
Source: UNICEF, 2021, *The Climate Crisis is a Child Rights Crisis: Introducing the Children's Climate Risk Index*. New York: UNICEF.

Recommended websites

1. <https://www.iucn.org/resources/issues-briefs/gender-and-climate-change>
Gender and climate change: IUCN issues brief.

Tools for gender analysis

1. <https://unfccc.int/gender>
Introduction to gender and climate change.
2. <https://www.interaction.org/wp-content/uploads/2019/03/Gender-Audit-Handbook-2010-Copy.pdf>
Gender audit tool for organizational transformation (InterAction 2009).
3. https://insights.careinternational.org.uk/images/in-practice/Gender-in-the-workplace/2_care_canada_gender_audit_method_frameworks_and_tools_2011.pdf
Canada's gender equality health check method, frameworks and survey instruments (CARE 2012).
4. <https://eige.europa.eu/gender-mainstreaming/methods-tools/gender-analysis>
Gender analysis (European Institute for Gender Equality (EIGE)).

Recommended videos

1. [Why Gender Matters for Effective Adaptation to Climate Change](#) (NAP, 2021)
2. [Introduction to Gender and Climate Change](#) (UNFCCC, 2019)
3. [Women and Climate Change](#) (NRDC, 2017)
4. [What is intersectionality?](#) (Peter Hopkins, 2018)

Module discussion forum

Discuss the following issues:

1. What positive outcomes have you seen as a result of gender-inclusive approaches, or what could have been done differently in cases where gender considerations were overlooked?
2. What are the main challenges you've encountered when addressing gender inequalities in your work, and how can we collectively address those challenges?

Module quiz

1. Inclusive practices are required for managing water resources sustainably within climate change adaptation practices because
 - a. Climate change alters the predictability of water availability, compromising the quality of water, sanitation and hygiene.
 - b. Climate change exacerbates pre-existing inequalities and the vulnerability of those lacking access to water and sanitation.
 - c. Climate change has a greater impact on those most reliant on natural resources for their livelihoods.
 - d. All of the above.
2. For climate change actions to be effective and long-lasting they need to
 - a. overlook political and socially ingrained barriers faced by vulnerable groups as these are challenges which are specific to each context and cannot be changed or overcome.
 - b. promote innovative adaptive technologies and actions which target men since they are primary stakeholders in water decision-making, from the design stage, through to implementation, monitoring, and evaluation.
 - c. use top-down design and development approaches at ministerial levels only, as they are able to represent the needs of all water users.
 - d. provide opportunities that fully incorporate the needs and skills of women and vulnerable groups.
3. Evidence shows that women's empowerment and advancing gender equality can
 - a. deliver improvements across a variety of sectors, including water, food, and economic security and health.
 - b. reverse environmental gains; causing adverse effects at household and national levels.
 - c. lead to greater responsiveness to citizens' needs, often increasing cooperation across ethnic lines and delivering more sustainable solutions and recovery plans.
 - d. A and C.
4. Using an intersectionality approach when assessing the effects on participation, access to water, adaptive capacity, and opportunities to influence decision-making is one in which
 - a. gender is the only aspect of identity that influences how people experience the effects of climate change.
 - b. the multi-layered dimensions where social inequality results from aspects such as age, race, ethnicity, and education, and how they work together, are all considered.

- c. the different root causes of social inequality are understood and addressed as they emerge during project implementation.
 - d. the needs of men are prioritised over women as their roles in water management are more relevant.
- 5. When it comes to climate change financing, inequalities are persistent between women and men, and vulnerable groups due to
 - a. unequal access to financial services, and particularly credit availability.
 - b. high transaction costs, collateral requirements, limited education and awareness, and other socio-economic and cultural barriers.
 - c. under-representation of vulnerable groups when it comes to financial decision-making which broadens the gender gap in economic positions.
 - d. all of the above.
- 6. The lack of inclusive participation in decision-making processes and the predominately male-dominated water sector and employment opportunities, augment inequalities and often prevent women from fully contributing to climate and water-related planning, decision-making and implementation.
 - a. True.
 - b. False.
- 7. Gender-inclusive adaptation requires
 - a. an iterative process shaped by multiple feed loops and capturing of lessons learned in addressing power relations across sectors.
 - b. a dynamic set of measures and strategies that need to be tailored to specific situations.
 - c. a strong monitoring system that tracks progress and any unforeseen harm created.
 - d. all of the above.
- 8. Conducting a gender analysis of the different roles people have in the water sector, the different ways they are impacted, and strategies in place for coping with climate change is
 - a. irrelevant: people in different countries experience climate change differently.
 - b. essential: it will highlight the differences between and among women, men, girls, and boys in terms of their relative distribution of resources, opportunities, constraints, and power in relation to water and dealing with the impacts of climate change.
 - c. not useful because it is not possible to break procedural habits that marginalise persons, peoples, and communities through policy or programmes.
 - d. a tool to be used only by gender experts or gender focal points as they are best positioned to understand gender-related aspects, and not something water practitioners need to worry about.
- 9. Select all that are true:

- a. Climate change exacerbates water scarcity and the social impact of these disasters, increasing both investment of time and effort needed for water collection.
 - b. Climate change exacerbates pre-existing inequalities and the vulnerability of those lacking access to water and sanitation.
 - c. Climate change affects all members of society equally as its effects are felt globally.
 - d. Climate change is disrupting weather patterns, leading to unpredictable water availability, exacerbating water scarcity and contaminating water supplies.
10. Due to the lack of inclusive participation in decision-making processes and the predominately male dominated water sector,
- a. women are encouraged to fully contribute to climate and water-related planning and implementation.
 - b. women and men continue to enjoy equal employment opportunities in the water sector at all levels of management.
 - c. climate change adaptation policies which are put in place are designed strategically to target only those who make decisions.
 - d. restricted land rights, lack of access to training, technology, and financial resources, can all prevent women from playing a full role in tackling climate change challenges.

Quiz key

1. Inclusive practices are required for managing water resources sustainably within climate change adaptation practices because
 - d. All of the above.**
2. For climate change actions to be effective and long-lasting they need to
 - d. provide opportunities that fully incorporate the needs and skills of women and vulnerable groups.**
3. Evidence shows that women's empowerment and advancing gender equality can
 - d. A and C.**
4. Using an intersectionality approach when assessing the effects on participation, access to water, adaptive capacity, and opportunities to influence decision-making is one in which
 - b. the multi-layered dimensions where social inequality results from aspects such as age, race, ethnicity, and education, and how they work together, are all considered.**
5. When it comes to climate change financing, inequalities are persistent between women and men, and vulnerable groups due to
 - d. all of the above.**
6. The lack of inclusive participation in decision-making processes and the predominately male-dominated water sector and employment opportunities, augment inequalities and often prevent women from fully contributing to climate and water-related planning, decision-making and implementation.
 - a. True.**
7. Gender-inclusive adaptation requires
 - d. all of the above.**
8. Conducting a gender analysis of the different roles people have in the water sector, the different ways they are impacted, and strategies in place for coping with climate change is
 - b. essential: it will highlight the differences between and among women, men, girls, and boys in terms of their relative distribution of resources, opportunities, constraints, and power in relation to water and dealing with the impacts of climate change.**
9. Select all that are true:
 - a. Climate change exacerbates water scarcity and the social impact of these disasters, increasing both investment of time and effort needed for water collection.**

- b. **Climate change exacerbates pre-existing inequalities and the vulnerability of those lacking access to water and sanitation.**
 - d. **Climate change is disrupting weather patterns, leading to unpredictable water availability, exacerbating water scarcity and contaminating water supplies.**
10. Due to the lack of inclusive participation in decision-making processes and the predominately male dominated water sector,
- d. **restricted land rights, lack of access to training, technology, and financial resources, can all prevent women from playing a full role in tackling climate change challenges.**

Case studies

The case studies in this section are all related to integrating gender in water management when implementing climate change adaptation practices.

The following overview shows the imbalance between emissions and experiences of impacts of climate change. Those who contribute most to emissions that exacerbate global warming are the high consuming rich countries, while experiencing the least impact as they are better equipped. Those who suffer most from effects of global warming (such as floods and droughts) are poor women, children, and men in the poorer countries, while contributing the least to emissions. (GWA, [Climate Change and Gender](#))

CLIMATE CHANGE and GENDER

1. Mitigation: protecting the climate from the people

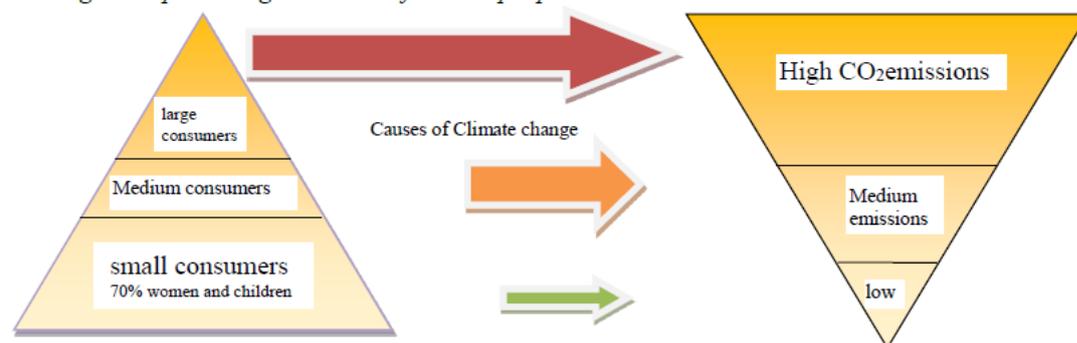


Fig.1: Different consumers' relative impact on climate change

2. Adaptation: protecting the people from the climate

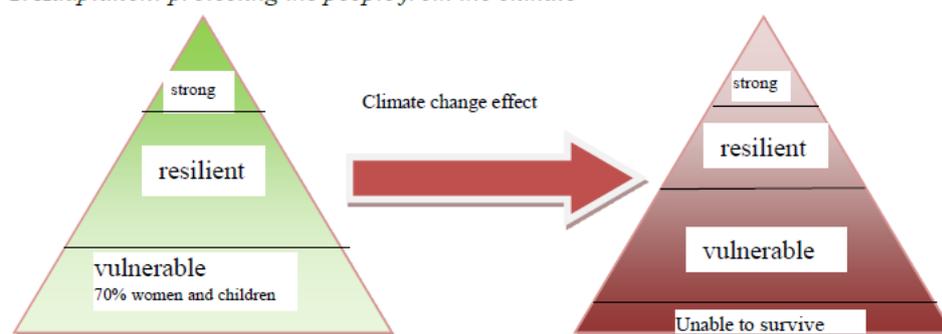


Fig.2: Effect of climate change on the division of the world population

Those who add most to emissions that cause global warming are the over-consuming rich people, in rich and in poor countries, who suffer the least of the impact.

Those who suffer most from effects of global warming (such as floods and droughts) are poor women, children and men who cause few emissions.

Very rich people are mostly men. Very poor people are mostly women and children.

Fig. 3: Emissions of some countries in percentages of global emissions (2009/10, Wikipedia, WRI World Resource Institute):

Country	% of global emissions CO ₂ = tonnes of Green House Gasses	Population in 2010 In Million	Average Tonnes GHG per person	Remarks
Australia	1,3 % = 378	22	17	Highest of all
Bangladesh	0,3 % = 87	149	0,6	Within countries poor people cause far less emissions than rich
Canada	1,8 % = 524	34	15,4	
China	23,6 % = 6868	1,340	5,13	Lots of emissions are for products consumed in the West
Germany	2,6 % = 757	82	9,2	
India	5,5 % = 1601	1,182	1,37	Lots of emissions are for products consumed in the West
The Netherlands	0,5% = 145	17	8,5	
USA	17,9 % = 5209	309	16,9	
World	100 % = 29100	6,448	4,5	

Case study 1: Incorporating gender approaches into climate resilience in an indigenous community in Guatemala (REDICA, GWA)

During the aftermath of Hurricane Stan (2005) in San Isidro and Vista Hermosa in rural areas of Guatemala, the lack of participation of women in activities of prevention, social organisation, and in political spheres became apparent, despite the large number of projects, foreign financing, and significant presence of non-governmental organisations (NGOs). In cases where women did participate, membership did not exceed 20%. When analysing the differentiated impacts on women and men related to extreme events in rural areas, the Mayan worldview must be kept in mind, which is based on pillars of duality, balance in the universe and complementarity. This worldview must remain integral when promoting the inclusion of women in the development of adaptation to climate change strategies in this region.

Vulnerability to climate change has a broad social component, and gender differences are manifested in the adaptation capacity and vulnerability of women and indigenous groups. Immediately after the storm, the women had to work extraordinary hours to regain some normalcy within their families: meal preparation, reset bedtimes and have a dry place to do it. Women went out to look for food, to wash large quantities of clothes full of mud; to support the most affected relatives, to clean farm fields, walk long distances to find dry firewood, and boil rainwater. In Olitepeque, women worked on the riverbank, recovering banks and filling sacks with sand to prevent the river from flowing out of the riverbed again and further damaging housing located along the river. It was evident that women were disproportionately affected with extreme working hours, assuming recovery and mitigation tasks, attending to large and extensive family demands, in addition to the regular tasks of cooking, cleaning, and caregiving. As for the men, time was dedicated to opening roads and recovering the water supply system. It became clear that these communities are economies of survival, where if they do not work, they do not have the resources to acquire food, as they do not store food or medicine.

The entire affected population presented problems of fatigue and poor eating. A survey conducted three months after the disaster showed gendered differences such as the number of years of education, income generation and access to property and economic resources; hours of sleep; recreational activities and free time and self-perception. Women showed significant dependence on their partner, and on the other hand, in cases where they did not have a partner, women with children were subjected to very vulnerable social situations. The need for CONRED, the agency responsible for emergency care in Guatemala, to disaggregate data on populations affected by gender, ethnicity, and race was evident, as at that time it was not possible to establish the number of people killed during the hurricane, which was understood to have had higher tolls on women and youth.

Case study 2: Inclusion of women in adaptation practices – Kiribati

In a patriarchal setting where men have roles as decision-makers and provide the family income, women are assigned household tasks, cleaning, caregiving, and farming. The common concern however is access to safe drinking water. Prolonged drought has led to severe implications where groundwater degrades due to saltwater intrusion in the source used for drinking, cleaning, and cooking.

Solutions

During drought season, safe and potable water could be found miles from the village. When men were unable to collect it, women continued to collect it from the well. They mixed the saline water with toddy and coffee after boiling. Applying this knowledge, they were able to provide sufficient water during droughts. Diversification of crops was also undertaken by women, planting pumpkin and papaya which are less water-reliant, ensuring food security while adapting to climate change.

Ensuring women's knowledge and skills to adapt to climate-induced disasters are captured and transferred, are key to resilience at the household and community levels. The inclusion of both men and women in planning and decision-making is key to finding solutions to climate risks when planning for adaptation using an integrated water resources management approach.

Capacity development initiatives bridged the gender gap between local institutions and informal groups, equipping both men and women with skills and knowledge to integrate gender in climate adaptation activities. They provided an opportunity to link both sectors by compiling lessons learned and identifying entry points to involve informal groups in all adaptation and mitigation projects on the island. (Source: [Gender and Climate Change, Gender CC](#), 2019.)

Case study 3: Incorporating traditional knowledge for sustainable water management in adapting to climate change – Colombia

Strengthening traditional knowledge is at the centre of a project on agriculture and sustainable water management implemented by Agua, Cultura y Vida (ASOBONGO) in Colombia, where rural areas experience tropical storms and droughts that affect access to clean water and food security. The project rehabilitates ancestral knowledge, using locally adapted seeds and small livestock species to support climate-resilient traditional agriculture and to promote sustainable water gathering, storage, and management. Among the 200 beneficiary families, 38 have participated in ecological training to restore 20 ancient crops, create organic fertiliser out of compost, increase crop yields, and reinsert two livestock species in their farming ecosystems. The strong gender approach empowered young women to take on leading roles in the water committees, as their time was freed up from the heavy burden of water gathering. (Source: [Women and Gender Constituency 2018](#), Gender Just Climate Solutions)

Case study 4: Promoting gender equality in climate-resilient water investments through AIP Water Climate Development and Gender Transformation (AIP WACDEP-G)

A support programme under the [Continental Africa Water Investment Programme](#), AIP WACDEP-G was developed to trigger a long-term change process. Its goal was to ensure that the preparation, development, governance, and management of climate resilient water investments, and institutional development strategically advance gender equality. The overall objective is to transform gender inequalities at scale by promoting gender-transformative planning, decision-making, and institutional development for climate resilient water investments in Africa. The programme is expected to be a ‘game changer’ across the water sector and beyond, addressing gender inequalities across Africa by taking a gender-transformative approach to development at the water and climate interface.

As a precursor to programming and implementation of the programme, GWP conducted a gender analysis in the five countries to provide baseline information on gender inequalities at different levels particularly in the water, natural resources, and related sectors. The gender analysis examined the existing water, climate, and related development policies and laws and clearly established the level of gender integration using the gender continuum or ladder (see Figure 3). The results unveiled entry points that the WACDEP-G will use in promoting the gender-transformative approach, and assisted in formulating the WACDEP-G work plans.

Gender-transformative approaches

AIP WACDEP-G has adopted gender-transformative approaches (GTAs), which go beyond the ‘symptoms’ of gender inequality to address the social norms, attitudes, behaviours, and social systems that underlie and reinforce them. As such, they critically examine, challenge, and question power and norms. A common characteristic of transformative approaches is that they challenge existing social norms, patriarchal systems, and the distribution of power and resources. For example, reducing women’s drudgery by challenging gender norms has led to transformational changes in secluded and marginalised communities. It is also important that people critically assess their own behaviour and how this constrains or enables transformation. As [Kabeer \(2020\)](#) explains, “to question, analyse, and act on the structures of patriarchal constraint” will, over time, contribute to social transformation. Figure 1 is a graphical representation of the transformational framework applied in this gender analysis.

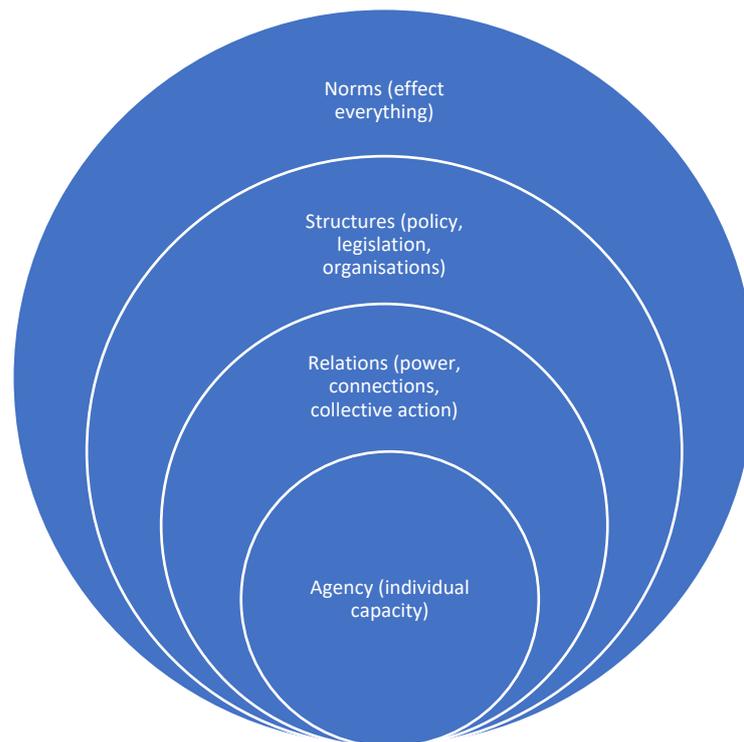


Figure 1. Transformational framework

Achieving transformational change requires understanding the relationship between the levels shown in Figure 1. For example, if an individual is trained on gender, their capacity improves, but their efforts might be blocked by their supervisor or their organisation if they are not given resources to implement a gender-transformative approach. If there is a national or institutional policy in place, this employee may be able to use that to nudge their supervisor to provide the required resources. Consequently, change should be sequenced to occur at every level. Structures, agency, and relations intersect to enable or constrain transformation.

The reason norms affect everything is because an individual's behaviour will be influenced by the norms of that society. For example, a woman may not have the confidence to speak at meetings because she was raised believing that women should be submissive. At the relationship level, a husband may not permit his wife to attend community meetings because of social norms prohibiting women's mobility. Similarly, organisations can have their own internal cultural dynamics that are based upon the norms with which senior executives were raised and have internalised. AIP WACDEP-G seeks to address gender inequalities in Africa at three levels in terms of structures, relations, and agency as conceptualised during the gender analysis.

Figure 2 below presents the three transformation levels and the six systems.

Levels of Gender Transformation, Dimensions of System Change and AIP WACDEP-G Interventions

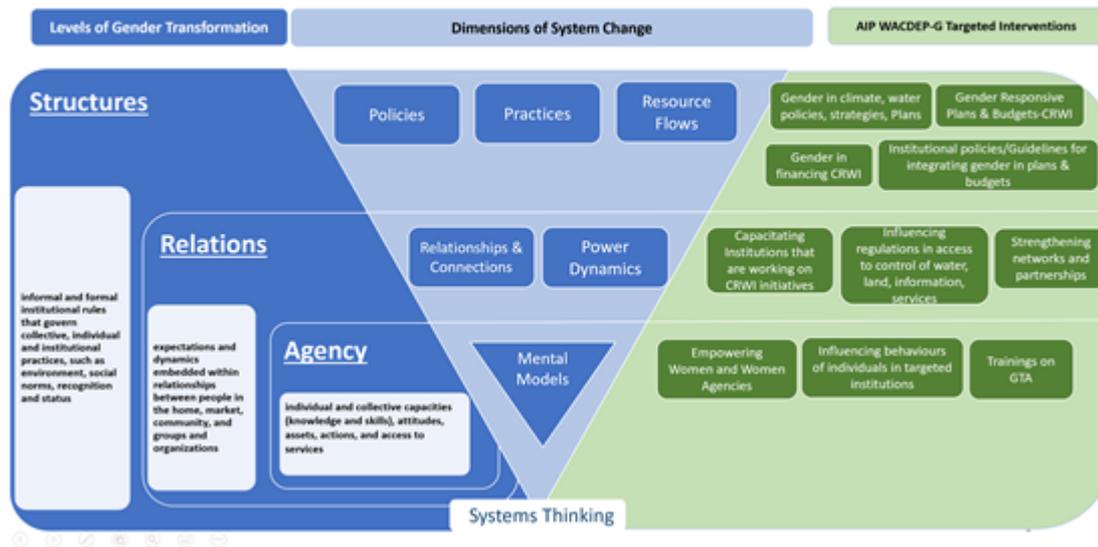


Figure 2. Levels of gender transformation, dimensions of system change and AIP WACDEP-G interventions

The WACDEP-G programme aims to address deeply rooted gender inequalities through interventions at three levels: agency, relations, and structural levels as illustrated in Figure 2.

Gender continuum or ladder

Creating structured spaces and processes to critically examine beliefs, attitudes, and practices around gender among staff and partners, enables gender transformation. Institutions need to reflect on their roles as key actors and power holders or duty bearers in the systems they are trying to change. One way to enable this process is to think through a gender continuum or gender ladder to assess where each programme or policy is located within the ladder. The gender continuum presented in Figure 3 offers a useful visualisation to help people self-identify with the need for change.

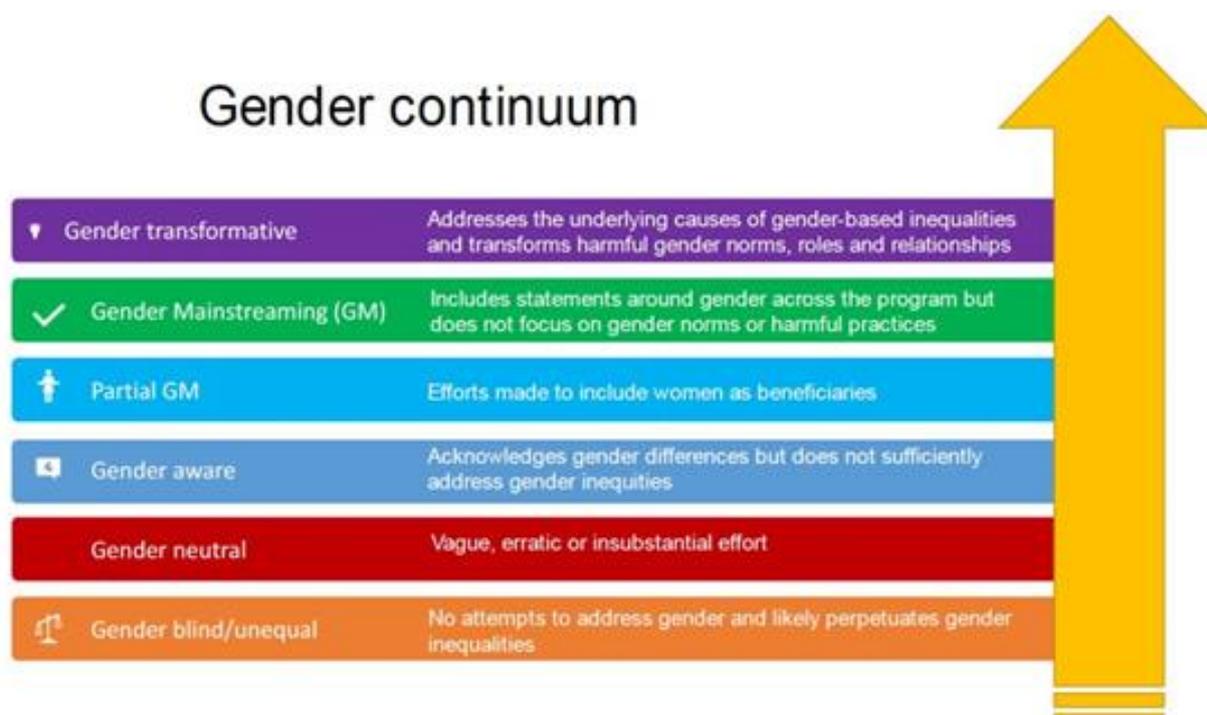


Figure 3. Gender continuum

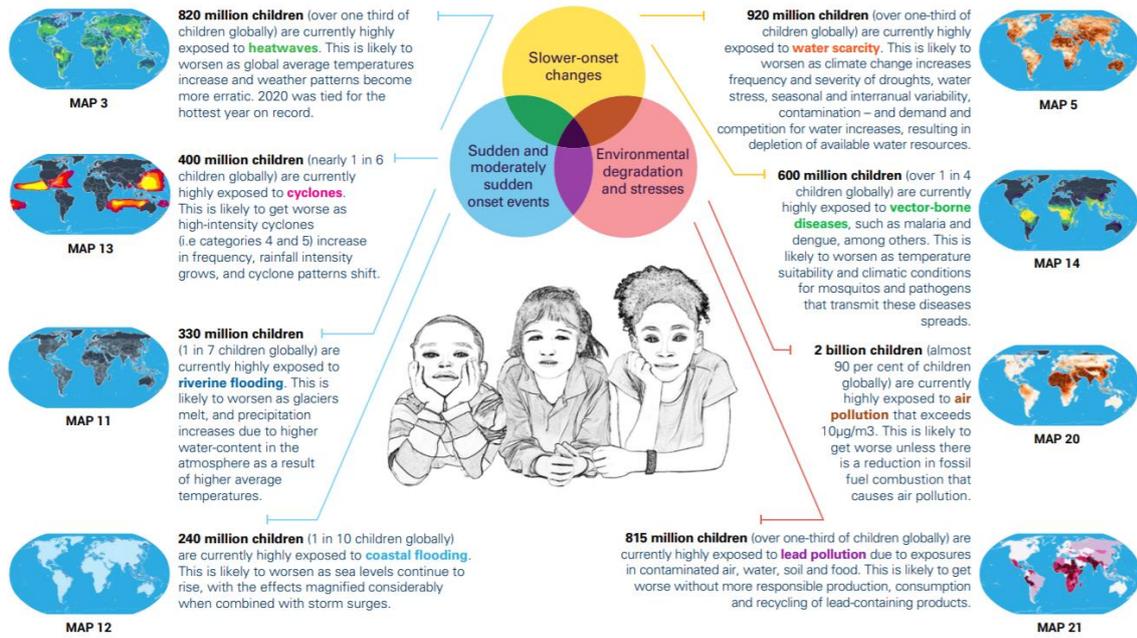
Key outcomes from the gender analysis from all five countries

- All had well-written gender policies that can be integrated into broader natural resource policies through revisions or addenda. Enforcement of these gender-related policies can greatly contribute to addressing the existing gender inequalities and gaps.
- Current policies do not adequately address issues related to water security and climate resilience from a gender perspective.
- Deeply embedded gender inequalities can be addressed by reviewing and amending policies through a gender-transformative lens.
- Failure to recognise and address the disproportionate impacts water insecurity and climate change have on women will limit or harm efforts towards gender equality.
- Current policies supporting gender-responsive budgeting will contribute to gender transformation in each country.

In conclusion, gender inequality was found to be a cause for concern, not only in the water and climate sectors, but in society as a whole. Policies that do integrate gender often do it in a tokenistic way that results in a surface-level treatment of gender without detailing the pathways to change.

Case study 5: *Climate Crisis is a Child Rights Crisis* (UNICEF 2021)

The report published by UNICEF, [*Climate Crisis is a Child Rights Crisis*](#) (2021), utilises high-resolution geographical data that provides new global evidence on how many children are currently exposed to a variety of climate and environmental hazards, shocks, and stresses.



Source: UNICEF 2021 Climate Crisis is a Child Rights Crisis, page 10.

GENDER AND INTEGRATED WATER RESOURCES MANAGEMENT



Cap-Net



Global Water Partnership

25 YEARS



Module 3: Gender, Water, and Meaningful Participation in Decision-making Processes

Introduction

Research and practice in the development context over the last 40 years show that simply inviting women and other vulnerable participants to decision-making processes and planning events is not sufficient to ensure their meaningful participation. Despite progress and increases in self-mobilisation on their part, women and vulnerable people of any society face a set of obstacles (social, cultural, economic, even physical) that can prevent them from fully participating.

The second Dublin principle (Dublin principles from 1992 are the base of all IWRM work) states that water development and management should be based on a participatory approach, involving users, planners, and policy-makers at all levels.

This module is based on the GWP Action Piece, [*Gender Equality and Inclusion in Water Resources Management*](#) and specifically on Action area 3 which advocates for meaningful and inclusive participation in decision-making and partnerships. It recommends adopting a 'nothing about them without them' approach. To include people who will be affected by a water management decision is about more than just numbers, it is about meaningful participation. This includes training, financial support, long-term engagement, and working in partnership with women's, Indigenous Peoples', and disabled peoples' organisations.

Module goal

Module 3 aims to improve practitioners' understanding of the importance of meaningful participation of all stakeholders, including those from the most vulnerable parts of society and how careful planning can help avoid exclusion and ensure improved results of any IWRM decision-making processes. It provides guidelines and tools on how to ensure meaningful participation, using examples from IWRM and broader development context.

Learning objectives

By the end of this module participants are expected to:

1. Acquire a basic understanding of the place of participation in IWRM and an overview of types of participatory approaches in the context of development interventions and decision-making processes in NRM and WRM.
2. Understand the obstacles to participation that women and vulnerable groups face to participate in any decision-making processes.
3. Understand the positive impact of inclusive decision-making processes on development and on IWRM more particularly.

4. Learn how to use existing guidelines for ensuring meaningful participation and how to develop project-/activity-specific guidelines.

Content

Part 1: Participation and why it matters for IWRM

The role of participatory approach in SDGs and IWRM process

Participation as a key principle of the Sustainable Development Goals

For the countries of the world to achieve the 2030 agenda, working in a manner that includes all people from all countries for the benefit of humanity and the planet, is key.

The UN Deputy secretary Amina J. Mohammed, in her 2017 address, stated that “[p]articipation, consultation, and engagement [were the] critical elements for an effective implementation of the 2030 Agenda”.

The origins of the concept of participation in the context of IWRM, go back to 1992, when, during the World Summit in Rio de Janeiro, a set of four principles guiding the work of IWRM, referred to as the Dublin principles, were presented.

Principle number 2 addresses the need for a participatory approach. This principle is addressed on in this module through the following set of ideas:

- Water is a resource that affects all.
- True participation is ensured only when all stakeholders are involved in the decision-making.
- A participatory approach involving all stakeholders is the best strategy to achieve long-term accord and consensus.
- Participation means taking responsibility for and acknowledging the impact of this sector on other water users and water ecosystems as well as committing to increasingly effective use and sustainable development of water resources.

It is important to recognise that participation is not a straightforward process nor does it necessarily result in consensus, therefore, practitioners should be prepared to use arbitration and other conflict resolution mechanisms.

Governments should work to ensure participation of all stakeholders, in particular, vulnerable groups of the population.

Vulnerable groups of the population will benefit least from a mere participatory environment without enhanced participation mechanisms.

Decentralising decision-making to the lowest level is the only strategy to enhance participation. Nikki Slocum (2003), [Participatory Methods Toolkit: A practitioner's manual](#)

Participatory decision-making is not only desired and demanded by citizens who wish to play a more active role in the governance of their society. Regional, national and local governments, development agencies and NGOs, scientists and companies are also increasingly eager to reap the benefits of actively engaging in decision-making processes diverse perspectives and those who will be affected by policies.
(Slocum 2003: page 9)

Global guidelines for meaningful and inclusive participation

When Global Water Partnership, one of the leading organisations in the field of promotion of IWRM best practices, further developed their thinking around gender equality and social inclusion, they did so by defining a set of Action areas outlined in a document entitled *Gender Equality and Inclusion in Water Resources Management*¹, which contains four action areas:

1. Institutional leadership and commitment.
2. Gender inclusion and analysis that drives change.
3. Meaningful and inclusive participation in decision-making and partnerships.
4. Equal access to and control of resources.

Action area 3 is particularly relevant for this module as it addresses challenges to meaningful and inclusive participation in decision-making and partnerships. The motto of Action area 3 is adopt a 'nothing about them without them' approach. To include people who will be affected by water management decisions is about more than just extending an invitation, it is about 'meaningful' participation. This includes training, financial support, long-term engagement, and working in partnership with women's, Indigenous Peoples', and disabled people's organisations.

While this may sound reasonable and obvious to people working with the vision of gender-equal and socially inclusive IWRM, it is important to recognise that even today, many of the self-declared participatory processes are less than inclusive and not fully participatory.

Types of participation

In 1995, Jules Petty devised a typology of participation and listed seven types of participation. Despite it being 26 years old, this typology remains valid today. Here are the seven types of participation:

¹ Full text available at <https://gwp.org/globalassets/global/about-gwp/publications/gender/gender-action-piece.pdf>

Manipulative participation is simply a pretence, with peoples' representatives on official boards, but who are un-elected and have no power.

Passive participation: People participate by being told what has been decided or has already happened. It could involve unilateral announcements by an administration or project manager without listening to people's responses. The information being shared belongs only to external professionals.

Participation by consultation: People participate by being consulted or by answering questions. External agents define problems and information-gathering processes, and so control analysis. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to take on board people's views.

Participation for material incentives: People contribute resources, for example, labour, in return for food, cash, or other material incentives. Farmers may provide the fields and labour but are involved in neither experimentation nor the process of learning. It is very common to see this called 'participation', yet people have no stake in prolonging technologies or practices when the incentives end.

Functional participation is participation used by external agencies to achieve project goals, especially reduced cost. People may participate by forming groups to meet predetermined objectives related to the project. Such involvement may be interactive and involve shared decision-making, but tends to arise only after major decisions have already been made by external agents. At worst, local people may still only be co-opted to serve external goals.

Interactive participation: People participate in joint analysis, development of action plans and formation or strengthening of local institutions. Participation is seen as a right, not just the means to achieve project goals. The process involves interdisciplinary methodologies that seek multiple perspectives and make use of systemic and structural learning processes. As groups take control over local decisions and determine how available resources are used, so they have a stake in maintaining structures or practices.

Self-mobilisation: People participate by taking initiatives independently of any external institution to change systems. They develop contacts with external institutions for resources and technical advice they need but retain control over how resources are used. Self-mobilisation can spread if government and NGOs provide an enabling framework of support. Such self-initiated mobilisation may or may not challenge existing distributions of wealth and power.

As is clear from Petty's description, only the last two types, self-mobilisation and interactive participation are true forms of meaningful and inclusive participation.

Self-reflection exercise

Think of past projects you have either studied/read about, designed and/or participated in. Evaluate them according to this typology and, if not ranked in the interactive participation or self-mobilisation, think about what changes could make them more interactive in their format/approach. What was missing in terms of political will, capacity, and resources?

How not to do participation

Petty's list of different types of participation indicates that there is a risk that participation becomes lip-service, or a box-ticking exercise that does not benefit the people whose lives will be changed due to the interventions of a particular water resources management programme or project.

Here are some examples of poor/bad practices where the participatory approach has not been aligned with the values of true participation [please note that Part 4 will contain advice on steps and guidelines for ensuring meaningful participation]:

- Stakeholder consultation takes place only after all the decisions have been made and the participants in the consultation process have no say on the matter.
- Only high-level stakeholders are included in the process, no attention is paid to ensure that participants from all levels of society get to participate.
- Women are brought to the event, but no effort is made to ensure that they can participate equally to the men.
- Technical language, or the dominant national language included in the consultation process excludes less educated people, those who are illiterate or minority language groups in society.
- The set-up of the consultation process is done in a way that reiterates the power structures in the community, leaving marginalised and minority groups in the corner, feeling powerless and only agreeing to decisions under the coercion/pressure from the elite/powerful people in the community.

Following these explanations and examples, we conclude that the working definition of meaningful participation in decision-making processes in WRM and beyond is as follows: A meaningful participation is one that includes people of all genders and social categories who will be affected by water management decisions beyond their mere presence, by giving them a voice in water management matters and access to leadership positions. It should include training, financial support, long-term engagement, and working in partnership with women's, Indigenous Peoples', and disabled people's organisations. If using the Petty typology, meaningful participation can be categorised as either interactive participation or self-mobilisation.

Part 2: Why gender equality and social inclusion matter in participatory approaches to IWRM

In the previous part we raised examples of poor/bad approaches to participation. We mentioned that if participation only serves as a box-ticking exercise it may exclude the people who will be impacted by the interventions being discussed in the process and this may have a negative impact on people's support of the project, and hence its subsequent success. It could also harm the people who are living in the water catchment or around the water resource and may turn them against future projects in the area.

In order to avoid negative impacts on both the people and the project it is important to understand that inclusion means different things to different people. Furthermore, when speaking about gender equality and social inclusion, it is important to recognise that simple binary understanding of gender, with all women seen as homogenous group, and all men as another homogenous group, is not only limiting, but no longer acceptable in the context of development and IWRM interventions. Since 1989, the concept of intersectionality has been introduced that helps us deal with the challenges of diversity within gender and other social categories.

Intersectionality and its role in ensuring meaningful participation in IWRM

The concept of intersectionality has been addressed in Module 2. As stated there, it refers to the way in which the interconnected nature of multiple identities such as class, dis/ability, ethnicity, geographic location, gender, sexual orientation and age interact to create specific disadvantages and positionalities.

In the context of integrated water resources management and related participatory processes, intersectionality matters as it addresses the issue of diversity of stakeholders at all levels. If we take an example of a local water committee that is created to support community management of a catchment area, the participation of the rural population is often limited and plays a lesser role compared to representatives from the different government institutions. Often the rural population may be represented by just one or two people, at best, one man and one woman, to ensure the gender balance. However, when we take the intersectionality lens, we see that rural populations are very stratified within what may seem a homogenous group to an outsider. If we do not carry out a gender analysis using the intersectionality lens before creating participant lists for community engagement, we may omit vulnerable groups, such as youth (or in some cases elders), people from particular social categories (cast, religion etc) and proposed interventions may end up exacerbating existing inequalities.

An example of this type of exclusion could be a decision to put up a water pump in one part of the neighbourhood where the elite population lives but where people from a lower caste in that community are not allowed to enter or fetch water. Similarly, if only able-bodied members of the community participate in the process, they may not take into the account the special needs of disabled members of the community when it comes to creating access to a water point.

Access the link below and spend 15 minutes reading and analysing the case study from researchers in wetlands management at the International Water Management Institute. Assess the activity critically and try to draw lessons from the case study for your own work.

<https://www.iwmi.cgiar.org/2021/02/ramsar-convention-and-the-wise-use-of-wetlands-rethinking-gender-equality-and-inclusion/>

Socio-cultural obstacles to women's participation in IWRM and other participatory processes in management of natural resources

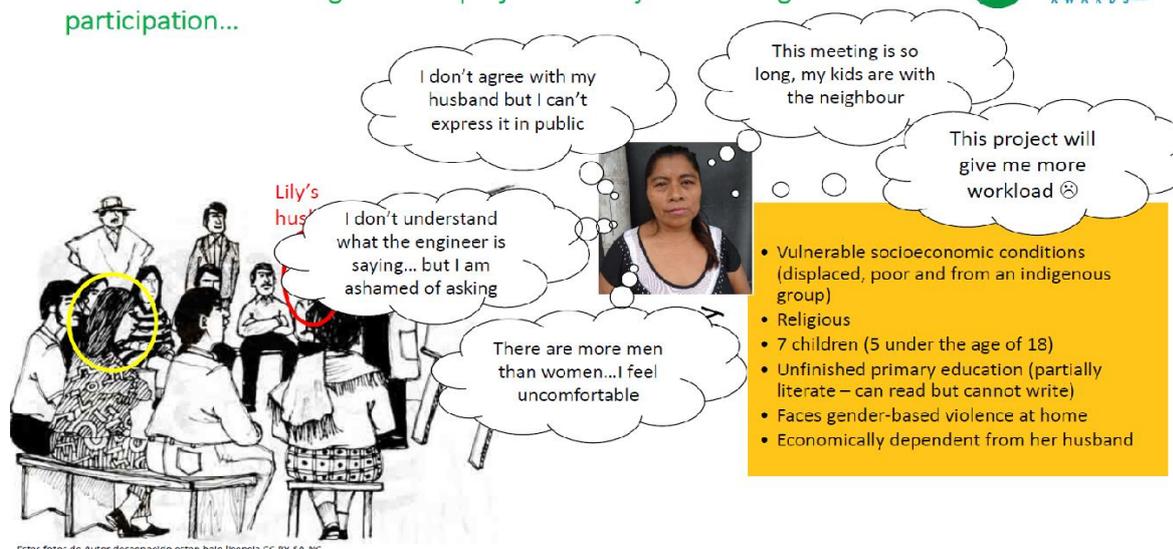
The case study 'Woman WASH: Innovating and transforming my community from within', at <https://gwp.org/en/waterchangemakers/change-stories/560476/> which addresses women's participation in IWRM and WASH and the burden of mental load, focuses on a protected area in rural Colombia. It is a place where historically balanced natural processes, including the natural water cycle mechanisms, have undergone substantial change in recent years. Due to several factors this area became occupied by people that established an unauthorised settlement. Among those factors are socio-economic inequality, gender-based violence, corruption, armed conflict, and lately internal displacement due to climate change.

The natural landscape became transformed due to human interventions and the natural processes were disrupted and gave place to new social, environmental, and sanitary dynamics. All these dynamics have a gender aspect to them. In this specific context women get affected differently by those dynamics. The sanitary conditions of the community have a higher impact on women because they remain in their community for longer periods in comparison with men and children who leave the community on daily basis as they attend work or school. Women decided to act and take sanitation management into their hands. The first sanitation project targeted solid waste management, but the women's community also wanted to approach wastewater treatment as it was severely impacting their daily lives.

Cindy Osipina Gallego, a researcher and development practitioner who supported the community in this process argues that to make the change happen we should apply a complete gender-mainstreaming approach within the project including the analysis of gendered outcomes, otherwise we would be instrumentalising women for the success of our water projects and disempowering women as a consequence. Osipina Gallego bases her approach on the research of Dery et al 2002, who wrote that "participation is only one dimension of empowerment and it doesn't guarantee gender equity. Empowerment dimensions in WASH: access to information, participation, capacity building, leadership and accountability, and decision-making."

When observing women's participation in the decision-making processes at community level and in interaction with the local government, Cindy noted that women often struggle with several layers of mental load due to all the different obligations and social pressures that burden them.

Gender mainstreaming in WASH projects is not just ensuring participation...



Look at the visual above and consider the challenges that a woman may face when participating in a public discussion, workshop, or any participatory event. Here are some of the challenges:

- Finding reliable free childcare to attend an event. Most IWRM committee meetings and workshops do not organise childcare nor are women encouraged to bring children to the meeting. A woman who attends an event with a crying baby is often seen as a distraction and is asked to leave the meeting room. This adds to the marginalisation of the women.
- Fear of public speaking related to lack of experience, fear of social repercussions for speaking in front of men, sense of shame.
- Fear of expressing disagreement with men in the meeting – women's understanding, and experience of water resources are often different from that of men, as women are primary water users at domestic level, while men may more often be familiar with water for agriculture and other forms of production.
- In certain cultures, women are not allowed to travel to a location away from their home unless accompanied by a male relative. In the case of Oromo region in Ethiopia, a team of researchers from IWMI, ILRI, and FAO who were studying women's empowerment through participation in agricultural associations found out that women who attended such meetings exposed themselves to reputational risks, especially if the meeting required them to spend the night in town unchaperoned. Many women therefore opted out of participating in the project-related training due to these challenges.
- Women may have more difficulty than men arranging safe travel to the workshop, if an event is taking place outside their home community. They may choose not to expose themselves to risks and costs of travel.

Part 3: Positive impact of gender-responsible participatory approaches to IWRM

According to *Participatory Methods Toolkit: A Practitioner's Manual* (2003)², effective and meaningful public involvement is seen as beneficial as it is essential to:

- Enable high quality and democratic governance.
- Strengthen civil capacity.
- Develop and deliver programmes effectively and efficiently.
- Build public confidence and trust in decisions.
- Generate a greater understanding of public issues, concerns, priorities, and solutions.
- Build broader support for programmes and initiatives.
- Increase mutual learning through the sharing of information, data, and experiences.
- Ensure that decisions and policies incorporate knowledge and expertise that otherwise might be overlooked.
- Reflect a wider range of public concerns and values in decision-making.
- Rapidly identify possible controversial aspects of an issue and help bring together different points of view to achieve consensus in a collaborative manner.

Case study 1: “One Hand Does not Tie a Bundle”: Women’s Participation Transform Water Management – Nkouondia, Cameroon

This case study, from the Resource Guide on Gender and IWRM on gender and water governance in Cameroon illustrates how women’s involvement in local water management increases creativity.

Read the case study by following this link: http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/case-studies/Ench32Cameroon.pdf/at_download/file

Activity: after reading the case study, make a list of all the examples of positive impact from a participatory approach and another list of all the examples where the activity could go wrong, if a participatory approach had not been taken. Look at the two list and see what lessons you can draw from this example for your own work.

Case study 2: Egypt: Empowering Women’s Participation in Community and Household Decision-making in Water and Sanitation

This case study from the Resource Guide on Gender and IWRM on gender, domestic water supply and sanitation and hygiene demonstrates a gender-integrated approach to a water and sanitation project in the village of Nazlet Fargallah.

² Full text available at <https://cris.unu.edu/participatory-methods-toolkit-practitioners-manual>

Read the case study by following this link: http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/case-studies/Ench3435Egypt.pdf/at_download/file

Activity: after reading the case study, make a list of all the examples of positive impact from a participatory approach and another list of all the examples where the activity could go wrong, if a participatory approach had not been taken. Look at the two lists and see what lessons you can draw from this example for your own work.

Case study 3: Successes and Failures in Gender Mainstreaming in Integrated Water Resources Management

Full information is available at this link: <http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/case-studies/case-studies-e-conference-2002/message-29-from-wijk-christine-van/view> (Wijk, Christine van (2001). *The Best of Two Worlds? Methodology for Participatory Assessment of Community Water Services*. IRC Technical Paper Series 38, IRC International Water and Sanitation Centre, Delft, Netherlands).

A women's project or equality of women and men?

Limai, a community in the DED project in Cameroon, had a relatively good water service. It had a demand-responsive approach, more equitable contributions, and a stronger, more capable, and more autonomous water management organisation. The history of Limai's water service has to be seen in the context of its location in the region of Bassa. Women in this region marry into the village of their husbands and continue to be considered strangers, although they belong to the same ethnic group as their in-laws. This shared experience has caused high solidarity among them and has stimulated them to unite and organise around their most pressing need, a better domestic water supply. The women formed a women's group that initiated the water project, chose the locations, and raised the initial capital by cultivating a communal field. Having got the project off the ground, they then invited men into the local water committees that manage the service. The management work is divided along gender lines: a man is in the chair at village level and a woman is the village water treasurer. Women chair water committees at neighbourhood level. Men committee members clear the paths and sites from vegetation, open and close the water points, and manage conflicts, spending in total about three times as much time as women members. Initially, the women's group raised all income to maintain the service. Recently they have been able to convince the men to also contribute financially as the domestic water benefits all members of the households, and not just the women.

Important considerations that could result in negative impacts

- Gender mainstreaming is not just about women, but it is about addressing the socially and culturally assigned roles to men and women and accompanying beliefs and values about womanhood and manhood. While domestic water use and management may be, in most societies around the globe, a woman's domain in the sense of practical daily responsibilities, decision-making regarding household, family and community issues

remains mostly a man's prerogative. This means that projects that aim to empower women through participation in IWRM must take the socio-cultural context into account and not alienate or dis-empower the men in the process. Additional recommended reading on this issue: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/--ifp_seed/documents/briefingnote/wcms_430936.pdf

- In Module 2 and in Part 2 from this module, we addressed the issue of intersectionality. This concept and related thinking are necessary to ensure that we do not simply engage with the elite and mainstream part of a given community but that all members, regardless of their gender, race, ethnicity, religion, or wealth are consulted in a meaningful manner. Failing that, the results of a project may further exacerbate the problems of already vulnerable and marginalised populations. Additional recommended reading on this issue: <https://www.wri.org/insights/water-can-exacerbate-inequality-or-it-can-help-solve-it>

Part 4: Practical tips on integrating gender and participatory approaches to IWRM

Before engaging in a participatory approach in IWRM we need to ask ourselves when is a participatory approach appropriate?

According to *Participatory Methods Toolkit: A Practitioner's Manual* (2003), the participatory approach is particularly appropriate for addressing:

- Themes that require ethical, social, or cultural study and may call for a choice between fundamental values and principles.
- Policy issues that call for a combination of public awareness, learning, a search for solutions and emotional or moral acceptance of the eventual decision.
- Public policy choices that will rely on the precautionary principle or the weight of evidence.
- Underlying values and principles that must be clarified before detailed proposals or risk management options are brought forward.
- A clearly defined set of options or proposals that support the search for consensus or innovative solutions.

The GWP Action Piece, [*Gender Equality and Inclusion in Water Resources Management*](#), advises practitioners to ask the following questions to drive better practice and make interventions more participatory:

- Have we considered the need for participation of intended beneficiaries throughout the planned project/programme/initiative?
- Who is marginalised in a given context? Which groups have specific needs that should be accounted for? Is it all women, or women from certain classes and castes? Is it people with disabilities, young or old women?
- To what extent are marginalised people represented in consultation and decision-making opportunities? To what extent can they and do they contribute to and hold decision-making influence and power? Are changes to decision-making processes needed to enhance participation?

- To what extent are marginalised people supported to meaningfully engage in ways that are appropriate to them? Is capacity building and/or support needed?

Ethical issues are also an important component of participatory planning and decision-making in IWRM. Researchers Daniell et al. (2009)³ reflect on this in the following way:

Greater attention needs to be given to ethics related to the use, organisation and coordination of participatory forms of water planning. Working with diverse groups of people on water management issues requires the ability to understand and collectively make a range of decisions on the content, design, and implementation of participatory processes. Ethical questions and sensitivities arise in such work including issues of changing existing power structures, privacy conditions and cultural sensitivities. Existing procedures for ethics clearance and codes of ethics, conduct and professionalism aim to increase adherents' awareness of ethical issues and mitigate risks. Yet it is common in some jurisdictions involved in participatory water planning to overlook both codes and the ethical implications of the processes in which they are involved.

For the purpose of common ground, Daniell et al (2009) define ethics using the Oxford dictionary as "moral principles that govern a person's or group's behaviour". When we ask if something is 'ethical' we are questioning the 'rightness' or 'goodness' of action, as defined by personal values, reasoning, and feeling or by societal norms and rules. In participatory practice, decisions are therefore likely to be made based on a variety of different versions of 'right' or 'good'.

Water managers, engineers, researchers, consultants, government officials and other stakeholders are often charged with the responsibilities of determining and collectively managing conflicts and issues arising from their differing values, beliefs, relations and practices during the creation and implementation of water management plans. This includes working through questions of the allocation and development of sustainable water systems, such as:

- Why should a water plan be created?
- What should be the goals of the water plan?
- What should be the actions to achieve these goals?
- Who should be responsible for funding and implementing these actions and when?
- How should progress towards these goals be measured?
- How should the plan be adjusted based on these evaluations?

³ Daniell, K. A., Ian White, and Dominique Rollin (2009) Ethics and participatory water planning, pp. 1476–1489. In 32nd Hydrology and Water Resources Symposium, Newcastle, Australia.

Equally important, they should also ask questions about the participatory process itself related to its design, implementation and the evaluation of its effectiveness. For example, this may include debating:

- Who should be responsible for organising and managing the participatory process?
- How should the scope and purposes of the water management plan be decided?
- How should the decision be made on who should participate and when?
- Which participatory methods should be used and why?
- Who should design, implement, or facilitate the use of these methods with the participants?
- Who should analyse and synthesise the results stemming from the participatory process?
- How should evaluation of the process take place and who should be allowed access to the raw data and final results? (Adapted from Daniell et al. (2003))

General challenges need to be addressed to ensure meaningful participation for all members of the community.

- Communication should be in a language that is understood by all participants or translation should be provided to minority languages. Technical language needs to be brought down to the level of understanding of all participants.
- If payment is given to participants for covering the costs of their participation, it may be important to understand a) local costs, b) provide payment in kind for all participants (food, items for domestic consumption (sugar, soap etc) to avoid appropriation of the funds by relatives etc.
- In case of meetings held at a distance from people's homes, ensure safe transport and/or accommodation for all to avoid exposing participants to risks.
- Childcare facilities should be provided to women participants.
- Facilitators should ensure that all participants get a voice, and this can be done using a variety of facilitation approaches, including those found at these excellent free resource sharing sites:
<https://www.liberatingstructures.com/>
<https://www.participatorymethods.org/>
<https://communityatwork.com/>

Practical exercise

Read the 21 tips on how to plan and organise a workshop by Robert Chambers at the link below. Read and prepare a draft plan for your next event (it can be a made-up event). Practice preparing a one-page guideline taking into account these tips.
<https://www.participatorymethods.org/method/facilitating-workshops-co-generation-knowledge-21-tips>

For additional training and information on participatory workshops see also
<https://www.artofhosting.org/>

Mandatory reading

1. GWP, 2017, *Gender Equality and Inclusion in Water Resources Management*, Action area 3, page 14–15. Available at: <https://gwp.org/globalassets/global/about-gwp/publications/gender/gender-action-piece.pdf>
See also folder
2. Pimbert, Michel, 2004, Natural resources, people and participation. *Participatory Learning and Action* 50: 131–139.

The mandatory reading includes the case studies linked to the content section.

Recommended reading

Scientific and academic articles

1. Tanwir, Maryam and Safdar, Tayyab, 2013. The rural woman's constraints to participation in rural organizations. *Journal of International Women's Studies* 14(3): 210–229. Available at: <http://vc.bridgew.edu/jiws/vol14/iss3/15>
See also folder
2. Das, Priyam, 2014, Women's participation in community-level water governance in urban India: the gap between motivation and ability. *World Development* 64:2014: 206–218. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0305750X14001533>
See also folder

Practical guidelines and project reports

1. Bessette, Guy, 2004, *Involving the Community: A Guide to Participatory Development Communication*. IDRC. Available at: <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/31476/IDL-31476.pdf>
See also folder
2. Government of Bangladesh, 2000, *Guidelines for Participatory Water Management*. Available at: <http://extwprlegs1.fao.org/docs/pdf/bgd197583.pdf>
See also folder
3. Guijt, Irene, 2014, *Participatory Approaches: Impact Evaluation No. 5*, Methodological Briefs, UNICEF. Available at: https://www.unicef-irc.org/KM/IE/impact_5.php
See also folder

Recommended websites

1. GWP ToolBox
www.gwptoolbox.org
2. Lisbon Charter
<https://iwa-network.org/publications/the-lisbon-charter/>

The Lisbon Charter is an international framework of good practice for public policy and regulation in drinking water supply, sanitation, and wastewater management services. It details the rights and responsibilities of the various stakeholders and users. It offers a vision and a practical platform for reforming water management for sustainable development. Through five key principles for public policy and regulation on water and wastewater services, the Charter provides a framework for transforming water regulation that can be universally applied.

3. Public participation at a glance
<https://iwa-network.org/projects/public-participation-in-the-regulation-of-urban-water-services/>
4. SDG 6.5.1. (IWRM) Support programme
<https://www.gwp.org/en/sdg6support/>
 Target 6.5 aims to implement integrated water resources management at all levels – this page provides resources and information on ongoing events and support available to countries.
5. Participatory planning for a more inclusive and sustainable water management in rural Burkina Faso
<https://pwgbf.iwmi.org/>
 A participatory planning project that includes reports on community engagement and a set of guidelines for participatory watershed management (several documents in French only).
6. Participatory methods
<https://www.participatorymethods.org/>
 This site, run by Institute of Development Studies, provides resources to generate ideas and action for inclusive development and social change.

Recommended videos

1. The power of participation in development (2020)
<https://www.youtube.com/watch?v=WZ2jB-lhhac>
 Duration: 4:21
 This short personal anecdote by Laurens van Veldhuizen of KIT Amsterdam explains how projects and interventions should come from the needs expressed by the community and should not be imposed from the top.
2. In conversation: Participatory development (2012)
<https://www.youtube.com/watch?v=21QVB42wsC8>
 Duration of video: 25:59
 This conversation between two world-renowned experts in participatory development: Prof Gita Sen and Prof Robert Chambers covers power relations, gender, empowerment, and participation.
3. Nabeel Hamdi: Participation in practice (2014)
<https://www.youtube.com/watch?v=7r9IYl4CtKl>
 Duration of video: 8:35

This lecture outlines the impact of participation on practice, in particular how it can expand the scope and nature of practice in order to add strategic value to practical work. Prof Nabeel Hamdi introduces the issues of equity and efficiency and their convergence in participatory work, and articulates the value of participation in building community and in human development.

Module discussion forum

Watch the video discussion by Sen and Chambers, *In conversation: Participatory development*, and discuss key challenges to truly participatory (non-tokenistic) development projects in the context of your work in the water sector.

Make a list of all the things you could do to prevent the process from being participatory. Now review the list and ask yourself the hard question: 'Which of these things am I already doing?' and make a new list.

Evaluate this new list and consider which things you could stop doing today to make your work more participatory.

Module quiz

1. Which of the following ideas is NOT one that the Dublin Principle No. 2 is based upon:
 - a. Water is a resource that affects all.
 - b. True participation is ensured only when all stakeholders are involved in the decision-making.
 - c. A participatory approach involving all stakeholders is the best strategy to achieve long-term accord and consensus.
 - d. Participation means that the government can hand over all the responsibility for the resource to the users and is no longer accountable to protect the water resources.

2. Which of these is the GWP Gender Action area that addresses meaningful participation?
 - a. Action area 1.
 - b. Action area 2.
 - c. Action area 3.
 - d. Action area 4.

3. Which two types of participation are the true forms of participation according to Jules Petty?
 - a. Manipulative participation and functional participation.
 - b. Interactive participation and self-mobilisation.
 - c. Functional participation and interactive participation.
 - d. Participation by consultation and participation for material incentives.

4. Why is it important to consider intersectionality in the context of participation in IWRM processes?
 - a. We need to include all industry sectors in the process.
 - b. It is not important at all.
 - c. It addresses the issue of diversity of stakeholders at all levels.
 - d. There are financial incentives.

5. Choose all the statements that refer to the mental burden women may experience when participating in IWRM and other participatory processes (you can choose as many as you think are correct).
 - a. How will I find childcare for a two-day workshop?
 - b. My husband gets angry if I disagree with him, but I know more about how difficult it is to access water in our community.
 - c. I am worried about walking home from the meeting at night as many women get attacked in the forest.
 - d. I cannot afford to travel on public transport to the town where the workshop is as I have no money.

(Note that all answers are correct.)

6. Which of these is NOT a beneficial aspect of participation?
 - a. It enables high quality and democratic governance.
 - b. It strengthens civil capacity.
 - c. It helps develop and deliver programmes effectively and efficiently.
 - d. It ensures rapid generation of funds for new projects.

7. What is a potential negative impact of empowering women in a participatory IWRM project?
 - a. Men may feel disempowered and may not support the process if they are completely excluded from consultations.
 - b. The project will be bad as women are not qualified water resources managers.
 - c. Water resources will be polluted as women do not care about the environment.
 - d. All of the above.

8. Why were women of the Nhouonda, Cameroun alienated from decision-making and paying contributions to the water management committee?
 - a. They were lazy and not interested in the well-being of the community.
 - b. They were not members of the water committee.
 - c. They were taking revenge due to their husbands' gambling problem.
 - d. Women of the Nhouonda are not allowed to handle money due to local custom.

9. Does ethical conduct matter when implementing participatory workshops in IWRM?
 - a. Yes.
 - b. No.
 - c. Only if funds are provided for this purpose.
 - d. Depends on the donor.

10. Which of the following are the roles of the participatory workshop facilitator? (More than one answer is correct.)
 - a. Ensure all the participants get a chance to speak during the discussions.
 - b. Address all officials participating in the event with honorific titles.
 - c. Pay people to agree to ideas proposed by the project.
 - d. Use language that is understood by all participants.

Quiz key

1. Which of the following ideas is NOT one that the Dublin Principle No. 2 is based upon:
 - d. Participation means that the government can hand over all the responsibility for the resource to the users and is no longer accountable to protect the water resources.**
2. Which of these is the GWP Gender Action area that addresses meaningful participation?
 - c. Action area 3.**
3. Which two types of participation are the true forms of participation according to Jules Petty?
 - b. Interactive participation and self-mobilisation.**
4. Why is it important to consider intersectionality in the context of participation in IWRM processes?
 - c. It addresses the issue of diversity of stakeholders at all levels.**
5. Choose all the statements that refer to the mental burden women may experience when participating in IWRM and other participatory processes (you can choose as many as you think are correct).
 - a. How will I find childcare for a two-day workshop?**
 - b. My husband gets angry if I disagree with him, but I know more about how difficult it is to access water in our community.**
 - c. I am worried about walking home from the meeting at night as many women get attacked in the forest.**
 - d. I cannot afford to travel on public transport to the town where the workshop is as I have no money.**

(Note that all answers are correct.)
6. Which of these is NOT a beneficial aspect of participation?
 - d. It ensures rapid generation of funds for new projects.**
7. What is a potential negative impact of empowering women in a participatory IWRM project?
 - a. Men may feel disempowered and may not support the process if they are completely excluded from consultations.**
8. Why were women of the Nhouonda, Cameroun alienated from decision-making and paying contributions to the water management committee?
 - b. They were not members of the water committee.**
9. Does ethical conduct matter when implementing participatory workshops in IWRM?
 - a. Yes.**

10. Which of the following are the roles of the participatory workshop facilitator? (More than one answer is correct.)
- a. Ensure all the participants get a chance to speak during the discussions.**
 - d. Use language that is understood by all participants.**

GENDER AND INTEGRATED WATER RESOURCES MANAGEMENT



Cap-Net



Global Water Partnership

25 YEARS



Module 4: Gender-Disaggregated Data and Monitoring IWRM

Introduction

Water-related development, management, and projects need to be monitored. Outputs are easy to monitor, especially if the targets are quantitative, even the gender aspects. But more important is the outcome of projects, as listed in the Theory of Change. Then Inclusive Outcome Harvesting is necessary. Not just the response to the question: “how many men and women have been trained?” but also: “Which change was the result of that training for different categories of women and men?”.

In this module the collection of gender-disaggregated data, quantitative and qualitative is explained: the WHY and the HOW. The module also covers Inclusive Monitoring in relation to the Theory of Change, with annual Inclusive Outcome Harvesting.

Monitoring of progress, outputs, and outcome in IWRM need not take too much time and effort. It is important to be correct, effective, and limited in number of indicators, and especially consider indicators on decision-making power.

Inclusive monitoring should be a participatory exercise involving the women and men who benefit and those who are disadvantaged from any actions taken.

Various tools for inclusive monitoring related to water management are explained.

Module goals

1. Understand the importance of inclusive monitoring in IWRM.
2. Learn GDD collection, from a gender and diversity perspective.
3. Develop quantitative and qualitative indicators and learn to apply them for monitoring.
4. Learn how to monitor gender-disaggregated outcomes, to contribute to the Theory of Change of the programme or project.
5. Know different, relevant tools, and reasons why to choose one over another.

Learning objectives

By the end of this module participants are expected to:

1. Understand the need for gender-disaggregated data collection in water-related programmes or projects.
2. Know how to develop quantitative and qualitative inclusive indicators.
3. Understand the importance of participatory monitoring, and how to do it.

4. Understand Outcome Harvesting and how to use it for the Theory of Change.
5. Know the tools that can be used for gender-inclusive monitoring, where to find them, and which one to select.

Content

Part 1: Why use inclusive monitoring?

Water is important for all categories of people: women and men of all ages, different ethnicities, poor and rich, urban and rural, and with different abilities. These different categories of people don't have equal access to resources such as water, and some totally lack decision-making power.

In agriculture, generally speaking, women produce food crops for the household, the village, and the market, whilst men are more involved in cash crops often for export. Irrigation is more available for men, for example because it is linked to formal land ownership.

In the WASH sector, the gender division of tasks is rather rigid in many places worldwide. Women are often responsible for water in the household, which is used for drinking, cleaning, and bathing. In poor households, women and elderly people may wish to spend money on a proper toilet, while men often have other priorities. During menstruation and in the maternity period, women are particularly vulnerable to infections and accidents, if toilets are far away and messy. Toilets need to be cleaned, which is usually the work of women. Thus domestic water is much more important for women than for men. Nevertheless, men make decisions regarding water and also about sanitation, toilets, and sewage.

In environmental development work such as in wetlands, women are often involved in collecting shells and small fish, but also tree-fruits, roots, and medical herbs. Men have their focus on one product on a much larger scale, but it is important that women do not lose their livelihoods.

Hydro power and transport influence the environment: dams block the routes swum by fish, indigenous men and women who depend on fishing for their livelihood lose out, whilst they often have no say in decisions about such infrastructure.

Within IWRM, which includes these sectors and also the interaction between them, it is important to monitor the involvement of the categories: those who gain and those who lose from each policy, project, or intervention. Monitoring is conducted at all levels. Globally, drinking water and sanitation are monitored by the Joint Monitoring Programme of the WHO and UNICEF. Governments provide the data per country, and the indicators are very few, and leave out lots of gender issues. Countries' governments also monitor the water and sanitation facilities, and not all disaggregate the data by gender. Since 2016 the SDGs are monitored, including SDG 5 for gender and 6 for WASH.

Part 2: Gender-disaggregated data (GDD) collection

To monitor activities, progress, and results, the first necessary and relatively simple procedure is to collect data in a gender-disaggregated way. **Sex-disaggregated** means to divide men and women in the data, and **gender-disaggregated** is more than that, also the socio-economic situation of the women and the men, their ethnicity, age, ability, and all such aspects as are relevant in the context.

GDD for monitoring are both quantitative and qualitative. Quantitative GDD are, for example:

- Percentage of women (poor, minority) in irrigation water-user groups.
- Number of (paid) working days per year (women, men, minorities, etc.).
- Number of girls and of boys dropping out of school, and at which age.
- Number of households with improved toilet (male- or female-headed households, single households, elderly, disabled, etc.).

Such quantitative data can be processed with various software.

Qualitative data give more clarity to the actual meaning of the quantitative data. For example:

1. If women are member of the irrigation water-users group, do they get an equitable amount of water for their crops? Are they at the end of the canal and ditch, or are they only getting water in the night? What is their opinion? Do they feel equally treated? Are they listened to when speaking?
 - Women are responsible for their sick family members, and also when ill themselves, they cannot work. Ask why they did not work a certain number of days per year. The number of working days can increase for women labourers if there is safe water and a clean toilet. There can also be other factors.
2. With new WASH facilities in school, which suit girls with menstruation too, do they stay in school longer than before? There may also be other reasons, so it is important to ask them their opinion.
 - Which categories of households have not been able to afford the improved toilets? Why not? Did some decision-making family members have other priorities? Or is the household ultra-poor, such as elderly widows?

Such qualitative data can be short case-descriptions, or more generally collecting causes of success or failure of interventions. This additional information adds more depth to and understanding of the graphs and tables with quantitative data.

Part 3: Data collection tools

There are myriad ways to collect both quantitative as well as qualitative gender-disaggregated data which all have their advantages and disadvantages. To mention some of them:

- **(Participatory) observation:** data are collected by observation of activities and in case of participatory observation, taking part in them. You keep notes and take photographs of specific activities, paying special attention to gender differences such as access or control over resources.
- **In depth interviews/key informant interviews** take place one-on-one and can have structured or semi-structured questions, but also open questions. As timing and place can affect the dynamics and information you get from interviews, choose a suitable place and time. Ask the respondents if they agree to be interviewed. Ensure that information cannot be traced back to the interviewee in case it is agreed that the identity of the interviewee will not be revealed. Ensure that if you ask someone a question, it is their answer that is noted down, and not that of a different person also attending the interview (e.g. a husband answering for his wife).

In case of key informant interviews you look for certain people with a big network or of high importance in the community to interview e.g. a school teacher, a village leader, or a religious leader. In this case it will be more difficult or not required to keep the identity hidden.

- **Focus group discussions (FGD)** involve people from similar backgrounds or experiences gathering to discuss a specific topic of interest together. The group of participants is guided by a moderator (or group facilitator) who introduces topics for discussion and helps the group to participate in a lively and natural discussion among themselves.

The strength of FGD relies on allowing the participants to agree or disagree with each other to give an insight into how women and men in a group think about an issue, the range of opinions and ideas, and the inconsistencies and variation that exist in terms of beliefs and their experiences and practices.

- A **transect walk** is a walking tour through areas of interest along a pre-drawn line on the map to observe, listen, identify different zones or conditions, and ask questions to identify problems and possible solutions. With this method the outsider can quickly learn about soils, land, and water points and local assets, as well as places of open defecation and pollution or those vulnerable to droughts or flooding. The walk reveals where poor people and those who are better off live, and how these differ in safety and access to resources.
- **Ranking priorities** or problems helps villagers to set priorities (i.e. problems, needs, actions, etc.). Ranking can be undertaken with key informants or groups of villagers that represent a good mixture of interests. The information can also factor in gender to determine different preferences between men and women for simple issues.
- **Social mapping** helps to map vulnerabilities, capacities, needs, knowledge, and activities of different groups of people. **Resource mapping** gives insight into access, use, and control over resources. They are quick surveys of society and resources, making use of

local, available materials. In both mapping exercises local people are asked to jointly make a map of their village and indicate either social issues (who are the rich people, and who are the poor, where do they live, how many people live in every house, who pertains to which religion, etc.) or resources (where are the water points, who can use them, who decides about their use, where are the agricultural fields, who works on those fields, who decides what to do with the harvest, etc).

In these exercises it is important to choose a proper location and time and to include all stakeholder groups including women. It is interesting to let men and women make different maps of water sources.

- **Historical timelines** are used to analyse the evolution of particular issues, their context, the pattern and the relationship over time. They should cover several events that have occurred in the village and trace the dynamics of the natural or social changes over time. A timeline reconstructs the important events that have had an impact on the community's way of life. The history profile can help to identify factors influencing current problems within the village and its inhabitants. It puts into perspective the causes of problems. It is important to collect data across different generations, and let all members participate. Since the activity depends on memory recall, it is important that older people are actively involved to assist with historical events. It is also important to include gender and poverty issues in the historical timeline. The use of oral history can be very helpful in this exercise.
- In **stakeholder analysis** you assess who will win and who will lose from a policy or programme. When doing this from a gender perspective it is important to get a complete overview of all those affected: differentiate between men and women, as well as between different socio-economic groups, age, ethnicity, minorities, etc.
- **Consultations** can be organised to get the opinions of different people on a proposed programme or policy. It is important to get a wide variety of stakeholders, both men and women, to discuss the proposal to get a picture as complete as possible. Here ideas can be brought forward and discussed, and adaptations can be made.
- In a **case study** qualitative data can be gathered on specific gender issues. It often includes a field visit to discuss the matter being studied with local people and record their opinions. It can be used to monitor the progress of a project, or for identifying problems. It can also be used to document approaches that worked successfully and assess if they can be scaled up.
- In **participatory action research**, the researcher does not research the topic from the 'outside', but ensures participation of the people under study by involving them in the formulation of the research question, data collection and formulation of conclusions. The aim of the research is that action can be taken on the basis of the conclusions of the study. It is a useful tool to identify problems felt by women or vulnerable groups and give them tools for empowerment to improve their situation.
- **Literature research** helps to unlock scattered or hidden data. Often data are available but hidden or scattered in (project) reports, proposals, research documents, statistical surveys, etc. Literature research can bring these together in a useful document for planning projects and policies. It is important to disaggregate these data so gender differences become clear and can be addressed.

Part 4: The HOW of monitoring: methods to monitor gender in water management

Project monitoring, from baseline to end report

A project or a plan will begin with a baseline study, to make monitoring and evaluation possible. The project is structured following a Logical Framework or a Theory of Change. With either approach, gender indicators have to be formulated for each component or activity, some quantitative, and some qualitative.

Over the project period there may be reasons to adapt the indicators, to make them more realistic and relevant. Conversely, when gender monitoring shows that women and other categories are not sufficiently involved, the approach can be changed to make more women benefit from the project.

Examples of indicators

In agricultural projects:

- Time allocation of women and time allocation of men in agriculture and other work (to ensure that women's work is recognised).
- Percentage of women participants in agricultural training (to make sure that women get the training that deals with the work they do).
- Production by different categories (depending on the goal of the project).
- Gender data in value chain (if women's work is not calculated in the value chain, the farmers lose out in the final price) .
- Open qualitative question to beneficiaries, to learn aspects which were not thought of beforehand.

In WASH interventions:

- What is the involvement of users, women, and men, in design, location, planning, financing, maintenance, and training of sanitation and water facilities?
- Who is responsible, in the family, for collecting, storing, and use of water? (men, women, girls, boys)
- What is the distance to the toilet, and quality of the path; what are women's experiences walking to the toilet and back?
- In school: how many boys and how many girls per toilet? Are toilets for girls provided with facilities for menstrual management (a small clean shelf and a closed waste basket, lock inside, and water basin)?
- Ask open, qualitative questions to beneficiaries, to learn aspects which were not thought of beforehand.

In environmental activities:

- What is the number of women (minority) active in the production of saplings, replanting saplings, and/or sale of saplings?
- Are there women leaders in mangrove planting groups?
- Who are the participants in training for sustainable management of wetlands? Are they women, men, of different ages or background etc. and able to actively contribute?
- What are the earnings for poor women's groups working in solid waste management for recycling?
- Ask open, qualitative questions to beneficiaries, to learn aspects which were not thought of beforehand.

These are just examples. See the obligatory and voluntary literature for many more details and examples.

In all indicators for monitoring, it is important to have gender mainstreamed, and to collect the data in a gender- or sex-disaggregated manner. Even so it is advisable to include a few specific gender indicators.

Empowerment approach and analysis

The empowerment approach, as described in Module 1, serves well as a methodology to monitor progress, in a mostly qualitative manner.

Questions in a short checklist, and open questions that give answers about the four elements of empowerment show the extent of progress resulting from a project.

Organise annual field days with a small multi-disciplinary team, doing transect walks through a selection of villages involved in the project, asking different categories of people about the impact of the project for their position, to gain deep understanding of what works well, and what does not. Find out which people benefit, and which people are left behind, or worse, lose out.

Back in the office, write one of the empowerment components (economic, political, socio-cultural, and physical) on four large sheets. These can be hung on the wall, and team members can take turns to write how empowerment was improved or not for one aspect of each category. The sheets can then be discussed in plenary, and changes or additions suggested.

Based on this report, the project can be adapted to benefit more categories of people especially those who are resource-less.

Outcome harvesting

Theories of Change include outputs, but not always outcomes. Outputs can mostly be counted and caught in quantitative data. Next to these data it is interesting to monitor outcome, by annually (or more regularly) discussing which unintended results were noticed. Especially in the gender field, there are many unexpected and unintended results: often negative, but also positive. In this methodology, a matrix is filled with the following columns:

	Significance of the outcome for gender relations	Project's contribution	Sources
In 1–2 sentences specify when who did what , and where , that potentially or actually represents progress towards empowerment, of which categories.	In 1–2 sentences, describe why the outcome represents progress towards the gender aspects of the Theory of Change of the project.	Briefly describe how and when your organisation influenced the outcome. What did you do that directly or indirectly, in a small to large way, intentionally or not contributed to the change in gender-power-relations?	Name the person, their position and organisation or document that provided the information, and the date they did so.
Positive outcome 1			
Positive outcome 2			
Negative outcome 1			

The planned outputs of the project are not included in this table. Outcome harvesting workshops add quality and depth to annual reports and to monitoring of the project.

Score cards for gender and water

Gender and water score cards are qualitative monitoring tools used for community- or project-level monitoring and evaluation of services and projects, and to catalyse face-to-face meetings between service providers and different categories of beneficiaries. Such tables have rows with gender indicators for progress, and columns with the different categories, as relevant for the context. In the cells the progress is shown by colours from red to green or by percentages of achievement. Each time period should be followed by a score card, which should become less red and more green.

Gender impact study

Towards the end of the programme, a gender impact study (GIS) will be part of the final evaluation. Depending on the resources available, a GIS includes fieldwork, interviews of beneficiaries of different categories (women, men, age differences, ethnic differences, poor, higher income, etc.), and of those who were not involved in the programme, to see the different impacts.

Such studies include, apart from interviews with open questions and a checklist, transect walks, FGD (separate for men and for women, but also joint), key informant interviews (official people, decision-makers, teachers, municipal office holders, etc.)

If the finances permit a survey is also an option, to make sure quantitative requirements are also met.

It is important to budget for the GIS at the beginning of the project. External gender experts can be given the assignment, and field staff can support them. Without a budget, the staff can do this GIS but then it will not be considered as an objective evaluation. It will nevertheless be important for learning.

Other gender and monitoring issues

Various issues arise in each of the methodologies for gender monitoring explained above. Examples are:

- Data, and that includes GDD, are important in all phases of a programme. Most crucial is that data are reliable if quantitative but also if qualitative.
- A context analysis will serve for the results monitoring framework, by clarifying which categories are involved, and also who has been left out.
- Make use of existing data, and find them during desk research.
- For data to be valid it is important to clean them, and make sure they fit in a range which can be explained.
- Apart from valid, the GDD data must be accurate and consistent.
- If data are not as expected, ask WHY?
- Present the data in a clear way. In all software packages there are beautiful options.
- Stories and cases are important data.

Take home messages

- Progress-monitoring (for example of projects) needs to include information about involvement of different people (by gender, age, ability, ethnicity, etc.).
- Limit the number of gender-disaggregated data collected to measure outputs. Qualitative indicators are important. This is most successful when the people who benefit or suffer as result of the activity participate.
- It is important to harvest further outcomes to promote empowerment and inclusion. This is an opportunity to learn the indirect results of the activity, outside of the project objectives.

Case study

1. GWA contributed to the Watershed Programme, Empowering Citizens, in Bangladesh. Monitoring and coaching visits by GWA yielded lots of gender-disaggregated information. See, for example the Debriefing Note, pages 44–48 in the report of one field trip. <http://genderandwater.org/en/bangladesh/watershed-empowering-citizens/report-of-field-visit-to-bhola-gwa-2018/view>

Orientation video

1. There are no videos to be found which deal with monitoring, gender, and IWRM, or any of the water sectors. We can suggest the following: <https://thewaterchannel.tv/videos/gender-and-water-alliance/>

Mandatory reading

1. On Gender-Disaggregated Data:
FAO, Land and Water, Water and Gender, 2 pages. <http://www.fao.org/land-water/water/watergovernance/water-gender/en/>
2. On Gender-sensitive monitoring and evaluation indicators:
UNDP, GWA, Cap-Net, IRC, *Resource Guide Mainstreaming Gender in Water Management*, pages 19–20. Available in many languages. <http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/resource-guide-on-gender-and-iwrm/download-complete-gender-and-iwrm-resource-guide>
3. On the empowerment approach:
Report on field visit, page 49. <http://genderandwater.org/en/bangladesh/watershed-empowering-citizens/report-of-field-visit-to-bhola-gwa-2018/view>
4. And a report of the application of the empowerment approach in a village in Indonesia:
GWA, Report *GWA PUSDIKLAT Training Bandung*, 2014, pages 39–45. <http://genderandwater.org/en/gwa-activities/capacity-building/training-workshops/report-of-training-of-trainers-workshop-gender-and-iwrm-in-pusdiklat-education-bandung/view>
5. On gender impact study:

- GWA, 2019, *Gender Impact Study for SNV-Bangladesh*, pages 11–17, to plan a GIS.
<http://genderandwater.org/en/bangladesh/snv-eu-switich-asia-gender-assessment/report-gender-impact-study-of-eu-switch-asia-project-snv-bangladesh/view>
6. On GGDs in water management and monitoring:
 GWA, 2016, *Gender Dis-aggregated Data, Review in Water and Sanitation Management with a Focus on Bangladesh*. Pages 10–16, for different methods to collect GDD, in fieldwork.
<http://genderandwater.org/en/bangladesh/gwapb-products/knowledge-development/gender-dis-aggregated-data-review-in-water-and-sanitation-management-with-a-focus-on-bangladesh/view>
 7. On scorecards:
 Andrea Lee Esser, UN, 2012, *Gender Scorecard: United Nations Country Team in Kenya: Performance Indicators for Gender Equality and Women's Empowerment*, pages 5–8.
<https://unsdg.un.org/sites/default/files/UNCT-Kenya-Gender-Scorecard.pdf>

Recommended reading

1. On GDD:
 GWA, 2016, *Gender Dis-aggregated Data, Review in Water and Sanitation Management with a Focus on Bangladesh*, including methodologies and lots of suggestions for literature and references:
<http://genderandwater.org/en/bangladesh/gwapb-products/knowledge-development/gender-dis-aggregated-data-review-in-water-and-sanitation-management-with-a-focus-on-bangladesh/view>
2. GWA, for UN-Habitat, GDD, *Count and be Counted, Be Empowered*.
 This report also includes four case studies on gender mainstreaming in WATSAN in Ethiopia, Ghana, Zimbabwe, and South Africa, as well as practical information on GDD and its use for monitoring.
<http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/count-and-be-counted-be-empowered/view>
3. Joni Seager, 2015, United Nations World Water Assessment Programme, *Sex-disaggregated Indicators for Water Assessment, Monitoring and Reporting*.
http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/Sex_disaggregated_indicators_for_water_assessment_monito.pdf
4. On empowerment and WASH:
 GWA and Simavi, 2015, Case Study on Gender and Empowerment through WASH.
<http://genderandwater.org/en/bangladesh/gwapb-activities/knowledge-development/research-report/case-study-on-gender-and-empowerment-through-wash/view>
5. On score cards:
 For international, national, and other levels, with many details:
 UNECE, WHO, *The Equitable Access Score-card: Supporting Policy Processes to chieve the Human Right to Water and Sanitation*.

https://unece.org/DAM/env/water/publications/PWH_equitable_access/1324456_ECE_MP_WP_8_Web_Interactif_ENG.pdf

6. On gender impact study:

GWA, 2019, *Gender Impact Study for SNV-Bangladesh EU-SWITCH*.

This is a complete example for what a GIS can entail.

<http://genderandwater.org/en/bangladesh/snv-eu-switich-asia-gender-assessment/report-gender-impact-study-of-eu-switch-asia-project-snv-bangladesh/view>

7. On data collection and processing:

<https://akvo.org/knowledge-library/>

Ebooks:

1. [Design Data-driven Programmes that Deliver Results Effectively](#)
2. [Capture Reliable Data in the International Development Sector](#)
3. [Understand your Data and Extract the Insights that Matter](#)

Recommended websites

1. <http://genderandwater.org>
2. <https://akvo.org/>
3. <https://unesdoc.unesco.org/search/867cce59-5476-4f97-b0da-ddd77b7f402e>

Module discussion forum

Discuss the following statements:

1. Inclusive monitoring is important in all water sectors, but it is also crucial for IWRM, because water is scarce, and can only be used once. Why is this a gender issue?
2. Quantitative and qualitative indicators and resulting data complement each other. Why are FGDs important to discuss the quantitative and qualitative findings?
3. Design a basic score card for your project or work, with four steps from 0 to 100% or from red to orange, to yellow to bright green.

Module quiz

1. Gender-sensitive or inclusive monitoring is
 - a. obligatory because donors want it.
 - b. important because we need the data for our annual report.
 - c. essential because we need to know who gains and who loses out by the project activities.
 - d. only a fashion, but not useful.

2. For monitoring we need indicators –
 - a. the more indicators the better the information.
 - b. not many, but relevant ones.
 - c. exactly following the outputs of the project.
 - d. which are easy to process in a table.

3. At the global level access to water and sanitation is monitored by the Joint Monitoring Programme of WHO and UNICEF (JMP). Before 2010 the indicators were gender blind. Then, after influencing the decision-makers, one gender indicator was added. Why were we happy, even with only one?
 - a. Gender is not very important, so one indicator is enough.
 - b. WHO and UNICEF did not agree about the number of indicators.
 - c. The diversity aspects of the indicators are already clear from the countries they come from.
 - d. The information has to be sent in by country governments, so to ask for more information, even one extra indicator, is already a lot of work globally.

4. Water, especially fresh water, is getting scarcer and scarcer globally, thus, it is important to keep track of who uses what and how much, and for which purpose.
 - a. This is equally bad for all people.
 - b. This is also equally bad for all water uses, because they are all equally important.
 - c. There is a sequence of priority in water use. First is always water for drinking. Industries and agriculture come much later in the queue.
 - d. There is plenty of water in the sea, so no need to worry.

5. The empowerment approach can be used for
 - a. gender analysis.
 - b. monitoring a process.
 - c. an objective to be reached.
 - d. All three are possible.

6. When are gender- and water-related data probably valid?
 - a. When, during a survey, only the head of the household is asked to respond to questions about water use.

- b. When hired enumerators, who live in the area, are confident about the answers, and fill in the forms behind their desks.
 - c. When representatives of all involved categories can express themselves in a validation workshop.
 - d. When the respondents give socially acceptable answers to questions.
7. Outcome harvesting turns out to be a useful methodology, even when a project was set up without any gender awareness.
 - a. Unintended results become visible, both negative and positive, which are important for further planning and adapting the project.
 - b. By outcome harvesting, the project automatically becomes more inclusive.
 - c. If food crops are produced as a result of the project, for example by more irrigation, the outcome always benefits women.
 - d. An outcome harvesting workshop with the whole team creates the opportunity to hide weaknesses in one's work.
8. Which of the following indicators is most important when monitoring IWRM?
 - a. The distance to the well, where water is to be collected from, per month.
 - b. Percentage of available fresh water per year in a country, used for agriculture and the percentage allocated to domestic and drinking water use.
 - c. The number of girls and of boys per toilet in secondary schools.
 - d. The discharge of polluted water by industries in cusecs versus the number of paid employees.
9. Solid waste management is also part of integrated water resources management. The following statement is not true.
 - a. Women are mostly responsible for throwing away solid waste from the household, so women need to pay for waste collection.
 - b. Women and men have different attitudes when throwing away things from the household, so both need to be made aware of the waste problem as it relates to water in a different way, by reducing waste.
 - c. Global awareness that waste can be turned into energy is gradually increasing, so it is a resource and not a burden, if managed well.
 - d. Due to solid waste lots of water sources, used by women and children to fetch water, have become polluted and unusable. Now they have to walk even further.
10. If a project did not include a baseline study,
 - a. monitoring becomes impossible, so we need to forget it.
 - b. we can still monitor some indicators, but not for gender, because that will be too complicated.
 - c. if the donor does not notice, we can continue without monitoring.
 - d. we will organise a workshop with participants from all categories of beneficiaries and of those who are left out, and together develop inclusive indicators for water management.

Quiz key

1. Gender-sensitive or inclusive monitoring is
 - c. essential because we need to know who gains and who loses out by the project activities.**
2. For monitoring we need indicators –
 - b. not many, but relevant ones.**
3. At the global level access to water and sanitation is monitored by the Joint Monitoring Programme of WHO and UNICEF (JMP). Before 2010 the indicators were gender blind. Then, after influencing the decision-makers, one gender indicator was added. Why were we happy, even with only one?
 - d. The information has to be sent in by country governments, so to ask for more information, even one extra indicator, is already a lot of work globally.**
4. Water, especially fresh water, is getting scarcer and scarcer globally, thus, it is important to keep track of who uses what and how much, and for which purpose.
 - c. There is a sequence of priority in water use. First is always water for drinking. Industries and agriculture come much later in the queue.**
5. The empowerment approach can be used for
 - d. All three are possible.**
6. When are gender- and water-related data probably valid?
 - c. When representatives of all involved categories can express themselves in a validation workshop.**
7. Outcome harvesting turns out to be a useful methodology, even when a project was set up without any gender awareness.
 - a. Unintended results become visible, both negative and positive, which are important for further planning and adapting the project.**
8. Which of the following indicators is most important when monitoring IWRM?
 - b. Percentage of available fresh water per year in a country, used for agriculture and the percentage allocated to domestic and drinking water use.**
9. Solid waste management is also part of integrated water resources management. The following statement is not true.
 - a. Women are mostly responsible for throwing away solid waste from the household, so women need to pay for waste collection.**
10. If a project did not include a baseline study,

- d. **we will organise a workshop with participants from all categories of beneficiaries and of those who are left out, and together develop inclusive indicators for water management.**