



#Women2030 Master Manual for Training of Trainers: Building knowledge, skills, and capacity to implement genderresponsive SDGs



Module 2: Mainstreaming gender in key SDGs



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Introduction

This module consists of five sessions, each covering the gender dimensions of one of five SDGs respectively, which align with the aims and work of the Women2030 partners. The main objective of this module is to increase the understanding of the trainers and target groups why gender equality and empowerment of women and girls are critical for achieving the Agenda 2030.

The sessions are divided as follows:

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Session 2.1: SDG 5: Gender Equality and Empowerment of Women and Girls
Session 2.2: SDG 6: Gender and Universal Access to Water and Sanitation
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Session 2.3: SDG 7: Gender and Access to Reliable, Affordable and Clean Energy

Session 2.4: SDG 13: Using a Gender Perspective in Climate Action

Session 2.5: SDG15: Gender, Forests and Biodiversity

Session 2.1: SDG 5 Gender Equality and Empowerment of Women and Girls

Learning objectives

At the end of this session participants will:

- Reinforce their understanding of concepts of gender, empowerment, and gender equality as outlined in Module 1 of this manual
- Be aware of the current developments and challenges for gender equality and women's and girl's empowerment worldwide.
- Know the Sustainable Development Goal 5, its targets, and some indicators for monitoring them globally and nationally
- Be aware of the gender dimension of all the 17 SDGs and why empowerment of women and girls is key to achieving Agenda 2030
- Know some exercises to engage participants in sharing their experiences on the subject and encourage peer learning and networking
- Be familiar with key global and regional resources to access general and specific information on gender and SDGs

Guidelines for the Facilitator/Trainer

The material for this session is presented in short text paragraphs and info-graphics with bold headings, so that the latter can be used as a basis for a PowerPoint presentation. It is strongly recommended that you adapt the information to make it relevant to the situation in your region, country, and local area using national data and statistics, info-graphics and case studies. This will attune better to the participants' experiences, interests and needs. There are small text boxes in sections with tips on where and how to do this.

This session can be facilitated in 4 hours, including at least an hour for exercises. It can easily be combined with Module 1 (Gender, Concepts, and mainstreaming gender in the SDGs) for a more extensive full day workshop.

There are examples of some exercises to engage participants, share the available knowledge and encourage peer learning. Do modify them if you know better techniques to make the session more useful and relevant for the participants. If there is more time, you can conduct a field exercise and do group work based on this.

- ✓ You can decide how long you want to spend on certain topics, but please make sure to address all of them, so as not to miss any relevant information out.
- ✓ Please DO make good use of the section on resources and web-links to add more interesting details to your session.
- ✓ DO make good photos of participants interacting during the workshop.
- ✓ DO assign timekeepers and note-takers from the participants to assist facilitation and documentation of the session.

GOOD LUCK!

TIP: You can start this session here with one of the Interactive Exercises from Module 1 (Gender, Concepts, and mainstreaming gender in the SDGs) of this training manual: *Inventory on understanding of gender* or the difference between sex and gender (30-45 minutes). If you did a training with Module 1 earlier, you can check if participants' understanding of gender has changed since.

Concepts and information for the facilitator

Gender, Empowerment, Gender equality and related concepts¹

Gender refers to power relations between women and men, to socially ascribed roles, different rights, responsibilities and opportunities associated with women and men. It relates to what women and men do (tasks, responsibilities), how they behave (dress, interaction in public sphere, decision-making), what they have (capacities, knowledge, assets, access to resources, decision making power):

Gender is different from sex. Sex is biologically determined at birth and usually fixed throughout a life-time, while gender is about power relations and the socio-cultural differences between women and men. It is:

- **Relational**: not women and men in isolation but about relations between them, which are power relations.
- Context, place and time specific: gender relations and responsibilities of women and men are specific to ethnicity, culture, class, caste, sexual orientation, age, location). Gender interacts with them to create diversity among women and men. Not all women are the same, and have the same needs and interests, and not all men

¹ A more extended glossary of gender(related) concepts can be found under Module 1 of this Training Manual

are the same. Ask participants for examples (mother-in-laws and daughter-in-laws; rural and urban women and men).

- **Hierarchical:** differences in tasks, responsibilities, behaviour, and assets of women and men, far from being equally valued, attribute greater importance to male activities and characteristics and produce unequal power relationships.
- **Institutional**: gender norms are taken up in the wider social system that is supported by values, legislation, religion etc., thereby creating and perpetuating a vicious cycle of gender inequality. Ask participants for examples (inheritance rights of women and men, dowry, women's right to birth control, abortion, valuation of care work)
- **Dynamic and time bound:** gender relations change over time depending on changes in the surrounding social, economic and physical environment (war, natural disasters, migration, epidemics) gender relations and responsibilities can and do change. Ask participants for examples.
- **Changeable:** individual men or women and categories of people can change the gender hierarchy by empowering themselves by utilising opportunities.

Gender equality: It is the ultimate *objective of sustainable development*. It means that women and men have equal conditions for realizing their full human rights and potential to contribute to national, political, economic, social and cultural development, and to benefit from the results.

Gender equity: is the *process of being fair to women and men*. To ensure fairness, measures must often be available to compensate for historical and social disadvantages that prevent women and men from otherwise operating on a level playing field.

Equity leads to equality: equity measures will be different for women and for men, often giving women privileges to achieve equality in the longer term. Ask participants for examples (reservation of seats for people of lower castes, for women in public institutions; affirmative action to recruit people with a disability).

TIP: Module 1 (Gender, Concepts, and mainstreaming gender in the SDGs) of this training manual has an interactive exercise explaining the difference between Equality and Equity.

Empowerment: Is both an objective, and a means- more transformative- to achieve sustainable development and gender equality. Empowerment is a process of change enabling people to make choices and transform these into desired actions and results. In doing so, people, not just women, are taking control of their own lives, improving their own position, setting their own agenda, gaining skills, developing confidence in themselves, solving problems and developing self-sufficiency.

NOTE: GWA uses an Empowerment approach as a field methodology and framework for analysis. It consists of 4 different interrelated elements: physical, socio-cultural, economic, and political. The framework is presented in Module 1 **(Gender, Concepts, and mainstreaming gender in the SDGs)** of this training manual. See also http://genderandwater.org/en/gwa-products/capacity-building/empowerment-for-gender-equality

Empowerment = self-help. You cannot empower somebody else but you can provide them with tools to empower themselves, like education, assets, or improved laws and regulations. It can also form the basis of a framework for gender analysis and impact assessment of a development intervention.

Gender mainstreaming: is a process rather than a goal, and it aims to foster transformative change to achieve gender equality and sustainable development. It does by assessing and analysing the implications of any planned action, policies and programmes on women's and men's wellbeing in all areas and across different social and cultural groups.

TIP: See **Module 1** (session 2) and module 4 (Organisational Skills) of this training manual for more information on mainstreaming gender at organisational and project level.

Some global facts and figures on Gender equality and Empowerment of women and girls²

NOTE: As preparation prior to the workshop, ask participants to seek out some statistics on indicators for their countries' situation in gender equality and women's empowerment. For example, the no. of female parliamentarians and women ministers, if there is a difference in statutory legal age of marriage between women and men; and proportion of women in paid employment, etc.

In some areas gender equality and women's empowerment have advanced in recent decades: girls' access to education has improved, the rate of child marriage declined³ and progress was made in the area of sexual and reproductive health and reproductive rights, including fewer maternal deaths. Nevertheless, gender equality remains a persistent challenge for countries worldwide and the lack of such equality is a major obstacle to sustainable development.

- Assuring women's rights through legal frameworks is a first step in addressing discrimination against them. In 2014, 143 countries guaranteed equality between men and women in their constitutions; another 52 countries have yet to make this important commitment. In 132 countries, the statutory legal age of marriage is equal for women and men, while in another 63 countries, the legal age of marriage is lower for women than for men.
- **Violence against women and girls** is a crime, an infringement of their human rights and hinders development. Surveys conducted between 2005 and 2015, in 52 countries, (including only one country from the developed regions) indicated that 21 per cent of girls and women aged between 15 and 49 experienced physical and/or sexual violence at the hands of an intimate partner in the previous 12 months. Estimates on the risks of violence experienced by women with disabilities, women from ethnic minorities and among women above the age of 50 are not yet included, due to data limitations, but are probably higher owing to the heightened discrimination faced by these groups.

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² Compiled from UN ECOSOC document E/2016/75: Progress towards the Sustainable Development Goals. Report of the Secretary-General

³ The most rapid reduction in child marriage overall was recorded in Northern Africa, where the percentage of women married before the age of 18 dropped by more than half, from 29 per cent to 13 per cent, since 1990.

- **Human trafficking disproportionately affects women and girls**, since 70 per cent of all victims detected worldwide are female.
- In 2015, **26** per cent of women aged between **20** and **24** reported that they were married before their eighteenth birthday. This number has only dropped 6 per cent in the last 25 years, and the average figure hides wide disparities between regions and countries. Child marriage percentages are highest in Southern Asia and sub-Saharan Africa, with 44 per cent and 37 per cent respectively. The marriage of girls under the age 15 is also highest in those two regions, at 16 per cent and 11 per cent, respectively.
- The harmful practice of **female genital mutilation/cutting (FGM)** is another gross human rights violation that affects girls and women worldwide. While the exact number of girls and women globally who have undergone the procedure is unknown, representative data shows that at least 200 million have been subjected to the procedure in 30 countries. Even though rates of FGM have been declining over the past three decades, not all countries have made progress and the pace of decline has been uneven. As of 2015, in 30 countries for which data were available, around 1 in 3 girls aged 15 to 19 have undergone the practice, versus 1 in 2 in the mid-1980s.
- In every region, **women and girls do the bulk of unpaid work**, including caregiving, fetching water and fuel for domestic use, cooking and cleaning. On average, women report that they spend 19 per cent of their time each day in unpaid activities, versus 8 per cent for men. The responsibilities of unpaid care and domestic work, combined with paid work, means greater total work burdens for women and girls and less time for rest, self-care, learning and other activities.
- Globally, **women's participation in parliament** has risen very slowly over the last decade from 17 per cent in 2006 to 23 per cent in 2016. This is the same for women in parliamentary leadership positions. In January 2016, women accounted for only 18 per cent of all speakers of parliament.
- Lack of access to land and productive assets, clean water and safe sanitation, reliable and clean energy contributes to increased poverty of women and their heightened vulnerability during crises and extreme events resulting from climate change⁴.



⁴ The sessions on SDG 6, 7, 13, and 15 in this training manual give more detailed information and statistics on gender gaps and challenges in the areas of water and sanitation, energy, climate change, and forests and biodiversity

The figure avobe (from UN Women, Source: Progress of the World's Women 2015/2016) shows some statistics on the gender gap in rights of women at work and to work.

The following figure from Womendeliver.org shows some important reasons why gender and empowerment are critical to achieve sustainable development and many of the SDGs.



SDG 5: Goal, Targets, and Global Indicators⁵

The goal: Achieve Gender Equality and Empower all women and girls

SDG 5 consists of nine targets, of which the first six targets are on outcomes and the last three targets on the means of implementing the outcome targets:

Target 5.1: End all forms of discrimination against all women and girls everywhere

⁵ Compiled from the UN-SDGs website https://sustainabledevelopment.un.org/topics

Target 5.2: Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation **Target 5.3:** Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation(FGM)

Target 5.4: Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

Target 5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life **Target 5.6**: Ensure universal access to sexual and reproductive health and reproductive rights (SRHR) as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action, and the outcome documents of their review conferences

Target 5.a: *Undertake reforms* to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws

Target 5.b: *Enhance the use of enabling technology*, in particular information and communications technology, to promote the empowerment of women

Target 5.c: *Adopt and strengthen sound policies and enforceable legislation* for the promotion of gender equality and the empowerment of all women and girls at all levels

A critique on the SDG 5 targets is that they do not touch upon two issues that could fall under the label of gender issues⁶. LGBTQI (lesbian, gay, bisexual, transgendered, queer, and intersex) issues are completely missing from the agenda, despite the existence of widespread structural discrimination and violence against persons who identify with these categories. Additionally, there is little mention of men in these targets and the word "gender" seems to be synonymous with women, even though engaging men is critical to achieve several of the targets above.

Gender and the global monitoring of SDG 5 targets and indicators

The Inter Agency Expert Group on SDGs (IAEG-SDGs), consisting of member states and including regional and international agencies as observers, has agreed to an official list of indicators⁷ for the global monitoring of the SDG targets. For more information on the official global indicators list for the SDGs and the monitoring framework please visit the IAEG-SDG website https://unstats.un.org/sdgs/indicators/indicators-list/

This official list includes indicators for SDG 5 targets, for example: Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex

⁶ Gender and the Sustainable Development Goals: Moving Beyond Women as a 'Quick Fix' for Development, Governance and Sustainability, Issue Brief Series No. 11 (2015), Michael Denney

⁷ From the Revised list of global SDG indicators (March 2017) in the Report of the IAEG-SDGs E/CN.3/2017/2

- Proportion of women and girls aged 15 years and older subjected to sexual and psychological violence by intimate partners and/or by others in the previous 12 months, by form of violence, age and place of occurrence;
- Proportion of time spent on unpaid domestic and care work, by sex, age and location;
- Proportion of seats held by women in (a) national parliaments and (b) local governments, and proportion of women in managerial positions
- Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control
- Proportion of individuals who own a mobile telephone, by sex

Getting a true picture of progress in the realisation of the SDG 5 targets requires qualitative data as well as quantitative data. It is important also to come up with practical indicators that can be collected and analysed at local level. These can then be compared with the progress on SDG 5 targets shown in national reports.

For all these reasons it is **very important for local CSOs and grassroots groups to be involved in monitoring these and other gender equality indicators at their local level**.

TIP: Ask the participants what they think of these official indicators, and if they know the national agencies collecting data on SDG 5 indicators in their country. Are they reliable? If not, why not? Ask the participants to think of **practical and gender-responsive indicators** that they can monitor at local level for the SDG 5 targets.

Gender equality and Women's Empowerment in the Agenda 2030

TIP: Ask the participants to think of gender dimensions of some of the SDGs before you start this section. Note these down.

Women are essential agents and stakeholders in all the 17 SDGs⁸, with many targets finally recognizing gender equality and women's empowerment as both the objective, and the means to achieve sustainable development. Unlike the MDGs, the Agenda 2030 has a standalone gender goal towards this end, and there is also a more consistent call for sex disaggregation of data across many indicators.

None of the 17 SDGs can be fully realised without tackling gender-discrimination across various spheres (economic, social, and political) and at various levels (legislative, institutional, and societal).

Here follow a few examples of how gender impacts on the achievement of some SDGs and the Agenda 20309:

⁹ Compiled from the 2016 UN Women report 'Women and SDGs' (see 'Resources and Tools' section of this session). Gender aspects of SDGs 6, 7, 13, and 15 are also covered in more detail in the other sessions of this Module 2

⁸ There is increasing recognition of the need to engage men in dialogue and actions to promote gender equality, especially in the areas of Sexual and Reproductive Health and Rights, violence against women, and Water Sanitation and Hygiene (WASH)

SDG 1 (Ending Poverty): Women constitute the majority of poor people globally. Poverty brings increased risks and gender discrimination leaves women less resilient to these. Women are unpaid and underpaid for a lot of their work, and are more likely to be indebted during external crises. Child marriage of girls is linked to poverty, bringing potentially life threatening risks from early pregnancy, and often lost hopes for an education and a better income. Ensuring women's access to basic services, control over land and other forms of property, inheritance,



natural resources, appropriate new technology and financial services is key to achieving SDG 1.

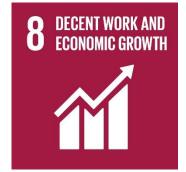


SDG 2 (No Hunger): Women prepare up to 90 per cent of meals in households around the world, yet when food is scarce, women and girls are often the first to eat less. Women comprise more than half of the agricultural labour force in Asia and Africa, yet their potential contribution to food security remains constrained by unequal access to land and other productive assets. Legal reform for more equitable (re)distribution of assets, such as land and credit, and enforcing decent work and income for women in food production are necessary to achieve SDG 2

SDG 3 (Good Health and Well-being): The right to good health is a fundamental human right that is undermined for many women due to reasons ranging from affordability to customary practices keeping them at home, to gender-based violence (GBV) and to lack of access to safe water and improved sanitation facilities. Among women of reproductive age worldwide, AIDS is now the leading cause of death. Not only are women biologically more susceptible to HIV transmission, but their unequal social and economic status reduces their ability to protect themselves and make empowered choices. SDG 3 cannot be achieved unless societies end practices



that critically endanger women's health and well-being—among them, all forms of GBV, child marriage, FGM, dietary restrictions and others. Governments must have pro-active legislation to discourage such practices, and improve the provision of health services for women and girls, including the poorest and survivors of violence.



SDG 8 (Decent Work and Economic growth): In an inclusive economy, decent work means a living wage, workplace safety and protection against discrimination; however these conditions are out of reach for most working women in the world. Globally, women still work at lower rates than men, in some of the worst jobs, and suffer a lot from discrimination at work and sexual harassment. To achieve SDG 8 women must have equal access to decent work, productive resources and financial services and an equal say in economic decisions, including those about the

spending of their income. Governments need to make and enforce laws on equal pay for equal work, better access to employment opportunities, safety from sexual harassment in the workplace, and other critical rights.

SDG 9 (Industry, Innovation, and Infrastructure): Sustainable industrial and infrastructural development needs to take gender dimensions into account so that women have access to services and facilities they need and have a right Research and development is key to this, but most researchers are still men and overlook women in consultation processes. There is poor gender-balance in many critical industries such as construction, manufacturing and energy, with few women employees and decision-makers, leading to gender-blind and unsustainable innovation and service-



provision. Unless women participate equally in planning, building and financing industry and infrastructure, as user, producer and decision-maker, SDG 9 will be unattainable.

SDG 10 (Reduced Inequalities): Despite economic growth inequalities have increased between and within countries, signalling deeper and structural causes of inequality. Gender discrimination intersects with other types of discrimination related to age, disability, ethnicity, economic status and so on, multiplying the burden of inequalities many times over. Women come out worst in this as they experience deeper disparities – in wage, work conditions, access to resources, decision-making power, citizenship, and vulnerability to



external shocks from disasters, climate change, etc. Different and potentially unequal outcomes of policy, technology, and projects for women and men must be recognized and addressed. SDG 10 can only be achieved by empowering women and reducing gender inequality in all spheres, whether by eliminating discriminatory laws, policies and practices that restrict women's ownership of resources, and access to services; or promoting appropriate legislation, policies and actions for decent work, social protection, etc.

SDG 14 (Life below Water): Destructive fishing, pollution and ocean acidification have depleted fish stocks and thrown marine ecosystems out of balance – the immediate effects of which are felt most sharply by coastal communities and those who depend on oceans for livelihoods. Women outnumber men in work related to both large-scale marine fisheries (66 per cent) and small-scale inland fisheries (54 per cent) but earn approximately 64 per cent of men's wages for the same work in aquaculture. They are also



largely concentrated in low-skilled, low paid jobs with irregular, seasonal employment in processing, packaging and marketing; and often work without contracts or health, safety and labour rights protections¹⁰. To achieve SDG 14, women's work in marine- and inland fisheries must be recognised, and all strategies for conservation and sustainable use of marine resources need to consult them and respond to their specific constraints and needs.

SDG 17 (Partnerships for the Goals): The SDGs will mean little without the means to implement them such as finance, technology, capacities, partnerships and data; and women often lose out at the means of implementation. While governments increasingly use gender-

¹⁰ GWA produced a Policy brief for Bangladesh: Gender issues in Aquaculture, detailing these and more issues. See: http://genderandwater.org/en/bangladesh/gwapb-products/knowledge-development

responsive budgeting to direct funds to programmes that benefit women, these reveal hug e funding gaps of up to 90 per cent. Only 5 per cent of foreign aid funds had gender equality



as a principle objective in 2012-2013. And just around a third of countries have an office for gender statistics, even though gender disaggregated data is critical for monitoring progress on gender equality. To achieve Agenda 2030 women must have the right to equal access to and benefits from each of the means of implementation. They also need to lead decisions being made — whether in ministries of finance, companies that produce technologies, statistical offices or institutions charged with global economic policies.

Interactive Exercises

Some of the interactive exercises under Module 1 (Gender, Concepts, and mainstreaming gender in the SDGs) of this training manual are also useful to use for this session. Please, see there. And use these exercises.

Useful Resources and Tools on Gender and SDGs accessed 03/05/17

- 1. Women Sustainable Development Goals. 2016. Women and This report provides a very useful overview of gender statistics, and concerns for each of the 17 SDGs, with practical examples of how UN Women are working to integrate gender Agenda in the 2030. https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=232 2&menu=35
- 2. Bridge Gender Update: The Sustainable Development Goals, Gender and Indicators, 2015.

This update focuses on the Sustainable Development Goals (SDGs) and gendersensitive indicators and highlights key relevant resources featured in the BRIDGE global resources database.

http://www.bridge.ids.ac.uk/updates/bridge-gender-update-sustainable-development-goals-gender-and-indicators

3. Gender and the Sustainable Development Goals: Moving Beyond Women as a 'Quick Fix' for Development, Governance and Sustainability, Issue Brief Series No. 11 (2015), Michael Denney, Boston: University of Massachusetts

This is an interesting and critical analysis of Goal 5 of the SDGs where the author proposes to assess SDG targets by looking at whether they improve women's ability to exercise choice which can be broken down into resources, agency, and achievements.

http://scholarworks.umb.edu/cgs issue brief series/10/

- 4. Sascha Gabizon (2016) Women's movements' engagement in the SDGs: lessons learned from the Women's Major Group, Gender & Development, 24:1, 99-110 Article on the Women's Major Group participation in the negotiations of the UN 2030 Agenda for Sustainable Development, assessing the scope this model of CSO participation in a UN process offers for feminist activism and women's movements to influence international development agendas and policy processes effectively. http://dx.doi.org/10.1080/13552074.2016.1145962
- 5. Sustainable Development Goals and Gender, 2017. Global Forest Coalition This introductory brief on the SDGs and Gender aims to shed light on some of the gender dimensions of realising the goals, as well as the challenges and opportunities going forward. http://globalforestcoalition.org/sustainable-development-goals-gender/

Relevant web resources (accessed 03/05/17)

- UN Sustainable Development Knowledge Platform for SDG 5 https://sustainabledevelopment.un.org/sdg5
- Gender and Development webpage for Key resources on Gender and SDGs <u>http://www.genderanddevelopment.org/page/sdgs-resources</u>
- UN Women webpages on Women and SDGs <u>http://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-5-gender-equality</u>
- Womens Major Group website
 Critical reports, statements, briefs from women's civil society input into the
 policy space provided by the United Nations for the SDGs
 http://www.womenmajorgroup.org/resources

Session 2.2: Mainstreaming gender in SDG 6

Learning objectives

At the end of this session participants will:

- Be aware of the current global scenario in water and sanitation and key gender issues in drinking and domestic water, sanitation, hygiene, and water management
- Know the SDG 6 goal, targets, and some indicators for monitoring them globally
- Be familiar with the most important international agreements and commitments on water and sanitation
- Learn how gender mainstreaming at project level, in policy, and organisational level is crucial to achieving the SDG 6 goal and targets
- Be familiar with key global and regional resources to access general and specific information on the subject
- Know some exercises to engage participants in sharing their experience on the subject and encourage peer learning and networking

Guidelines for the Facilitator/Trainer

The material for this session is presented in short paragraphs with bold headings, so that the latter can be used as a basis for a PowerPoint presentation. However, it is recommended that you adapt the information to suit the participants' experiences, interests and needs. There are **tips** and **notes** on how to do this throughout this session.

This session can be facilitated in 4 hours totally, starting with a short ice-breaker, and then the main presentation interspersed with some interactive exercises (schedule at least an hour and half for exercises).

There are examples of two exercises to engage participants, share the available knowledge and encourage peer learning. Do modify them if you know better techniques to make the session more useful and relevant for the participants. If there is more time, you can conduct a field exercise and do group work based on this. You could also use a case study from your region/country as a home-work assignment if you want to test that participants have understood how to integrate a gender perspective in water and sanitation activities and projects. You can decide how long you want to spend on certain topics, but please make sure to address all of them, so as not to miss any relevant information out.

Please:

- ✓ D0 make good use of the section on resources and web-links to add more interesting details to your session.
- ✓ DO make good photos of participants interacting during the workshop.

✓ DO assign timekeepers, note-takers, and recappers from the participants to assist facilitation, understanding and documentation of the session.

GOOD LUCK

Some facts and figures on the global water and sanitation situation

NOTE: please seek out some statistics on indicators for your countries' situation in access to drinking water and safe sanitation to make this more relevant for your participants. See the **JMP Progress on Sanitation and Drinking Water 2015 data dashboard on** http://data.unicef.org/topic/water-and-sanitation/drinking-water/

The world has changed				
In 1990	In 2015			
Global population was 5.3 billion	Global population is 7.3 billion			
57% of the global population was rural	54% of the global population is urban			
76% of the population used improved drinking water	91% of the population use improved drinking water sources			
sources	663 million people lack improved drinking water sources			
 1.3 billion people lacked improved drinking water 	159 million people use surface water			
sources 346 million people used surface water	68% of the population uses improved sanitation facilities			
 54% of the population used improved sanitation facilities 	1 in 3 people lack improved sanitation			
Nearly half the global population lacked improved sanitation	1 in 8 people worldwide practise open defecation (946 million)			
 1 in 4 people worldwide practiced open defecation (1.3 billion) 	139 countries had greater than 90% access to improved drinking water			
87 countries had greater than 90% access to improved drinking water	3 countries have less than 50% coverage of improved drinking water			
23 countries had less than 50% coverage of improved drinking water	97 countries had greater than 90% access to improved sanitation			
91 100	 47 countries have less than 50% coverage of improved 			
 61 countries had greater than 90% access to improved sanitation 	sanitation			
 54 countries had less than 50% coverage of 				
improved sanitation				
147 countries have met the MDG drinking water target				
 95 countries have met the MDG sanitation target 				
 77 countries have met both the drinking water and the sanitation target 				

Although the global MDG target for drinking water¹¹ was even exceeded in 2015, there is a wide disparity in in coverage and certain regions such as Sub-Saharan Africa and Oceania, rural areas, and poor households continue to be un-served and underserved. Around 1.8 billion people globally use a source_of drinking water that is fecally contaminated. The progress on improved sanitation is much worse: the MDG sanitation target was missed by almost 700 million people. The figure below¹² gives a snapshot of the progress made in drinking water and sanitation, and the challenges still to be overcome.

TIP: you can make this session interactive by asking participants to list what they think are the key challenges, before showing these in a slide.

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¹¹ Halving the proportion of people without access to improved sources of drinking water by 2015

¹² WHO-UNICEF Joint Monitoring Programme 2015 Update report

Key Gender challenges in Water and Sanitation

While everyone is affected by poor water quality and quantity, women are more directly and negatively affected than men due to their responsibilities in household water provisioning and in family health and nutrition. Collectively women and girls spend as much as 200 million hours every day fetching water¹³, often risking their personal safety when walking in remote areas and conflict zones. This is a huge opportunity cost which limits the participation of women and children in education, income-earning activities, and social and political groups, and thus also their empowerment and their contribution to the world economy and development.

When water is of a poor quality it negatively affects the health of family members, especially of children, and increases the burden of care of women. Worldwide, more than 2 million people die every year from diarrhoeal diseases. Poor hygiene and unsafe water are responsible for nearly 90 per cent of these deaths and mostly affect children¹⁴. Sick children and family members further increase the care burden of women, limiting the time they can spend in other activities.

Access to regular and safe water is embedded in power relations of class, caste, gender and ethnicity. People without access are mainly poor, concentrated in rural areas and slums around big cities, and in developing countries. Women are over-represented among these groups. Low caste and minority women and men lose out at all water related fronts, because the mainstream population often does not allow them to touch taps and water-points.

Women and girls suffer the most from lack of access to safe and adequate sanitation facilities due to their physical make-up (they menstruate, get pregnant, and bear children), and their responsibilities in hygiene management, care-giving, and domestic waste disposal. Thousands of women and girls risk physical harassment, violence, and even rape trying to relieve themselves in open spaces. Girls often drop out of education due to lack of suitable sex-specific sanitation facilities. Cultural taboos about menstrual health management make it difficult for girls and women to discuss their problems and find solutions to it.

The focus on 'women only' in local WASH interventions undermines the long term sustainability of these interventions as without engaging their male family members and community leaders the broader context of factors limiting their empowerment, and decision-making continue to prevail.

Millions of poor women, men, and children risk their lives every day managing domestic and solid waste in cities in Asia, Africa, and Latin America, under extremely dangerous and unhygienic conditions. Their important contribution mostly goes unrecognised as it is part of the informal economy, and efforts to regulate and improve their working conditions are very fragmented and as yet, ineffective.

¹³ UNICEF news report on http://www.un.org/sustainabledevelopment/water-and-sanitation/

¹⁴ 'Clean water and Sanitation: why it matters', SDG 6 brief, www.un.org/sustainabledevelopment

Water scarcity affects more than 40 per cent of the global population and is projected to rise – this has critical gender implications. Over 1.7 billion people are currently living in river basins where water use exceeds recharge. The under-representation of women at all levels of decision making, their dominant responsibilities in unpaid household work, and their over-representation in informal, vulnerable, and casual employment means that they lose out due to increased competition for scarce water from agriculture, industry, and energy. IWRM policies, strategies and practices are necessary, but most WASH organisations and government agencies are not aware of the importance to work together with other water-using stakeholders.

External shocks from climate change, natural and humanitarian disasters, and economic recessions deepen existing gender inequalities in access to water and sanitation, with women suffering the most from poor water quality (saline, arsenic contamination, etc.), breakdown of water and sanitation infrastructure, and inadequate facilities in rehabilitation shelters and refugee camps.

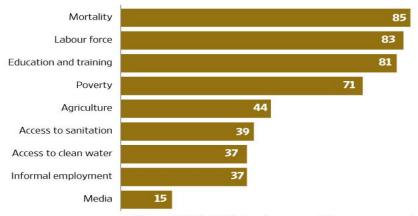
More than 80 per cent of wastewater resulting from human activities is discharged into rivers or sea without any treatment, leading to **pollution of scarce water resources and the environment**¹⁵. Improper management of wastewater further deteriorates the quality of scarce water resources used by women for drinking, homestead farming, and hygiene management.

Laws and mechanisms regulating water resources management are often gender neutral and do not consider the different needs, constraints, and access and control of resources of different women and men. Even when gender responsive policies are made, the lack of coordination between different line ministries, a designated budget for gender activities and, lack of indicators for monitoring progress, and lack of qualified staff makes it difficult to see these policies translated into practice.

ABOUT HALF OF ALL COUNTRIES DO NOT PRODUCE ANY GENDER-DISAGGREGATED STATISTICS RELATED TO WATER

Overall, 45.2% of countries do not produce any gender statistics related to water

Percentage of countries "regularly" producing sex-disaggregated statistics on specific issues



Source: UN World Water Assessment Programme report

¹⁵ http://www.un.org/sustainabledevelopment/water-and-sanitation/

There is a **lack of gender disaggregated data on the water and sanitation sector**, and this poses a big problem to track gender progress in water and sanitation goals globally and even regionally. See figure below from a 2015 report.

Water supply institutions (public and private) are male dominated even though most of their customer base is women. They neglect gender considerations in staffing, organisational policy, and tend to be supply driven rather than demand responsive. Failure to consult different women and men consumers (rich, poor, rural, slum-dweller) in the development of water supply schemes often results in poor technology choices and location, and inappropriate payment and maintenance systems that lead to rapid breakdown.

SDG 6 Goal: Ensure availability and sustainable management of water and sanitation for all

TIP: Ask participants if they know what this goal and its targets are before you show the slide. Do they think their work is related to the goal and its targets?

SDG 6 expands the MDG focus on drinking water and basic sanitation to now cover the entire water cycle, including the management of water, wastewater and ecosystem resources¹⁶. Not only does this SDG have strong linkages with all the other SDGs, but it forms the basis to achieve them. Progress on SDG 6 would in fact contribute towards achieving much of the 2030 Agenda, such as the goals on poverty elimination, food security, improved health and education, empowerment of women and girls, economic growth, sustainable cities, and reduced inequalities.

SDG 6 contains eight targets, six of which are on outcomes across the entire water cycle, and two targets on the means of implementing the outcome targets. However, gender dimensions of water and sanitation are not explicit in the goal or in the targets with only target 6.2 explicitly mentioning needs of "women, girls, and those in vulnerable situations" and target 6.b underscoring the need of capacity building and participation of "local communities in improving water and sanitation management". Neither do the global indicators emphasize the need for sex- and gender disaggregation in data collection to monitor if the progress in water and sanitation targets is gender equitable and leading to empowerment of poor women, men, and vulnerable groups.

Targets and global indicators for monitoring SDG 6¹⁷

The Inter Agency Expert Group on SDGs (IAEG-SDGs), consisting of member states and including regional and international agencies as observers, has agreed to an official list of indicators ¹⁸ for the global monitoring of the SDG targets. For more information on the official global indicators list for the SDGs and the monitoring framework please visit the IAEG-SDG website.

¹⁶ http://www.unwater.org/sdgs/a-dedicated-water-goal/en/ (accessed 10/10/16)

¹⁷ Compiled from the UN-SDGs website https://sustainabledevelopment.un.org/topics

¹⁸ From the Revised list of global SDG indicators (March 2017) in the Report of the IAEG-SDGs E/CN.3/2017/2

https://unstats.un.org/sdgs/indicators/indicators-list/

Target 6.1 "By 2030, achieve universal and equitable access to safe and affordable drinking water for all"

Indicator 6.1.1.Percentage of population using safely managed drinking water services

Target 6.2 "By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations"

Indicator 6.2.1.Percentage of population using safely managed sanitation services including a hand washing facility with soap and water

Target 6.3 "By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and increasing recycling and safe reuse globally"

Indicators: 6.3.1.Percentage of wastewater safely treated 6.3.2.Percentage of water bodies with good water quality

Target 6.4 "By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity"

Indicators: 6.4.1.Percentage change in water use efficiency over time 6.4.2.Level of water stress: freshwater withdrawal in percentage of available freshwater resources

Target 6.5 "By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate" Indicators: 6.5.1.Degree IWRM implementation (0-100)

Target 6.6 "By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes"

Indicator 6.6.1.Percentage of change in water-related ecosystems extent over time

Target 6.a "By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies" Indicator 6.a.1.Amount of water and sanitation related Official Development Assistance that is part of a government coordinated spending plan

Target 6.b "Support and strengthen the participation of local communities in improving water and sanitation management" Indicator 6.b.1.Percentage of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

The UNICEF-WHO Joint Monitoring Program for water supply and sanitation is responsible for global monitoring of targets 6.1 and 6.2, while a database – GEMI – is being developed for integrated monitoring of targets 6.3 to 6.6 across the entire water cycle.

TIP: Ask participants if they know which national agencies are collecting data on these indicators in their country. If not this could be a homework assignment for them.

Gender sensitive and participatory monitoring of SDG targets

As mentioned above, there is a critical need not to just know that targets are met, but that they are met for all - highlighting the need for data disaggregation, by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts. It is not clear how this information will come out of the global indicators mentioned above, which are mostly quantitative. It is therefore very important that national and local CSOs make qualitative indicators that are gender-sensitive and allow participatory monitoring by local women and men, especially the poorest and most vulnerable.

TIP: Ask the participants to think of better indicators for monitoring the SDG targets. Perhaps to combine with Exercise 2 (from the later part of this session)

Gender concepts in drinking and domestic water and sanitation

WASH: The term WASH is a cornerstone of the gender discourse and practice on drinking water and sanitation as it is now widely understood that gendered behaviour in hygiene management is crucial to the sustainability and effectiveness of interventions in drinking water and sanitation. WASH stands for water, sanitation, and hygiene and WASH approaches, at community level and in schools, work towards facilitating behavioural change alongside participatory water and sanitation planning and implementation.

WASHplus recognizes the importance of integrating water, sanitation, and hygiene into other development priorities, such as nutrition, to achieve the overall objective of healthy households and people.

Engagement of men and boys in WASH: interventions in WASH are not only about women, but even more so to do with men and patriarchal systems that determine who fetches water when it is not easily accessible, who cleans toilets, who influences hygiene behaviour of family members, who has power to decide about expense and design of toilets, and who is worst affected when water and sanitation is inadequate or inexistent. Community based WASH initiatives are increasingly recognising the need to involve men and boys in sustainable and gender-equitable WASH management.

IWRM or Integrated Water Resources Management: Access, quality and availability of water for drinking and domestic use, and sustainable sanitation is very much influenced by water use in other sectors such as agriculture, aquaculture, industry, energy, and environment – a fact that is recognized in the Agenda 2030 as well. The IWRM approach

promotes the coordinated development and management of water, land and related resources to combine social equity and economic efficiency goals with environmental sustainability, through gender mainstreaming and improved water governance.

Explanation of gender related concepts such as Gender+ (or gender and diversity) and Gender mainstreaming can be found in Module 1, Session 1.1 and Session 1.2 of this manual.

Benefits of Mainstreaming Gender in Water and Sanitation¹⁹

TIP: Ask the participants to name a few benefits of mainstreaming gender in Water and Sanitation before you show the slide.

Involving women and men users in planning, designing, implementing, and monitoring interventions in WASH interventions has direct and indirect benefits:

Improved efficiency of water use and management

- There is reduced water loss and more regular and cost-effective maintenance when both women and men participate in technology choice and maintenance arrangements.
- Water management becomes more effective and there is broader service coverage when women's interests and concerns, such as the location of water points and public latrines, are taken into account and their expertise recognized.
- Knowledge of gendered water use and alternative water sources used by women can improve adaptability during periods of water shortage.

Better acceptance and sustainability of water supply and sanitation systems

- Participation of local women and men in the construction and maintenance of local water supply systems and household toilets substantially reduces costs.
- Conflicts can be reduced by giving attention to and respecting the views of both men and women about what can and cannot work, and this also builds people's social acceptance of the water system or toilets.

Improved protection of water resources

- Protection of water supply sources: Women's and men's active participation in water supply projects can improve attempts to identify and resolve pollution and land use problems in the catchment.
- Improved health conditions: Gender analysis can help identify gender specific reasons for exposure to water-borne diseases and inform the development of targeted responses.
- Reduced water pollution from open disposal of harmful or untreated solid waste by identifying eco-friendly waste disposal and treatment solutions with local women and men that are safe and financially and technically viable.

¹⁹ Adapted from CAP-net, GWA 2014. Why Gender Matters in IWRM: A tutorial for water managers

Empowerment: social, economic, political, and physical²⁰

- Improved WASH services can contribute to the reduction of drudgery work of women and girls and increase their opportunity to engage in other social, political and income-

generating activities, contributing to their empowerment.

- The change from open defecation to having access to a clean toilet close by, gives women a sense of dignity. Women feel empowered as active members of WASH- and Village Water Committees where (and if) they play a role in decision making in planning, implementing and monitoring water and sanitation facilities.
- Reduced Gender Based Violence (GBV): Violence against women, elderly and children, and disabled people can be reduced drastically when gender sensitive decisions are made about location, privacy and other features of sanitation facilities. This adds to women's and men's physical empowerment.
- School WASH facilities for girls lead to higher school attendance rates of girls, and significantly reduces drop-out rate. Education on Menstrual health management (MHM) also plays an important role in empowering adolescent girls, reducing illness from poor menstrual hygiene, and keeps them longer in education.
- Reduction in water-related diseases morbidity/mortality and ill health from poor menstrual hygiene, not only has a positive impact on the public health sector, but also reduces women's care burden, freeing them up for engagement in other activities. Reduced expense on health also improves their economic status.

How to mainstream gender in water and sanitation?

Maximizing the potential benefits of the gender approach to sustainable water supply system and sanitation development needs an enabling environment at three levels: a) legal framework and policies; b) institutional arrangements; and c) local activity/project management. Here follow some ways you can contribute to facilitating this enabling environment as an NGO, CBO, local women's group, or even as an individual. You can select

WATER AND GENDER IN AFRICA. 90% **OF THE WORK** OF GATHERING WATER AND WOOD IS DONE **BY WOMEN** Reducing the distance **Women and girls** to a water source from 30 to 15 min often spend up to 6 HOURS every day fetching water ding to a study With the same access **Involving women** to productive resources as men, including water, the effectiveness women could increase water projects yields on their farms by 6 to 7 times 20-30% and lift 150 million UN WATER.ORG

²⁰ GWA has developed an Empowerment framework for gender analysis and monitoring, which can be used for monitoring in WASH. This paper can be downloaded from http://genderandwater.org/en/gwa-products/capacity-building/empowerment-for-gender-equality

which is most relevant and accessible for you. You will find that starting with one of them will equip you for others, and that should get you rolling!

TIP: This is a good point to conduct Exercise 1: Sharing experiences on gender and WASH (from the 'Interactive Exercises' section).

Legal Framework and Policies

Be informed and link up: review key global agreements, commitments on water and sanitation such as the very recent 2030 Agenda on Sustainable Development, and national laws and policy on water and sanitation in your country. Find out your countries position on the commitments, their status of ratification, and the global and national mechanism for monitoring them. Engage with advocacy groups such as Civil Society and Women's Major Group to make sure that governments keep to their international commitments. Join or begin national campaigns to make policies more inclusive and gender sensitive. Subscribe to relevant mailing lists so you have access to current information on meetings, documents, processes related to water and sanitation.

<u>Make a baseline</u>: assess the existing position and status of women and men in relation to water and sanitation laws and policies in your country, and check whether budget allocations are balancing gender inequities in the water and sanitation sector.

<u>Be seen and be heard</u>: engage with national and local public authorities in water and sanitation, join their stakeholder discussions and bring up your local issues there. Invite them to join your local consultations and speak to the stakeholders²¹.

<u>Gather qualitative and quantitative evidence</u>: Pro-poor, gender sensitive, participatory impact studies can provide hard evidence (numbers and case-studies) of the influence the climate crisis has on women and men of the poorest and most vulnerable categories, and how this affects their access to safe domestic and drinking water. Identify those people who are likely to lose out, as result of interventions. Policy makers need this kind of information to make their laws more inclusive and gender-responsive.

<u>Build your capacity and that of others</u>: Join trainings, webinars, workshops on gender in water and sanitation, and encourage other colleagues, especially male, to join as well. Give trainings to women and men, and local water and sanitation organisations to raise their awareness. Build your capacity for gender-sensitive advocacy, media communication, and monitoring, and use it to train others and/or encourage them to join trainings as well.

<u>Engage in advocacy at all levels</u>: Seek guarantees for equal entitlement to and protection of women's water and sanitation rights. Advocate for an explicit recognition of women as users and managers in water and sanitation laws and policies. Advocate for legal mechanisms to allocate and protect access of the poorest to basic water supply. Advocate

²¹ Select who you invite with care and with the goal that they can be a good ambassador for your cause in their organisation, and your point of contact.

for social protection policies and mechanisms that increase social infrastructure investment in domestic and drinking water and in safe and appropriate sanitation.

Network with like-minded groups and organisations: Join with them to form pressuregroups for demanding accountability of policy makers and (local) public authorities and enforcement of gender sensitivity in drinking water and sanitation interventions.

Make mass media and social networking work for you²²: make explicit the right and urgency of women's involvement in structures and mechanisms for citizen participation. Give voice and face to the women and men you work with, especially the most vulnerable, using social networking media such as Facebook, Twitter, Instagram, and making press releases and documentaries.

Institutional arrangements

Please refer to Module 4 on Organisational skills, which explains in more detail the different aspects of mainstreaming gender at organisational level, such as in staffing, budgeting, monitoring and communication activities.

Local activity planning/project management

<u>Carry out participatory assessments for water and sanitation projects</u> with attention to the following:

- Differences in needs, demands, practices and motives among women, men, boys and girls with respect to water and sanitation facilities. For example schools should have separate toilets for boys and girls, and female toilets should have water, space to dry clothes and waste disposal facilities so that women and girls can manage their menstruation in an adequate manner.
- Differences in control of and access to vital resources that enable/disable people to access improved sanitation.
- Take different needs of physically challenged women and men into account
- Get information from relevant stakeholders about possible local resources and skills. like local subsidies for school toilets, grants for low-income groups, and local trainings on toilet construction.

Gender-sensitive Planning

- Allow a gender-balanced expression of ideas, targeting women's opinions about household water use, accessible options for safe sanitation, technology and management.
- Seek equitable participation at all levels, considering not only gender but other variables such as wealth, age, and education.
- Develop gender-sensitive indicators in consultation with relevant stakeholders and collect sex- and gender disaggregated data on women's and men's experiences of water and sanitation services.
- Create a local gender equitable agenda for planning, implementation, and maintenance of water and sanitation facilities

²² There is a Media Training Toolkit of the Women2030 project you can use to learn how to do this. This can be downloaded on http://globalforestcoalition.org/resources/

- Bring relevant stakeholders such as local public authorities, community health workers, teachers together in discussions with local women and men for planning activities in water and sanitation.

Gender equitable Implementation

- In community managed water and sanitation projects, both women and men need training and tools for operation and maintenance of local water supply systems, as well as for the construction of different types of sanitary facilities and water storage facilities (for rainwater harvesting).
- Engage not only local women but also local men to take on roles as WASH promoters, teaching about safe water handling and storage, hygiene and (solid) waste disposal and use (as compost, sludge) for the prevention of sanitation-related disease transmission within their communities.

Gender sensitive monitoring

- Involve women and men in developing gender-sensitive indicators for monitoring satisfaction and use of water and sanitation services by local women, men, and especially most vulnerable groups.
- Recruit and train local women, youth, excluded groups in monitoring indicators for their groups, and compensate them for their efforts.
- Collect and use sex-disaggregated data.
- Collect qualitative data to reveal changes in perceptions, attitudes, and behaviour which may not be revealed by quantitative data.
- Spread the data gathered at field to policy makers, donors, and general public through advocacy and media outreach, so that information collected helps to bridge the gap between policy and local planning.

Some International Agreements and Commitments on Human rights to Water and Sanitation²³

TIP: look for your own countries ratifications of international agreements treaties to make this more relevant for your participants.

March 1977, Mar del Plata UN Water Conference: The Action Plan from the United Nations Water Conference explicitly recognised water as a right for the first time declaring that, 'All peoples, whatever their stage of development and social and economic conditions, have the right to have access to drinking water in quantities and of a quality equal to their basic needs.'

January 1992, International Conference on Water and Sustainable Development plus IWRM/ Dublin Conference: Principle 4 of the Dublin Conference states that 'it is vital to recognise first the basic right of all human beings to have access to clean water and sanitation at an affordable price'

²³ The WECF manual on Human Right to Water and Sanitation provides an overview of relevant regulations and conventions on the subject, and is a useful advocacy tool. It can be accessed from http://www.wecf.eu/english/publications/manuals.php

June 1992, United Nations Conference on Environment and Development/ Earth Summit: Chapter 18 of Agenda 21 endorsed the resolution of the Mar del Plata Water Conference that all peoples have the right to have access to drinking water, and called this 'the commonly agreed premise'

2000, The Millenium Summit led to the adoption of The Millennium Declaration and subsequent Millennium Development Goals. MDG 7 on Environmental Sustainability refers specifically to water in Target 10: reduce by half the proportion of people without access to safe drinking water by 2015. In 2002 at the World Summit on Sustainable Development (WSSD) sanitation was latterly included in Target 10 in addition to water access: 'Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation'

July 2010, through Resolution 64/292, the United Nations General Assembly explicitly recognized the human rights to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realisation of all human rights. The resolution calls upon States and international organisations to provide financial resources, capacity-building and technology transfer to help countries, in particular developing countries, provide safe, clean, accessible and affordable drinking water and sanitation for all.

January 2016, 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development — adopted by world leaders in September 2015 at a historic UN Summit — officially came into force. Over the next 13 years, with these new Goals, countries will mobilize efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind. There is now a stand-alone goal (no. 6) for universal access to water and sanitation.

Interactive Exercises²⁴

1. Sharing experiences on gender and WASH

Sort of exercise: Plenary discussion for peer learning

Time allocation: 15-30 minutes

Needs/requirements for this exercise: Question/Statement for discussion

Description of the exercise

After having explained that both women and men need to be involved in the design, planning and implementation of any WASH activities, the facilitator asks participants to share examples from their own project where participation of poor women and men and dialogue between different stakeholders (local public authorities, project staff, target group) resulted in more appropriate and sustainable WASH interventions.

This will lead to peer learning and generate good examples for other participants to use and adapt to their own context.

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²⁴ The WECF ToT Manual 'Gender in Sustainable Development' has a collection of exercises on gender sensitive participatory techniques for training of trainers which are also relevant for the subject of WASH. It can be accessed at http://www.wecf.eu/english/publications/

2. Linking your work to SDG goal and targets

Sort of Exercise: interactive group work

Time allocation: 1 hour

Needs/requirements for this exercise

- A flipchart or small boards,
- Different colour of markers, cards

Description of the exercise

The facilitator should write down clearly the eight SDG 6 targets on cards (one target per card). The participants are then divided into four groups, where each group gets two SDG target cards. Each group needs to discuss and come up with two specific local indicators per target, with a strategy/methodology for monitoring them. These should be written down on a flipchart paper. The participants will get 30 minutes for the group work, and should be instructed to allocate a time-keeper, note-taker, and presenter for their groups.

Finally, each group will get about 5 minutes to present their indicators to the other groups, with a small explanation of how they will monitor them.

After all the groups have presented, the facilitator can draw out some learning from the exercise and make some recommendations (for sex-disaggregated data, participatory action research, qualitative methods)

Useful resources and tools on Gender and WASH

Tools (accessed 18/10/16):

- 1. African Development Bank; African Development Fund, 2009. **Checklist for gender mainstreaming in the water and sanitation sector.**
 - http://www.afdb.org/en/documents/document/checklist-for-gender-mainstreaming-in-the-water-and-sanitation-sector-20014/
- 2. Asian Development Bank, 2006. **Gender checklist: water supply and sanitation** (also available in Russian, Nepali, Bangla, and Bahasa) https://www.adb.org/documents/series/gender-checklists?page=2
- 3. Gender equality & the rights to safe drinking water & sanitation 2016 UN Special Rapporteur report to the Human Rights Council 33 (also available in French, Spanish, Arabic, Chinese, and Russian) http://ap.ohchr.org/documents/dpage e.aspx?si=A/HRC/33/49
- 4. CAP-net, GWA 2014. Why Gender Matters in IWRM: A tutorial for water managers (available also in interactive and popular versions) http://genderandwater.org/en/gwa-products/capacity-building/tutorial-forwater-managers-why-gender-matters
- 5. GWA, UN-Habitat 2006. **Gender mainstreaming Toolkit for Water and Sanitation actors** (focus on African cities, with case studies from the region) *mirror.unhabitat.org/downloads/docs/2527_1_595415.pdf*
- 6. **UN-Water Policy brief on Gender, Water and Sanitation**, 2006 www.un.org/waterforlifedecade/pdf/un_water_policy_brief_2_gender.pdf

- 7. UN-Water Expert Group Meeting. **Gender disaggregated data on Water and Sanitation,**2008

 www.unwater.org/downloads/EGM report.pdf
- 8. WECF, 2014. **Developing a Water and Sanitation Safety Plan (WSSP):** This manual consists of 3 parts- A, B, and C, targeted to NGO's, CBO's, Water operators; local authorities, teachers/schools and aims to enable them to develop a WSSP for small-scale water supplies as well as to assess the quality of sanitation facilities such as school toilets.

http://www.wecf.eu/english/publications/

Relevant web resources (accessed 18/10/16)

- Gender and Water Alliance (GWA); pages on 'domestic and drinking water', and 'sanitation'
 - http://genderandwater.org/en/water-sectors
- Sustainable Sanitation Alliance SuSanA WG7 http://www.susana.org/en/working-groups/community-rural-and-schools
- UN-Habitat (Water and Sanitation Trust Fund Impact study series, UN-Habitat channel, UN-Habitat Gender in Water and Sanitation) www.unhabitat.org
- UNICEF Water, Sanitation, and Hygiene webpages <u>www.unicef.org/wash/</u>
- UN Sustainable Development Knowledge Platform for SDG 6 https://sustainabledevelopment.un.org/sdg6
- Water Aid-Women website (also WaterAid channel on YouTube)
 www.wateraid.org/uk/what-we-do/the-crisis/women
- World Bank (Sanitation, Hygiene, and Wastewater resource guide) http://water.worldbank.org/shw-resource-guide/promotion/gender-hygiene-and-sanitation
- WHO (Water, Sanitation and Health; Global Analysis and Assessment of sanitation and drinking-Water or GLAAS) http://www.who.int/water_sanitation_health/glaas/en
- WHO/UNICEF Joint Monitoring Programme (JMP) for Water supply and sanitation (2015 update report, post-2015 brochure, methodological note on SDG monitoring)
 - http://www.wssinfo.org/
- Water Supply and Sanitation Collaborative Council or WSSCC (resources on gender and MHM, channel on YouTube)
 http://wsscc.org/resources/?sft_category=equality
- Women Engage for a Common Future (WECF) publications in several languages on WASH in Schools, WSSP, and low-cost technological options in sustainable sanitation and water treatment http://www.wecf.eu/english/publications/

Session 2.3: SDG 7 - Gender and Access to Reliable, Affordable and Clean energy

Introduction:

The material for this session is presented in short paragraphs, tables and info-graphics, so that it can be used as a basis for a PowerPoint presentation. It is strongly recommended that you adapt the information to make it relevant to the situation in your region, country, and local area using national data and statistics, info-graphics and case studies. This will attune better to the participants' experiences, interests and needs.



The workshop is designed for one day, which includes exercises proposed to engage participants, share the available knowledge and encourage peer learning. If there is more time, you can conduct a field exercise and do group work based on this. You could also Guidelines for the Facilitator/Trainer. Use a household survey on energy use as a home-work assignment if you want to give a better understanding of the local energy situation.

Please consider how to encourage women's participation, especially from poor and marginal groups. The workshop schedule should be adapted to women's needs. Take it into consideration whilst choosing location & time planning. An option of providing child care during the training might be considered as well.

You can decide how long you want to spend on certain topics, but please make sure to address all of them, so as not to miss any relevant information out. You may decide to exclude parts if you have no need of them.

Learning objectives

At the end of this session participants will:

- Be familiar and able to explain the economic, social, political and cultural dimensions of gender and energy
- Share experiences and jointly reflect on energy use /, and on improving the well-being of women and men using energy efficient technologies
- Raise awareness of gender differences in terms of access/ control / use of energy in different geographical and socio-economic contexts (rural-urban, rich-poor)
- Know some exercises to engage participants in sharing their experiences on the subject and encourage peer learning and networking
- Learn about the current global challenges in energy efficiency and their gendered impact
- Know the SDG 7 targets, and some indicators for monitoring them globally and nationally
- Learn some examples how to improve energy use at household level in communities (best practices)
- Learn how to integrate a gender approach in project activities related to energy efficiency and renewable energy
- Be familiar with key global and regional resources to access general and specific

information on gender and energy.

Didactic approach

The didactic approach of the module is characterised by:

- 1. **Learning in the local context and making a link with global trends**: the workshop is conducted with local CSOs and the local context (village / rural community) constitutes the frame of reference for the learning and reflection on global issues concerning gender and energy.
- 2. **Learning together and from each other**: The learning process is based in the knowledge and experience of the participants. Teaching and lecturing should be avoided: everybody is a "learner" and a "teacher" at the same time.

Methodological diversity to keep participants interested and engaged: i.e. changing between plenary discussions, group work, individual reflection and practical demonstrations.

Please:

- ✓ DO make good use of the section on resources and web-links to add more interesting details to your session.
- ✓ DO make good photos of participants interacting during the workshop.
- ✓ D0 assign timekeepers and note-takers from the participants to assist facilitation and documentation of the session.

Some facts and figures on Energy and Gender

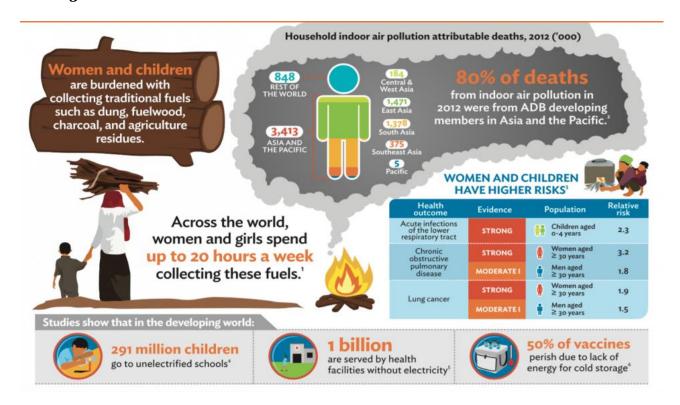
- More than 40% of the world's population, mostly poor rural households, still use solid fuels (wood, coal, charcoal, dung and agricultural rests) for their household needs such as cooking and heating because clean energy alternatives are often not available and/or affordable for them.
- 4,3 million people die yearly from diseases related to indoor air pollution: pneumonia, chronic lung disease, lung cancer due to use of inefficient fuels and technologies for cooking and household use (WHO, 2016 data). More than 60% out of these deaths are of women and children²⁵ due to the time they spend indoors and in household tasks like cooking and heating.
- **Indoor pollution is the second largest health risk** (in sub -Saharan Africa, the single biggest risk factor) **for women and girls** whilst for men this is the fifth biggest risk factor after tobacco smoking, alcohol use and high blood pressure (WHO, Burning energy, 2016)
- Women are also mainly responsible for fuel gathering. Fuel gathering requires considerable time and constrains income-generating activities for women, and takes children out of school. In less secure environments, women and children are at risk of injury and violence during fuel gathering.
- A billion people (around 20 percent of the world's population) do not have access to
 electricity. Access to electricity would make enormous differences in women's household

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²⁵ http://www.who.int/mediacentre/factsheets/fs292/en/

work and drudgery, and would help them to shift from being mostly informal traders to larger scale business operators and entrepreneurs.²⁶ Children and youth would be able to put in more hours of study with lighting after dusk.

 Non-renewable harvesting of biomass causes deforestation, and use of polluted fuels in households contributes to climate change which has a gendered impact. You can find more information on climate change and gender in the session on SDG 13 in Module 2 of this training manual.



The figure above (from ADB) gives an overview of the poverty-energy-gender nexus

TIP: You can find more infographics on gender and energy at: https://ourworldindata.org/indoor-air-pollution/

Gender mainstreaming into (international) energy policies 27

Gender mainstreaming is the overarching strategic approach for achieving gender equality and women's empowerment at all levels, as mandated by the Beijing Platform for Action. Even though the approach has been known and practiced since over 20 years, it has not been applied systematically and therefore responses and impacts are still limited²⁸. A major

²⁶ ENERGIA 2011. Mainstreaming gender in energy projects. A practical handbook, WB Data

²⁷ ENERGY AND GENDER ISSUES IN RURAL SUSTAINABLE DEVELOPMENT, Yianna Lambrou and Grazia Piana, Rome 2006

²⁸ E.g. the Agreed Conclusions (E/CN.6/2014/L.7 2014, para.37) of the 58th Session of the Commission on the Status of Women (CSW) in 2014 summarised in para.37: "progress on the MDGs for women and girls has been limited owing to the lack of systematic gender mainstreaming and integration of a gender perspective in the design, implementation, monitoring and evaluation of the Goals."

challenge is the context-specific approach requiring teams with diverse expertise and the willingness to cooperate across disciplines.

Specifically, about energy, the Beijing Platform called on governments to support equal access for women to sustainable and affordable energy technologies, using participatory need assessments in their design of energy plans.

Many international agreements and commitments nowadays call for integrating gender perspectives in energy policies and programmes. The 2016 extension of the UNFCCC Lima Work Programme on gender provides a new opportunity to advance the progress made towards integrating gender in UN climate policies by helping to ensure their implementation in an effective and cohesive manner. Furthermore, Parties requested that a concrete action plan, a 'Gender Action Plan' (GAP), be developed in 2017 in order to set clear timelines and responsibilities for undertaking and monitoring these activities.

On the way to SDG 7: Energy and MDG's

In September 2000 world leaders adopted a global partnership to reduce extreme poverty and related targets, with a deadline of 2015, that have become known as the **Millennium Development Goals**.

There was no specific Millennium Goal on Energy, but improved energy practices contributed to all eight MDG's. There is a strong link between energy and poverty, health and environment, as well as with gender equality and women's empowerment. Please find more details on the links between the MDG's and energy in the table 'Cracking the energy code' as presented by WHO in the publication: Household energy and the Millennium Development Goals, page 2: http://www.who.int/indoorair/publications/fflsection2.pdf (see also under 'Resources and Tools' section of this session).

To ensure the inclusion of sustainable energy issues in the international Agenda and implementation of the MDG's the **Sustainable Energy for All** (SE4All) initiative was created by the UN Secretary-General in 2011. This initiative aims to ensure universal access to clean and modern energy.

A resolution by the UN General Assembly in 2012 declared it as **the International Year of Sustainable Energy for All**: a lot of activities and commitments promoting a sustainable energy future took place that year. More information on this can be found here: http://www.un.org/en/events/sustainableenergyforall/index.shtml

Also, in the outcome of the 2012 Rio+20 Conference on Sustainable Development (The Future We Want), Member States: (1) recognise the critical role that energy play in the development process; (2) emphasise the need to address the challenge of access to sustainable modern energy services for all; and (3) recognise that improving energy efficiency, increasing the share of renewable energy and cleaner and energy-efficient technologies are important for sustainable development.

However, despite all efforts and progress made, today, almost the same number of people cook with polluting energy systems as 30 years ago²⁹ due to population growth. Women remain marginalized from decision-making processes in relation to energy, and gender-sensitive energy projects and research are far and few between.

SDG 7: Ensuring access to affordable, reliable, sustainable and modern energy for all

SDG 7 adopted in September 2015 by 193 nations, aimed to "ensure access to affordable, reliable, sustainable and modern energy for all" by 2030.

Table 2: The five targets and proposed indicators for the SDG 7³⁰:

Table 2. The five targets and proposed indicators for the 3Dd 755.					
Targets of SDG 7	Indicators				
7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	7.1.1 Proportion of population with access to electricity7.1.2 Proportion of population with primary reliance on clean fuels and technology				
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	7.2.1 Renewable energy share in the total final energy consumption				
7.3 By 2030, double the global rate of improvement in energy efficiency	7.3.1 Energy intensity measured in terms of primary energy and GDP				
7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	7.a.1 Mobilized amount of United States dollars per year starting in 2020 accountable towards the \$100 billion commitment				
7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support.	7.b.1 Investments in energy efficiency as a percentage of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services				

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²⁹ WHO, Burning energy, 2016

³⁰ Official list of SDG indicators: http://unstats.un.org/sdgs/indicators/indicators-list/

The progress on achieving of SDG 7 per country can be seen using a toolkit developed by Se4ALL and the World bank RISE: Regulatory Indicators for Sustainable Energy http://rise.worldbank.org/

TIP: Show this one-minute introduction video: https://youtu.be/pB4-ZCZgMy8 and check the progress on SDG 7 for your country

The official indicators used for measuring the progress on SDG 7 are not gender sensitive, and prove a lack of attention to gender in the targets and indicators of the SDG7. Therefore it is important to include both qualitative and quantitative monitoring of energy access, use, consumption, and production at local level. This information must be integrated in national and global monitoring of the SDG 7 targets to see that these targets are achieved in a gender equitable and climate-just way.

The need for gender mainstreaming in energy policies and planning

Both male and female members of societies are equal stakeholders in benefiting from energy use. However, all too often women and men do not benefit equally from access to energy due to different energy needs, but also different perceptions of the benefits of energy and the capacities to access those benefits.

For example, men may choose to locate a light outside the house for security reasons (such as protecting livestock from theft) while women may choose to locate the light in the kitchen where they do a lot of work.

Energy planning is mostly gender-blind: Until recently, the energy sector in development plans referred to large-scale, capital-intensive technology projects designed to provide energy for growth in the formal sectors of cash crop agriculture and mechanised production, which are primarily a male-dominated domain. Almost totally excluded from this definition are small-scale, productive activities for family subsistence and business done primarily by women using manual power or local natural resources, usually in the informal sector.

Thus, household energy-consuming activities like food processing, water procurement, transportation of water and fuel, which fall almost exclusively within women's gender responsibilities in many societies are generally not considered in energy planning. Energy policies fail to recognize different needs, perceptions, and energy use of men and women, and it is assumed that a good energy policy, programme or project will benefit both male and female equally in meeting their needs.

Women are still underrepresented in the energy industry work force in research and development, in marketing and services, as well as in ministerial positions: In developed countries, the share of female employees in the energy industry is estimated at only 20%, most working in non-technical fields such as administration and public relations, and worldwide women account for only 9% of the construction workforce and make up

only 12% of engineers. Worldwide, women occupy around 19% of all ministerial posts, but only 7% of these are in environment, natural resources and energy.³¹

Therefore, it is important:

- To take women's needs into account in energy interventions and strengthening women's leadership and participation in sustainable energy solutions are critical in the transition to sustainable energy for all and to reaching internationally agreed sustainable development goas.
- To make sure policymakers recognize the importance of women in the energy sector and to engage them directly in policy making and project design.

Energy policies and programmes that recognize women's work and roles in the energy sector, and build on their expertise and influence within households and communities, can be effective in promoting access to sustainable energy solutions for all (ENERGIA, 2007).

It is helpful to design a **gender responsive technology needs assessment** in order to identify the needs and of women and men.

ENTRY POINTS FOR GENDER RESPONSIVE TECHNOLOGY NEEDS ASSESSMENT

Different needs of women and men according to their social and economic division of tasks (at household level and within employment sector);

- Burden of work of women and men (new "green solutions", such as recycling and reusing waste/materials can increase labour at household level);
- Benefits of new technologies for women and men;
- Education levels of women and men and their technical skills;
- Recognition of risks women run when collecting fuel;
- Participation of women and men in technology needs assessment;
- Budget available for technical trainings of men and women;
- Recognition of women's work in energy supply (wood, crop residues, dung sticks and cakes.

Energy efficiency and renewable energy: local level

As an NGO or CBO, we can have some influence on the targets 7.1, 7.2 and 7.3: focusing on **renewable energies** and **energy efficiency**, which are the main pillars of the sustainable energy policies. Herby some examples of technologies which can be easily implemented in rural areas:

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³¹ Sustainable Energy for All: the gender dimensions (UNIDO)

Some examples of Energy efficient & gender friendly technologies:

• **Energy efficient or improved cooking stoves**: Cooking is one of the most time-consuming activities poor, rural women are dealing with in their daily life. The energy required for cooking is often the biggest share of the total national energy demand and is mostly met by biomass for rural areas mainly. While there is some progress made in term of ensuring access to clean fuels and technologies for cooking: from 51% of households in 2000 to 58% in 2014 (GACC). However, the absolute number of people using unsafe fuels and technologies has increased due to population growth and poverty.

An attempt to guarantee access and use of clean energy is made by introducing improved cooking stoves (ICS). The ICS helps to reduce the amount of toxic smoke which causes health problems, and improves the living situation of women and children who spend a lot of time indoors. It also saves time spent on collecting fuel and cooking, and has a positive impact on the indoor and outdoor environment.

Women play a crucial role in the widespread adoption and use of clean household cooking solutions because of their central responsibility for managing household energy and cooking. As consumers and users of cook stoves, women are not just victims but a critical component of the sector's ability to scale. Especially poor and rural women must be fully integrated into the process of designing products and solutions for clean cooking technology because without their opinions and input, products will not meet their needs and will not be used.

A next step should be to ensure that energy efficient stove can cleanly burn biomass fuel. A public initiative - the Global Alliance for Clean Cook stoves (GACC)- established in 2011 strives to ensure this objective. See more information on the GACC website: http://cleancookstoves.org/impact-areas/women/

TIP: There are some **useful videos on YouTube showing use of ICS in different countries** which might be interesting to show your participants. Choose a video which better suits to the energy situation in your local area

Solar Dryers:

One of the energy consuming activities in many rural areas that mostly women are involved in, is the drying of food products such as fruits, vegetables, meat etc. to preserve them for consumption in lean seasons. Dried food not only makes an important contribution to household food security of poor rural households, but is also a source of much needed cash for women, as you can often get a good price for dried products.

Solar Dryers are low-tech devices that use sunlight to dry substances, especially food and food crops, and can be easily constructed by women. They reduce the drying time of crops making it possible for more crops to be dried in a very short time.

Solar Water Heaters:

Warm water for washing, cleaning and laundry is an important factor for comfort and hygiene in daily life. Mostly women are responsible for these tasks, and heat water using different kind of fuels such as wood, kerosene, and coal which give out noxious fumes which contribute to climate change through Greenhouse gas emissions. Solar water heaters, also called solar collectors, use the energy from the sun for water heating. There are different types of solar water heaters, all based on the simple idea that a black surface absorbs the heat from the sun and this heat is then transferred to the water. The easiest models are accessible for women as they can be constructed with simple materials and do not need any pumps or other electric devices.

TIP: Please check the 2015 WECF manual: *Construction of solar water heaters. Practical Guide* under 'Resources and Tools' section of this session.

Solar panels:

Prove to be very useful in areas where electricity by cable is still a dream for the far future. Nomads, migrant workers and refugees have increased access to solar panels, for light, but also for cooking.

Briquetting machines:

This is another gender-friendly, sustainable technology as it offers a good alternative to fuelwood for cooking and heating. It has positive effect both on the health of women and the children, and the environment. Briquetting machines produce briquettes from bio-products such as rice husk, saw dust, groundnut pellets and other biomasses that could be compressed and bound together. Briquettes burn slowly, but effectively and efficiently.

TIP: You can find more info energy efficient and gender friendly technologies in 'Rural women energy and security', WEP, 2013 (see 'Resources and Tools' section of this session)

All technologies mentioned above can be easily implemented, are gender friendly and don't require high investments.

It is important to consider gender aspects at all stages of project implementation. Below are some best practices of the gender-responsive energy projects:

Best practices in gender-responsive energy projects:

 Analyse a local situation for better understanding of gender roles and dynamics by conducting a gender sensitive needs assessment. It is very important to understand local gendered division of work and power dynamics to choose your approach. Involve women and men of different classes, religions, ethnicity and age from the local area to

- get an informed idea of local needs and priorities that your project plan needs to consider.
- Conduct a gender analysis at the start of project identification and planning stages to ensure that the project objectives and design are gender sensitive.
- Make sure you select gender-responsive indicators in participation with local women and men.
- It is important that data is sex- and gender disaggregated so as to be able to analyse / monitor and report on the progress of the project/intervention in a gender-sensitive way.
- Make sure that women are actively involved in planning, data collecting, monitoring and evaluation. Women often give honest answers and feedback to women staff, and the latter may be able to analyse responses better.
- Develop a strategy how to involve both men and women: don't stick to traditional stereotypes, be creative. Even if you have a technical project (e.g. Implementing EE technologies) don't limit involvement of women to awareness raising and monitoring only and involve men alone in design and construction of installations. Women especially need to be encouraged to be involved at every stage of the project including product design, construction and maintenance.
- Make sure men are aware about women's involvement and support it.
- When organising gender sensitive trainings, workshops and meetings: be flexible.
 Women have a greater work burden at home and out of it (farming, employment,
 business), are mainly responsible for child care, therefore all trainings should consider
 their availability and convenience. Take it into consideration whilst choosing location &
 planning the time schedule. An option of providing child care during the training might
 be considered as well.
- Organize tailor made trainings for women to cover their gaps in knowledge: leadership, businesses, finances and technologies.
- Build up trust and partnership: no project can be successfully implemented without local support and expertise. Consider working with women's groups to ensure women's ownership. Women's groups can be created, and / or you may also consider working with existing groups. Being part of a group makes women stronger and offers some additional opportunities to them (access to finances, markets, scaling up etc).

TIP: Read more on this topic in: GACC Scaling Adoption of Clean Cooking Solutions through Women's Empowerment. A resource Guide: http://cleancookstoves.org/resources/223.html

Energy cooperatives: a gender-responsive approach to sustainable energy

A cooperative is an autonomous association of persons who voluntarily collaborate for their mutual social, economic, and cultural benefit. Their business model is one of democratic ownership and governance and offers an alternative to the shareholder model of business ownership. Co-ops are governed by their members, who typically invest in the co-operative and have an ownership stake in it, as well as a voice in how the firm is run.

An energy cooperative is a good option to improve the local energy situation.

Energy cooperatives produce, distribute, sell and maintain renewable energy plants and increases energy efficiency. The cooperatives invest in small-scaled and medium-sized renewable energy (RE) projects, like solar heating, photovoltaic, wind, water and biomass technologies and support projects aimed at increasing energy efficiency(EE) and energy saving. Many cooperatives successfully sell the electricity produced and heat developed from producer-members to power traders.

Cooperatives have the potential to contribute to the empowerment of women by:

- Creating equal access to women in whole energy value chain: technologies, jobs, funding, dividend, entrepreneurs
- Encouraging women to build their capacity in technology and leadership in the energy sector
- Reducing women's workload: saving cost and time
- Providing control over energy production and consumption
- Fostering women's empowerment & leadership in the energy sector
- Engaging women in energy policy planning
- Providing possibilities for women to invest money in renewable energy and thus influence the policy of the company in a democratic way
- Demonstrating successful public participation and bottom-up processes
- Being a beneficiary and people-centred approach. It pays particular attention to small-scale and community-based actions, where women are over-represented.

TIP: For more information on gender aspects of energy cooperatives see the 'Resources and Tools' section of this session below.

Participatory Exercises

Introduction exercise: What is energy for you?

Aim: to make an opening for further discussion, assess level of participants, ensure participatory session.

Sort of exercise: Brainstorm

Time allocation: 15 -30 minutes

Needs/requirements for this exercise

- Pen and small sheets of paper
- Pens and flipcharts to put on responses

Description of the exercise

The moderator asks participants to brainstorm on the term energy: **What comes into your mind when you hear the word 'energy'?** List keywords on a big sheet of paper. Point out that different people have different notions of energy. Some may refer to sources of energy, some to functions of energy resources, etc.

Summary by moderator:

Based on participant's responses, the moderator makes a brief introduction on energy use (in the local context), main problems and possible solutions to give participants a first overview on the thematic issue and a sort of guidance for the exercise. **Open the thematic field but do not go into details!** E.g.: Mention the role energy plays in everybody's daily life, different realms of energy use (domestic, production, industry, transportation, etc.), different types and sources of energy, etc., different access/control over energy sources. Mention also very briefly some problematic aspects such as high costs, waste of energy, pollution, collection of fuel, and indicate in which direction possible solutions could be found (e.g. more efficient use of the energy by increasing storage capacity, alternative sources of energy, etc.).

Group work: gender differences regarding energy access / control and use

Time allocation: one hour

- group work: 20 min

- plenary: 40 min

Objective: Have a closer look at gender differences regarding the access/ use/ control of energy

Needs/requirements for this exercise

- Pens and blocks
- Flipchart

Procedure:

-Divide participants in 2-4 groups, 1-2 groups women only, 1-2 groups men only. Ask the groups to discuss on the gender specific / use of energy resources. For women: what type of energy resources do women use? For which activities? For men: what type of energy resources do men use? For which activities? Each group fills in a table (according to own sex):

Example:

women men

Type of energy / energy	Used for / activities	Type of energy / energy	Used for / activities
resource		resource	
Wood	Cooking Heating Hot water	Wood	Heating
Dung	Cooking Heating	Diesel, petrol	Machines, tractor Generator Work as taxi, rickshaw drivers

Hydropower	Mill	hyd
Electricity	Light	Elec
	Cooking	
	Hot water	
Solar panel	light	Sola

hydropower	Electricity	
Electricity	Many uses	
Solar panel	light	

Plenary: Ask the groups to present their tables. Point out the differences between the energy resources used by women and those used by men and the fields of activities the energy resources are typically used for. Differentiate between domestic use (cooking, heating, hot water), agriculture, production (industry and crafts), costs, and other uses (transportation etc.).

Alternative option: Ask women to identify which energy resources men use for which purposes (and vice-versa). After presenting the results, men may complete or correct the information (and vice-versa). This may result in more lively discussions but requires more time.

Summary by moderator:

As evident during the exercise women and men, girls and boys, have different needs, access to the energy sources. The level of control over the energy sources is also different.

Poor women and men are more intensively in contact with polluting sources of energy and therefore are at higher risk of ill health, and would benefit most from introducing clean energy sources for cooking and other uses.

This should be considered whilst planning projects, and designing policies.

Useful Resources and Tools on Gender and Energy (accessed 12/03/17)

- 1. Burning Opportunity: Clean Household Energy for Health, Sustainable ment, and Wellbeing of Women and Children, 2016: pps.who.int/iris/bitstream/10665/204717/1/9789241565233 eng.pdf
- 2. **Energy and gender issues in rural sustainable development**, Yianna Lambrou azia Piana, Food and Agriculture Organization of the United Nations, 2006 www.fao.org/docrep/010/ai021e/ai021e00.htm
- 3. **Gender & Energy: a toolkit for sustainable development: and resource guide**, http://www.undp.org/content/undp/en/home/librarypage/environment-sustainable energy/energy and genderforsustainabledevelopmentatoolkitandresourceg
- 4. **Mainstreaming gender in energy projects: A practical handbook**, Elizabeth and Soma Dutta, ENERGIA 2011: ergia.org/Mainstreaming gender in energy projects A practical Hand book.pdf
 - 5. *Gender Tool Kit: Energy, Going Beyond the Meter, Asian Development Bank*, 2012: https://www-cif.climateinvestmentfunds.org/sites/default/files/knowledge-documents/gender-toolkit-energy.pdf

- 6. *Household Energy, Indoor Air Pollution and Health:* http://www.who.int/indoorair/publications/fflsection1.pdf
- 7. *Household Energy and the Millennium Development Goals*: http://www.who.int/indoorair/publications/fflsection2.pdf
- 8. Case study: Access to affordable low-cost solar water heating solutions as a basis for the first gender-sensitive. Nationally Appropriate Mitigation Action (NAMA) in Georgia Sharing. Lessons Learnt, WECF, 2015: http://www.wecf.eu/download/2015/November/Gender Sensitive NAMA-WECF.pdf
- 9. Sustainable Energy for All: the gender dimensions: https://www.unido.org/fileadmin/user media upgrade/What we do/Topics/Women and Youth/GUIDANCENOTE FINAL WEB.pdf
- 10. **Construction of solar water heaters. Practical Guide**, WECF, 2015: www.wecf.eu/download/2010/WECF Construction of solar collectors.pdf
 - 11. *Rural women energy and security*. Women Environmental Programme (WEP) September, 2013: http://bit.ly/wepwomenenergysecuritynewsletter
 - 12. Feasibility study of gender-sensitive energy cooperatives in Georgia, Ukraine, Armenia and Moldova (WECF). http://www.wecf.eu/download/2017/05-May/Feasibilitystudy CLEENcountries final.pdf
 - 13. Cooperatives, Women and Gender Equality (COPAC): http://www.copac.coop/wp-content/uploads/2015/07/COPAC PolicyBrief CoopsWomen.pdf
 - 14. Cooperatives and the Sustainable Development Goals (ILO): https://sustainabledevelopment.un.org/content/documents/1247ilo.pdf

Relevant web resources (accessed 12/03/17)

- GACC (Global Alliance for Clean Cook stoves) http://cleancookstoves.org/
- GERES (Groupe Energies Renouvelables, Environnement et Solidarités): http://www.geres.eu/en/
- ENERGIA: http://www.energia.org/
- International Energy Agency: https://www.iea.org/
- RISE (Regulatory Indicators for Sustainable Energy): http://www.worldbank.org/en/topic/energy/publication/rise---regulatory-indicators-for-sustainable-energy
- World Bank monitoring tools: http://trackingenergy4all.worldbank.org/
- SE4all (Sustainable Energy for All): http://www.se4all.org/
- UNDP (United Nations Development Programmes): http://www.undp.org/content/undp/en/home/ourwork/womenempowerment /focus areas/women and environmentalchange.html
- UN Women: http://www.unwomen.org
- *UN* Sustainable development knowledge platform: https://sustainabledevelopment.un.org/?menu=1300
- WECF (Women Engage for a Common Future): http://www.wecf.eu/english/energy-climate/
- Women Environmental Programme (WEP): http://wepnigeria.net/
- WHO household energy database: http://www.who.int/indoorair/health-impacts/he-database/en/

Session 2.4: SDG 13 – Using a Gender Perspective in Climate Action

Introduction

The material for this session is presented in short text, paragraphs and info-graphics with bold headings, so that the latter can be used as a basis for a PowerPoint presentation. It is strongly recommended that you adapt the information to make it relevant to the situation in your region, country, and local area using national data and statistics, info-graphics and case studies. This will attune better to the participants' experiences, interests and



needs. There are **tips** and **notes** on how to do this throughout this session.

Learning objectives

At the end of this session participants will:

- Know about the concept of climate change (CC), and the current global challenges in CC with regard to their gendered impact
- Be familiar with some important concepts used in discussion of human response to CC, and their gender implications: adaptation, mitigation, loss and damage, climate financing, REDD+, resilience and vulnerability
- Be familiar with relevant international agreements and commitments on CC from a gender perspective
- Know the Sustainable Development Goal 13, its targets, and some indicators for monitoring them globally and nationally
- Learn how to integrate a gender approach in CC related project activities
- Know some exercises to engage participants in sharing their experiences on the subject and encourage peer learning and networking
- Be familiar with key global and regional resources to access general and specific information on gender and CC

This session can be facilitated in 4-8 hours, including at least an hour for exercises.

There are examples of some exercises to engage participants, share the available knowledge and encourage peer learning. Do modify them if you know better techniques to make the session more useful and relevant for the participants. If there is more time, you can conduct a field exercise and do group work based on this. You could also use a case study from your region/country as a home-work assignment if you want to test that participants have understood how to integrate a gender perspective in climate action interventions at project activity, policy and advocacy levels.

You can decide how long you want to spend on certain topics, but please make sure to address all of them, so as not to miss any relevant information out.

Please DO make good use of the section on resources and web-links to add more interesting details to your session.

DO make good photos of participants interacting during the workshop.

DO assign timekeepers and note-takers from the participants to assist facilitation and documentation of the session. GOOD LUCK!

Climate change and its gendered impact

Climate change: in its most basic terms this refers to changes to regional or global climate patterns that persist for an extended period of time, generally decades or longer. The Earth experiences periodic, temporary episodes of climate change, such as volcanic eruptions or episodic warming periods of ocean regions associated with El Niño. However, over the last 200 years the planet has experienced a continuous and drastic level of climate change in the form of rising global temperatures. This **global warming effect** is due to a dramatic rise in the amount of heat-trapping gases in the atmosphere, commonly referred to as **greenhouse gases (GHG)**, which are now at the highest levels in 650,000 years³².

The massive **rise** in atmospheric GHG concentrations in modern times is from human activity, primarily the burning of fossil fuels, as well as agricultural practices, industrial processes, and the destruction of standing forests and other land use changes. As a result of increased GHGs in the atmosphere, **surface temperature** is **projected to rise over the 21st century** whereby heat waves will occur more often and last longer, and extreme precipitation events will become more intense and frequent in many regions. The oceans will continue to warm and acidify, and global mean sea level to rise. Climate change will amplify existing risks and create new risks for natural and human systems which will increase as the magnitude of the warming increases³³. **Climate risks are not country specific, but geography- and gender specific** - risks are unevenly distributed and are greatest for the poorest women and men who rely most on natural resources and have the least say in international climate action discussions.

The immediate effects of CC can be felt in the short-term through natural hazards, such as floods, landslides and hurricanes, as well as sudden changes in weather; and in the long-term, through the gradual degradation of the environment (desertification, loss of plant and animal species, increasing soil salinity etc.). The adverse effects of these events are felt by both men and women in many areas, including agriculture and food security; biodiversity; water resources; energy and transport; human health; migration and settlement. However women are affected differently and often more severely than men because of persisting gender inequalities at all levels which lead to their over-representation among the poor,

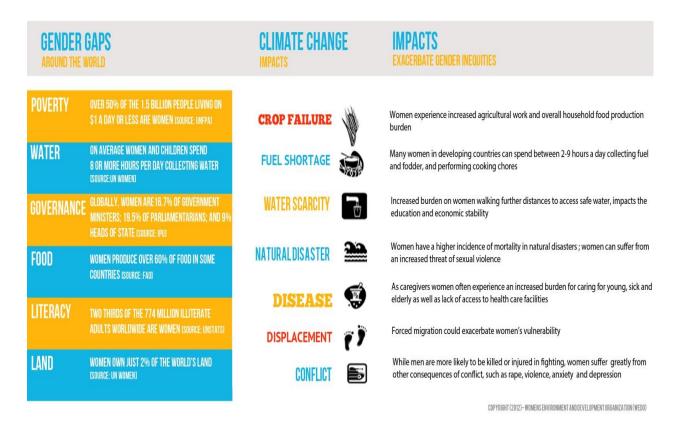
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³² Oliva, M., Owren, C., (2015), Chapter 1: An introduction to climate change – and the value of a gender-responsive approach to tackling it. In 'Roots for the future: The landscape and way forward on gender and climate change'.IUCN & GGCA.

³³ IPCC, Climate Change 2014 Synthesis report summary for Policy makers

their greater dependence on their natural environment and resources, and their underrepresentation in decision making in the economic and political spheres.

The figure below (WEDO, 2012) maps some of the global gender gaps around the world and the linkages to climate change impacts.



TIP: You can break this session here with **Exercise one**: **Why are Women more vulnerable to climate change?** (see Interactive Exercises section).

Alternatively, if participants are interested in discussing about gender dimensions in international policy and planning in climate change, from an urban context, there is a 23 minute video of *Genre en Action* which they can watch on the following link (in French, English and Spanish, with French subtitles): http://www.genreenaction.net/ville-genre-climat.html

Some facts and figures on gender and climate change

Women are more vulnerable to the effects of CC than men—primarily as they
constitute the majority of the world's poor and are more dependent for their
livelihood on natural resources that are threatened by CC (see above figure).
Entrenched gender roles and gender-based discrimination in social, economic and
political spheres create and perpetuate barriers that limit the coping capacity of
certain groups of women and men more than others.

• Women and children are more at risk during climate-induced disasters such as floods. UNDP made an inventory of 140 disasters between 2005 and 2009 and found that four times more women died than men (UNDP, 2011)³⁴.

TIP: During the 1991 Gorky cyclone in Bangladesh 14 times more women died than men. Ask participants if they can give reasons why this was so? During Hurricane Mitch in 1998 many more men died in Central America – why do they think this was? Relate this to gender roles and responsibilities in different socio-cultural contexts as well as to gender inequality in decision making and access to resources.

- Women farmers currently account for 45-80 per cent of all food production in developing countries depending on the region, and about two-thirds of the female labour force in developing countries, and more than 90 percent in many African countries, are engaged in agricultural work (FAO)³⁵. In the context of climate change, when local crops fail or decline women face loss of income as well as food, and their health is worst affected during food shortages. Their care-giving responsibility also typically increases as a result of food shortage.
- In the rural areas of most developing countries, it is mainly women and girls who
 are responsible for fuel and water collection for their families. When water and fuel
 is scarce due to CC (droughts, increasing salinity, deforestation) women and girls
 can spend several hours a day (see above figure) trying to access water and fuel for
 their daily needs, losing out on income, education, and rest.
- When severe weather events lead to large scale displacement of people, women are
 worst affected in terms of loss of lives, gender based violence, and trafficking due to
 their lower socioeconomic status, socio-cultural and religious restrictions on their
 mobility and behaviour, and poor access to education and information.
- Climate change is a driver of conflicts and in the last sixty years, at least 40% of all intrastate conflicts have had a link to natural resources and the environment³⁶. Increased economic insecurity related to climate change increases the susceptibility of people, including young women, to be recruited into combat. Gender-based violence is likely to increase during period of conflicts.³⁷
- Increase in climate-related disease outbreaks has very different impacts on women and men, mainly because around the world women have less access to medical services than men and are the major care-giving responsibilities in the household. For example, malaria vectors are changing their range due to CC and, each year, approximately 50 million women living in malaria-endemic countries throughout the world become pregnant an estimated 10,000 of these women and 200,000 of their infants die as a result of malaria infection during pregnancy. Moreover,

³⁴ GWA, Cap-Net, 2013 'Why Gender matters in IWRM: a tutorial for water managers'

³⁵ UN WomenWatch Factsheet 'Women, Gender Equality and Climate Change'; http://www.un.org/womenwatch/feature/climate_change/

³⁶ United Nations Environment Programme (retrieved March 12, 2015 from

 $[\]frac{http://www.unep.org/disasters and conflicts/Introduction/Environmental Cooperation for Peace building/tabid/543}{55/Default.aspx.})$

³⁷ APWLD, Women Warming Up!Building Resilient, Grassroots Feminist Movements for Climate Justice in Asia-Pacific, http://apwld.org/wp-content/uploads/2015/12/CJ-FPAR-regionalreport.pdf

women's workloads increase when they have to spend more time caring for the sick³⁸.

- Historically women are under-represented in (environmental) policymaking as well as in decision-making forums on CC which also keeps them away from decision making on funding allocation for local climate interventions³⁹. For e.g. Only 12% of federal environment ministries globally are headed by women, as of 2015, and at the UNFCCC COP 20 meeting in 2014, only 36% of government delegates were female⁴⁰.
- Climate change exacerbates patriarchal control of women. In Bangladesh, a
 persistent link has been proved between the loss of lands and livelihoods due to
 climate change and early, child or forced marriage. Researchers also found that
 climate change increased demands for dowry payments, as other forms of
 livelihoods become less dependable and that child marriage and dowry may in turn
 form local adaptation strategies.⁴¹

NOTE: As preparation prior to the workshop, ask participants to seek out some statistics on indicators for their countries' situation in gendered impact of CC and disasters to make it more relevant for them. If they find sex disaggregated or gender disaggregated is hardly or not available, discuss the gender implications of this with them.

Some important concepts used in discussing Climate Change, and their gender dimensions

Climate Change Mitigation

Refers to efforts to reduce or prevent emission of greenhouse gases (GHGs) through use of a combination of strategies, including using new technologies; making older equipment more energy efficient; and changing management practices and consumer behavior. Burning of fossil fuels being the principal cause of global warming, mitigation actions are mainly seeking to transition towards renewable energies, but also reducing the emissions caused by deforestation or through the industrial agriculture system.

However, instead of promoting sustainable and equitable production and consumption patterns, developed countries are pushing forward false solutions that allow them to continue their business as usual⁴². The use of market-based mechanisms is among these false solutions, including 'carbon markets' which allow countries that have unused emission amounts to sell this excess capacity to countries that are over their targets; and the *Clean Development Mechanism (CDM)* which allows emission-reduction projects in developing countries to earn Certified Emission Reduction (CER) credits. These CERs can

³⁸ IUCN, UNDP et.al, 2009 'Training Manual on Gender and Climate Change'

³⁹ see Heinrich Böll Stift NA: Liane Schalatek paper: "Gender Equality and Climate Finance" Nov 2016 www.climatefundsupdate.org

⁴⁰ GGCA, 2016 'Gender and Climate Change: a closer look at existing evidence'

⁴¹ APWLD (2015), FPAR Regional Report, APWLD Climate Justice Programme 2014-2015

⁴² APWLD (2015) FPAR Regional Report, APWLD Climate Justice Programme 2014-2015

be traded and sold, and used by industrialised countries to a meet a part of their emissionreduction targets under the Kyoto Protocol⁴³.

Reduce Emission from Deforestation and Forest Degradation (REDD)

Initially agreed as part of the Bali Action Plan, the REDD framework is a key market-based mitigation mechanism that encourages a reduction in emissions by placing a monetary value on forests based on their ability to store carbon. The second phase of the framework, REDD+, involves the storage or removal of carbon from the atmosphere by conserving forests or planting new ones. REDD also allows governments or companies from the North to purchase 'carbon offsets' (the right to pollute) by paying countries from the South not to destroy their forests⁴⁴.

These market-based programmes have been heavily criticized for their inefficiency in curbing GHG emissions, but also for their record in violating human rights, their genderblindness, and their negative impacts on sustainable development. For example, the key issue in implementing REDD+ initiatives is how they change a pre-existing situation of inequality amongst people living in or near to forests (for e.g in land tenure, rights to harvest forest products). If they do not do so effectively, then REDD+ efforts may come to, albeit inadvertently, entrench structural inequality while only offering token benefits to marginalized people (Chomba, Kariuki et.al 2016)⁴⁵

Climate Change Adaptation

Refers to the different actions, practices, strategies, policies used by individuals, groups, and natural systems to prepare for and to respond to changes in climate and the environment. It encompasses changes in processes, practices, and structures, in order to limit potential damage associated with climate change. Adaptation strategies such as drought resistant crops, more resilient infrastructure and economic diversification must be developed in order to avoid the worst impacts. Furthermore, Disaster Risk Reduction strategies, such as early warning systems and weather forecasting, are a crucial means of adaptation for people who bear the brunt of climate change.

Loss and damage

Refers to the negative impacts of climate change that cannot be overcome and to which adaption is no longer conceivable. Whilst mitigation and adaptation can stall loss and damage to a degree, there is an ever-increasing tally of permanent loss already resulting from climate change. The term can refer to the direct physical impacts of extreme weather events and slow onset events, as well as many indirect costs such as loss of life, lost productivity, relocation and loss of livelihoods⁴⁶.

Historically, gender concerns have been poorly represented in both mitigation and adaptation policy due to the lack of gender sensibility of those shaping the debates, leading to a strong technical and economical bias in the contents. However, women and gender rights groups are increasingly gathering forces to ensure bottom-up approaches to climate

⁴⁵ Chomba, S., Kariuki, J., Friis Lund, J. and Sinclair, F., 2016. Roots of inequity: How the implementation of REDD+

⁴³ Aboud, G., 2011. Gender and Climate Change Supporting Resources Collection (BRIDGE-IDS)

reinforces past injustices. Land Use Policy 50 (2016) 202-213

⁴⁶ APWLD (2015), FPAR Regional Report, APWLD Climate Justice Programme 2014-2015

change mitigation, adaptation and loss and damage strategies. One of their key demands is active participation of poor women, men, indigenous communities and other vulnerable groups in international discussions and negotiations on Climate action to break the unequal, patriarchal power relations that have generated climate change⁴⁷.

Resilience

Refers to the ability of people, localities and countries to adapt to CC impacts so as to limit risks and damage from them. It requires an integrated strategy of hard measures (building infrastructure like sea walls) and soft measures (policies, governance and management structures at national and grassroots level). Women should be prime stakeholders in discussions about resilience because of their important role in household-level food production, water and fuel collection and domestic care: they are at the forefront of inventing coping strategies when their environment changes.

Vulnerability

Is the degree to which an individual, group, or natural system is susceptible to or unable to cope with the adverse effects of CC, including climate variability and extremes (Mc Carthy et al., 2007). Vulnerability has a gender dimension as the capacity to cope and adapt to CC is shaped by gendered differences in access and control of resources, decision-making power and empowerment – all of which are determined by the larger social, economic and political environment.

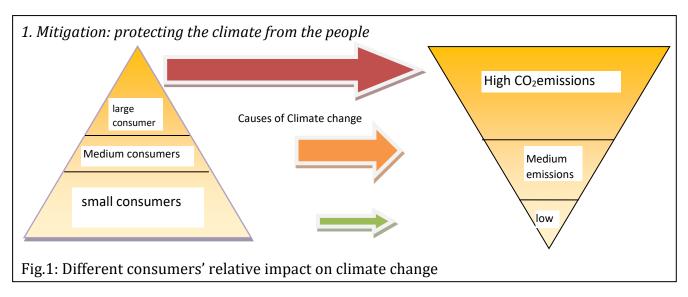
Climate Financing (CF)⁴⁸:

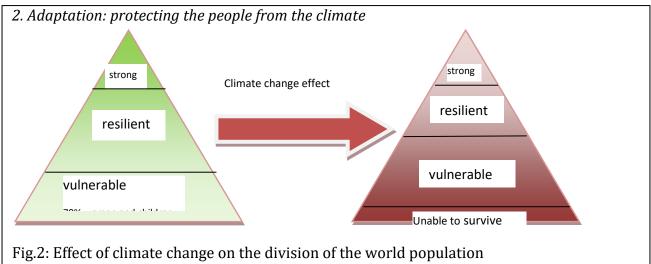
In the 1990s, public funds—such as those affiliated with the UNFCCC— began to mobilise financial resources from developed nations to help developing nations combat global climate change and deal with its impacts. Since then the forms of climate financing in the forms of loans, grants and funds from the public and private sector have multiplied to form a complex network that is both difficult to define and to monitor. However, the most prominent multilateral climate finance mechanisms, which are largely channelling public funding through the UNFCCC are the Global Environment Facility (GEF), Clean Development Mechanism (CDM), Adaptation Fund (AF), Climate Investment Fund (CIF), and Green Climate Fund (GCF). While most of these five CF mechanisms were gender-blind to start with, over the past few years significant progress has been made in integrating gender considerations into their policies, programming, or allocation practices. However the boards of these funds are still largely dominated by men and their business interests, and the finance mechanisms lack monitoring and accountability measures to ensure that their decisions positively impact the lives and livelihoods of those that have the greatest need.

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⁴⁷ APWLD (2015), FPAR Regional Report, APWLD Climate Justice Programme 2014-2015

⁴⁸ Schalatek, L., Aguilar, L., Granat, M., (2015), 'Unlocking the door to Action: Gender-responsive climate finance'. Roots for the future: The landscape and way forward on gender and climate change'. IUCN & GGCA.





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 % of global emissions (2009/10, Wikipedia, WRI World Resource Institute):

Country	% of global emissions	Population	Average	Remarks
	CO ₂ = tonnes of Green	in 2010 In	Tonnes	
	House Gasses	Million	GHG/person	
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	

Some International Agreements and Commitments on Climate Change and Gender

The 1979 Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) has direct implications for climate change, obliging states to ensure that women participate in and benefit from all levels of development planning. It specifically addresses issues of access and control of resources, and the right to participate in forming and implementing government policies and to represent the country at international level—all of which impact on women's capacity to adapt to impacts of climate change and to participate in planning and implementation to address climate change.

The Earth Summit in 1992 was a critical milestone for the development and setting out of the framework for action on environmental protection and climate change through the outcomes of. An important aspect of this framework was the launch of the three Rio Conventions: the UN Convention on Biological Diversity (CBD), the UN Convention to Combat Desertification (UNCCD), and most notably for climate action, the UN Framework Convention on Climate Change (UNFCCC).

CBD: Adopted in 1992 for the conservation and sustainable use of biodiversity, this convention has clear sustainable development and climate change implications, but it mentions women only in the preamble. In 2014, the CBD adopted a Gender Plan of Action for 2015-2020 to promote gender equality and mainstream gender into activities, building on the first Gender Plan of Action that was developed in 2008, facilitated by IUCN. Parties have, over the years, agreed a number of decisions that well integrate gender concerns cohesively

The **UNCCD**, adopted in 1994, recognises the role of women in rural livelihoods and the importance of local women's knowledge in addressing issues such as climate change.

UNFCCC: It started as a **way for countries to work together to limit global temperature increases and CC**, and to cope with their impacts. However, unlike the CBD and the UNCCD this convention did not include references to issues related to women or gender. Even years later, many of the texts were limited to gender balance concerns in UNFCCC processes and encouraging but not requiring women's participation. However, in more recent years, with technical decisions integrating recognition of gender considerations, significant progress is noted and establishes a framework by which adaptation, mitigation, and climate finance can, and should be pursued with gender responsiveness.

For more information on the negotiation process, Parties, stakeholders and the Conference of the Parties (COP) please visit the <u>UNFCC website</u>.

TIP: Chapter 2 of the 2015 publication 'Roots for the future: The landscape and way forward on gender and climate change' (IUCN, GGCA) presents a concise info-graphic of the timeline of key milestones in the UNFCCC process, demonstrating how decisions have progressed to substantively reflect gender concerns. See **Resources and Tools** section for more details on accessing this publication.

Gender mainstreaming in the UNFCCC:

From gender blind to gender balance to gender action plans and gender financing.

- The Climate Convention text from 1992⁴⁹, makes no reference to gender
- Despite a first 'gender decision' at the COP7 in 2007, no progress on integrating gender dimensions was made.
- In 2009, the CEDAW Committee issued a <u>statement on Gender and Climate Change</u>, expressing concern about the absence of a gender perspective in the UNFCCC and other global and national policies and initiatives on CC⁵⁰.
- At the 2012 COP 18 in Doha, a 'Gender Balance' decision was passed setting targets for women in national delegations to the climate negotiations.

NOTE: Ask participants to look for their own countries' ratifications of international agreements under the UNFCCC and screen them for gender-responsive content and wording to make this section more relevant for them. They can choose from:

Nationally Appropriate Mitigation Actions (NAMA) which are voluntary mitigation contributions by developing countries that are embedded in their plans for development National Adaptation Programme of Action (NAPA) which help LDCs identify urgent adaption needs and prioritise proposed projects

Intended Nationally Determined Contributions (INDC) encourage governments to increase the ambition of their commitments to mitigate GHG emissions, and also serve to clarify the overall scope of NAMAs and REDD+ activities and plans, including components such as adaptation and means of implementation.

TIP: WEDO has compiled a **gender analysis of INDCs** which is a useful resource to use for this section (see under Resources)

- In Lima, at COP20, the Lima Work Program on gender was decided, with concrete actions and deadlines, including in-sessions gender workshops to ensure capacity building on gender & climate for negotiators.
- Still in 2015 at the COP-21 only 40% of the 160 Parties made gender references in their Intended National Determined Contributions (INDCs) none of whom were from the industrialized countries⁵¹.

50 http://www2.ohchr.org/english/bodies/cedaw/docs/Gender and climate change.pdf

⁴⁹ https://unfccc.int/resource/docs/convkp/conveng.pdf

⁵¹ https://ccafs.cgiar.org/blog/gender-and-climate-change-policy#.WEgVGft77IV (accessed 08/12/16)

- The combined efforts of government negotiations, the **Women and Gender constituency (WGC)**⁵² and several other stakeholders led to the inclusion of a critical gender-relevant text in the Paris Agreement, where Parties committed to two goals⁵³:
 - ➤ Improving gender balance and increasing the participation of women in all UNFCCC processes, including in delegations and in bodies constituted under the Convention and its Kyoto Protocol, and
 - Increasing awareness and support for the development and effective implementation of gender-responsive climate policy at the regional, national and local levels.
 - Recently, at the COP 22 in Marrakesh in 2016, a new 'gender decision'⁵⁴ was adopted which will lead to a 3 year Gender Action Plan on climate, to be adopted and to start at COP23 with concrete actions in several thematic areas both at global and at national level. The gender decision specifically mentions the important role of women and gender civil society organisations, as well as the need to recognize women's and indigenous people's ancestral knowledge as tools for climate action. It introduces the idea of periodical reports by Parties and UN bodies on the progress made on gender integration and reinforces the need to support capacity building on gender both for the State Parties, UN bodies and the delegation members.
 - **Gender and Climate Financing**: The Green Climate Fund has as one of its criteria the need for gender mainstreaming: see its Gender Policy paper⁵⁵. Almost all projects approved under this fund have some sort of gender dimension, even though most are not very ambitious or transformative as yet.

TIP: You can conduct **Exercise 2 on Gender Financing** here. See section on Interactive Exercises

SDG 13 Goal, Targets, and Global Indicators⁵⁶

SDG 13 Goal: Take urgent action to combat climate change and its impacts. This SDG contains five targets, of which the first three targets are on outcomes and the last two targets on the means of implementing the outcome targets:

⁵² The WGC is a civil society observer – one of the nine stakeholder groups of the UNFCCC. Established in 2009 and granted full constituency status in 2011, it consists of 16 women's and environmental CSOs, who are working together to ensure that women's voices are heard and their rights are embedded in all processes and actions of the UNFCCC framework, making gender equality and women's human rights central in the fight against climate change.

⁵³ http://unfccc.int/gender and climate change/items/7516.php (accessed 08/12/16)

⁵⁴http://unfccc.int/files/gender and climate change/application/pdf/auv cop22 i15 gender and climate change rev.pdf

⁵⁵ http://www.greenclimate.fund/documents/20182/24949/GCF B.09 10 - Gender Policy and Action Plan.pdf/fb4d0d6c-3e78-4111-a01a-e5488f9ed167

⁵⁶ Compiled from the UN-SDGs website https://sustainabledevelopment.un.org/topics and IAEG-SDG website https://unstats.un.org/sdgs/iaeg-sdgs/

Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Target 13.2: Integrate climate change measures into national policies, strategies and planning.

Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

Target 13.a: Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of *mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible*

Target 13.b: Promote mechanisms for *raising capacity* for effective CC-related planning and management in least developed countries and small island developing States, *including focusing on women, youth and local and marginalized communities*

Apart from Target 13.b above, none of the other targets have an explicit gender objective, and there is a long way to go before gender is mainstreamed in the decisions, actions and financing of CC.

Gender and the global monitoring of SDG 13 targets and indicators

The Inter Agency Expert Group on SDGs (IAEG-SDGs) works mainly through UNFCCC and its partner agencies for global monitoring and data collection on the official indicators for SDG 13 targets. For more information on the official global indicators list⁵⁷ for the SDGs and the monitoring framework please visit the IAEG-SDG website. http://unstats.un.org/sdgs/iaeg-sdgs/

These indicators include, for example:

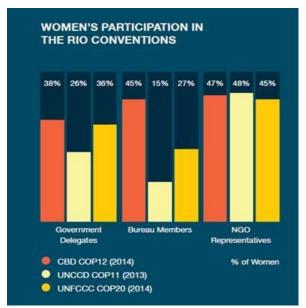
- Number of countries with national and local disaster risk reduction strategies;
- Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions;
- Number of deaths, missing persons and persons affected by disaster per 100,000 people;
- Mobilized amount of US dollars per year, starting in 2020, accountable towards the \$100 billion commitment

From a gender perspective these indicators are very unsatisfactory for three main reasons: Firstly, they are mainly quantitative, but not requiring gender and/or sex disaggregated data which makes them rather gender-blind. Secondly, the indicators emphasis on nations ignores the fact that groups most vulnerable to CC live not only in poor countries, but also in middle-income countries, and not only in rural areas but also in cities. Thirdly, the focus is more on the development of CC adaptation, mitigation plans at macro-level, and

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⁵⁷These indicators have been proposed by the IAEG-SDGs as of March 2016.

mobilisation of climate funds – both areas where participation of women and vulnerable groups is very low. See figure below.



This figure (IUCN, EGI, UN-Women)⁵⁸ shows the gender gap in women's participation in international decision-making forums on CC policy and agreements.

It is therefore **very important for local CSOs and grassroots groups to be involved in monitoring climate action, financing at local level**. It is important to have qualitative and quantitative data for this, and come up with practical indicators that can be collected and analysed at local level. These can then be compared with the progress on SDG 13 targets shown in national reports.

TIP: Ask the participants if they know the national agencies collecting data on these or other Climate Action indicators in their country. If not, then this can be a follow-up assignment for them after the workshop.

Ask the participants to think of **practical and gender-responsive indicators** that they can monitor at local level for the 5 SDG 13 targets.

Benefits of Mainstreaming Gender in Climate Action

TIP: Ask the participants to name a few benefits of mainstreaming gender in CC before you start this section.

Because CC affects women and men differently, a gender equality perspective is essential when discussing policy development, decision making, and strategies for mitigation and adaptation. Poor women and men, indigenous and tribal groups, ethnic minorities are not just helpless victims – they are powerful agents of change with proven knowledge and expertise that can be used in CC mitigation, disaster reduction and adaptation strategies. Furthermore, women's responsibilities in households and communities, as managers and

⁵⁸ http://genderandenvironment.org/resource/egi-womens-participation-in-global-environmental-decision-making-factsheet/ (accessed 12/12/16)

caretakers of family and natural resources, positions them well to contribute to livelihood strategies adapted to changing environmental realities.

Taking a gender-responsive approach can help climate action strategies related to food security, energy use, deforestation, population, economic growth, science and technology, and policy making, among other things. Furthermore, these strategies can improve gender equality – a precondition for sustainable development. There are many benefits that can accrue from integrating gender perspective in climate interventions:

- In Bangladesh, for example, consulting women in coastal areas prone to flooding in the design of climate-resilient agricultural innovations resulted in low-cost and effective solutions such as cattle rearing and growing food crops in geo-textile sacks. These could be shifted to higher areas during floods and provided nutritious food for families in uncertain periods⁵⁹.
- Including gender criteria in the design of early warning systems for disasters, and in
 the planning of relief measures during disaster and post-disaster recovery can
 reduce loss of lives, ensure safety of women, children, elderly and disabled, and
 ensure that all benefit from adaptation interventions such as sea-wall, dyke
 construction.
- Taking advantage of women's and indigenous groups' knowledge of traditional food and medicinal plants and seed preservation techniques results in more effective and sustainable biodiversity conservation efforts.
- Promoting equitable integration of local women and men in mitigation strategies, for example, by encouraging tribal women and men to participate in forest management and conservation efforts leads to reduced loss of forest cover and loss of endangered species due to illegal logging and poaching. In some cases women's resistance has led to major policy changes to protect forest cover, for e.g. the Green belt movement in Kenya and Chipko Andolan in India.
- Mainstreaming gender in the legal framework of access to productive resources (land, water rights, credit) not only reduces the vulnerability of women to the shocks of CC, but also helps accelerate their recovery from them.
- Design and use of climate resilient technology in many sectors such as energy, drinking water and sanitation has proven to have a far better uptake, and much more cost effective when both women and men have been involved during planning, implementation, and monitoring⁶⁰.
- While climate policymaking is still mostly dominated by men, studies have shown that as more women enter positions of authority that have been traditionally dominated by men, systematically different choices are made. For instance, having more women in positions of political authority is associated with lower national carbon footprints, or more protected land⁶¹. Additionally, countries with a greater

https://unfccc.int/files/gender and climate change/.../c1 wecf harbersbrunner.pdf)

⁵⁹ IWMI Water Policy Brief, 2014, issue 36 'Promoting productive gendered spaces for adapting to climatic stress: Two case studies from rural Bangladesh'

⁶⁰ In Georgia access and control of women to Solar Water Heaters and other climate smart energy options has made them the best users, operators and ambassadors of the new technologies and has a positive impact on CC mitigation (2016 WECF case study:

⁶¹ GGCA, 2016, Gender and Climate Change: a closer look at existing evidence

proportion of female parliamentarians are more likely to ratify environmental treaties⁶².

Mainstreaming gender in climate action⁶³

TIP: If there is time you can conduct Role Play Exercise 3: Technique for mainstreaming gender in adaptation planning (see Interactive Exercises section)

Four areas have been identified as critical building blocks in response to CC: mitigation, adaptation, technology transfer and financing. A gender perspective needs to be integrated in all of them.

Mitigation and adaptation efforts should systematically and effectively address genderspecific impacts of CC in the areas of agriculture and food security, energy, biodiversity, water and sanitation, health, human rights, and peace and security. In doing so the following issues need to be considered:

- In adaptation interventions women need to be recognized much more as *agents of* change that can contribute a lot in terms of unique knowledge and expertise, for example in traditional knowledge in adaptation including women-led strategies in resource conservation and restoration
- Gender inequality in access to resources and asset ownership needs to be addressed for adaptation and mitigation efforts to work
- Women need to be much more involved in the international dialogue on mitigation
- Women's needs and concerns in clean and sustainable energy sources and technologies cannot be underestimated as they are mainly responsible for ensuring energy supply and security at the household level;
- Women's concerns over uptake of unsafe and high-risk technologies in climate protection strategies (like nuclear energy, geo-engineering and carbon capture and storage) need to lead to policies that apply the precautionary principle and a technology-ban till risks to human health and the environment are fully understood
- Sustainable consumption is a highly gender-sensitive issue as women make many consumer decisions (in water, sanitation, energy), and their priorities need consideration in policy and financing strategies.

Financing

- The active participation of women in the development of funding criteria and allocation of resources for CC initiatives is critical, particularly at local levels.
- Gender analysis of all budget lines and financial instruments for CC is needed to ensure gender-sensitive investments in programmes for adaptation, mitigation, technology transfer and capacity building.
- Climate change financing policy must take into account the effect of CC on women's economic security. It should focus on promoting investments in micro projects and national carbon taxes that may yield greater benefits to women.

⁶² Norgaard K, York R (2005) Gender equality and state environmentalism. Gend Soc 19(4):506–522.

⁶³ Adapted from IUCN, UNDP, GGCA. 2009, 'Training Manual on Gender and Climate Change'

- Adaptation financing should focus on cost-effective adaptive measures in agriculture and natural resource management that are more in alignment with women's CC and related activities.
- Mitigation financing should complement GHG reduction with projects that enhance women's livelihoods and rights.
- Private-sector CC financing should be subject to strict public scrutiny, and guided by norms, standards and guidelines to prevent prevalence of corporate and market interests over rights of poor women and men and their access to resources such as land, water, energy for their livelihood.

Technology Transfer

- Gender analysis is a necessary component of CC technology policy. Technology related to CC should take into account women's specific priorities, needs and roles, and make full use of their knowledge and expertise, including indigenous knowledge and traditional practices.
- Women's involvement in the development of new technologies can ensure that they are user-friendly, affordable, effective and sustainable.
- Gender inequalities in access to resources, including credit, extension services, information and technology, must be taken into account in developing activities designed to curb CC.
- Women should also have equal access to training, credit and skills-development programmes to ensure their full participation in CC initiatives.

Governments should be encouraged to incorporate gender perspectives into their national policies, action plans and other measures on sustainable development and CC, through carrying out systematic gender analysis; collecting and utilizing sex-disaggregated data; establishing gender-sensitive benchmarks and indicators; and developing practical tools to support increased attention to gender perspectives.

Interactive Exercises

Brainstorming Exercise: Why are Women more vulnerable to climate change?

Aim: to understand the link between gender, vulnerability, and CC; and the importance of recognising women as agents of positive change

Time allocation: 15-30 minutes

Needs/requirements for this exercise

- Poster on Gender and Climate Change (can be downloaded from http://arrow.org.my/five-indicators-of-climate-change-and-their-impact-onwomen/ or some other relevant image from Internet)
- Pens and flipcharts to write down the responses

Description of the exercise

The facilitator shows one poster depicting the impact of CC on women. He/she then asks the participants the following questions. After each question the responses are written

down on a flipchart, then the next question is asked etc. After the responses have been collected, the flipcharts should be stuck on the walls of the training room:

- 1. What are the factors that increase the vulnerability of women during and after disasters?
- 2. Are women always more vulnerable than men? Do you know or can you think of some examples of women as agents of change who contributed their knowledge and expertise in CC interventions
- 3. How to overcome or reduce these gendered vulnerabilities?

Group-work Exercise on Gender-responsive Climate Financing

Aim: to understand gender dimensions of climate financing

Time allocation: 1 hour

Needs/requirements for this exercise:

- Printed copies of 8 different projects funded by the Green Climate Fund (you can download these from http://www.greenclimate.fund/projects/browse-projects
- Flipchart sheets, marker pens

Description of the exercise:

- Divide the participants into 4 groups and ask each group to look at 2 projects funded by the **Green Climate Fund** and make suggestions how the gender dimension can be further strengthened (30 minutes)
- Discuss each groups findings in a plenary session and note down suggestions on a Flipchart (7 minutes per group)

TIP: Before conducting Exercise 3 below it would be good to review with participants some case studies of CC mitigation and adaptation strategies employed by local women and men groups around the world. Participants can select some cases from their own area/region and see how the interventions can apply to their own context and area of work.

The 2016 **Gender Just Climate Solutions publication of Women Gender Constituency (WGC)** has lots of cases studies to choose from (see Resources and Tools section)

Role Play Exercise: Technique for mainstreaming gender in adaptation planning

Objective: Explore ways to mainstream gender in adaptation planning through a participatory approach

Time allocation: 1 hour

Needs/requirements for this exercise

- Copies of one country's National Adaptation Plan of Action (NAPA) for each participant in small group
- Four tables with papers indicating different roles
- Flip chart, paper, and marker pens for each table/group

Procedure:

- 1. Divide people into 6-7 groups, and give them copies of one country's NAPA.
- 2. Assign a different role to each table group:
 - a. National Climate Change Committee b. Ministry of Women's Affairs c. Ministry of Environment and Energy d. Informal sector e. CSOs working on CC f. UNFCCC g. National News channel
- 3. Per table male and female participants should take roles such as Journalist for National News, Director of CSO, Minister of Women's Affairs, National Focal point for UNFCCC. Women and men participants can have any role, and in some cases it may be useful to assign a role to the non-traditional gender. Assign a writer, presenter per group (one male, one female)
- 4. Ask everyone individually to read through the NAPA assigned to their group, from the perspective of the role on their table.
- 5. In small groups, discuss ways that women and men may be differently affected by CC impacts in that country.
- 6. Brainstorm actions that could be taken by each of the roles in the group. On the flip chart, draft an implementation plan that incorporates each stakeholder's roles.
- 7. 6. Select a rapporteur per table group to present the plans in plenary. Everyone displays their table tents and each group presents for about 5 minutes.

TIP: Many more exercises on Gender and CC can be found in the 2009 IUCN, UNDP, GGCA Training Manual on Gender and Climate Change (see **Resources** section below)

Useful Resources and Tools on Gender and Climate Change accessed 12/12/16

- 1. **Gender and Climate Change:** a closer look at existing evidence, 2016. GGCA This literature review provides the most up-to-date assessment of the current evidence base illustrating how vulnerability to climate change and climate adaptation decisions vary by gender. http://gender-climate.org/resource/ggca-research-gender-and-climate-change-a-closer-look-at-existing-evidence/
- **Factsheets** on Gender and Climate Change, 2016. GGCA Factsheets with literature review for 5 regions: Africa, Asia, Latin America, N. America & Europe, Pacific Islands. Australia and New Zealand. http://gender-climate.org/resource/ggca-research-gender-and-climate-change-acloser-look-at-existing-evidence/.
- 3. **The Gender Climate Tracker App** provides experts, decision-makers, negotiators and advocates on-the-go access to the latest information on research, decisions and actions related to gender and climate change.

http://genderclimatetracker.org/app/overview.html

4. **CAP-net, GWA 2014.** Why Gender Matters in IWRM: A tutorial for water managers (available also in interactive and popular versions) Module 5 of this tutorial on 'Environment, Climate Change, and Waste management' is a useful tool for practitioners with various tools, case studies, and references to websites and literature on promising practices, as well as examples of evidence of impact.

http://genderandwater.org/en/gwa-products/capacity-building/tutorial-for-water-managers-why-gender-matters

5. Training modules - gender component of Great Green Wall, WEP Module 1 covers impact of CC on livelihoods of people, especially women, living in the area of the Great Green Wall Initiative in Nigeria. http://bit.ly/weptrainingmodulesggw 6. 'Gender and Climate Change, Supporting Resources Collection (SRC)', 2011. IDS Bridge. The SRC presents a mix of accessible and engaging research papers, policy briefings, advocacy documents, case study material and practical tools from diverse regions and disciplines, focusing on different aspects of climate change and its associated gender dimensions.

docs.bridge.ids.ac.uk/vfile/upload/4/document/1111/Climate_changeSRC1.pdf

- 7. Participatory Tools and Techniques for Assessing Climate Change Impacts and Exploring Adaptation Options: A Community Based Tool Kit for Practitioners, 2010. AID: Livelihoods and Forestry A resource for practitioners to help build the capacity of local forest user groups and households to adapt to climate change. This guide includes 13 participatory tools examples, instructions for facilitation. and guidance including notes. www.forestrynepal.org/images/publications/Final%20CC-Tools.pdf
- 8. Roots for the future: The landscape and way forward on gender and climate change, 2015. IUCN & GGCA. This publication is a full overhaul of the IUCN manual below, with clear, step-by-step guidance on gender mainstreaming and gender-responsive approaches to climate change decision-making, planning and projects at all levels (and lots of case studies) http://genderandenvironment.org/roots-for-the-future/
- 9. **Training Manual on Gender and Climate Change, 2009. IUCN, UNDP, GGCA.** This is a practical tool to increase the capacity of policy and decision makers to develop gender-responsive climate change policies and strategies. Available also in French, Spanish, and Arabic to download from: http://genderandenvironment.org/resource/training-manual-on-gender-and-climate-change/

10. GWA Diagram of causes and impact of climate change

A pictural of categories of people world wide that cause global warming and climate change, and of those who suffer most. A comparison between countries.

11. Gender, Water and Climate Change, 2009, factsheet GWA

The impact of climate change on poor people is water-related: too much or too little water, floods and droughts. This short fact sheet describes examples and gives explanation.

http://genderandwater.org/en/gwa-products/knowledge-on-gender-and-water/factsheets/folder-gender-water-and-climate-change/view

12. WECF Educative Posters on Gender and Climate Change (in French):

Six posters explaining essential gender issues linked to different aspects of climate action, along the main elements of the Paris Agreement http://www.wecf.eu/francais/actualites/2017/poster.php

- Gender 13. **Iust** Climate Solutions. 2016. **WECF** and **WEDO** A collection of cases from around the world of how local groups are integrating women's CCand gender concerns in mitigation and adaptation http://womengenderclimate.org/gender-just-climate-solutions-publication-2016/
- 14. Gender and Climate Change: Analysis of Intended Nationally Determined Contributions (INDCs), 2016. WEDO This useful document analyses the extent to which submitted INDCs address women's human rights and the linkages between climate change and gender http://wedo.org/wp-content/uploads/2016/11/WEDO GenderINDCAnalysis-1.pdf
- 15. Leveraging co-benefits between gender equality and climate action for sustainable development, 2016. UN Women and Green Climate Fund This is a comprehensive guidebook for practitioners and stakeholders on mainstreaming gender in Climate Change Projects with useful tools, statistics, and case studies https://trainingcentre.unwomen.org/mod/folder/view.php?id=2217

Relevant web resources (accessed 12/12/16)

- **Climate Funds Update** website has lots of information and resources on international climate finance initiatives www.climatefundsupdate.org
- Food and Agriculture Organisation (FAO) **Mitigation of climate change in Agriculture (MICCA)** Programme http://www.fao.org/in-action/micca/en/
- **Gender and Water Alliance** (GWA); pages on 'Climate change and disasters' and 'Environment' http://genderandwater.org/en/water-sectors
- **Gender CC** Women for Climate Justice <u>www.gendercc.net/</u>
- Global Gender and Climate Alliance (GGCA) http://gender-climate.org/
- UN Sustainable Development Knowledge Platform for SDG 13 https://sustainabledevelopment.un.org/sdg13
- International Institute for Environment & Development <u>www.iied.org/</u>
- **IUCN** Gender and environment https://www.iucn.org/theme/gender
- **UNDP** Gender and climate change website http://www.undp.org/content/undp/en/home/ourwork/environmentandener

- gy/strategic themes/climate change/focus areas/gender and climatechange.ht ml
- **UNFCC** webpages on Climate and Gender http://unfccc.int/gender and climate change/items/7516.php
- US Gender and Disaster Resilience Alliance Videos, posters on CC http://usgdra.org/
- Women's Environment and Development Organization http://wedo.org/
- Women and Gender Constituency (WGC) of UNFCCC <u>http://womengenderclimate.org/</u>

Session 2.5: SDG 15 - Gender, Forests and Biodiversity

Introduction

This session is made up of three main sections: the introductory part (objectives), conceptual information related to this thematic session, and resources and tools (interactive exercises). Steps and interactive exercises on how to develop this session are further explained in the toolkit section (page 11). For instance, facilitating an interactive exercise to begin with can enable participants to get to know each other, followed by a discussion on the gender dimension of forests and biodiversity, which is the objective of this exercise.



Depending on the place and timing of the training activity, the facilitator can create a friendly environment by placing some pictures, infographics and key messages (see Box 1) on the wall. The facilitator, in coordination with the local leader (both women and men), can also organize a field visit to a local forest, or mixed farming field to assess the local biodiversity *in situ*, and the work women and men do, as well as their access to forest resources.

Total time to develop this training session: 2.5 – 3 hours (excluding the field visit)

Learning objectives of this session

At the end of this training session, participants are:

- Familiar with SDG-15 and its targets
- Able to understand why this session is focussing on forests and biodiversity (SDG-15)
- They understand and analyse the importance of linking gender to forests and biodiversity
- They are able to develop a short gender analysis and prepare an action plan to mainstream gender in forests and biodiversity at local level
- They gain awareness on how to influence national policies relating to SDG-15

Gender and SDG-15 and its targets

SDG-15 comprises an inter-sectoral and integral objective: 'protect, restore and promote sustainable use of terrestrial ecosystem, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss.' For more information on this SDG and its respective indicators, see the following link: https://sustainabledevelopment.un.org/sdg15

Box 1: Forests are diverse ecosystems, home to a large proportion of the world's biodiversity. They are vital for 1.6 billion people's livelihoods, who directly depend on forests for food, fibre, seeds, medicines and fuel. Forests contribute to the regulation of hydrological, carbon, nitrogen and nutrient cycles and thus help maintain the delicate balance of atmospheric gases vital for a habitable atmosphere. They moderate temperature and are necessary for holding soil in place and keeping it from eroding into waterways as troublesome sediment. By helping to regulate the global hydrological cycle, forests are essential for maintaining the quantity and quality of freshwater available on Earth. (WMG, 2014)

To implement this SDG, the following targets have been agreed upon:

- **15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements. **15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.
- **15.3** By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.
- **15.4** By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.
- **15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.
- **15.6** Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed.
- **15.7** Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.
- **15.8** By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.
- **15.9** By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.
- **15.a** Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.
- **15.b** Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.
- **15.c** Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.

Although SDG-15 tries to cover multiple terrestrial ecosystem interrelated issues, most of the indicated targets are related to sustainable management and conservation of forests and biodiversity. This is understandable because of the critical role of these resources for combating desertification, reversing land degradation and restoring terrestrial ecosystems (see also Box 1).

Even if SDG-15 intends to tackle multiple interrelated ecosystem problems – including resource mobilization – this SDG does not acknowledge gender. It is gender blind and should address indigenous women's and men's knowledge and role in conserving and managing local ecosystems, forest and biodiversity.

Why focusing on gender in conservation and restoration of forests and biodiversity?

The conservation and restoration of forests and biodiversity is not gender neutral. Women and men have different knowledge, abilities, and power; hence, they have varied roles in accessing and managing these resources. Both men and women are also affected differently by and respond differently to the consequences of deforestation and biodiversity loss. They also have different levels of influence on decision-making regarding the use, exploitation, and conservation of these resources. Gender is constitutive to both the sustainable management of forests and biodiversity, and to deforestation/biodiversity loss and ecosystem degradation. Therefore, mainstreaming gender in forest and biodiversity related policies, actions plans an accountability mechanisms should be a priority.

Though most forests and biodiversity policy, plans and programmes have recently been attempting to recognize their gender dimensions; it is the case that this acknowledgment is not translated into real actions to mainstreaming gender (as a crosscutting theme). There is a tendency to usually consider men as the main stakeholders and beneficiaries of forests and biodiversity programs, while women go invisible. In the best case scenario, women (including indigenous women) tend to be seen as a vulnerable group; while their functions as gatekeepers, stewards, managers and agents of change are overlooked. For instance, an assessment made by UNEP and the Convention on Biological Diversity (CBD) on mainstreaming gender considerations in National Biodiversity Strategies and Action Plans (NBSAPs), shows that only 4% of the countries identify women as agents of change, while 17% characterized women as a vulnerable group. The same assessment revealed that 56% of NBSAPs (143 out of 254) contain at least one reference to 'gender' and/or 'women', while the remaining 44% do not mention either 'gender' or 'women' at all (UNEP and CBD 2016).

However, women farmers, indigenous women (and men) pastoralists and fisherwomen are feeding the majority of the world population, and are more productive per unit than large scale agriculture, while maintaining the largest seed and livestock diversity (WMG 2015). In some regions, such as Southern Asia and Sub-Saharan Africa, women are the main agricultural labour force (and producers of food) (See infographic 1 and 2), whereas the majority of female farmers are in charge of subsistence farming. By practising this farming, women are the custodians of agricultural and forest biodiversity.

Infographic 2: Hand weeding labour **75%** of the 250m tons of crops grown in Sub-Saharan Africa are on smallholder farms **75%** of those farms veeded by hand Infographic 1: Female and Male employment % in agriculture and other activities PERCENTAGE OF MALE AND FEMALE EMPLOYMENT (%) Source: FAO 50-70% of total Agriculture Industry Services 100% labour time is spent on this handweeding 80% 60% 90% of this handweeding is done 40% by women 20% **70%** of farm children between the ages of 5 and 14 are forced to leave school and Developing Eastern & L America Near East & Southern Sub-Saharan work in the agricultural sector Southeastern &the North Africa Asia Africa at the peak period of weeding Asia Caribbean

Source: FAO 2011

Further, indigenous people's traditional knowledge of biodiversity, including adaptation and sharing these practices for forest and biodiversity conservation and restoration, are usually overlooked. Special attention should be given to indigenous women's knowledge because:

- Across the globe, indigenous women play an important role as gatherers of wild plants, home gardeners and plant domesticators, herbalists and seed custodians (Howard, 2001).
- Research on 60 home gardens in Thailand revealed 230 different species, many of which had been rescued by women from neighbouring forests before being cleared (FAO, 1997).
- Women in different regions of Latin America, Asia and Africa manage the interface between wild and domesticated species of edible plants. This role dates back to 15,000-19,000 B.C. (Aguilar (2016)
- In a study in Sierra Leone, women could name 31 uses of trees on fallow land and in the forest, while men named eight different uses. This shows how men and women have distinct realms of knowledge and application for natural resource

management, both of which are necessary for conservation and restoration (Aguilar (2016).

- Women provide close to 80% of the total wild vegetable food collected in 135 different subsistence-based societies. Women often have specialized knowledge about "neglected" species. See also Aguilar (2016).
- Globally, women have bred more than 7,000 species of crops. In India alone, seed saving has enabled women to breed 200,000 varieties of rice. By practising mixed farming system (agroforestry + livestock or/and artisanal fisheries), women have greatly contributed to maintaining local biodiversity, which is necessary for protecting against diseases, pests, and weather events that threaten to wipe out food supplies (Shiva, 2012).

However, the majority of botanical and biodiversity research is not gender sensitive. This has led to incomplete or erroneous scientific results in the forests and diversity field, as well as information on characteristics and uses of plants, and the causes of genetic erosion. Integrating women's traditional knowledge into botanical and ethnobotanical⁶⁴ research is critical for improved knowledge and management.

Gender gaps and barriers in forests and biodiversity

In spite of the fact that an increasing number of publications and cases are demonstrating the high engagement of women in forests, agriculture and biodiversity management, is it often true that women do so without equitable participation in land tenure, access to resources, capacity building, and decision-making. These inequalities and barriers are deeply rooted in different societal structures, gender ideologies and ways of thinking about gender roles and boundaries, as described below.

Social, cultural and structural barriers

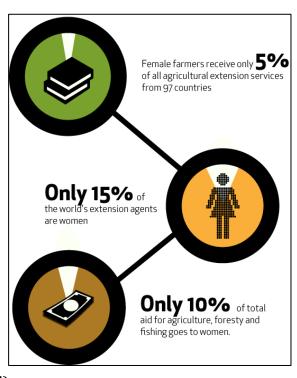
Women are at disadvantage on several social levels, largely due to the influence of patriarchal power systems. All societies practice some form of social structuring based on gender relations, and the impact of this has major complications in the Global South, where resources are especially scarce (see Annex 1, case of Ethiopia). Social stratification affects women's land tenure rights and thus, access to the management of forests and biodiversity, including production of food. Social segregation based on gender and/or sexual orientation, when combined with other forms of discrimination based on religion, race, ethnicity, class, caste, marital status, and education put them at disadvantage, even further. For instance, women pastoralists commonly find themselves marginalised and their traditional social and economic status eroded due to policies and investments that restrict pastoralism and promote the conversion of grasslands to large extensions of monocrops and/or monoculture tree plantations.

Indigenous women living in rural areas are more likely to have difficulties in the fulfilment of their rights to land, health, and education in comparison to non-indigenous women.

⁶⁴ Ethnobotany: the branch of botany concerned with the use of plants in folklore, religion, etc.

On the other hand, professional (and masculine) culture of forests and agricultural engineers and technicians tend to consider forests and biodiversity management as a male domain, excluding women not only from accessing to extension services (see infographic 3), but also from decision-making spaces.

The consequence of masculinizing forests biodiversity conservation restoration results in gender differentiated impacts. For instance, forests and other spaces (such as wetlands) predominantly used by women – for seed, food, fibres, fuel and fruits collection - are ignored in favour of those used by men. Similarly, noncommercial (mostly female managed) species are undervalued in favour of commercial (mostly male managed) production.



Infographic 3: gender bias in extension services

Infographic 3 indicates that only 10% of the total aid for agriculture, forestry and fishing goes to women (FAO 2011).

Legal barriers:

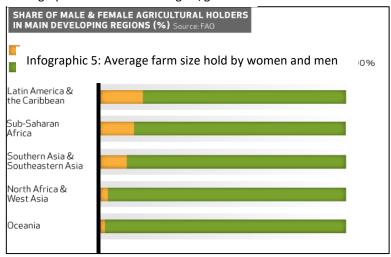
Women additionally face numerous legal barriers in domestic and customary law, which prevents them from holding land and water rights, and intellectual property rights. These legal barriers also prevent women from maintaining sustainable livelihoods, which also provide the necessary incomes to conserve biodiversity and purchase seed and food.

• **Property rights:** One of the central factors enabling women to maintain sustainable livelihoods is women's ability to access land tenure rights, which is highly differentiated by gender and marital status.

Share of landholdings owned by women in Africa ranges from 5 to 30% (UN-HRC 2015). This situation is even worse in regions such as North Africa, West Asia and Oceania (see infographic 4). Even if women may have access to land through inheritance practices, women are still less likely to inherit a small plot of land in comparison to their male counterparts (See infographic 5). Besides, inheritance practices in most societies are patrilineal. Under this system, sons rather than daughters, inherit land from their fathers, therefore women's access to land is often determined through marriage practices.

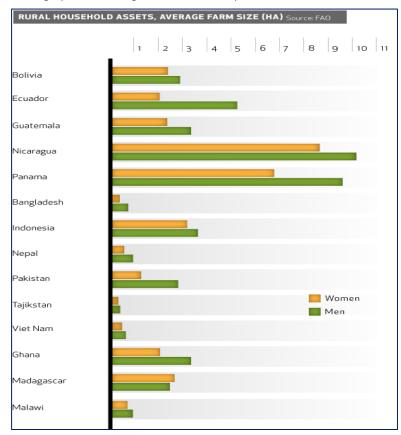
Women can also access land and forests through collective tenure of communal land, however, this is undermined by increasing policies and practices that favour individual property rights – and these affect women the most.

Infographic 4: share of land rights/gender



Source: FAO 2011

Infographic 5: Average farm size hold by women and men



• *Intellectual property rights*: In most communities, farming practices, such as seed exchanges are communal activities usually carried out by women, which is critical for subsistence and mixed-farming systems. Today, however, industrialized monoculture farming (promoted by a business oriented model and by an

agricultural Intellectual Property Rights (IPR) framework) is replacing traditional seed exchange and mixed farming.

Box 2: Global agribusiness and agrobiotechnology corporations have transformed the global commercial seed market into a multi-billion dollar industry and four companies alone account for 50% of this market. With such lucrative monopolies at stake, these international corporations have actively exercised the IPR regime to secure exclusive access to, and thus royalties from, patented seeds.

[UN-HRC 2015]

The IPR regime does not readily acknowledge the value of (indigenous) women's traditional knowledge. practices. technologies techniques related to biodiversity. IPR tends to reward "high technology" but ignores the contributions that the female labour force makes to agricultural production. Meanwhile, the privatization of agricultural resources leads to increased monetization. Women are less likely than men to have discretionary income, and are therefore less able to afford expensive seeds that were once managed communally. Currently, certain seeds are being genetically modified and are affecting yield rates and income, which forces farmers to keep buying seeds at the detriment of native seeds use and preservation.

Furthermore, (indigenous) women are faced with the threat of bio-piracy: the practice of co-opting and patenting traditional knowledge without receiving appropriate compensation. Further, as a result of IPR laws, seeds that would have once been saved and shared are now the intellectual property of corporations. Recent litigation demonstrates that corporations are willing to appeal to the law to protect their property. Since 1997, Monsanto reports that it has filed 147 lawsuits against those farmers who failed to "honour this agreement," i.e. Monsanto's intellectual property rights (UN-HRC 2015).

Economic barriers

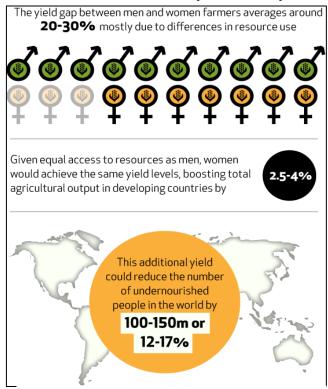
Economic structural adjustment policies, imposed throughout developing countries in the past decades, have negatively affected poor women and men farmers. Agricultural trade liberalization and WTO agreements are generally premised on export-promotion policies that benefit large-scale male farmers, encouraging the production of crops for export over local consumption, including subsistence, and mixed farming systems. Liberalization has also opened markets to subsidized agricultural imports thus displacing local products. Women food producers have been particularly impacted, engaging in agricultural production on a scale that is not competitive nor compatible with a large, corporate model of farming. Under WTO Agreements women are struggling to maintain local biodiversity and their traditional mixed farming system, which is also their source of income. Poor women are pressured to search for a job in commercial agricultural fields where their rights are systematically violated (Vera, 2015).

On the other hand, in most cases women do not have easy access to credit to develop their agricultural activities. This is in part, because of land tenure limitations, since property rights are a precondition to access credit. As a result of this bias, in those regions where women are allowed to keep a plot, this produces less than men's plots (infographic 6). In addition, some experiences in India with microfinance pose several problems that have not yet been solved such as: 1) high interest rates; 2) difficulty to reach the poor; 3) Regional

disparity; 4) lack of insurance services; 4) legal structure ad regulation; 5) Financial illiteracy; and 6) Drop out and migration of family group members, to name a few (further info see Loha, 2015).

Ecological constraints

Poor women and men in the Global South are severely affected by biodiversity loss and by exacerbated poverty and deprivation due to the destruction and degradation of forests, grasslands and other ecosystems. The work load of women is particularly affected by deforestation and biodiversity loss as they are the primary food providers and care-takers



Infographic 6: Yield gap between men and women farmers

of the family. Women also have the main responsibility for procuring water and fuel wood and are thus particularly affected by freshwater depletion. Water shortages and depletion of forests require women and girls to walk longer distances to collect water and wood. In Senegal and Mozambique, women spend 5.3 and 17.5 hours respectively each week collecting water. In Nepal, girls spend an average of five hours per week on this task. In rural Africa and India, 30 percent of women's daily energy intake is spent in carrying water (UN 2015).

The work overload (burden) and poverty situation of rural women and men is exacerbated by industrial tree plantations and large scale agriculture.

Monoculture tree plantations are the main drivers of biodiversity loss, soil degradation, flooding, water scarcity, droughts, climate change, livelihood loss, land grabbing, and displacement of communities (see Annex 2: case of Chiapas, Mexico).

Approaches on forests and biodiversity conservation and restoration

Market-based approach:

International forests and biodiversity policy have mainly focused on market-based approaches to forest conservation and restoration. Such approaches result in highly detrimental consequences for indigenous and rural women around the world. Indigenous and rural women are heavily impacted by market-based approaches because of their roles in managing and using natural resources, small-scale agriculture and the production of food as well as their lack of formal land tenure rights and involvement in decision-making processes. In addition, women have fewer capital assets (as usually their work goes unpaid or precariously remunerated), and in many customary and statutory tenure systems women are not able to have their own land title (Brown 2010).

In such situations they rely on male relatives for access to forest resources. More generally, women tend to be more dependent on the sound management of common property forest resources and compliance with related customary norms (however, they lack formal rights to these resources).

It is also important to distinguish recognition of community governance and tenure rights from property rights. The conviction that common pool resources would be overexploited has motivated many governments to implement programs to privatize communal resources; such privatization can be particularly disadvantageous for women, children and economically poor community members who are not able to obtain their own property for cultural, economic or other reasons, and who are very dependent upon common forest resources (Chomba 2016). In this regard, the Green Economy framework, defined by UNEP as "one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities", can be highly problematic.

Carbon markets and the (in) famous REDD+ scheme – part of the Green Economy –

Are even more problematic for the effective participation of women. Under such schemes, women in many rural communities cannot participate effectively in decision-making due to cultural/traditional or social norms, and a lack of capacity, education, mobility and time, even though they play a major role in forest management and the provision of forest products (Alban 2004). Sometimes male community members simply bring their wives to community meetings to fulfil women's participation requirements. Even when some women are able to overcome these cultural barriers and speak up during meetings, it is important to realize that women are not a homogeneous group, and that the women who speak up might not always share the same interests as other women who remain silent (Brown, 2010). For example, the women who speak up might be literate, have recognized land rights and be in a social position that they can benefit from REDD+ projects while the women who remain silent might not have land tenure rights and risk losing access to fuelwood sources. A REDD+ analysis in some Central African countries showed women were seldom involved in discussions (Brown, 2011). Excluding women in such processes would result in their needs not being addressed and the promised financial gains from the scheme not reaching them.

Community-based conservation and restoration,

Is a non-market based approach, which is based on the different strategies that indigenous peoples and local communities have been using since time immemorial. These rights holders are advocating and raising awareness of governments, policy makers, and other stakeholders of the urgent need for appropriate support for these approaches; financial resources devoted to less effective strategies can be redirected to this integral approach that entails customary practices in harmony with nature and traditional governance systems that recognize the role of women and girls in their societies.

The recently negotiated Agenda 2030 could greatly benefit from non-market based approaches. Likewise, other related international agreements could benefit from taking a stronger stance towards community-based conservation and restoration of forests and biodiversity. The Global Forest Coalition's Community Conservation Resilience Initiative (CCRI) is a global initiative by Indigenous Peoples' Organizations and NGOs to facilitate

participatory assessments of the resilience of community conservation by local communities in at least 20 different countries. The overarching objective is to build the capacity of communities to assess the resilience of their own conservation practices and establish incentives that can enhance this resilience. For more information see the following link: http://globalforestcoalition.org/es/category/community-conservation-resilience-initiative/

International Commitments on gender and forests and biodiversity

Convention on Biological Diversity's Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS): The CBD recognises "the vital role that women play in the conservation and sustainable use of biological diversity" and affirms "... the need for the full participation of women at all levels of policy-making and implementation for biological diversity conservation." https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf

<u>Aichi biodiversity targets:</u> Target 11 on Conserved Areas and Territories (ICCAs) can provide secure tenure through land and natural resource laws. Their value lies in the collective nature of the conservation action and recognition of traditional authorities and customary laws and practices. https://www.cbd.int/sp/targets/rationale/target-11/

Agenda 21 recognition and promotion of "the traditional methods and the knowledge of indigenous people and their communities, emphasising the particular role of women, relevant to the conservation of biological diversity and the sustainable use of biological resources" and the guaranteed "participation of those groups in the economic and commercial benefits derived from the use of such traditional methods and knowledge." (Chapter 15.4).

Beijing Platform, Strategic Objective K.1 (253.a) governments agreed to "encourage, subject to national legislation and consistent with the Convention on Biological diversity, the effective protection and use of the knowledge, innovations and practices of women of indigenous and local communities, including practices relating to traditional medicines, biodiversity, and indigenous technologies and endeavour to ensure that these are respected safeguard the existing intellectual property rights of these women as protected under national and international law ...".

http://www.un.org/womenwatch/daw/beijing/platform/environ.htm#object1

Bridging the gap: action plan to mainstreaming gender into forests and biodiversity

Prior to developing an action plan for mainstreaming gender into forests and biodiversity conservation and restoration activities, it is critical to first know about the gendered aspects of these activities. This includes how these activities affect/impact gender relations and vice versa as well as how gender interacts with the land tenure, access to and control over forests and biodiversity. To this end, it is useful to develop an introduction to a 'Gender Analysis'; some steps and tips are indicated to inform the facilitator.

Step 1: Developing a gender analysis

A gender analysis is the process of assessing a wide range of issues (or factors) that affect and impact gender relations and the position and situation of women and men in society. In relation to forests and biodiversity conservation and restoration, it is advisable to do the gender analysis regarding the following issues:

- Gender roles, activities and needs/priorities (*who does what and what is done*) for managing and conserving and restoring forests and biodiversity.
- Resources: assets, labour, knowledge (who accesses what, what is used and what is produced
- Rules, rights, obligations and authority (how things get done, who decides, and whose interests are served): official norms, customary norms, values, traditions.
- (Re)distribution of forests and biodiversity conservation and restoration benefits and risks (*who benefits from and what are the impacts*)

As gender relations and the conservation and restoration of forests and biodiversity are defined, negotiated and produced in different domains, such as household, community, and market, it is necessary to do the gender analysis at different levels. This is because these institutions (including the State) shape the outcome of any gender relationship.

You can use different tools to develop a gender analysis, some of them include: household survey, key informant interviews, focus group discussions, life history and so forth. See this link for different matrix that can be used to develop a gender analysis: (link of Google drive https://drive.google.com/drive/u/0/folders/0ByejYlliYlrUeHRwSkUtd1RLT0U)

Step 2: Gender-responsive Action Plan of forests and biodiversity conservation and restoration

A gender analysis will provide you with the necessary input to design a gender-responsive action plan (GAP) either at local, regional or national level. You need to consider the following aspects when developing a GAP:

- Define gender strategic plan outcomes and objectives, based upon gender priorities defined by local women and men.
- Mainstreaming gender in all strategic plan including outcomes, for instance: capacity building, collective access to forests, biodiversity management and conservation, and sustainable livelihoods.
- Focus on targeted gender priorities across strategic plan outcomes, for instance, regarding 'biodiversity and conservation', you can target the following: advancing indigenous women intellectual rights to local biodiversity, promoting gender equal access to capacity building.
- Address gender bottlenecks and barriers: limited access to knowledge, information and technology, excessive time burden of women and girls to collect wood/water/medicinal plants.

Tools and interactive exercises to develop the training session

To start the workshop: Short assessment of participants

Exercise: Getting to know each other and our relations with forests and biodiversity

Time allocation: 30-45 minutes

Needs/requirements for this exercise

- A flipchart, two colour of carts, and pens to write down the answers of the participants

Description of the exercise

When the group of participants is small (no more than 15), the facilitator can ask the participants to work in pairs (for around 10-15 minutes) and ask each other the following questions:

- What is your relation to forests and biodiversity?
- Can you tell a gender-related experience that has especially impacted to you?

Afterwards, each participant will introduce her/his partner to the entire group, and tell her/his respective gender experience. The facilitator or assistant will write down relevant information of the experience on the flipchart or cards of two different colours. In one, the experience of male participants will be written down in one colour, and female participants will use other colours.

For big groups (more than 16), participants can be grouped in 4 of 5. The difference is that during the presentation, only one of the participants of each group will present all answers of the components of his/her group.

The objective of this exercise is not only to know the participants and her/his experiences, but also to start a discussion on the gender dimension of forests and biodiversity.

SDG-15, Focusing on forests and biodiversity, and the gendered gaps

Time allocation:

- Power point presentation: 15 minutes
- Questions: 10 minutes

Needs/requirements for this exercise

- A computer and a projector, in case that is not possible to use these equipment, the facilitator can prepare his/her presentation in flip charts
- Pens and charts to write down questions

Exercise

For the PowerPoint presentation the facilitators can use the information and infographics provided in this session. When presenting the gendered dimension and the gender gap in forests and biodiversity, the facilitator should try to relate it to the gendered experiences of the participants, discussed in the previous exercise.

Some facts on gender and forests and biodiversity conservation and restoration

Wake-up exercise

Role play (competition between two groups) of contrasting debates based on statements

Suggested time allocation

Two minutes/participants to defend a statement, and two minutes to contradict this statement. Total 40 minutes for 10 statement:

Conclusions and reflexions: 15 min

Total time: 55-60 minutes

Needs/requirements for this exercise

• A PowerPoint slide or flipchart to show the statements one by one

Description of the exercise

For this exercise, the facilitator divides the participants into two groups. One of the groups will defend the statements, which are shown on a flipchart (or PowerPoint) one by one, and the another group will contradict the statement. All participants of both groups should be involved, and each of them has only 2 minutes to defend or contradict a statement. It is important that the facilitator keeps the 2 minutes/statement.

During the role play, the facilitator or assistant will write down relevant information that both groups are debating, for later discussion and reflection.

Examples of statements to use (the facilitator can use all these statements or choose some of them, according the context and the time planning of the workshop):

- 1. Women have a less influential role than men in forests and biodiversity conservation and restoration
- 2. Management of forests is dominated by men
- 3. Water legislation prevents women from participating in forest management organizations
- 4. Forest professionals do not 'see' women as forest actors
- 5. Women do not like to participate in forest conservation and restoration decision-making
- 6. Male members of forest management organizations (FMO) do not usually allow women to participate
- 7. There is lack of gender awareness in biodiversity conservation
- 8. Including gender in forests and biodiversity management requires an additional budget and this is too expensive
- 9. Local culture and traditions do not allow women to participate in decision-making related to forests and biodiversity
- 10. Women do not have time to participate in forests and biodiversity related meetings and discussions, because they are overburdened with other tasks.

For the discussion it is important that the facilitator keeps in mind that statements 1,2,4,6 and 7 are true; statements 3 and 5 are false; and statement 8, 9, and 10 are true and false. In the case of statement 8, it is true that including gender in forests and biodiversity needs a special budget, but the final result of this action is cost-effective. Statement 9 can be true in some cultural contexts and in others this may not be the case. Statement 10 is true and some women may find difficult to make time to attend to FMO meetings. Those women who try to participate in meetings first have to fulfil their domestic and other responsibilities.

Bridging the gap: action plan for mainstreaming gender into forests and biodiversity interventions

Exercise: groups discussion - plenary

Time: working in groups 45-60 minutes

Plenary: presentation of each group's work: 15 minutes

Final reflexions: 10-15 minutes

Needs/requirements for this exercise

Flipcharts

• Charts and pens

Description of the Exercise: The facilitator divides the participants in groups of 5-7 people. Each group will get a case study of forests and biodiversity conservation and restoration (provided in Annex3), and work on it. These cases will need to be prepared and printed out beforehand by the facilitator. The following two guiding questions can help the work of the group:

- According to your opinion, has the development organization carried out a gender analysis? If yes, what did they do?
- Based on your analysis, could you draw an alternative gender action plan?

To facilitate this exercise, the facilitator should provide the matrix of a gender analysis (indicated in the link: https://drive.google.com/drive/u/0/folders/0ByejYlliYlrUeHRwSkUtd1RLT0U).

Importantly, before dividing the participants into groups, the facilitator should explain to the participants what a gender analysis is and how to do a gender action plan. To this end, the facilitator can prepare his/her presentation using the information provided in this session.

Plenary discussion, recap and reflexions

After each group has presented their work, the facilitator can recap the main conclusions and finish this part by explaining to the group that there are a number of international agreements and commitments (provided as information in this session) to include gender in forests and biodiversity.

Additional sources to develop this session

The facilitator can further revise the following additional sources to develop their training day:

- Community Conservation Resilience Initiative (CCRI) Methodology Gender Toolkit in Annex via http://globalforestcoalition.org/wp-content/uploads/2014/06/New-Last-CCR-Initiative-methodology_May-2014.pdf
- Other information related to the CCRI, including country Case Studies can be found via http://globalforestcoalition.org/resources/supporting-community-conservation/
- Newsletter of the GFC features Gender related articles in the different areas we campaign for: http://globalforestcoalition.org/resources/forest-cover-issues/.

- Gender and Water Alliance (2016) *Empowerment. Four Interacting Elements for Analysis and as an Objective for Development*. GWA Project of Bangladesh.
- Gender perspectives on Biodiversity. CBD and UNBiodiversity. http://womenwatch.unwomen.org/environment
- Women and Natural Resources. Unlocking the Peacebuilding Potential. UNEP, UNwomen, PBSO and UNDP (2013). http://www.unwomen.org/-/www.unwomen.org/-/www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2013/11/unep_un-women_pbso_undp_gender_nrm_peacebuilding_report%20pdf.pdf?vs=1455
- Gender and Biodiversity. Living in harmony with nature. UNDO. https://www.cbd.int/gender/doc/fs_gender_long.pdf
- Biodiversity and equality between women and men. https://www.oecd.org/dac/gender-development/1849290.pdf
- Gender in Forest Tenure: Pre-requisite for sustainable Management. Brief # 1, Rights + Resources (2012).
 http://theredddesk.org/sites/default/files/resources/pdf/2012/gender in forest-tenure forest management nepal.pdf

References

- Aguilar Lorena. Biodiversity. Gender makes the difference. IUCN. Download 17/11/2016. http://www.wocan.org/resource-keywords/biodiversity-0#
- Alban, M. and Arguello, M., 2004. Un Análisis de los Impactos Sociales y Económicos de los Proyectos de Fijación de Carbono en el Ecuador: El Caso de PROFAFOR – FACE, International Institute for Environment and Development, London, UK.
- Alvarez, Isis. 2013. Forests, biodiversity and rural and indigenous women's rights; In Gender Equality, Women's Rights and Women's Priorities: Recommendations for the proposed Sustainable Development Goals (SDGs) and the post-2015 Development Agenda (Chapter 4 section c). http://www.womenmajorgroup.org/wp-content/uploads/2014/06/Womens priorities SDG.pdf
- Brown, H. C. P., 2011. Gender, climate change and REDD+ in the Congo Basin forests of Central Africa. International Forestry Review, 13(2).
- Chomba, S., Kariuki, J., Friis Lund, J. and Sinclair, F., 2016. Roots of inequity: How the implementation of REDD+ reinforces past injustices. Land Use Policy 50 (2016) 202–213
- FAO, 2011. The State of Food and Agriculture. Women in Agriculture, Closing the Gender Gap for Development. http://www.fao.org/docrep/013/i2050e/i2050e.pdf
- FAO, 1997. Higher agricultural education and opportunities in rural development for women An overview and summary of five case-studies. *Women and Agrobiodiversity*. http://www.fao.org/docrep/W6038E/w6038e05.htm
- Gabizon, Sascha et.al. 2015. Sustainable Development Goals and the 2030 Agenda. Why environmental sustainability and gender equality are so important to reduce poverty and inequalities. *In: Perspectives, Issue No 17.* WMG.
- GFC, 2016. Mainstreaming Biodiversity? Mainstreaming Equity and Justice. *In:* Forest Cover a Global Forest Coalition newsletter on International Forest Policy No 51 October 2016.

Loha, Rucha. 2015. Problems of micro-finance prevailing in India. *Ph.D., (pursuing) MBA, B.com. DIRPM) Assistant Professor, Datta Meghe Institute of Management Studies.*

https://www.academia.edu/19760951/Problems of Micro finance Prevailing in In dia

- Howard, Patricia. 2001. Women in the plant world: the significance of women and gender bias for biodiversity conservation. Briefing produced for the IUCN. https://portals.iucn.org/library/sites/library/files/documents/Rep-2001-028.pdf
- UNEP, 2016 Progress in implementing the gender plan of action: update on mainstreaming gender considerations in National biodiversity strategies and action plans. *Convention on Biological Biodiversity UNEP/CBD/COP/13/8/Add.3. October 2016.*
- United Nations, 2015. Report of the Special Rapporteur on the Rights to Food. Human Rights Council. Thirty-first session, agenda item 3. A/HRC/31/51
- Shiva, Vandana 2012. Seeds in Women's Hands, Oxfam Int'l GROW Blog Channel. https://blogs.oxfam.org/en/blogs/seeds-in-womens-hands GFC
- WMG, 2014. Women's Major Group contribution for the Eight Session of the Open working Group on the sustainable Development Goals (OWG8). Forest and Biodiversity.

ANNEXES

Annex 1: Women headed households: greater risk of poverty in Ethiopia

In Tigray, Ethiopia - one of the poorest regions in the world – there is a highly significant correlation between extreme poverty and households where the head of the household is a woman. Belonging to such a household means one is 35% more likely to be poor, compared to 8% in households led by a man. In addition, women heads of family often lack land ownership, and where they do own land, 70% of the women are obliged to rent the land out, losing close to 50% of the harvest, because they lack enough workers or working animals to help them with direct harvesting. Thus many households headed by women depend on food aid. Additionally in this area, there is limited access to forest and agricultural resources, which are also key for their livelihoods, because it is an area severely affected by soil erosion, deforestation, and overgrazing. Access has also been deteriorating, because of physical delimitation with fences and monoculture plantations. Cultural prejudices also affect women in Tigray: there is a high divorce rate fragmenting agricultural activities as "getting a divorce and building a new family, especially for men, is a new way of accessing additional land." Despite this situation, the Ethiopian government has recently been involved in providing access to extensive areas of land to foreign investors, causing further harm to its people.

Source: developed by Patricia Howard, researcher from the Wageningen University cited in Antonios, 2006⁶⁵

Annex 2: From Living in the jungle to 'existing' in "little houses made of ticky-tacky...": Case from Chiapas, Mexico

Indigenous communities from the Amador Hernandez region in Chiapas, Mexico, have lived in the Lacandon jungle for generations. In 2011 they opposed the implementation of REDD+ projects in their territories that were seen as crucial for the California-Chiapas-Acre agreement. This agreement made during the Schwarzenegger administration between the states of California (US), Acre (Brazil) & Chiapas (Mexico) looks for REDD carbon credits generated for use as offsets in the Californian emissions trading scheme, set to have begun in 2012. However, the Amador Hernandez communities did not agree with their government plans and have been denied medical services and have suffered other consequences for their non-compliance. The government in turn offered them a new "life" in 'Santiago el Pinar', one of the "Sustainable Rural Cities" established by the government for relocation. These indigenous communities that have traditionally held a close spiritual and cultural relationship with forests would then have to live in prefabricated houses far from their ancestral lands thus interfering with their traditional ways of life, cultural values and livelihoods.

Source: http://climate-connections.org/2011/09/05/communique-from-the-communities-of-the-amador-hernandez-region-montes-azules-lacandon-jungle/.

Annex 3: Case studies for focus group discussions:

Case 1: How fruits of the forest are helping women in rural Mali

The Mopti region in central Mali is a rural, dryland area bordering the Niger River, with the Koubaye forest in the South. In the local villages, women are important breadwinners. They are the principal, if not exclusive, gatherers of forest produce, and make up 70% of traders of these types of products.

⁶⁵ "Acceso desigual a los recursos naturales," Pierre Antonios, Oficial de información, FAO-Sala de prensa, Italy, http://www.fao.org/newsroom/es/news/2006/1000342/index.html.

ITF and local partner Sahel Eco are working across 29 villages with 695 women to improve income generated from commercialisation of the forest produce. Indirectly, this will have positive effects on the conservation and regeneration of trees and the nearby Koubaye forest.

Trees 4 Livelihoods, a programme of ITF and Sahel Eco that runs from 2013 – 2017, is helping women create a living from the trade of non-timber forest products in two ways. Firstly, by developing business strategies through market research and organisation. Collectively, women will be stronger in negotiations and able to obtain higher prices. Secondly, by transforming forest produce into household commodities like soap, beverages, syrup and jam. When the project started two years ago, none of the participants were transforming the products before sale. This not only adds value, but also allows the preservation of perishable stocks. During the long, dry seasons, when vegetation is scarce, there will still be something to sell.

During the initial activities, two women were chosen from each group to undertake training and implement surveys in the market towns of Mopti and Kouakourou. Based on the findings and group discussions, eight products were chosen to transform and commercialise: Grape, henna, tamarin, balanites, jujube, shea, African fan palm and sounsoun. All decisions are taken by the groups, ensuring a sense of ownership and motivation that will help sustain development of the enterprises in the future. The method has proven fruitful. Products are selling well in the villages, as well as on the market in the larger village of Konna. In three months, 750 bars of henna soap have been sold, 620 jujube cakes and over 1300 bottles of tamarin and balanites syrup.

Some Visible Results

For example, women are earning enough to put aside, and have adopted the Savings for Change model. This initiative developed by Oxfam in sub-Saharan Africa helps rural women constitute collective savings funds. Each week, the groups meet to contribute a small sum into the fund. Once large enough, small loans are made to members over a short period of time, and paid back at a low interest rate. So far, 20 groups have been formed in the villages. Initial information sessions were followed by the election of the management committees and definition of the criteria for evaluating a loan request. The groups have collectively saved a total of 945 750 CFA Francs (a little over £1,000), which in turn has allowed individuals to invest in the material needed to transform and conserve the products. A total of £650 has already been given out in loans.

Building sustainable livelihoods for women is not simply about increasing income. It fits into the wider aims of the project, which are to increase food security, reduce poverty and build resilience to climatic shocks and long term climate change. About 80% of Mali's 15 million population are dependent on farming, fishing and livestock production – all of which are vulnerable to climate shocks.

Source: Trees Journal. Oct 2015. http://internationaltreefoundation.org/wp-content/uploads/2016/06/Trees-Journal-Oct-2015.pdf

Case 2: All Women's Forest Protection Committee in Dengajhari village, Nayagarh (India)

Dengajhari village is situated in Nayagarh district of Orissa. These forests were once dense, but they were plundered due to the setting up of heavy industries and the pressure on the forest resources due to population explosion; women had to walk as far as 12 km daily to collect firewood for their hearths, and villagers began migrating for employment. Faced with an impending ecological disaster, many villages in Ranapur initiated forest protection and regulated use of resources within and around their villages. There were few open-access forests left, leading to consequent clashes between the protecting communities and the illegal users. Gradually, facilitated by some NGOs, various clusters came together to form a parishad (federation).

Dengajhari consists of 30 households dominated by the Kand tribe. Patrolling parties, all men, began to face serious threats from the timber mafia and villagers were demotivated and discouraged to protect forests. Additionally, time spent on patrolling started affecting the daily wages and to compensate for the loss men were often compelled to fell a tree. In the meantime Ranapur Federation, with the help of NGO Vasundhara, started convening monthly meetings of the women from the member villages. The objective was to elicit better participation of women in the decisions related to forest protection. Women from Dengajhari regularly participated in such meetings. After some deliberations, the women decided to take on the responsibility of forest protection.

Around the same time, on 26 October 1999, 200 people with 70 carts were seen entering the forest. The village men rushed to the forest department but received no help from them. All the village women gathered at the village temple, divided themselves into two groups, waited at the paths leading to the forest and besieged the offenders with spades and sharp weapons. The offenders, all men, were scared of retaliating. They feared that they could get charged with violence against women—that too, tribal women—which was legally a serious offence. The men ran off. Women then sent for members of the federation and forest officials. The felled timber was confiscated and sold by the villagers, and the money was deposited in the village fund. After this incident, women started patrolling the forests regularly.

Although all meetings about village protection are open to all villagers, women are the main decision-makers. In a state like Orissa, where women's participation in decision-making is negligible, Dengajhari is among the few villages where even the monthly general body meetings of the Ranapur Federation are attended by women. The women have adopted the *thengapalli* practice for forest vigilance. Every day four women patrol the forest and by the evening the *thengas* or batons are placed in front of the houses that should take over patrolling the next day. The women's committee has also laid down certain rules for collection of forest resources. The small population of the village, which makes for a high amount of transparency and visibility of each other's activities, ensures that people abide by the rules.

As a result, Dengajhari itself protected about 80 ha of lush green forest and, if seen in association with protected forests of adjoining villages, the green patch is considerably larger, and possibly contains significant wildlife populations. Dengajhari is one village where the able support and intervention of the federation resulted in successfully thwarting external pressures. With that emerged a unique and powerful initiative by the women to become the caretakers of their forests.

Source: Kalpavriksh, 2002.

http://kalpavriksh.org/images/CCA/Directory/Orissa CaseStudy DengajhariVgeNayagarh.pdf

Case 3: Women and mangrove biodiversity conservation in Cogtong-Philippines

In Cogtong Bay⁶⁶, like in many mangrove areas, marine biodiversity provides the source of livelihood to local population (food, fuel, and other products). Women in this Bay are engage in different activities, fishing, *nipa* weaving, snakeskin trade, fish and oyster marketing, mariculture and firewood collection. Farming backyard gardening and livestock-rearing are other important subsistence and wage earning activities. Changes in the patterns of women's involvement in these activities often depend on shifts in accessibility to these resources. Declining of resource availability, for instance, lower fish catches, has often been an important factor for women to seek non-resource-based employment, such as running

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⁶⁶ In Cogtong Bay, which is located in the central region of Philippines, mangroves and other coastal resources represent s rich and valuable resources for the traditional and commercial uses. By providing spawning grounds, mangroves support many fish species, crustaceans and other aquatic biodiversity. Besides, they provide timber, fuelwood, poles, posts and traps.

Sari-sari stores, providing child care, laundry services, and trading. Therefore, the depletion of coastal resources has direct impact on women's and men's role.

In 1989, a project called Cogtong Bay Mangrove management (implemented by an NGO), aimed to improve the management of the Bay by organising local communities to undertake the coastal resources management. The project was funded by USAID, through the Ministry of Environment.

The project had three major objectives:

- To organise local communities of 8 coastal Barangays (an administrative subdivision) to undertake coastal resources management.
- To assist local communities in: rehabilitating 400 ha of mangrove forest; constructing 80 clusters
 of concrete artificial reef modules; initiating the culture of commercial oysters and green
 mussels; Controlling the use of illegal and destructive fishing methods.
- To identify and test new approaches to mangrove rehabilitation and management

During the design and first stage of project implementation, fishermen and farmers association were set up in 11 *Barangays*. Each association was headed by officials selected from among the members. Membership was open to men, who implicitly represented the household. Although very few women were selected as officials, they often attended and actively participated in the meetings as proxies of their husbands. The project did not take into account the gender component. As men usually were absent, out fishing in the sea, the project started to confront some difficulties. Even when the majority of attendance were women, they were not, in their own rights, entitled to the direct benefits provided by the project, since membership was in men's names. For instance, they could not be directly issued with the 'Management Steward Certificates (MSC)', which guaranteed security of tenure over rehabilitated mangrove areas managed by the association. Similarly, they could not obtain access to the credit facilities provided by the association for maintain the aquaculture for oysters and mussels.

Regardless, women actively participated in project activities, but at varying levels. Most women participated in mangrove afforestation and oyster culture, with the least participation in stablishing artificial reefs. They also attended training sessions on how to raise mangrove propagules. They obtained the seedlings from the project nurseries and planted them in the designated areas. Women regarded all the activities as part of their family responsibilities, where family members support each other. Women undertook mariculture as a joint enterprise with their husbands. The men did the work on installing the stakes in the likely breeding grounds in the Bay and hanging the collectors on stakes, while women strung together the discarded oyster shells to make collectors and did much of the harvesting, processing and selling of the oyster and mussels produced. Most of the marineculture trainees were women.

Source: Erie s. Tamale. World Wide Fond. In Biodiversity and gender for sustainable development. <a href="https://books.google.nl/books?hl=nl&lr=&id=8wD1dVayf1AC&oi=fnd&pg=PR5&dq=biodiversity+and+gender+for+sustainable+development&ots=12KjZM6Tgp&sig=EuESBC8f5TeRcKHh_mbiqHiGaHl#v=onepage&q=biodiversity%20and%20gender%20for%20sustainable%20development&f=false