GGCA
Global Gender and Climate Alliance

UNDP

Gender and Climate Change Capacity Development Series – Africa

Module 2 – Adaptation

Working Draft

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I. PURPOSE OF THE TRAINING MANUAL

IA. Rationale

The United Nations Development Programme (UNDP) has developed training modules and policy briefs on gender and climate change themes of specific relevance to the Africa region, including overall climate change issues, adaptation, finance, agriculture and food security, and energy and technology. These knowledge packages are expected to assist in capacity-building efforts in the Africa region on gender and climate change and on broader issues of sustainable development. These materials draw on capacity development work being undertaken in partnership with other members of the Global Gender and Climate Alliance (GGCA) and complement existing GGCA training modules, resource guides, and related knowledge products. Their preparation has been made possible by contributions from the Government of Finland and the Government of Denmark (For more detail, see the introduction to module 1).

This second module in the series addresses gender issues involved in the processes of adaptation to climate change.

IB. Module structure and method

This module provides basic information and learning tools needed to understand, advocate and influence climate change polices at the regional, national, and community levels so that they integrate gender perspectives. It focuses on climate change adaptation, both planning and financing, and covers the following themes:

- Gender-differentiated impact of climate change in Africa
- Gender-differentiated impact of adaptation planning and financing
- Need and options for the integration of gender perspectives in adaptation responses

Box 1: Key to pictures and icons

	Activity or exercise
	Link to other modules
	PowerPoint / video presentation
	Readings
	Important information
	Timing indication
	Internet link

The module starts by outlining its learning objectives and what users are expected to understand upon conclusion of the training (part II). The key messages of the module are presented in part III followed by parts IV and V, which provide background, core information and analyses of the causal relationship between gender and human adaptation to climate change. Part VI offers policy options for designing gender-sensitive responses to climate change.

Case studies and other learning tools, including handouts, video and group activities, are included to help facilitate use of the module. In addition, the module employs seven pictures and icons to help make it user friendly (box 1). The module also includes references to other thematic modules in this series. Both the facilitators and participants are encouraged to consult the other modules in this series.

Training based on this module can be delivered in three sessions:

Session 1: Part II and IV (1 hour)

Session 2: Part V (1.5 hours)

Session 3: Part VI (1.5 hours)

Total estimated session time: 4 hours

The Learning tools section offers a breakdown of time for different activities.

II. LEARNING OBJECTIVES

- Understand the gender dimensions of climate change adaptation
- Identify the gender-differentiated impacts of adaptation initiatives including adaptation planning and financing
- Identify and propose gender-conscious policy and programming responses for adaptation to climate change

III. KEY MESSAGES

- Women and men are affected in different ways by climate variability and change.
- There is a causal interrelationship between climate change and gender: (1) climate change tends to exacerbate existing gender inequalities, and (2) gender inequalities lead women to face larger negative impacts of climate change.
- Women are important agents of change. Their unique knowledge is key to ensuring the effectiveness and sustainability of adaptation responses to climate change; hence their full and effective participation and contributions are essential.
- Investing in women as part of climate responses can lead to greater returns across the MDGs and broader development objectives.
- Men and women have different needs and priorities, so adaptation planning and financing need to be attuned to them.
- The Cancun Adaptation Framework "affirms that enhanced action on adaptation should … follow a country-driven, gender-sensitive, participatory and fully transparent approach..." The ongoing implementation of NAPAs and the implementation of the Cancun Adaptation Framework should fully integrate gender considerations.
- Gender equality and women's empowerment need to be integrated into adaptation initiatives at the global, national, and community levels.
- This requires continued advocacy and capacity-building on the gender dimensions of climate change at each level; developing new and building upon existing guidelines and tools on 'how' to mainstream gender in adaptation; and creating adaptation learning networks to facilitate sharing of knowledge within and across regions.
- There are several analytical and advocacy tools, guidelines, and case studies available, and a growing pool of national experts on gender and adaptation policy.

IV. THE RELATIONSHIP BETWEEN GENDER AND CLIMATE CHANGE ADAPTATION

Learning objective: Understand the importance of incorporating gender considerations into adaptation responses to climate change

1. There is a regional differential in the predicted impacts of climate change. Africa is predicted to be severely impacted (IPCC 2007; World Bank WDR 2010). In Africa, the predicted impacts range from malaria infestation in previously malaria-free highlands in Ethiopia to a possible increase in the sea level cyclones and attendant population displacement in Tanzania and Mauritius, to the drying up of Victoria Falls in Zambia. These impacts are compounded by 'multiple stresses' including poverty, governance deficits, conflicts, HIV/AIDS and debt, which means that many African countries lack the capacity to adapt to these effects (IPCC 2007; Toulmin 2009; OECD 2009). (See box 2 for more illustrative impacts.)

Box 2. Illustrative regional impacts of climate change in Africa

- Agricultural production, including access to food, will be severely compromised as the area suitable for agriculture, the length of growing seasons and the yield potential, particularly in semi-arid and arid areas, are expected to decrease.
- By 2020, crop yields from rain-fed agriculture may be reduced substantially.
- By 2020, between 75 and 250 million people are projected to be exposed to increased water stress due to climate change. By 2050, between 350 and 600 million people are projected to be at risk of water stress. There will be a significant increase in the number of people experiencing water stress in northern and southern Africa.
- By 2050, production of many crops in Egypt will be reduced: up to 11 percent for rice and by 28 percent for soybean.
- The rise in sea level will have significant impacts on coastal areas. By 2050, in Guinea, between 130 and 23 km^2 of rice fields (17 percent and 30 percent of existing rice field area) could be lost as a result of permanent flooding due to the rise in the sea level.
- By 2050, a large part of the western Sahel and much of southern-central Africa are likely to become malaria free. Meanwhile, previously malaria-free highland areas in Burundi, Ethiopia, Kenya and Rwanda could experience modest incursions of malaria.

Source: (OECD 2009: 44).

2. The Human Development Report notes that, absent **meaningful adaptation**, the adverse effects of climate change on people's lives and livelihoods could also derail progress toward sustainable development and achievement of the Millennium Development Goals (MDGs), and argues that environmental sustainability can be most fairly and effectively achieved by addressing health, education, income, and gender disparities. (UNDP HDR 2011; UNDP HDR 2007; World Bank WDR 2010). Table 1 outlines some ways in which climate change could impact each of the MDGs. Given the complex nature of the drivers, stressors and impacts of climate change in the continent, adaptation to climate change will need to be not just a reaction but also an opportunity to improve human security and welfare.

3. Simply put, adaptation is a process by which individuals, communities and countries seek to cope with the impacts of climate change and variability. It is about taking the right measures to reduce the negative impacts of climate change (see the IPCC definition in module 1, paragraph 9). There are many ways of adapting to climate change, ranging from technological options to behavioural change at the individual level. The degree to which a system needs to adapt is a function of its vulnerability to climate change, which in turn is determined by the level of its exposure, sensitivity to impacts and adaptive capacity (see IPCC definitions below, and box 3 for an illustration of the role of women in adaptation). The exposure can be to hazards such as drought or conflict and also underlying socio-economic, institutional and environmental conditions (Burton et al., 2006; Pinter et al UNEP 2009).

Sensitivity
is the degree to which a system is affected, either adversely or beneficially, by climate variability or change. The effect may be direct (e.g., a change in crop yield in response to a change in the mean, range or variability of temperature) or indirect (e.g., damages caused by an increase in the frequency of coastal flooding due to sea-level rise)

(IPCC 2007).

Vulnerability
is the degree to which a system is susceptible to and unable to cope with adverse effects of climate change including climate variability and extremes. Vulnerability is a function of the character, magnitude and rate of climate change and variation to which a system is exposed, its sensitivity and its adaptive capacity

(IPCC 2007).

Adaptive capacity
(in relation to climate change impacts) is the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences

(IPCC 2007).

4. Climate change can be a development problem. Adaptation to its effects is, therefore, both a matter of need and equity. It is a matter of need because current efforts to stabilize current greenhouse gases (GHGs) in the atmosphere are not adequate to avoid climate change. It is also a matter of equity since the impacts of climate change will fall disproportionately on those who are least able to bear them. The IPCC notes that "poor communities can be especially vulnerable, in particular those concentrated in high-risk areas. They tend to have more limited adaptive capacities, and are more dependent on climate sensitive resources such as local water and food supplies" (IPCC 2007: 9).

Adaptation is adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities (IPCC 2007).

5. Adaptation is a critical priority for the poorest nations, particularly for women. Two thirds of the poorest people in the planet are women. A diversity of factors make women overly vulnerable to the effects of climate change (WRI 2011). Women are often the main users and managers of natural resources, the primary caregivers, and constitute the largest number of unpaid workers. At the same time they are usually poorer, receive less education, and are excluded from political and household decision-making processes that affect their lives. In addition, women tend to possess fewer assets and depend more on natural resources for their livelihoods. Adaptation policies thus need to prioritize the needs of women to prevent a further deepening of gender inequality. They also need to draw on the particular expertise and knowledge that women bring to bear on the issue of climate change, which can make these policies more substantive in their impact for the entire community.

The ballad of Aisha and Akello: Conceptual tools related to gender equality and equity (see appendix B: Learning tools)

See module no. 1

Table 1. Some ways climate change affects the MDGs

	Agricultural production and food security, access to clean and abundant water resources and gainful employment are vulnerable to climate change.
	When climate change poses additional burdens on agricultural production and other subsistence activities like water collection, it may burden families enough to remove children from school. Climate change also threatens to destroy infrastructure (e.g., schools) and increase the chances of displacement and migration of familie, thus disrupting and limiting education opportunities.
	Women, the majority of the world's poor, are the most vulnerable to climate change. Their traditional roles as the primary users and managers of natural resources, primary caregivers, and unpaid laborers mean they are involved in and dependent on resources that are put most at risk by climate change. Further, women lack rights and access to resources and information vital to overcoming the challenges posed by climate change.
  	Climate change can reduce food security and water security; increase the incidence of water-borne diseases associated with poorer water quality due to floods and drought; create more favourable conditions for the spread of vector-borne and air-borne diseases; and increase the level of heat stress.
	Climate change threatens environmental sustainability because it will cause fundamental alterations in ecosystem relationships, change the quality and quantity of available natural resources, and reduce the productivity of the ecosystem. The poor depend on these resources for their day-to-day survival and livelihoods in many parts of the developing world.
	Climate change threatens to exacerbate current challenges to the achievement of the MDGs. Funding for development and adaptation must be greatly increased to meet the needs of the poor.

Source: http://www.undp.org/climatechange/cc_mdgs.shtml.

V. GENDER INEQUALITY IN ADAPTATION AND WOMEN AS ACTIVE AGENTS OF CHANGE

Learning objective: Understand implications of the lack of inclusion of gender concerns in adaptation initiatives including adaptation planning, disaster planning and financing

6. Women are particularly vulnerable to climate stress: for instance, climatic stress on water and forest resources often leads to women having to travel longer distances for longer time periods to fetch water or wood, limiting their opportunities to branch out into other non-traditional and self-improving activities such as education, as well as exposing them to negative health risks (WHO 2011). All of these factors increase women's vulnerability to climate change impacts relative to men (FAO 2011; Dankelman 2010; UN Women Watch 2009). (See table 2 for a summary of vulnerabilities of key sectors in Africa and the gender connection). Cultural restrictions also increase vulnerability to climate change for women and girls. Women are 14 times more likely to die than men during a disaster as there may be cultural and behavioural restrictions on their mobility, including restrictive dress norms. In many societies, girls are not encouraged or taught how to swim or climb a tree; this significantly reduces their survival chances in the event of climatic hazards such as flooding. Climate change may accentuate or otherwise increase existing inequalities (UNDP 2007; 2011, IUCN/IIED/UNDP 2009; World Bank 2010 b).

7. Gender-based vulnerabilities notwithstanding, it is a mistake to assume that women are simply victims in the face of climate change. Their accumulated wisdom in resource management equips them with unique skills that are valuable for the design of community-based adaptive solutions (Alexander et al., 2011; UNDP 2010b; Dankelman 2010; WEDO 2007). As an example, during a drought in the small islands of the Federal States of Micronesia, the knowledge of island hydrology that the women gained as a result of their land-based work enabled them to find potable water by digging a new well that reached the freshwater lens (Anderson 2002). The World Resources Report (2011) also observes that measures taken to address the vulnerability of women can strengthen the capacity of societies to act in a changing climate. In addition, engaging and promoting the unique capacities of women in adaptation can allow decision makers to help build resilience in communities while also promoting gender equality (WRI 2011). Conversely, adaptation actions that do not incorporate gender perspectives may exacerbate inequalities (paragraph 8A). Hence, a focus on women and other vulnerable members of society should be a significant priority of any adaptation effort including planning (paragraph 8) and financing (paragraph 9) of adaptation.

Box 3: Roles women play in adaptive efforts

There are multiple reports on the diversity of roles that women have been playing in adaptation efforts. Here are some examples:

- Women effectively mobilize the community in the different phases of the risk management cycle (Guha-Sapir 1997; Enarson 2001; Yonder et al. 2005)
- Women are often in a better position to note environmental hazards manifesting in multiple forms, for instance, patterns of sicknesses in the children in the neighborhood, or changes in the water (such as strange smells) (Harding 1998)
- Women tend to have better knowledge of which social groups would be most impacted by a disaster (who in the community are at risk? what is needed?) (Enarson and Fordham, 2001)
- On account of their family and communal responsibilities, women usually have broad knowledge and skills related to environment and natural resources and changes in occurring in them (Ariyabandu, 2004)

Source: Adapted from (Carvajal-Escobar et al., 2008).

8. However, women are underrepresented in decision-making and their concerns are far from integrated into planning for adaptation. There is ample room for improvement in gender-conscious planning of adaptation projects in Africa. For purposes of this module, let us look at National Adaptation Programmes of Action (NAPAs) and disaster adaptation, both discussed below.

8A. **Gender issues in adaptation planning:** Adaptation initiatives that are not gender conscious may themselves inadvertently replicate gender inequality. An example of a specific adaptation project would be a bridge that needs to be built in a particular location across areas that are subject to flooding. This project may have the unintended consequence of creating job sources (construction) that tend to favour a male work force , with diminished opportunities for women. It may also lengthen the working day for women or make it more difficult for them by increasing the distances they must cover if bridges are built exclusively for transport (GGCA 2009).

Such unintended results could also occur at the policy and planning levels. A good illustration of this is the NAPA-gender nexus. NAPAs were designed to address the immediate adaptation needs of the Least Developed Countries (LDCs), under the United Nations Framework Convention on Climate Change (UNFCCC). Forty-five NAPAs (about 30 from Africa) have thus far been finalized and submitted to the Global Environment Facility (GEF) for funding, while three more are in the pipeline (UNFCCC 2011). NAPAs have been critiqued for not fully and adequately incorporating gender perspectives (UNDP 2011). Less than one third of NAPAs currently mention gender equality as an important underlying principle, although some

NAPAs, (e.g. Malawi, Bangladesh and Uganda) have identified gender equity as a necessary tool for achieving national adaptation and development goals. The Malawi NAPA (2006) is notable in that it addresses gender as a realm of equal importance with other sectors such as agriculture and water management and not just as a cross-cutting issue. It lists several interventions that target women in highly vulnerable situations, including empowering women through access to microfinance; diversifying their earning potential; and ensuring access to water and energy sources by drilling wells, planting trees and focusing on rural electrification programs (Schalatek 2009). Table 3 breaks down 32 NAPAs, 20 from Africa, on the basis of inclusion by group and vulnerability.

Table 2: Gender dimensions of vulnerability to climate change in Africa

Sector	Possible impacts	Examples	Gender dimension
Water and sanitation	Around 25% of Africa's populations currently face water stress. Climate change could create further stress. Increase in temperatures and precipitation intensity and reduced flows could to worsen water pollution, with consequences for ecosystems and public health (IPCC 2007, 2008).	Water is of such importance to the economies of many African nations that in the 1991-1992 drought, Malawi's GDP decreased by 8 to 9% and in 1999-2000 Kenya's GDP fell by 16% (Toulmin 2009).	Women and girls are responsible for collecting water for cooking, cleaning, health and hygiene, and growing food. Increasingly limited water supplies, poor service delivery and pollution jeopardize their survival and that of their families (GGCA 2009; Toulmin 2009; Dankelman 2010).
Biodiversity and ecosystems	There are projections of significant extinctions in both plant and animals species. It is estimated that between 15 to 37% of natural species (up to 60% of mountain plant species) may be extinguished by 2050 as a result of climate change and habitat change (Thullier, 2007).	Over 5,000 plant species could be impacted by climate change, mainly due to habitat loss. The Fynbos Biome ecosystem (an IUCN 'hotspot' in South Africa) is projected to lose 51 to 61% of its extent due to decreased winter precipitation by 2050 (IPCC 2008).	Women are traditionally the custodians of local knowledge about the properties and uses of wild plants, and the keepers of seeds for cultivated varieties. Understanding the gender-differentiated biodiversity practices and knowledge of women and men enhances biodiversity conservation (FAO 2008; GGCA 2009; CBD 2010).

Table 2: Gender dimensions of vulnerability to climate change in Africa			
Sector	**Possible impacts**	**Examples**	**Gender dimension**
Agriculture and food security	Agricultural production and food security in Africa are expected to come under considerable stress due to climate change. Livestock and fisheries, important sources of revenue, employment and protein in many parts of Africa, are likely to be impacted by climate change (FAO 2007; IPCC 2007; Toulmin 2009).	In coastal regions that have major lagoons or lake systems, changes in freshwater flows, and more intrusion of salt-waters into the lagoons would affect species that are the basis of inland fisheries or aquaculture (IPCC 2007).	Rural women are the principal basic food producers and are key to food security in Africa. Yet, they face gender-based barriers in access to land, credit, extension services and technology. Removal of these barriers would increase productivity (World Bank 2010, 2011; FAO 2011).
Desertification	Impacts include acceleration of the loss of vegetation, and thus desertification through decreased rainfall and increase in disasters (e.g., droughts). Other anthropogenic factors such as land use and deforestation also contribute to this challenge. Around 4 hectares of forest (roughly twice the size of Rwanda) are felled or burnt in Africa each year (GGCA 2009; Toulmin 2009).	Home to 16% the world's forests and the world's second largest rainforest — the Congo basin — Africa is home to a rich variety of forests (FAO 2005). Desertification is a serious challenge that could be exasperated by climate change (Toulmin 2009).	Women who live in dry lands are natural resource managers and custodians of knowledge on plants, medicine, food and water; crucial roles in dealing with soil fertility and crop failure in degraded and drought-prone areas. Yet, these women are overly vulnerable due to, among other reasons, unequal access to resources (e.g., land), services and decision-making (GGCA 2009; UNCCD 2007).
Health	Climate change will lead to increased malnutrition and gastro-intestinal, cardio-respiratory and infectious diseases. Heat waves, floods and droughts will lead to increased mortality and changes in the distribution of some disease vectors. Health services will also be burdened by an increase in patients (WHO 2011; GGCA 2009).	By 2100, changes in temperature and precipitation could alter the geographical distribution of malaria in Zimbabwe, with previously unsuitable areas of dense human population becoming susceptible (IPCC 2008).	There is evidence for gender differences in health risks that are likely to be exacerbated by climate change. Adaptation strategies need to take into account women's and men's relative and different capacities, power, social resilience, vulnerabilities and resources, because gender norms, roles and relations can either enable or constrain adaptive capacities (WHO 2011).

Table 2: Gender dimensions of vulnerability to climate change in Africa

Sector	Possible impacts	Examples	Gender dimension
Coasts	Coasts are exposed to increasing climatic risks, including coastal erosion and a rise in the sea level. More than one fourth of the population of Africa lives within 100 km of the coast and most of Africa's largest cities are along coasts vulnerable to sea level rise, coastal erosion and extreme events such as tropical storms (IPCC 2007; OECD 2004).	Coastal areas are more vulnerable to damage caused by floods and storms, and about 30% of the coastal wetlands may disappear (IPCC 2007).	Women's tasks with relation to fisheries have not been prioritized in economic analyses or resource investment. Limited access to and representation in decision-making has also led to women's interests not being included in coastal plans (GGCA 2009).
Cities	Today more than half of the world population lives in urban centres. In the 1950s, only 14.5% of Africans lived in the cities; and in the 1970s 25.7%. By 2050, 61.8% will live in cities. Climate change presents multiple hazards for urban dwellers in Africa; especially the poor majority (UN Habitat 2009, Toulmin 2009).	Rise in sea levels and coastal erosion are threatening the economy of the coastal and lagoon ecosystems in the city of Cotonou (Benin). Its vulnerability is worsened by socio-economic and political constraints such as rapid population growth and inadequate resources for urban development (Dossou et al., 2007).	One consequence of much unplanned and rapid growth is the increasing vulnerability of poor urban women, men and children to a changing climate, including a rise in the sea level, flooding, high winds and other climate induced hazards (Khoshla et al. in Dankelman 2010).

Sources: (Toulmin 2009, IPCC 2008, IPCC 2007, GGCA 2009, FAO 2005, FAO 2008, FAO 2007, FAO 2011, CBD 2010, UNCCD 2007, UN Habitat 2009, Dankeman 2010, World Bank 2010, World Bank 2011, WHO 2011, UNDP 2009, OECD et al 2004, Dossou et al 2007, Thullier 2007)

The NAPAs, over 45 in number, were started to communicate priority adaptation needs to be addressed in the immediate term and succeeded in doing so. The Cancun Adaptation Framework which was adopted at the Conference of Parties (COP 16), in Cancun (Mexico), has launched a process that enables LDCs to formulate and implement National Adaptation Plans (NAPs) as a means of identifying medium- and long-term adaptation needs and develop strategies and programmes to address those needs, building on their NAPA experiences (UNFCCC 2011). The Cancun mandate states that the process has to be gender conscious (UNFCC 2011). It is to be noted also that most of the projects identified and prioritized during the NAPA process have yet to be implemented. There is, therefore, an opportunity for making progress in adaptation planning based on lessons learned from the NAPA preparation process.

Table 3: Analysis of inclusion by group or by vulnerability in NAPAs to date				
Inclusivity factor	**Yes - % of available NAPAs**	**No - % of available NAPAs**	**Yes - % of African NAPAs reviewed**	**No - % of African NAPAs reviewed**
Mentions gender	78	22	80	20
Prioritises gender	37.5	62.5	45	55
Mentions poverty	97	3	100	0
Prioritises poverty	81	19	100	0
Mentions ethnicity	22	78	15	85
Prioritises ethnicity	97	3	0	100
Lists vulnerable groups	65	34.5	75	25
Identifies participatory actions	56	6	55	45

Source: (Perch 2011).

8B. **Gender issues in disaster adaptation:** Africa has the second highest number of people affected by natural disasters, largely due to frequent occurrence and the long-term effects of droughts upon the vitally important agricultural sector (OECD 2004). A number of studies have underscored the disproportionate victimization women in natural disasters. One study states that boys and girls are 14 times more likely than men to die during a disaster (Ikeda 1995). Others examine the gender dimension of different disasters such as heat waves, flooding and tsunamis, and in different countries in both industrialized and poor nations (Peterson, 2007, Pirard et al., 2005 Gault et al., 2005; Williams et al., 2006 Oxfam, 2005 Davis et al., 2005 Cannon, 2002, FAO, 2000 Bradshaw, 2004, Duncan, 2007. See module 4 of this training package for a summary of these findings.) The oft-quoted study by the London School of Economics, the University of Essex and the Max-Planck Institute of Economics analysed disaster events in 141 countries and found that when women's economic and social rights are not protected, more women than men die in disasters. In societies where both genders enjoy equal rights, disasters kill similar numbers of women and men (Neumayer and Plümper 2007).

The bottom line is that involving women in disaster adaptation (reduction and preparedness) responses can save lives and ensures more judicious social policy.

9. **Gender issues in adaptation financing:** There are a number of mechanisms under the UNFCCC which provide finance for adaptation initiatives; these include the Least Developed Countries Fund, Special Climate Change Fund, the Adaptation Fund, and the newly established Green Climate Fund (which is still in the design phase and has yet to be operationalized). In addition, mechanisms such as the Pilot Program for Climate Resilience, under the Climate Investment

Funds, as well as other forms of national and bilateral financing, have emerged outside of the Convention framework. (See web link below) This pillar of adaptation is still evolving. While some sources of funds have yet to be operationalized, preliminary studies on these funds show that more work needs to be done in the area of adaptation finance (UNDP 2010; Schalatek 2009; UNDP 2010).

Drought Adaptation - Kenya (CODES)

For 8 A-B: see module 1

For 9: see module 5

List of sources of adaptation finance (UNDP/World Bank 'Climate Finance Options' web link) climatefundsupdate.org

VI. INCORPORATING GENDER PERSPECTIVES IN ADAPTATION PLANNING

Learning objective: Identify and propose gender-conscious policy and programing response for adaptation to climate change

10. To prevent climate change from reinforcing gender disparities, it is important to mainstream gender in adaptation efforts (Dankelman 2010). Because women's contributions to adaptation are significant (paragraph 6), gender mainstreaming would also be useful for effective adaptation planning (UNDP 2010). There is a range of tools and methods as well as other resources that could be used in gender mainstreaming (see module 1). This part briefly summarizes the concept of gender mainstreaming both in adaptation in general (paragraph 11; box 4) and disaster risk reduction (box 5). Also discussed is the application of gender mainstreaming within the ongoing Africa Adaptation project (paragraph 12; box 6).

Box 4: Steps for gender mainstreaming in adaptation initiatives

- Analyse the effects of climate change from both male and female perspectives;
- Ensure disaggregation of qualitative and quantitative data by sex, in all assessments and stocktaking;
- Incorporate a female perspective when designing and implementing projects;
- Capitalize on the talents and contributions of both women and men;
- Set targets for female participation in activities;
- Ensure that women are adequately represented in all decision-making processes, at all levels;
- Ensure that gender specialists are involved and consulted throughout the project implementation process;
- Make women's equal access to information, economic resources and education a priority;
- Address gender differences in capabilities to cope with climate change adaptation and mitigation;
- Develop and apply gender-sensitive criteria and indicators for progress monitoring and evaluation of results;
- Undertake a gender analysis of all budget lines and financial instruments to determine the differentiated impact on women and men of the budget;
- If relevant, consider reallocation of resources to achieve gender equality outcomes from the actions planned;
- Develop and apply gender-sensitive criteria and indicators.

Box 5: Steps for gender mainstreaming in disaster risk reduction

- Include gender perspectives into disaster reduction efforts at the national, regional and international levels, including in policies, strategies, action plans, and programmes;
- Analyse climate change data (such as desertification, floods, drought, deforestation) through a gender-sensitive perspective;
- Take gender-conscious steps to reduce the negative impacts of natural disasters on women, particularly in relation to their critical roles in rural areas in the provision of water, food and energy;
- Increase the participation and representation of women in all levels of the decision-making process;
- Include the traditional knowledge and perspectives of women in the analysis and evaluation of the characteristics of key disaster risks;
- Ensure that women are being visibly used as agents of change at all levels of disaster preparedness, including early warning systems, education, communication, information, and networking opportunities;
- Build the capacity of national and local women's groups and provide them with a platform to be heard and to engage optimally;
- Consider the level of a woman's access to technology and finances in times of disaster;
- Include gender-specific indicators to monitor and track progress on gender equality targets.

11. Gender mainstreaming is an integrated approach that is intended to facilitate equitable participation of both women and men, so as to adequately address their strategic and differing needs. The approach entails the use of a gender lens to understand the social processes relating to adaptation. A gender approach is a working tool that should be integrated in the entire policy planning and implementation process, including: (a) gender analysis; (b) disaggregating all data by sex; (c) gender responsive indicators to measure results, benefits and impact; (d) building capacity and strengthening sustainable development strategies and institutional frameworks, and (e) documenting and dissemination best practices to continually promote learning and innovation.

12. An illustration of how the gender approach is being implemented at the national level is the African Adaptation Project (AAP). The AAP is a partnership between the Government of Japan and UNDP to build capacity for adaptation in 20 African countries (Burkina Faso, Cameroon, Congo, Ethiopia, Gabon, Ghana, Kenya, Lesotho, Malawi, Mauritius, Morocco, Mozambique,

Namibia, Niger, Nigeria, Rwanda, São Tome and Principe, Senegal, Tanzania and Tunisia). The AAP is mainstreaming gender in all its strategic priorities, addressing gender equality and indigenous knowledge, strengthening women's leadership and mainstreaming pro-poor and gender-sensitive climate change adaptation into national and subnational development processes in the 20 countries of operation. The AAP is also undertaking a gender analysis of NAPAs, developing a guide book on gender mainstreaming in climate change adaptation, developing guidelines for gender indicators for climate change adaptation, documenting best practices in mainstreaming gender, facilitating training on gender and climate change finance for the different stakeholders, and providing training to UNDP Country Office staff and national AAP coordinators on gender and climate change (box 6).

Box 6: Gender mainstreaming experiences from the AAP

Kenya

- Develop gender mainstreaming strategies and guidelines
- Effectively include gender concerns and issues in the implementation of the national climate change policy strategy and to the achievement of adaptation benefits
- Improve the articulation of gender issues and concerns during design, implementation, monitoring and evaluation of climate change programmes and projects

Niger

- Mainstream gender in the design of the integrated study "Evaluation of the climate risk assessment in the Tabalak Pond/ Niger from a gender perspective"
- Include gender dimensions in climate risk assessments based on traditional resources
- Identify priority options for climate risk management in relation to the Pond of Tabalak and identify lessons learned to be applied to other similar humid areas in Niger

Burkina Faso

- Reinforce the knowledge on climate change challenges and opportunities of vulnerable groups, mainly rural women and youth
- Analyse the roles of vulnerable and marginalized groups in the climate change adaptation processes and poverty reduction
- Establish a participatory approach for the effective implication of vulnerable and marginalized groups in climate change adaptation planning processes

Box 6: Gender mainstreaming experiences from the AAP *(continued)*

Nigeria

- Enhance skills and capacity of policy makers to address the specific vulnerabilities of women to climate change and existing adaptation framework
- Increase knowledge and awareness on gender-related aspects of climate change adaptation strategies
- Advocate for more gender responsive structures, mechanisms and processes in the context of climate change adaptation in Nigeria

Ethiopia

- Ensure each adaptation project submitted by the regional government has a gender component
- Ensure women's representation in decision-making to validate regional adaptation programmes
- Make gender a criteria for selecting adaptation programmes for funding under the AAP

Senegal

- Showcase women's collective leadership role in mangrove restoration and adaptation strategies
- Put in place a strategic platform for institutional capacity-building on gender mainstreaming
- Include gender in university research on agriculture, floods, fisheries, migration, and climate change adaptation strategies at the local and national levels

Mozambique

- Enhance women's role in climate change, disaster risk reduction and environment activities
- Ensure the inclusion of gender needs and interests in developing national capacities for green human development
- Integrate gender perspectives in strengthening national capacities and frameworks for disaster risk reduction and climate change adaptation

13. Beside gender mainstreaming in adaptive actions and activities, efforts should be made to build the asset base of women such as land, access to technology and credit. This would enhance the adaptive capacity of women.

14. Since finance is necessary for any adaptation effort, adaptation finance, whatever its source, should be used to promote both climate and development objectives, including gender equality (UNDP 2011; UNDP 2010). By the same token, gender-sensitive criteria need to be developed for all new and proposed climate change financing mechanisms supporting adaptation.

15. Finally, all stakeholders and the adaptation community should make the empowerment of women and poor and marginalized groups of society a strategic priority in the fight against climate change.

Module 1 for paragraphs 10-13 Group Exercise (see appendix B: Learning tools)

Module 5 for paragraph 14

VII. CONCLUSION

Women and men are affected in different ways by climate variability and change. Climate change tends to exacerbate existing gender inequalities and, conversely, gender inequalities lead women to face larger negative impacts. At the same time, women are important agents of change. Women bring unique capabilities to adaptation responses. Their knowledge as both key producers and managers of resources, and caretakers, equips them with unique skills and experience that are valuable for the design of adaptive solutions. Adaptation responses that draw on these capabilities and strengths can lead to greater returns across the MDGs and broader development objectives.

Several examples highlight the diversity of roles that women are playing in adaptation efforts. Seen in this light, gender inequality, if allowed to persist, can compound the effects of climate change. Hence, gender mainstreaming is a key factor in ensuring the success and sustainability of adaptation responses. Men and women have different needs and interests — adaptation planning and financing need to be attuned to these varied demands. It is essential to integrate gender perspectives into planning and implementation of adaptation initiatives at all levels. NAPAs as well as the ongoing implementation process of the Cancun Adaptation Framework are ideal opportunities to engender adaptation.

APPENDIX A: CASE STUDIES

Case Study 1: Gendered vulnerability and disaster adaptation (Mozambique)

Mozambique has been hard hit by climate change due to its geographical location — downstream of the main rivers in southern Africa and a long coastline of 2,700 km — and its weak socio-economic situation. The major anticipated impacts of climate change are an increase in the frequency and severity of floods, droughts and cyclones. A study was conducted in two communities of Gaza Province in southern Mozambique — MapaiNgale in Chicualacuala District and Magondzwene in Chibuto District — to understand the gender aspects of climate change, as part of a regional project funded by the Heinrich Böll Foundation. The following is an excerpt of the summary of findings and recommendations of the study:

"The results of this study reveal that women and men are differentially impacted by climate changes due to the current power relations and their differentiated roles in these communities. Women have access to but not control over natural resources and other property rights. Additionally, women do most of the reproductive and part of the productive work, while men are only responsible for productive work.

Successive droughts these communities have faced for the last two years has increased men's migration to South Africa and other places in search for jobs. As a consequence, women's role in productive work has increased considerably in the last two years. For example, women's participation in alcoholic drink brewing in Mapai-Ngale and fisheries-related work in Magondzwene has increased in the last two years. This imposes pressure on women who have to spend extra time for productive work in detriment of the reproductive jobs and time spent with kids. On the positive side, men's migration has enhanced women's participation in the decision-making structures. This is especially evident in the Mapai-Ngale community where migration is more intense and as a consequence, the National Women Organization (OMM) has gained better position in the decision-making structures. However, this issue was not deeply explored in this study and thus a thorough investigation on this is recommended.

A number of coping and adaptation strategies are currently being deployed in these communities and these include alternative food sources such as tinhirre, ulharo, canhu — marula and, massala — Strychnos spinosa in Mapai-Ngale and muambo and tinhirre in Magondzwene, informal (charcoal, farms, livestock and construction) and formal (migration) jobs and adoption of different lifestyles. In terms of formal and informal organizations to discuss environmental problems, the Magondzwene community is better organized than Mapai-Ngale. However, Mapai-Ngale has a better representation of women in the decision-making structures through the OMM and the elderly advisory group which is stronger.

There is general consensus amongst policymakers and academics that there are four ways to strengthen women and men's capacities for a better adaptation to climate change. These include: implementation of existing policies and programmes, allocation of resources, capacity building and

reinforcement of women's participation in local institutions. Due to the key role women play in these communities, they should always be considered as the priority group in any activity.

Since agriculture is the main women's activity in these communities, we strongly recommend capacity building of women in agriculture and agro-processing techniques through for example the creation of farmers' clubs, the creation and reinforcement of local institutions and discussion forums and the formation of an environmental multi-institutional task force (including institutions as the Ministry for Environmental Coordination — MICOA, National Institute of calamities management -INGC, Ministry of Agriculture — MINAG, Non-governmental Organizations, etc.)."

(Ribeiro et al., 2010)

Case study 2: Enhancing participation of women by enlisting men (Morocco)

Example 1: In a small village association in eastern Morocco, several women expressed, in the course of 'informal' conversations, the limits they face in participating in local projects, because their husbands did not want them to leave the house. Sharing their problems allowed the women to realize that several of them were struggling with the same issues, and made it possible to think about solutions. One of the solutions included organizing a meeting at their homes in order to reassure their husbands, make them participate indirectly, and gain their support. All but one time this idea worked well, and husbands were very proud of having the association's meeting in their house, and started to help with the projects. Organizing meetings in a different woman's house each time brought honour to the host and enhanced participation.

Example 2: When a group of rural women started the association El Amal (hope) in Guenfouda (in Eastern Morocco), they had a difficult time finding support from the men, who hold power in the community. Year after year, project after project, they proved their professionalism, always respecting the local rules of informing the authorities, and working not only towards their own well-being but that of the community as a whole. At first, the mayor of the village was very skeptical, but is now one of their supporters, facilitating their work whenever possible by making work space available, driving them to meetings outside of the village, promoting their work in the region, and helping them to raise funds. Support from the community leader facilitates further support from other men, including husbands. Building men's confidence, in a culturally appropriate manner (slowly, through actions and results) was an achievement for these women and has helped guarantee their sustainable inclusion and empowerment.

Gender mainstreaming is about men and women, it is therefore important to gain the support of both men and women. The men cannot be alienated.

(UNDP 2010)

Case study 3: Diversification of livelihoods (Niger)

In Niger, Community Based Adaptation focuses on improving farming techniques and ecosystem protection, which are usually men's activities. The Community Based Adaptation team noticed the lack of opportunities for women to be involved in their programme and is currently designing new pilot projects that are more aligned with women's roles and responsibilities. For example, one project helps women raise a breed of goats that are well adapted to harsh Sahelian conditions. Small animal husbandry is a traditional income generation activity for women. The animal husbandry activity has been successfully included in an integrated project addressing both men and women's vulnerabilities to climate change. The partner NGOs for Niger's Community Based Adaptation are learning from the project and becoming increasingly sensitive to gender.

(UNDP 2010)

APPENDIX B: LEARNING TOOLS

Task 1: The Ballad of Aisha and Akello (plenary)

Learning objective: Understand the concepts of sex, gender, gender equality, gender equity and affirmative action, gender empowerment, division of labour and reproductive and productive work, gender needs and interests, and gender and access and control of resources

The Ballad of Aisha and Akello: Conceptual Tools Related to Gender Equality and Equity

20 minutes

Notes to the facilitator

Encourage the participants to share thoughts and experiences on how the concepts mentioned above are understood and/or applied in their communities.

Task 2: Assessing NAPAs through SWOT analysis (breakout groups and plenary)

Learning objective: Understand the challenges and opportunities of NAPAs in incorporating gender perspectives in adaptation to climate change

SWOT analysis of NAPAs from a gender perspective

30 minutes (group breakout discussions), 15 minutes presentation of findings (three presentations of five minutes each), 20 minutes plenary discussions

NAPA Malawi (2006)

NAPA Eritrea (2007)

NAPA Guinea-Bissau (2006)

Notes to the facilitator

1. Divide the participants into three groups; give each group one country NAPA each and have the groups appoint their leader.
2. Ask the groups to use the information on the above-cited materials and do a SWOT analysis of the NAPA at hand, from the vantage point of gender consciousness. (SWOT analysis for purposes of this task is a method used to evaluate the Strengths, Weaknesses/Limitations, Opportunities, and Threats involved in a project/plan.)
3. Ask each group to present their findings to the plenary.
4. Finally, ask the participants to discuss what they have learned from the assignment.

Task 3: Drought adaptation (Kenya) – Group discussion (plenary)

Learning objective: Appreciate the importance of drought adaptation to women and men in poor communities

Drought Adaptation (CODES) (Video presentation)

10 Minutes (video presentation) 20 minutes (group discussion and reflections)

Notes to the facilitator

Encourage a general discussion on how adaptation efforts could benefit women and vice versa.

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