GENDER EQUALITY IN CLIMATE CHANGE

Analysis report on Gender in Climate Change Policies, Programs and NDC Processes.

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Executive Summary

Gender equality is integral to all development decisions: it concerns the composition of participants, procedures and culture of development organizations as well as their programmes; and, it is the responsibility of both men and women. The changes required for gender equality are not only to address why women and (some) men lack resources but also why they may not even access and utilize resources targeted towards them. Gaynor and Jennings (2004) note that effective gender equality requires major changes at institutional, policy, organizational and resource allocation levels.

Many countries of the Global South have committed to gender equality in their national and climate change plans to manage the impacts of climate change and while simultaneously ensuring the ensuring women's empowerment. Through the 2030 Agenda for Sustainable Development and the Paris Agreement (2015), African states have an opportunity to draft and implement nationally appropriate policies through international commitments including the National Determined Contributions (NDC).

This report focuses on these two commitments with an aim to highlight gender perspectives in climate change policies. A particular focus of African countries' NDC formulation processes highlights the factors contributing to gender related climate change vulnerability and the gender responsiveness of adaptation and mitigation mechanisms that will lessen the vulnerability of disproportionately affected groups, particularly women and youth. But as this report will also show, many African governments across their relevant departments are needing support in the formulation (and implementation) of their NDCs.

The ACPC of UNECA leads a programme to deliver climate resilient development policies in Africa. By partnering with African governments, the programme will support national governments to ensure gender equality in NDC implementation. This study investigates the constraints and opportunities for gender equality in NDCs. The key findings and recommendations for ACPC intervention can be summarised as follows:

Promote the participation of women in leadership, government departments and climate change institutions with an ultimate aim of shifting the view of women as victims, lacking agency to that of women as drivers of change.

Ensure that **climate change adaptation and mitigation** strategies are in line with other development priorities such as human security and sustainable development. For this to be implemented effectively, **gender disaggregated data** is needed to demonstrate the differences in climate impacts and adaptative capacities of men and women. This will also inform the choice of investment in adaptation and mitigation plans.

Develop capacity at the national and sub- national levels and awareness-raising are integral to climate change and integration climate change policy and planning in all sectors. Building capacity of policy makers is especially important.

Gendered Financing mechanisms should be designed to generate mutual benefits, not exacerbate patterns of inequity when implementing adaptation and mitigation options. More women should participate in decisions on the adaptation and mitigation programs to put financial resources towards.

The INDC/NDC process requires countries to publicly **communicate the actions** they are taking or have taken to address adaptation and mitigation goals. In many African countries where women's literacy rates remain low, careful consideration of communication strategies is needed to ensure that they are not only involved in crafting the messaging but also that it is delivered in ways accessible to them and allows their contribution.

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Abbreviations

ACBP African Climate Business Plan ACPC The African Climate Policy Centre

AfDB African Development Bank

AWGGCC African Working Group on Gender and Climate Change BNRCC Building Nigeria's Response to Climate Change Project

CBD Convention on Biological Diversity ccGAP Climate Change Gender Action Plan

COP Conference of the Parties

CRC Convention on the Rights of Children

GCCA Global Climate Change Alliance

GCF Green Climate Fund

GEF Global Environment Facility

GHG Green House Gases GoK Government of Kenya

ICT Information and Communications Technology

INDC Intended Nationally Determined Contributions

IPCC Intergovernmental Panel on Climate Change

ISET International School of Economics at Tbilisi State University

LDCEG Least Developed Countries Expert Group

LULUCF Land Use Change and Forestry MDG Millennium Development Goals

NAMA Nationally Appropriate Mitigation Action

NAP National Adaptation Plan

NAPA National Adaptation Programmes of Action

NCCRS National Climate Change Response Strategy

NDC Nationally Determined Contribution

NGO Non-Governmental Organizations

ODI Overseas Development Institute

SDG Sustainable Development Goals

SIDA Swedish International Development Cooperation

UN United Nations

UNDP United Nations Development Programme

UNECA United Nations Economic Commission for Africa

UNFCCC United Nations Framework Convention on Climate Change

UNFPA United Nations Population Fund WHO World Health Organization

WIEGO Women in Informal Employment: Globalizing and Organizing

1 INTRODUCTION

1.1 Gender in International Policy

The African continent is as diverse as it is varied across resources, geography, cultures, and social/economic development – yet all African countries continue to experience challenges associated with climate change that threaten their economic progress. This vulnerability is especially evident on the continent because of countries' high dependence on climate sensitive sectors such as agriculture (Nyasimi et al. 2020). As is the case in the broader Global South, the vulnerability of African countries is largely driven by lack of adaptation resources, poor governance, lack of information and the already hot and dry climatic conditions (IPCC, 2007).

African countries' participation in global efforts to manage the impacts of climate change is crucial. The Intergovernmental Panel on climate change (IPCC) was set up by the United Nations in response to the global climate change challenge to include scientific and technical information in climate change issues. IPCC outputs are then used by parties to United Nations Framework Convention for Climate Change (UNFCCC) for negotiations. A key mandate of the UNFCCC is to ensure women's equality in the development and implementation of climate change mitigation and adaptation plans.

The 2030 Agenda for Sustainable Development, including its 17 Sustainable Development Goals (SDG) have been adopted by the international community with an aim to address women's concerns and to promote gender equality and empowerment across sectors including agriculture, energy, water, forestry and others (UN, 2015).

The Fifth Assessment Report of the IPCC notes that differences in vulnerability and exposure arise from non-climatic factors and from multidimensional inequalities often produced by uneven development processes, putting people at differential risk of climate change impacts due to underlying socio-economic factors. In addition, people who are socially, economically, culturally, politically, institutionally, or otherwise marginalized are especially vulnerable to climate change and also to some adaptation and mitigation responses. As a result, income, socio-economic status, gender, ethnicity, class and age are all factors that increase vulnerability to the impacts of climate change (Field et al. 2014). This report focuses squarely on increased vulnerability associated with gender and the policy considerations needed to support women to better manage climate change impacts.

1.2 Women's Vulnerability to Climate Change

Women are considered more vulnerable to climate change than men. This vulnerability thesis has however been challenged, particularly by feminist scholars. For example, Kapur (2002) examines how the International Women's rights movement has reinforced the image of the woman as a victim subject (in the context of violence against women). The author argues that the focus of woman as victim reinforces gender and cultural constructs and fails to take advantage of the liberating feminist insights that frame the woman as liberator and a part of the solution. These arguments have been adopted to the understanding of gender in climate change debate as well and are increasingly adopted into policy making, albeit at a slow pace.

In 46 of Africa's 54 countries, women represent 40 percent or more of the agricultural workforce. Agricultural work is characterised not only by vulnerability because often it does not comprise formal sector jobs with contracts and income security, but also by the fact that African agriculture is rainfed dependent and as such vulnerable to climate change. In this

context, the human threats inherent in climate change are crucial, and may be more serious for women in certain occupations and regions (AFDB, 2015).

Gender balance is also lagging in women's participation in boards and bodies is highly unequal even within the UNFCCC. Women's rights groups have made important contributions to the UNFCCC, including several decisions stating the need for women's participation in thematic areas and their right to decide on mitigation, adaptation, climate change finance, technology and capacity building (Reckien et al. 2017).

1.3 Addressing gender imbalance

Understanding the mechanisms causing gender differences in vulnerability to climate change helps to identify comprehensive policy options for addressing both climate change and gender inequality (Schwerhoff and Konte, 2020).

Men and women contribute to the causes of climate change differently and are differently affected. Given the option, men and women would also choose different solutions for dealing with the consequences of climate change (Gender CC 2009). Gender integration in climate change policy is important to ensure gender appropriate responses and support to climate change impacts. Careful consideration of differentiated gender impacts should prevent the deepening of inequality in climate change policy and address the structural factors that cause or uphold the discrimination of women (ibid).

Despite much progress that has been made by African countries in developing climate change policies and strategies, the challenge remains to ensure that their development and implementation does not create further gender and social inequalities (Schwerhoff and Konte 2020; Reckien et al. 2017). Many African governments themselves have identified a need for technical support to ensure greater gender equality in their climate change policies and strategies.

1.4 Aim of the report

The focus of this report is on gender equality in African countries' climate change responses as guided by NDCs. By providing a comprehensive analysis showing the centrality of gender equality and women's empowerment in climate change initiatives in Africa, the report will identify and better address the climate change policy areas through which gender programming in the NDCs can be enhanced or better developed. A better understanding of who does what, why and how they are affected by climate change impacts, and more importantly, how they (particularly women) can contribute to addressing climate change. Such a process will help to implement climate change policy and ensure information or resources reach the most appropriate groups.

The report will draw on country examples to highlight drivers of existing policy gaps as well as demonstrate progress made by national governments in their attempts ensure gender equality in their NDCs. The slow development of NDCs on the continent is a great opportunity for national governments to ensure gender equality in their policies and plans. This report will inform the African Climate Policy Centre (ACPC) within United Nations Economic Commission for Africa (UNECA), programmatic aim of "Delivering climate resilient development policies in Africa" (ACPC 2019). A key component of the programme is to provide policy analysis support to Africa's decision makers in developing strategies keeping in line with development and economic commitments in a changing climate (ibid).

1.5 Limitations of the study

The results of this study cannot be used to generalise all countries in the Global South or Africa as each country and community within it is unique and will differ in culture and values. However, the findings are an important step in unveiling the dynamics and realities of gender differentiated impacts of climate change. Given its wide scope of analysis this report was not aimed to be exhaustive but rather ensure that key emerging issues are highlighted for consideration in the ACPC programme

In understanding gender issues in the context of the global South – it is important to appreciate the differing gender relations in different countries. Colonialism, capitalism and apartheid for example have shaped social relations along class, gender and social lines. Despite this and as the analysis will show, significant progress is being made. As this report will show many African countries are working towards the implementation of their NDCs and making efforts to integrate gender considerations therein. In spite of these gains, there remain significant gaps in country's development plans that will ultimately frame NDCs.

2 CONCEPTUAL FRAMEWORK

The ACPC of UNECA supported by SIDA (Swedish International Development Cooperation) is a knowledge generation center with numerous aims, chief of which is to integrate climate change into development and the implementation of the Nationally Determined Contributions (NDCs) through the development of responsive policies, plans and programmes. Pursuant of its goal to devolve climate actions to national governments through the Intended Nationally Determined Contributions (INDCs), the ACPC programme will support African governments, private sector and communities to respond to the impacts of climate change with a particular focus on "addressing vulnerabilities and managing climate-induced human insecurity" (ACPC 2019).

This conceptual framework presents the relevant literature and theoretical underpinnings surrounding the discourse on gender and climate change. The literature and the theoretical background provide useful conceptual links, used in identifying policy gaps in which ACPC can support African governments to address for greater gender equality in NDCs.

We begin with a conceptual framework highlighting theories and concepts emerging from gender and climate change. The concepts of gender and gender equality are explored. This is followed by the link between gender and climate change, drawing on the concepts of gender differentiated climate change vulnerability, adaptation, mitigation and resilience. Lastly, definitional concepts for policies, programmes, plans and processes are introduced.

2.1 CONCEPTS OF GENDER

2.1.1 Definition of Gender

Gender refers to the socially constructed differences between men and women and the resultant power relationships (Rothchild 2007). The study adopts the definition of gender as a social construct whose roles and expectations are learned and therefore can change over time (See Box 2). Roles and expectations vary across cultures and can be changed by other variables including geographic location, age and religion (Babugura 2010).

Box 1 Definition of Gender

The social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context/ time-specific and changeable. Gender determines what is expected, allowed and valued in a women or a man in a given context. In most societies there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Gender is part of the broader socio-cultural context. Other important criteria for socio-cultural analysis include class, race, poverty level, ethnic group and age. (

Source: UN Women (2001¹)

2.1.2 Gender Equality and Women's empowerment

Equality between men and women has many dimensions as it does not denote men and women being the same. Rather, the rationale of promoting gender equality is to meet a human rights and social justice call in the pursuit of equal rights, opportunities, and responsibilities. Equality is also a useful indicator of people-centered development processes (UNDP 2013). This is in sharp contrast with gender equity whose interpretation of social justice is usually drawn from tradition, custom, religion or culture and therefore detrimental to women in relation to the advancement of women.

Another strategy considered useful in order to achieve equality is the empowerment of women. The empowerment of women involves them gaining more power and control over their own lives. Numerous activities are used to ensure this including: awareness raising; increased access to and control over resources; and actions to transform the structures and institutions which reinforce and perpetuate gender discrimination and inequality (UNDP 2013). The empowerment of women is also unique in that it emanates from within – women empower themselves. Therefore, women's active participation in defining their needs and priorities is important for the process of change.

Gender mainstreaming is yet another strategy to achieve gender equality. According to the UN in the Economic and Social Council (ECOSOC) 1997/2, it is defined as: "[...] the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making men and women's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that they benefit equally, and inequality is not perpetuated. The ultimate goal is to achieve gender equality."

Preventing inequality and therefore achieving equality is reinforced through institutional processes that incorporate gender perspectives in planning, implementation and monitoring of policy and legislation (Larrson 2017).

2.1.3 Challenging gender mainstreaming and equity

Gender mainstreaming entails making gender perspectives more central to policy development, research advocacy, development, implementation and monitoring of norms and standards (UNDP 2013). However, the efficiency of gender mainstreaming has been widely challenged in the literature with various arguments offered for its limitations in achieving gender equality.

One explanation is around problem identification, that is, gender mainstreaming policies do not clearly define the problems they aim to address (Alston 2013). The argument then is that gender mainstreaming policies are at risk of reproducing inequalities between men and women Bacchi and Eveline (2010)

Other proponents such as the African Working Group on Gender and Climate Change (AWGGCC) within the African Union Commission, advocate for a move away from gender mainstreaming to gender integration. Gender integration is understood as having greater women's involvement at all levels of planning and implementation, rather than mainstreaming targeted and gender-specific needs in policies, strategies and legislation (Larrson 2017; AFDB 2016).

For the purposes of this report, the use and understanding of gender equity is the preferred terminology as it "[Gender equity] denotes an element of interpretation of social justice, usually based on tradition, custom, religion or culture, which is most often to the detriment to women. Such use of equity in relation to the advancement of women is unacceptable" (UNDP 2013:4). It is the preferred terminology within the United Nations.

2.2 CONCEPTS OF CLIMATE CHANGE

2.2.1 Definition of Climate Change

The IPCC defines Climate change as any change in climate over time – whether due to natural variability or human activity. The UNFCCC offers a different definition of climate change as a change of climate attributed directly or indirectly to human activities' change to the composition of the global atmosphere over comparable time periods (UNDP 2009).

While a changing climate is a natural phenomenon, there is increasing concern for changes in climate because of the exponential growth of industrial and development activities (since the mid-1980s) that have caused changes significantly higher than the natural variation and to limit global warming to less than two degrees Celsius (2°C) above pre-industrial levels and pursue efforts to limit the increase to 1.5 degrees Celsius (1.5°C) (IPCC 2001).

The impacts of climate change include sea level rise, changes in the intensity, timing and spatial distribution of precipitation, changes in temperature and the frequency, intensity and duration of extreme climate events such as droughts, floods, and tropical storms (Babugura 2010; IPCC, 2007).

Despite its global nature, climate impacts are uneven because social and development processes often generate multidimensional inequalities between people, which result in differences in vulnerability and exposure to the effects of climate change (Larsson 2017).

2.2.2 Climate Change Vulnerability

Vulnerability is comprised of three components: these are exposure, sensitivity and adaptive capacity. Exposure refers to the presence of a climate hazard; sensitivity refers to responsiveness of a system to the climate hazard and adaptive capacity refers to the ability of

a system to change in a way that makes it better equipped to manage its exposure and sensitivity to climate hazards and or cope with adverse impacts (Babugura 2010; IPCC 2001).

Vulnerability analysis tends to be based on the experience of past hazards/disaster events and can only be, at best, predictive (looking at an individual or community's *likely* susceptibility). However, if vulnerability is viewed as a dynamic process, this takes into account the *risk* of exposure and susceptibility. Equally, this enables us to assess the strength of different responses, and/or the potential for building people's capacity to adapt. Then, we may have a better indication of *who* is vulnerable, *when*, and *how*. We can also look at opportunities for addressing vulnerability and enhancing adaptive capacity of men and women (Terry 2009).

The Hyogo Framework 2005–2015 defines vulnerability as a 'set of conditions determined by physical, social, economic and environ-mental factors or processes which increase the

Box 2 Drivers of individual vulnerability

Vulnerability differs according to the 'initial conditions' of a person – how well-fed they are, what their physical and mental health and mobility are, and their morale and capacity for self-reliance. It is also related to the resilience of their livelihood – how quickly and easily they can resume activities that will earn money or provide food and other basics. The hazard itself must be recognized, and the fact that vulnerability will be lower if people are able to put proper 'self-protection' in place.

Source: Terry (2009)

susceptibility of a community to the impact of hazards,' (adopted by the UN at the World Conference on Disasters in 2005). This emphasizes the need to look at vulnerability not simply as a result of, or response to, environmental extremes (Cutter 1996; Vincent 2004). Rather, vulnerability is rooted in the construction of *everyday* social space or social existence; that is, vulnerability needs to be seen as context (for example, unequal access to opportunities) rather than as an outcome (Bohle *et al.* 1994).

There is a divide in the academic climate change literature between, on the one side, those who think of vulnerability in terms of physical exposure and sensitivity, and on the other side, researchers who are more interested in how social differences such as class, gender, and ethnicity shape people's vulnerability. This analysis draws largely on the latter, the backdrop of social vulnerability affecting whole communities, and what creates and sustains women's gendered vulnerability (Terry 2009).

On the other hand, in some countries at least, the message of women's gendered vulnerability has not yet got through and still needs to be communicated to national policy makers (Zahur 2008). When gender issues are mentioned at all in discussions of climate change, it is usually with reference to women's gendered vulnerability. Here, there is a tendency to present women as victims, rather than as agents capable of contributing to solutions, and to make broad generalizations that lump together all women in the global South.

The 'class-gender' effect is a useful one to examine as the issue of survival of the family is quite crucial for a woman living in the rural setting. Their awareness about modern environmentalism is also a crucial matter while studying the relationship between women and environment. Women often not only perform the duty of 'caregiver' for their own family, they are obliged to carry the major burden of environmental degradation in terms of their family's concern (Agarwal 2007). A closer look at the rural household exposure is a useful way to demonstrate women's vulnerability within the household (See Fig. 1).

Material Vulnerability	Institutional Vulnerability	Attitudinal Vulnerability
Weightage: 35%	Weightage: 50%	Weightage: 15%
 Income source – local/non-local, and or non-land based Educational attainment, particularly for women Assets – fungibles Exposure to risk – distance from river, coast, landslide zone 	 Social networks Extra-local kinship ties – response at times of adversity Infrastructure – access to roads, water, sanitation, electricity, health services, communication Proportion of dependants in household Reliability of early warning systems Belonging to the disadvantaged – caste, religious or ethnic minority 	 Sense of empowerment, derived from: Access to leadership at different levels – community, regional, national Knowledge about potential hazards

2.2.3 Climate Change Adaptation

Having established what vulnerability to climate change is and identified the key drivers, particularly as they affect women, we now reflect on coping with vulnerability. Adaptation is different from short-term coping. While people's coping strategies may ensure immediate survival, they might fail to protect them in the long-term and could even make the situation worse. Effective adaptation, on the other hand, reduces people's vulnerability to climate shocks and stresses in the future.

The term 'adaptation' covers a wide range of responses, from big government projects such as building sea-walls, to the changes people make on their own initiative, such as changing the crops they grow, taking out insurance, or finding ways to make a living that are less sensitive to the weather. In sub-Saharan Africa, for instance, it is women who carry out many farming tasks, so their inclusion in adaptive innovations is critical (Terry 2009).

Adaptation measures that do not take into account drivers of inequality are likely to exacerbate social injustice and inequalities, which in themselves make adaptation less effective and even, counterproductive. Existing research and examples point to the fact that decision makers cannot sidestep social injustices and their root causes when planning and implementing adaptation interventions. It is social, political, economic and cultural factors that drive vulnerability: women's limited access to and control over agricultural resources, such as land and capital, are not directly an effect of climate change but of social, political and economic practices and norms that discriminate on gender grounds (Resurreccion, 2019).

The understanding of adaptation as used in this discussion moves beyond conventional notions of 'coping' and rather as "the capacity of social actors to shift livelihood strategies under stress, and to develop supporting systems that are resilient and flexible to absorb and respond to the impacts of (climate) change" (ISET forthcoming 2008: 6). Adaptation can be defined as either autonomous or planned, although in practice, both strategies are often interconnected:

- a. Autonomous adaptation depends on underlying systems that enable people and organizations to take advantage of opportunities available in the new environment or constrain their ability to shift livelihood strategies as conditions evolve.
- b. Planned adaptation depends on the ability to:
 - proactively identify, and respond to, emerging constraints and opportunities;
 - enable autonomous adaptation processes by supporting the development of flexible, resilient, and accessible social and physical infrastructure systems; and; and
 - establish social protection systems capable of ameliorating the impact of climate change on vulnerable groups.

2.2.4 Resilience to Climate Change

The above-cited understanding of adaptation consequently takes the view that increased adaptative capacity will result in resilience. **Resilience** is the ability of a system to absorb disturbance (e.g. market changes, fires, conflict) and maintain function, structures, and feedback processes (Matin et al. 2018).

For coping and adaptation to result in resilience, resources that would enhance men and women's capacity to adapt to climate variability and change need to be equally accessible. These include access to land, credit, agricultural inputs, decision-making bodies, and technology and training services, education, natural resources, mobility, access to equal economic opportunities, information and communication systems. With the appropriate resources, women and men have the ability to develop complex adaptive strategies, differentiated by gender so as to build resilience to climate variability and change (Babugura 2010).

2.3 Policies, Programmes, Plans and Processes

Climate change threatens numerous sectors and to sustainably address this global challenge, gender should be integrated sufficiently in the relevant climate change policies, programmes, plans and processes (see Box 3 for definitions). The report will review the legal, planning, policy processes in national climate change initiatives with an aim to highlight the advances

Box 2 Definitions: Policies, Programmes, Processes and Plans

Policies are a course of action (or inaction) chosen by decision-makers to address a given problem or interrelated set of problems or the way in which the courses of action for achieving the appropriate goals are determined (Skopje 2007).

Programmes include a range of strategies working towards defined outcomes. They can include a collection of inter-related projects and activities or may be a mixture of development, relief, advocacy, networking and capacity building (Giffen 2009). According to UNDP (2011) a programme is a plan for effectively delivering development results through a set of projects. These projects are normally developed after the approval of the programme.

A **Plan** is a predetermined course of action to achieve a specified goal. It is an intellectual attempt on the part of decision makers to anticipate the future in order to achieve better performance (Sarker 2019).

Processes are a series of steps and decisions involved in the way work is accomplished (Giffen 2009).

and gaps in countries' gendered considerations. The examples of national countries provided in this report are meant to highlight the above-mentioned processes across the continent.

When policy measures are suitably designed to address the concerns of the most vulnerable populations, they can alleviate burdens and reduce inequalities caused by climate change. The WHO offers a qualitative tool (see Box 8) that helps users assess the gender responsiveness of their policies and programmes.

Box 3 WHO Gender responsiveness of Policies and Programmes

Level 1. Gender-unequal: perpetuates gender inequality by reinforcing unbalanced norms, roles and relations; privileges men over women (or vice versa); will often lead to one sex enjoying more rights or opportunities than the other;

Level 2. Gender-blind: ignores gender norms, roles and relations; by ignoring gender aspects, gender-blind programming will often reinforce gender-based discrimination;

Level 3. Gender-sensitive: considers gender norms, roles and relations; does not address inequality generated by unequal norms, roles or relations; indicates gender awareness, although often no remedial action is developed;

Level 4. Gender-specific: considers gender norms, roles and relations for women and men and how they affect access to and control over resources; considers women and men's specific needs and might intentionally target and benefit specific groups of women or men to achieve certain policy or programme goals or meet certain needs;

Level 5. Gender-transformative: considers gender norms, roles and relations for women and men and how they affect access to and control over resources; considers women and men's specific needs; addresses the causes of gender-based health inequities; includes ways to transform harmful gender norms, roles and relations; includes strategies to foster progressive changes in power relationships between women and men.

Source: WHO (2011).

3 GENDERED VULNERABILITY TO CLIMATE CHANGE: CAUSAL FACTORS

3.1 Gender and drivers of climate change vulnerability

Several key variables make the continent especially vulnerable to climate change. Bube et al. (2016) cite the following:

- *Geographical positioning* of the continent makes it one of the warmest regions because of proximity to the equator;
- High reliance of rainfed agriculture which is sensitive to climate change;
- Lack of technology and resources to improve the adaptive capacity of vulnerable communities to overcome exacerbating factors including socio-economic gaps in governance, government financing, high rates of poverty and growing populations.
- Decreased rain fed agriculture driven by droughts in already hot and dry regions such as Southern Africa and Sahel.

A closer look at African men and women's vulnerability to climate change points to significant differentiation beyond its geographical position (Resurrección, 2019). Systemic variables pose a greater vulnerability because they are less visible and sometimes more difficult to assess. This report is largely concerned with these more systemic drivers of vulnerability as identified and explained below.

3.1.1 Gendered roles and responsibilities

The social positioning of women means that the roles they are expected to take on are often supportive and reproductive, centered around the home and local community rather than the public space. This does not mean that women do not play important roles in activities crucial to sustainable livelihoods and national economies but the roles they play are generally less visible and attract less public recognition than the work men engage in (Brody et al. 2008).

Some of these roles and responsibilities disadvantage women. For example, while women are doing other domestic activities, the men may be using the time to gather and access vital information on climate change mitigation or adaptation strategies. Consequently, women miss vital information and opportunities to improve their knowledge on available adaptation and mitigation strategies.

Also, more women compared to men are involved in multiple livelihood methods. While the measurement of plural activity is still a major challenge for survey statisticians, countries like Burkina Faso have made an effort to obtain a better estimate of women's contribution to Gross Domestic Product (GDP) by measuring secondary activities in which most rural women are engaged. These activities mainly include processing of agricultural products (Blackden and Wodon, 2006).

Women earning a wage often earn less than men, leaving them more vulnerable to changes in their working environment caused by external phenomena, including climate change (Brody et al. 2008).

3.1.2 Gender inequality

Men and Women's differential access to social and physical goods and resources is one of the key dimensions of gender inequality. Women are more likely than men to be absent from

decision-making, whether in the household or at community, national or international levels. This can either be because their contribution is not valued or because they do not have the time, confidence or resources to contribute (Brody et al. 2008). They are also held back by social norms and practices in their community.

According to the Institute of Development Studies and Plan International, women's voices are marginalized across household, community and national climate change decision making levels relating, particularly in disaster risk reduction (Mitchell et al. 2008).

3.1.3 Education

Women are often excluded from decisions about household spending or other domestic decisions such as their children's education. Girls are expected to help their mothers with household tasks and caring for younger siblings, often excluding them from opportunities to gain an education. Unlike the boys, most girls (and women) are unable to read which hampers their ability to understand climate change issues (Brody et al. 2008). In some climate-vulnerable countries - particularly during a crisis period - girls may be taken out of school to reduce the drain on household resources, while boys continue their education during the crisis period (Ingram, 2019).

3.1.4 Poverty

Women constitute the largest percentage of the world's poor; they are most affected by the impact of a changing climate. Young girls and elderly women are particularly vulnerable (Brody et al. 2008). With increased ecosystem degradation as a result of climate extremes, household burdens on women and girls will likely increase, forcing them to search for resources in unsecure areas, increasing their exposure to greater poverty. These threats are even higher where families are displaced by climate change related disaster such as flooding and drought (Resurrección, 2019).

3.1.5 Under representation

A study by Jerneck (2018) uses a Web of Science search as a rough indication of gender representation in climate change debates including other gender research of relevance for climate change responses. The study revealed that only 450 articles mentioning either 'gender' or 'women' in comparison to the 12,966 social science articles on 'climate change' and 'adaptation' published between January 1, 2000 and December 3, 2017. This raises concern on how well gender is included in climate change policies. Nonetheless documented "adaptation initiatives have increased significantly since 2006 albeit from a low level, mainly in Africa, especially Kenya and most often in semi-arid agriculture" (ibid:4).

3.1.6 Religion and Culture

In some cultures women are responsible for growing food crops to feed the family, while men focus on cash crops to earn money. However, as climate change reduces the length of the growing season and rainfall becomes scarce or unpredictable, there is a tension between men and women over which crops to grow and where priority should be placed. Also, in many cultures women are responsible for their children's wellbeing, placing the added responsibility of their care and nutrition on the women.

4 Climate Change and Sustainable Development

Global and national initiatives have focused on finding workable and sustainable solutions to overcome some of the above-cited climate-change challenges as they affect women in the Global South. The most notable and particularly relevant for this discussion are the 2030 Sustainable Development and the Paris Agreement.

Under the Paris Agreement (2015) African states have an opportunity to draft and implement nationally appropriate policies through international commitments including the National Determined Contributions (NDC), National Adaptation Plans (NAPs), and Nationally Appropriate Mitigation Actions (NAMAs). The focus of this report is on gender equality in the implementation NDCs, therefore the preceding discussion takes a closer look at NDCs in African countries and will later identify opportunities for ACPC intervention for delivering climate resilient development policies.

Since the adoption of the 2030 Agenda for Sustainable Development and the Paris Agreement in 2015, the international community has worked towards embedding women's concerns in both for greater gender equality. Women are center fold in all of the SDG's and gender equality and empowerment recognized as a solution to all of the SDG objectives (Huyer 2016). Similarly, climate change cuts across all SDGs - recognizing that if unaddressed, many climate impacts are likely to impact the lives of women the most and in many cases may reverse some of the progress already made in women's empowerment (IPCC 2014). This is a great opportunity for countries to coordinate and streamline actions at the international level and promote gender, climate action and social development at national level (Huyer 2016).

Gender Equality in SDGs

The SDGs consider gender equality to be a fundamental human right. Of particular relevance to this report are the following goals:



SDG2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture:

SDG5: Achieve gender equality and empower all women and girls. Gender equality is also integrated into SDGs related to social development or climate change;

SDG6: Ensure access to water and sanitation for all;

SDG7: Ensure access to affordable, reliable, sustainable and modern energy for all; and

SDG12: Ensure sustainable consumption and production patterns (Huyer 2016, United Nations 2015).

5 Climate Change and Sustainable Livelihoods

This section draws on definitional concepts presented in the introductory section, namely: vulnerability, adaptation, mitigation and sustainability. Against an understanding of these concepts as used in this analysis we then analyse the gender responsiveness of adaptation and resilience building initiatives to lessen the impacts of climate change on livelihoods.

Given the overall low agricultural productivity in Sub-Saharan Africa, men and women often diversify incomes by doing other activities to support their household income.

Stressors can have differential impacts on community members, and adaptation strategies can vary by gender, social status, and so on. In the last decade the poverty

Box 4 Sustainable Livelihoods

A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living ... a livelihood is sustainable which can cope with and recover from stress and shocks. maintain or enhance its capabilities and and provide sustainable assets. livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.

Source: Chambers and Conway (1991 in Connolly and Smit 2016:389)

agenda has been dominated by ways of poverty reduction strategies, particularly with an emphasis on the role of labour and livelihoods. We have already discussed that (rural) women's work tends to be more vulnerable to climate change impacts with much of the labour being in smallholding agriculture. There is also a growing recognition of informal labour (in both rural and urban areas).

Much like the characterization of the smallholder agricultural sector, the informal economy is varied – with different types of activity, relations and productive activity. The definition of informal work relates to its precarious work conditions – with workers in this sector generally excluded from safety nets such as social security or labour legislation protections (WIEGO 2001). The discussion in this section draws on country examples to demonstrate the impacts on climate change on women's livelihoods and some of the ways in which they adapt to them and how they can build greater resilience.

A study on farm workers in **South Africa** by Lemke et al. (2009) reveals another interesting relational dynamic between men and women working on the farm (often families) where men tend to be formally employed while their female counterparts take on informal work. Especially interesting is that the females tend to be employed through their male counterparts.

The case of South African farm workers by Lemke et al. (2009) should also be seen to present ways in which women – when presented with limited livelihoods opportunities take advantage of the same system that puts them in a disenfranchised position to their benefit. In this case – gaining employment through their male counterparts. While may not be the ideal position for many women, it points to an adaptation to labour legislation in clear need of review.

In a farming community in **Ghana**, Codjoe et al. (2012) found differences in adaptation strategies in response to flooding amongst men and women. Women often opted for post-harvest technologies more than men, while men favored light infrastructure projects such as

the construction of community drains. Women's land rights tend to be restricted and are therefore less able to move their food production to less flood-prone areas. Consequently, women's livelihoods and earning power tend to be more vulnerable than that of men who can make decisions over the land.

Scott's (1995) study on **Zimbabwean** home-based industries in household security found that women did gender-specific activities such as beer brewing while men did more technical skilled activities such as a carpentry. Women's incomes were significantly lower than those of their male counterparts and the sustainability of their business limited because it was not based on an adaptable skill set. Another way to look at it is that the women's income diversification strategies were confined to the informal sector while men's additional work was in the formal sector or could be scaled-up to the formal sector.

Drawing on the work of Wold (1997) in **Zambia**, Whitehead and Kabeer (2001) uses the example of smallholder farmers in a producer low-price period during which farmers, particularly female farmers, continued to cultivate maize for sale. Wold (1997) explains this maladaptation as a result of institutional resource constraints that would allow them to switch to higher value produce. Higher value produce would require access to different markets, non-farm income sources, different inputs (e.g. use of fertiliser), farming assets such as the plough – all of which women struggle to access because of traditional norms that guide resource access and use.

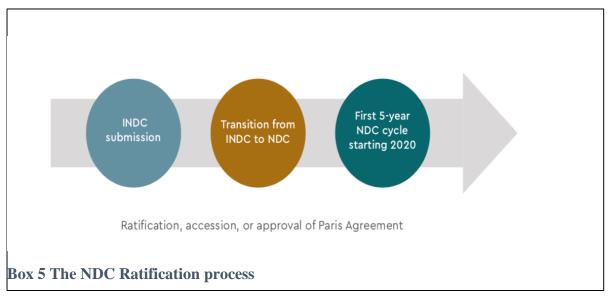
Blackden and Bhanu (1999) draw similar conclusions in **Burkina Faso** where married women's yields were significantly lower than those of their husbands on the same plot size in the same year. This difference is explained by access to inputs – and not less input – with male owned plots using a larger concentration of fertilizer. Taken at face value it may have seemed that female owned plots produced less because of less productivity whereas closer interrogation pointed to a higher concentration and of fertilizer allocation and use to the male counterpart.

Musyoki's (2012) study in **South Africa's** Limpopo province, where the provincial government was championing sustainable development through the promotion of green economy – including environmental conservation, social development and sustainable rural livelihoods. Using the case of biofuels, the author advocates for biofuel production as an opportunity for rural communities to overcome poverty and improve livelihoods. To achieve these outcomes, Musyoki (2012) suggests local and regional policy alignment to direct resources to relevant pro-poor sectors, particularly skills training and fairness of labor renumeration.

While it is seen in these outcomes what can be achieved, gender inequality remains a persistent problem. It can also affect land rights and land ownership issues and particularly land reform in the countries. Greater land ownership and management will have positive impacts on women's decision making and negotiation power not only over what they grow on their land but also ownership gives a powerful financial credibility as it can be used as collateral for bank loans. Currently because of limited land ownership, women tend to grow subsistence crops to realise profits in a shorter time frame. A more desirable outcome would be mixed farming to meet food security and income generating crops production and this will require policy and legislative protections.

6 Nationally Determined Contributions (NDC)

Following the adoption of the Paris Agreement, countries have since begun to plan for implementation of the Intended Nationally Determined Contributions (INDCs) submitted in ahead of Conference of the Parties (COP 21) negotiations. INDCs are later ratified to NDCs (Box 4) which countries are expected to update every five years starting in 2023 to demonstrate their progression (ACP 2018).



Nationally Determined Contributions (NDCs) outline mechanisms undertaken by member states to fulfill the objectives of the Paris Agreement – keeping the global temperature levels below 2°C and to strengthen nations' adaptive capacity to climate change impacts (World Bank, 2016). NDCs also promote national development priorities including fostering synergies between climate change action and other development agendas (Atteridge et al. 2020).

Box 6 What are Nationally Determined Contributions (NDCs)?

NDCs are a feature of the Paris Agreement (PA) – an international agreement under the United Nations Framework Convention for Climate Change (UNFCCC) framework. In an effort to reach its target to keep global warming under 2 degrees Celsius and for a 1.5 degrees Celsius limit – countries party to the PA are required to plan mitigative and adaptation (albeit optional) actions that are documented in the Intended Nationally Determined Contributions¹ (INDCs).

NDC implementation consists of key activities over the course of months and years during which they undertake activities including: building national awareness; strengthening institutional arrangements and technical capacities; identifying information gaps; developing funding strategies to mobilize resources from the public, private and international sectors; implementing mitigation and adaptation measures; developing monitoring systems; and planning for future NDC rounds beginning in 2020 (Comstock, 2016).

A total Ninety-seven (97) - Forty-eight (48) of which are in Sub-Saharan Africa - countries have ratified the Paris Agreement, though all are at different stages towards the implementation of their NDCs. This can be attributed to the fact that official guidance on NDCs is limited but many countries that have made their submissions have gone beyond the non-compulsory elements and submitted additional information while others have elected to completely overhaul their INDCs and submitted new contributions¹ (ACP 2018).

On one hand, this is a positive indicator of countries' commitment to the NDC process and is especially useful given the possible implications of climate change to African countries' human security, increased poverty and threats to human security. On another hand, even though NDCs have some common features, their composition varies greatly in terms of structure, content, scope, level of detail, and metrics used (see Box 6 for examples of African country NDCs). They reflect the countries' different capabilities. the adaptation components of African governments' NDCs do not clearly identify vulnerability in priority sectors; or the adaptation and mitigative actions so far undertaken.

Adaptation and mitigation are increasingly recognised by the UNFCCC as being of critical importance in the global response to climate change (Lesnikowski, et al., 2017; Okereke and Coventry, 2016) so their integration in national plans is crucial. Despite efforts to integrate adaptation into and streamline across NDCs and wider national plans, many African countries have not realized this and are in need of technical and financial support to ensure that national plans and NDCs are coherent.

Climate crisis and social justice research suggests that NDCs and other climate strategies need to better balance technical and social concerns (UNFCCC 2015). For starters, NDCs continue to over emphasise contributions made by large-scale mitigation activities, which tend to be highly technical (Tonkonogy et al. 2018). This is despite efforts by the Paris Agreement to increase attention to adaptation efforts², which tend to have more of a social focus. Second, social considerations in NDCs tend to focus on the politics state level, that is, politics between developed and developing economies, leaving little space for challenging social power structures (including gender) consequently increasing the risk and vulnerability to climate change more severely for already vulnerable groups (Carlarne and Colavecchio 2019; Jernnas and Linner 2019).

The global development community have made attempts to address this challenge. For example, the World Bank increased its support to Sub-Saharan Africa through the Action Plan on climate change adaptation and resilience by launching the Africa Climate Business Plan (ACBP) in 2016. The ACBP has become a critical support mechanism that is helping client countries institutionalize climate action and meet their Nationally Determined Contributions (NDCs) submitted under the Paris Agreement (World Bank, 2019). However, given that many country's' NDC development are in their infancy, it is an opportune time for ACPC support.

¹ Benin and Mali (Belize, Bahamas)

² Activities that attempt to help natural or human systems adjust to and/or transform in response to climate change

Box 7 Climate change adaptation and mitigation ambitions in African NDCs

Benin intends to achieve the NDC objectives by reducing the exposure of pregnant women and children under five to malaria and other climate change-related diseases. The policy seeks to achieve a decrease in morbidity and mortality related to climate change.

Senegal has activities that improve the access of households to clean energy sources and measure the reduction of carbon dioxide emissions and biomass use in the areas of electricity generation. The country hopes to alleviate the disproportionate economic burden on women related to fuel and energy provision, and to improve the academic performance of children.

Cote D'Ivoire seeks to integrate the gender aspect in a range of primarily agricultural policies aimed at the development of sustainable energy solutions. Also, facilitating the access of women to clean cooking stoves and fuels can improve health, livelihoods and generate sustainable income for women.

Kenya enacted a Climate Change Act in 2016 and National Climate Change Action Plan which serve as the main instrument for Kenya's NDC implementation (Gok 2016).

Uganda is in the process of finalising its National Climate Bill (2018) that provides a framework for climate change adaptation and mitigation action enforcement (Gilder and Rumble 2017).

Zimbabwe: The Zimbabwe National Climate Change Response Strategy (NCCRS) The Zimbabwe NCCRS incorporates a specific and cross-cutting strategic focus on children and youth, outlined in one of 12 strategic objectives, to "mainstream gender, children and youth, people living with HIV/AIDS and other vulnerable groups into all climate change interventions." Other countries that have demonstrated similar efforts are **South Africa** and **Zambia.**

In terms of women's political representation, **Rwanda, Burundi, Mozambique and Uganda** are useful examples. Rwanda continues to statistically demonstrate significant achievement in women participation in politics on the continent (Musau, 2019). At ministerial level, the country takes the lead with 51.9% representation of women, followed by South Africa (48.6%), Ethiopia (47.6%), Seychelles (45.5%), Uganda (36.7%) and Mali (34%) (UN Women and Inter-Parliamentary Union, 2019). Rwanda and South Africa have constitutional provisions that ensure gender balance in political positions. Similarly, a number of West and North African countries such as **Cameroon, Senegal, Cape Verde, Tunisia, Morocco, and Benin** have increased levels of female representation in political spheres (Inter-Parliamentary Union, 2019).

7 Opportunities for Youth Engagement, Participation and Empowerment in NDC implementation

This section identifies opportunities for enhancing youth engagement, participation and empowerment in NDC implementation.

7.1 Youth, Climate Change and Sustainable Development

One of the key focus areas of the 2030 Agenda is on the world's 1.3 billion youth, who make up 16 percent of the global population (United Nations, 2017). The youth are amongst the nine major groups identified as key players in achieving the world's SDGs (Heejin, 2020). However, there remains a gap in the literature on the mobilisation of youth in global climate politics.

Various dimensions of young people's lives, including their security, well-being and even mental health, will be negatively affected by climate change (Eskenazi et al. 2020). There is already some evidence of how climate change and extreme weather events have negatively affected the physical and mental health conditions of young people, including children (Majeed, 2017). Climate change also affects the socioeconomic conditions in which youth live. For instance, in many developing economies, young people who constitute the largest demographic group and the largest labor force in the agricultural sector, are exposed to growing existential threats, as climate change has altered environmental conditions such as water availability and adequate distributions Crops are mostly suffering from uneven rainfall intensity and distribution coupled with extreme events such as floods and heat waves. Moreover, a changing environment often engenders conflict between various youth groups over the use of scarce resources (Ensor, 2013).

7.2 Key policy recommendation for youth engagement in NDC formulation and implementation

7.2.1 Political will and high-level leadership

Integrating youth rights into national climate action such as NDCs will require political will from senior decision-makers. Such leadership often comes from the national/central level but needs to filter down to district and community levels.

7.2.2 Youth-sensitive budgeting

Evidence suggests that public spend on youth or child-sensitive plans yields higher social and economic returns. This is because investments in young children are relatively cost-effective, contributing significantly to adult outcomes by increasing the health, education and well-being of a population, and reducing inequalities (ODI, 2011). Also, national governments have obligations under the UN CRC to invest the necessary resources in public policies and programmes to fulfil children's rights.

7.2.3 Disaggregated data collection and assessment

Weaknesses in data collection and an over-reliance on averages fails to capture the specific and differential impacts of climate change on youth, and children in particular, based on their age, sex or other socio-economic characteristics, and compromises effective policy planning and equitable implementation of climate action and children's rights. Understanding the challenges that climate change poses to the youth and children is essential to inform and prioritise policies, plans and set target indicators for monitoring and evaluating progress.

7.2.4 Youth-sensitive targets and performance indicators

Clear monitoring and evaluation protocols ensure the alignment of targets and ensure better design of follow-up plans and action and decisions on budget allocations and accountability monitoring and evaluation.

7.2.5 Climate change education

NDCs must include the provision of quality and inclusive education. The UN General Assembly (2015) accurately elaborates stating "we commit to providing inclusive and equitable quality education at all levels—early childhood, primary, secondary, tertiary, technical and vocational training. All people, irrespective of sex, age, race or ethnicity, and persons with disabilities, migrants, indigenous peoples, children and youth, especially those in vulnerable situations, should have access to lifelong learning opportunities that help them to acquire the knowledge and skills needed to exploit opportunities and to participate fully in society" (ibid). This should be the yardstick for national governments in the implementation of education programs.

8 Analysis of Gender Equality in NDCs

This section of the report draws largely on the work of ACP (2018) and GGCA (in Huyer 2016) on the analysis of NDCs countries in the Global South. The analysis reflects on the challenges, gaps and opportunities for the integration of gender into national policies and particularly the integration of gender equality into national climate change policy and action, particularly as countries begin implementation of their NDCs. Table 2 presented criteria for gender-responsive policy which can be used as guidance NDC development.

Table 1 Principles and minimum criteria for a gender-responsive climate change policy or strategy

Principles		Criteria	
1.	Evidence-based	Analyze, whether the climate change policies/plans/strategies, did a gender analysis on climate risks, impacts, and vulnerability	
2.	Positive social and gender norms	Analysis whether vulnerable people are identified, defined and targeted and their knowledge and capacity to address risk and vulnerability assessed	
3.	Equal benefits	Analyze whether the design of initiatives and activities within the climate change policies/plans/strategies aim to ensure resulting benefits, systems and services are beneficial to women and youth	
4.	Participation	Analyze whether the climate change policies/plans/strategies promote participation, voice and inclusion of all groups, especially women and youth. Analyze whether they recognize and strengthen the capacity and rights of vulnerable men, women and youth to continually participate in adaptation decision-making	
5.	Needs assessment and analysis	Analyze whether the climate change policies/plans/strategies identified adaptation and mitigation actions that respond to needs of women, youth, and other vulnerable groups	
6.	Strategic planning and implementation	Analyze whether the technology choices identified in the policies/plans/strategies respond to risk and vulnerability as well as anticipation of future climate and uncertainty at community and natural level, and consider trade-offs and synergies between different vulnerable groups Analyze whether the technology choices identified in the climate change policies/plans/strategies build on local knowledge, and consider availability, accessibility, affordability, relevance to women, youth and other vulnerable groups Analyze the extent to which climate change policies/plans/strategies facilitate access to finances across gender and youth	
7.	evaluation	Analyze whether the monitoring system incorporates reflection by women and youth and identifies feedback loops to inform modifications as the project evolves so that activities are successfully adapted to new learning and does not create/lead to more inequalities	

Source: Nyasimi et al. 2018:174

This category of analysis assesses the **role of women in adaptation** (both planned and autonomous) and mitigation as reflected in NDCs. Priority sectors for women's participation in adaptation such as agriculture and water are especially interrogated. The findings reveal a high incidence (35 countries) of reference to the role of women in adaptation. Reference to women is also made under the identification of vulnerable groups. While on one hand this points to an important focus of women as particularly vulnerable to climate change impacts, it is problematic in that it misses the opportunity to highlight women as agents of change and reflect on their adaptive and mitigative actions in their communities. It is important to identify women as agents of change as it opens up opportunities to reflect their successful actions in climate change policy.

Only 8 countries are found to recognize **women's participation in decision making**, especially identified in the environmental management and energy sectors. There is a need for greater recognition of women's participation and decision making, particularly in these sectors because in many African countries, rural energy consumption is still largely towards cooking – a decision area dominated by women. Women's participation in decision making on managing fuel stocks and energy also has important impacts on family health, particularly that of young children as well women's workload.

Women's participation **programmes and training** receives a lot of attention, particularly in Sub-Saharan African countries where target areas for capacity building include sustainable energy, sustainable agricultural production, and environmental conservation.

Only three countries mentioned **finance** or finance instruments to support women's adaptation and mitigation actions.

The country examples below give a snapshot of how African countries have begun to embrace gender equality in related climate change policies and plans which can and will be built into the development of their NDCs.

Malawi NAPA (National Adaptation Programmes of Action) preparation process took gender considerations into account with consultations with women's non-governmental organizations (NGOs) and gender being used as one of the country's criteria for project selection. Some of the priority areas identified for the empowerment of women was access to microfinance, and rural electrification for improved access to both energy and water resources. The Malawi NAPA further disaggregates beneficiaries by vulnerability, citing the following groups: rural communities, especially women, children, female-headed households and the elderly. Proposed priorities include: (i) improved early warning systems (ii) recommended improved crop varieties, (iii) recommended improved livestock breeds; and (iv) improved crop and livestock management practices (Government of Malawi 2006).

Mauritania NAPA recognizes women as key stakeholders in the consultation and decision-making processes, even though they have not been represented in great numbers. The objective of the country's first NAPA project approved for implementation is improving the living conditions and incomes of women and young people in a sustainable way by developing agricultural value chains. One of the ways in which women are particularly impacted by climate change is as a consequence of frequent drought which requires that women and girls walk longer distances to collect water and firewood (GEF 2009).

Senegal the case study of Guinean migrant women in the district of Joal (Senegal) in sea resources management highlights an often-neglected dimension of climate change adaptation policies and programmes, that is, gender and migration. The case study has been used to inform policy and decision makers about the need to consider climate change adaptation policies and programmes (LDCEG 2015).

9 Gender Action Plans

Another attempt at gender responsive adaptation and resilience building is in the form of climate change gender action plans (ccGAP). The aim of ccGAP is to ensure that national climate change strategies and programmes are gender-responsive across sectors (LDCEG 2015). ccGAP therefore ensure that over time as policies are developed and planning underway, governments align their climate change priorities and other national policies to address gender considerations. Box 7 gives an example of Liberia's ccGAP.

Box 8 ccGAP in Liberia

In Liberia, the objective was to ensure that gender equality is mainstreamed into the country's climate change policies, programs, and interventions so that both men and women have equal opportunities to implement and benefit from mitigation and adaptation initiatives in combating climate change and positively impact on the outcome of "Liberia Rising 2030." Agriculture, Coast, Forestry, Health, Water and sanitation, and Energy were the covered sectors. Drawing from the Liberia Priority sector, much focused was put on coastal erosion which has impact on livelihood of the surrounding population.

An estimated that 230,000 people are at risk and 2,150 km2 will be lost by a one meter sea level rise, including land and infrastructure and much of Monrovia, valued at US\$250,000,00019. Liberia ccGAP includes therefore actions in the coastal sector with the objective to put in place a robust gender-balanced monitoring system in coastal zones with concrete activities and indicators that measure the outputs. For example, consultation with stakeholders in the selection of gender balanced coastal monitoring indicators and the number of women trained in coastal monitoring. To address the lack of human resources in collecting observed climate data, various women associations decided to assist the meteorological services by collecting this information, provided that they are given mobile phones.

Source: LDCEG ()

10 Key Policy Recommendations and Opportunities for ACPC engagement

As the analysis has shown, African governments need to make a concerted effort to a process that focuses on creating an enabling environment for creating gender-sensitive policies in their formulation and implementation of NDCs. This can help to ensure that a foundation is established upon which the appropriate technical support, financial resources, and political support can be built (United Nations 2015). Below is a summary of the possible policy intervention areas as revealed by the literature review in this study.

10.1 Women's participation in decision-making

While more and more women are taking up leadership roles in their communities, workplaces and arguably at the national level, they need to be in positions that drive change, steer development of institutions and drive the choice of financing decisions.

Involve women in leadership roles in community processes and local climate change politics, as women are recognized as key agents of change.

Increase women's participation in international and national political decision-making processes by providing equal space and resources for women and men to participate in climate change decision making and action at all levels, including the UNFCCC (Reckien et al. 2017).

Women as agents of change at different levels of the adaptation and mitigation process.

Challenge traditional gender roles and recognize and balance care work between men and women. Women should increasingly be factors of change as opposed to being viewed as lacking agents.

10.2 Adaptation and Mitigation

To promote gender-sensitive adaptation and mitigation approaches that are aware of gendered implications and outcomes and working towards gender equality and positive impacts on the lives of women through improving livelihoods and health and allowing time for the pursuit of additional opportunities.

Notwithstanding some of the challenges with income diversification, livelihoods diversification remain highly recommended adaptation and mitigation strategies. A move away from agriculture-reliant livelihoods could provide the already much-needed buffer for local communities to manage climate change impacts (Dube et al. 2016).

The institutions around the alternative livelihoods strategies that men and women are involved in are important. As Scott's (1995) Zimbabwean example demonstrated, even where women are diversifying their livelihoods and incomes, they tend to remain in highly gendered roles. More sustainable livelihoods should also enable men and women to take on economic roles in skills areas in the formal sector – where incomes are higher and there is greater potential for participation in a broader economy.

The relational nature of access to livelihoods is more complex than is captured in quantitative surveys which do not consider underlying micro-social variables such as household and gender

variables to obtain more reliable data on the socio-economic status of women and men's livelihoods and consequently, their adaptive capacity.

In terms of adaptation, the agriculture is the most highly cited sector in country's NDC (at seventy-eight per cent). Countries have also identified the need for international financial support and technology transfer for adoption of sustainable agriculture as a potential stumbling block. While international financial support is indeed much needed to initiate these shifts, countries also have to start thinking of long-term financial support independent of international support and how their national economies can place greater focus on increasing their adaptive capacity for greater food security outcomes.

This is a space that that ACPC is well placed to provide technical support in – especially in ensuring that those adaptive economies are sensitive to women's needs and contribution in ways that will not place even greater burdens on women – who already carry many of the consequences of climate change as they impact agriculture and caring for the land.

This will be a significant challenge to ACPC technical assistance to the different African countries at their respective levels of NDC development in line with their ambitions and capabilities. To further increase the challenge to the ACPC is the fact that the UNFCCC framework, coined the "Rulebook" has not been completed. This guidance framework will establish rules and processes on how countries communicate their climate action efforts and how they are held accountable. The challenge for the ACPC in the immediate future is to identify priority areas for their NDC development and in future when the Rulebook is ready—to align identified priorities with its guidelines.

To date, adaptation remains an optional component in the NDCs. Further, UNFCCC reports that adaptation in NDCs is varied – sometimes inclusive of both planned and ongoing activities (ACP 2018). Such methodological challenges make it difficult for countries to decide on which adaptation commitments to include in their NDCs but quantifying policies, programmes and plans that include adaptation commitments is a possible solution. Similarly, quantifying direct reference and outcomes that are gender-sensitive can be a viable methodology of ensuring gender equality in NDC development and implementation.

10.3 Education and Capacity development

Increasingly, national education policies are advocating for free girl child education from primary school and make it mandatory for every child to attend school. A greater cultural and social understanding and appreciation on the benefits of girls' formal education will need to be developed overtime. To overcome this deficit, policies need to be responsive to what women want. This requires investment in building women's skills and confidence (for example, through advocacy training) to engage with climate change debates at the local, national, regional and international levels.

Develop and transfer environmentally sound technologies that promote gender equality in technology access, information and training.

Take a gender-sensitive approach to creating, developing and *strengthening institutional, systemic* and human-resource capacity-building to foster gender balance in decision-making on, in the delivery of, and in the accessing of means and tools for the implementation of mitigation or adaptation actions (UNFCC 2015).

Knowledge, awareness-raising and capacity building of climate policymakers. Research suggests that the majority of climate policymakers feel ill-equipped to understand and apply human rights standards and principles in their work (MRFCJ 2016). This causes a challenge to the implementation of women and youth-sensitive policies. Similarly, gender equality advocates have identified awareness raising, training and guidance among climate policymakers as a vital intervention to ensure that the social dimensions of climate change are considered and addressed in climate policies, particularly the integration of rights-based approaches to both mitigation and adaptation (UNFCCC 2015).

10.4 Financing Gender Equality

Climate finance should be accessible to both men and women and designed to generate mutual benefits, not exacerbate patterns of inequity when implementing adaptation and mitigation options.

Develop resource mobilization strategies, applying climate finance instruments, and ensuring equal participation in the deployment of financial resources, particularly at the local level.

NDC implementation at country level must be guided by the aspirations of the UNFCCC with respect to gender and climate change as highlighted by the findings of this report. While women's political representation is on the increase, the challenge remains to ensure that the positions they hold in these institutions can drive real change on the ground. Decision making on financial issues are for example critical to steering change and ultimately where more women need to be visible.

The NDCs offer an opportunity for countries to access increased technical and financial support. This is also an opportunity to build 'new' economies that can take advantage of African countries' low emissions and foster greater climate resilient development. According to ACP (2018), the energy sector³ is cited the greatest potential for investment and mitigative intervention need. Many countries have also already identified barriers to reaching their energy goals. For example, lack of financial support from financial institutions for energy-efficient renewable energy and lack of domestic technological resources. This calls for policy that includes energy components and the ACPC can support respective government departments and private sector partners to collective comprehensive data and methods to count and estimate emissions in this and other sectors.

10.5 Effective communication of Climate Change Policy

Gender equality concerns across societies often relate to the discrimination against women with respect to access to information, technologies, education and income opportunities. For instance, women have less access to secure land tenure, they lack access to financial credits, subsidies, opportunities to generate financial and productive assets, which are important in climate change recovery stages and moreover, in post-disaster camps and temporary accommodations, women often face serious risks of sexual harassment and violence (Tovar-Restrepo and Irazábal 2014; Dankelman et al. 2008).

As policy makers develop climate change policies, programmes and procedures, they have to communicate these to implementers and nations level at large. Given the complexity of climate change – its varied causes and impacts, its communication is equally complex but critically important. Communications should consider the gender dimensions of climate change using

³ Other sectors include Agriculture, Buildings, Energy, Industries, Land Use Change and Forestry (LULUCF).

communications tools that will not only be culturally appropriate but allow for feedback (Tall et al. 2014; Moser 2010; Rohr 2009).

Tall et al. (2014) advocate for the use of traditional communication tools, particularly for grassroots women for which technologies are not accessible. The authors particularly advocate for the use of radio because of its low cost, easy to use, does not require literacy and does not interfere with women's' work. Other traditional communication tools include theatre, video and face-to-face interaction.

With rising numbers in mobile phone connectivity and use on the African continent, ICT is increasingly becoming a preferred communication tool. ICT is expected to be most impactful in communication to agricultural actors. Women make a high contribution to Africa's agricultural labor force and support for information dissemination on ICT platforms can have much needed impacts on improved social cohesion and women's participation in managing climate related risks and decision making.

11 Conclusion

Gender integration into climate change policy is not only about a focus on women – it is equally important to consider whether interventions are addressing the interests of men and women the same way; whether there is adequate disaggregated data to support policy initiatives; and whether the process of arriving at these is inclusive. An understanding of gender inequalities is important to identify the gender gaps and devise strategies to bridge them through policy (LDCEG 2015).

Gender demands may differ depending on culture and location. Policies and programmes require indicators and data collection that is specific to the different culture and location to provide adaptation measures, funding and capacity building to women and men affected by climate change. Inclusion of relevant quantitative and qualitative data is necessary (UNFPA, 2009; Quisumbing and McClafferty 2006) in entirely understanding the need for and impact of these policies and programmes. Improving representation of women and building their capacity for effective participation in key policymaking positions (especially those related to agriculture and climate change) can play an important role in addressing policy gaps.

As the analysis has shown, at the **global** level knowledge gaps remain. In particular, there is a need to strengthen the technical work related to the monitoring and evaluation systems for adaptation that integrate the consideration of gender. In addition, more specific guidance needs to be developed to facilitate the consideration of gender aspects in key national adaptation processes, including the national adaptation planning processes (UNFCCC 2014).

Given the notable progress that has been made in developing gender-sensitive approaches and tools by different communities of practice, there is a need to systematically document and widely share case studies that demonstrate the benefits of applying gender-sensitive approaches and tools for adaptation at the global and **regional** levels and in different sectors, to inform the climate change (adaptation) policy. Suggestions made in this regard include the development of an online database of gender experts and a database of case studies on the UNFCCC website, and the development of a user-friendly guidance document for practitioners in applying gender-sensitive approaches and tools.

Gender considerations and analysis need to be included in all stages of **national** development plans, policies and projects on climate change. National institutions need to attach greater priority to and provide resources for gender consideration in **risk analysis and mitigative strategies and national budgeting**. Women already make use of localized mitigative strategies such as village savings and loans groups that provide safety nets when climate impacts hit. Both adaptation and mitigation planning can draw on these communal skills in their planning. Women's steering such efforts is critical.

As regards community-level practitioners: gender needs to be integrated into existing approaches, for example, through the application of **indigenous and traditional knowledge and disaster risk reduction initiatives** rather than as a stand-alone approach.

As regards scientists/researchers/academia: information on gender-specific climate change impacts needs to be gathered and analysed; this could then inform the NAP process, among others (LDCEG 2015). Also, not enough is known about **the connection between climate change and gender roles**. More research on this connection, particularly the tools and

knowledge that men and women draw on to cope and ensure food security need to be incorporated into strategic policies (GGCA 2013).

Ensuring funds reach local communities, by factoring in gender considerations at the design and operationalization stages of **adaptation finance**. Investing in women is an effective way to ensure sustainable development and fighting climate change. Investment approaches may include setting up small grants programmes, including recommendations to vertical funds to ensure funding benefits vulnerable communities (LDCEG 2015; GGCA 2013).

There remains a lot of work to be done around gender equality and climate change policy to ensure that African governments receive the needed support to fulfill this aim. The infancy of NDC development and implementation of country plans ought to be seen as an opportunity to support the process to ensure not only aligned national policies but NDCs that are responsive to the needs of both men and women in their countries so that they are better able to respond to the impacts of climate change. The role of ACPC in providing such support is not only timely, it is very necessary.

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