

# Closing the Gender Gap in African Agriculture in the Face of Climate Change



Gender and climate smart solutions. Photo: <https://africaharvest.org>

## KEY MESSAGES

- 1. Gender is not about 'women and girls' but about roles, responsibilities, access and control over resources and relations between men and women, boys and girls which are socially ascribed.**
- 2. Women's meaningful participation in decision-making requires going beyond the presence of more women in institutions and processes.**
- 3. Comprehensive gender analyses at national and local levels are necessary to identify the challenges and opportunities for developing gender-responsive agricultural policies.**
- 4. A Gender Action Plan (GAP) for agriculture with a well-structured and robust M&E system is essential.**
- 5. Strengthening Gender Management Systems in the agriculture sector with regular gender audits can promote greater equity between women and men.**

## Introduction

Evidence across Africa reveals that significant strides have been made in promoting gender equality at policy and practical levels across all sectors, including the agriculture sector. Literature acknowledges the important role played by both women and men in agriculture and emphasizes that women contribute much of the needed labour in the sector. In countries such as Lesotho, Mozambique and Sierra Leone, women constitute over 60% of the agricultural labour force. More than 50% of the agricultural activities are performed by women and they produce about 60-70% of the food in the region.

Despite the important role that women play in agriculture, they face far more constraints than their male counterparts which influence the gender gap in productivity<sup>1</sup>. For example, gender productivity gaps in Nigeria, Tanzania, and Uganda were 18.6%, 27.4%, and 30.6%, respectively. In these countries, female farmers were less productive than their male counterparts due to differential access to resources such as land, inputs and agricultural extension services as well as competing gender roles. Closing the gender gap in the agricultural sector is estimated to yield production gains of 2.8%, 8.1% and 10.3%, respectively. These production gains would subsequently raise monthly consumption per adult equivalent by 2.9%, 1.4%, and 10.7% respectively in these countries and would help around 1.2%, 4.9%, and 13% households with female-managed lands in Nigeria, Tanzania and Uganda, respectively, to climb out of poverty.

It is also estimated that closing the gender gap would raise total agricultural output in developing countries by 2.5% to 4% and reduce the number of hungry people by 12% to 17% globally, the equivalent of 100 to 150 million people while neglecting it carries with it substantial costs.

If women had access to resources, on-farm yields could **INCREASE BY 20-30%**.

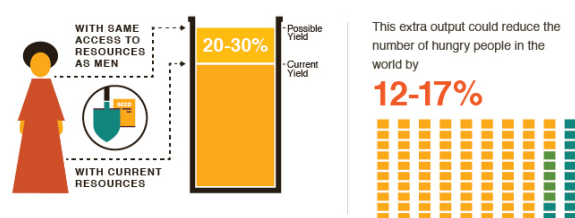


Photo: CCAFS - CGIAR - <https://ccafs.cgiar.org/bigfacts>

<sup>1</sup>IPCC Special Report on Climate Change, Desertification, Land degradation, Sustainable Land Management, Food Security and Greenhouse gas fluxes in Terrestrial Ecosystems, 2019.

## Gender in agriculture and climate change

### Access to productive resources and services

Important gender related aspects of climate change and agriculture include reducing vulnerability and increasing resilience of women and youth, supporting their coping strategies and survival skills, and promoting their adaptation and mitigation capacity. However, socially structured gender-specific roles and responsibilities, daily activities, access to and control over resources, decision-making and opportunities lead men and women to interact differently with natural resources and landscapes in the face of climate change. Women appear to be less able to adapt because of financial and resource constraints and lower access to information and extension services. The Intergovernmental Panel on Climate Change IPCC noted in 2014 that climate change will exacerbate existing gender inequalities (IPCC, 2014). Two key areas of interaction are access to productive resources and weather information.

#### Gender-differentiated impact of climate change on women

Climate change impacts	Impacts exacerbate gender inequalities
Crop failure	Household food provision; increasing work load
Fuel shortage	Household fuel provision; more time for fuelwood collection
Water scarcity	Household water provision; contaminated water; more time for water collection
Natural disasters	Women's greater incidence of mortality
Disease	Lack of access to health care; women's burden as care givers
Displacement	Forced migration increases women's vulnerability
Conflict	Loss of lives; violence against women

Source: World Bank, FAO, 2017

In terms of productive resources, women have limited control over land and other key productive resources and services such as inputs, labor, agricultural extension, information and markets due to socio-cultural, economic, legal and literacy barriers, while men are more likely to have access to these resources. In Africa, women receive 7% of agricultural extension services and less than 10% of credit offered to small-scale farmers. Evidence from Burkina Faso, Kenya, Nigeria and Zambia show that women are much less likely to use purchased inputs such as fertilizers and improved seeds or to make use of mechanical tools and equipment, but these are critical options for adaptation to the changing climate. The gender gap in access to livestock-based inputs has been noted in livestock farming systems (Mulema *et al.*, 2016).

The gender gap in access to productive resources shapes climate change effects on men and women and how they can respond to the effects. Women's limited access to productive assets and services compromises their adaptive capacity. It means that they cannot access credit to finance climate-smart agriculture innovations and have little access to services that could help facilitate investments to obtain new technologies, improve their natural resource management practices, or adopt more efficient and productive crop and livestock management practices, all of which could help them address the degradation of natural resources and build their resilience to climate change and recover from shocks.

In terms of climate and weather information, men currently have better access to these services than women, implying better adaptive capacity. Differing roles and responsibilities, decisions and control of resources can influence the climate information needs of men and women. In Senegal, women were more interested in information on rainfall cessation since they worked their lands after their husbands' plots were taken care of, and men were more interested in rainfall onset. Also, the gender digital gap in mobile phone ownership and internet use, as well as other information and communications technology (ICT) is significant in sub-Saharan Africa, so that reaching women with climate information will require different strategies and communication channels.

Reliable accessible and accurate weather information is required to inform climate change planning. Access to adequate weather and agro-advisory knowledge, gender-responsive improved technology, decision-making processes and financial services remain critical issues for women in the face of climate change. In 2011, the CGIAR Research Programme on Climate Change, Agriculture and Food Security (CCAFS) initiated a project that provided climate information to farmers through information communication technology in Ghana. Through collaboration between Esoko (an ICT company) and the Ghana Meteorological Agency, the project disseminated seasonal forecast information and agro-advisories to farmers through mobile phones. Both men and women found climate information services beneficial for strategic farm decision making such as when to begin land preparation, when to plant and which crop to select (Partey *et al.*, 2020).

As an example of the interconnection between gender, agriculture and climate change, the case of the effects of Cyclone Idai in Malawi, Mozambique and Zimbabwe in March 2019 shows the linkages clearly.

#### Case study 1: Gender differentiated Impacts of Cyclone Idai in Malawi, Mozambique and Zimbabwe

Cyclone Idai was described by the UN as ‘one of the worst climate related disasters in two decades, hitting a region already facing drought and growingly unpredictable seasons.’ It caused extensive damage and devastated the lives of more than 2.6 million people (51% of whom are women and girls) in Mozambique, Malawi and Zimbabwe. In Mozambique, the impact was especially devastating as it was preceded and followed by torrential rains and flooding, causing rivers to overflow, a dam in the Buzi district to burst, sweeping away entire communities and leaving an unknown number of people stranded. Food and grain stores, fisheries infrastructure and livestock assets were washed away and more than 500,000 hectares of crops completely destroyed.

Owing to gender division of labour and gender inequality, an area estimated at around 200–4000 hectares of diverse cultures was flooded, of which 71.6 hectares were lost resulting in increased food insecurity for women and their households, and reduced health status among women which inhibits their participation in economic activities. With the disaster, a proportion of women who earned their livelihoods through fishery products in Nhangau district have become unemployed and dependent, without means of income, and are vulnerable to the risk of contracting HIV and sexually transmitted infections (STIs), as well as abuse and sexual violence, while girls are exposed to multiple risks of disease and early marriages (Care International, 2019).

#### Time Poverty

Within the context of climate change, the gender gap in agriculture also manifest in women’s time poverty, i.e. the excessively long hours of work without time for rest or leisure that result from women’s triple roles in reproduction, production and social spheres. Women spend a significant amount of time ensuring that other members in their household, including men, children and the elderly are adequately and properly nourished. Rural women often manage complex households and pursue multiple livelihood strategies, and research shows that they work more hours than men, on average.

Case studies from Ghana and Uganda show that one of the most significant social impacts of environmental stress in farming systems is the intensification of women’s workloads and the decreases in the assets of poor households, indicating that climate change effects on local environments will add additional burdens to women’s time. Increased climate change disasters

have also resulted in the increased climate-induced migration leading to a majority of men moving to urban centers to look for better living conditions, leaving behind women to take up leading roles in rural agriculture resulting in the feminization of agriculture and additional responsibilities left to women remaining in rural areas.

Many climate-smart agriculture practices require relatively high investments in time and/or labour (e.g. building stone bunds and terraces) – investments that many households with few working-age adults or with few men cannot afford to make. Water harvesting technologies to meet water needs (irrigation, livestock and home use) during the dry season will minimize time spent by women looking for water and also secure food and livestock forage during the periods of shortage attributed to natural disasters.

Some climate-smart agriculture interventions, such as the introduction of improved cooking stoves, and the use of biomass for energy and biogas, have been more attractive to women because of their labour-saving features. For example, in Malawi, Irish Aid has introduced clean cookstoves that reduce demand for firewood, addressing environmental degradation and reducing the workload of women and girls. Clean cook stoves also contribute to increased incomes for the women and men engaged in producing them.

#### Case study 2: Gender Perspectives on Constraints and opportunities for coping with drought in Saweni and Mbitini villages in Tanzania and Kenya respectively

The ability to devote continuous periods of labour to an activity was an important differentiating factor in coping with drought. Men’s activities such as stonemasonry, making stools and running a shop or business, were sometimes carried out throughout the year. During non-drought times, these activities assumed secondary importance to farming. Charcoal burning and brick making, as well as high-intensity casual labour, were full-time activities for some men during drought. Unlike most men, few women could devote themselves to a continuous and reliable activity. A serious constraint that female-headed households faced was that, in most cases, a shortage of time available for outside labour prevented women from performing activities with sufficient intensity for these activities to serve as a principal income earner.

Domestic responsibilities, including looking after children and providing meals, meant that most women did not have large blocks of time required to carry out certain activities, such as running a shop, nor the mobility required to travel far to undertake paid work or trade. In contrast, women’s activities, including petty business, handicraft and collection of indigenous fruits, were often precarious. Few of these products yielded much money, and most female activities were maintained at a low scale.



The heavy burden of labour for women who bear the brunt of responsibility for many agricultural tasks, such as fuelwood and water collection, environmental management, and domestic work, means women's time is severely constrained. Gender differentiated roles and responsibilities further resulted in men having greater mobility, fewer domestic duties and easier access to certain resources.

### Gender responsive Climate Policy

The degree to which climate policy development and decisions are participatory, inclusive and responsive to the needs of women and men will help determine how well they embrace women's and men's lived experiences. Although initiatives to involve women in decision making have been put in place, mostly in the form of policy, in land management, desertification and climate decision making processes, their voices are not yet equally represented, particularly voices from African women. This means their limited input into agricultural and climate change policies and programmes is a gap. In 2012, the 18th session of the Conference of the Parties (COP 18) to the UN Framework Convention on Climate Change (UNFCCC) in Doha, Qatar parties to the conference reaffirmed the urgent need to ensure gender balance in all aspects of negotiations and decision making, including national delegations to climate conferences. However, achieving this is still a challenge.

To increase the effectiveness of climate action, both men and women should participate in and contribute to climate decision making, policy formulation, implementation action, monitoring and evaluation. Women's meaningful participation in decision-making around climate change requires more than the presence of more women in climate change institutions and processes. It also requires attention to the deep-rooted socio-cultural inequalities that can act as constraints to women's real inclusion and prevent them from having a voice in these processes. These constraints include: economic dependency and lack of adequate financial resources, illiteracy and limited access to education, lack of information, lack of the same work opportunities as men and time poverty. All these issues need to be addressed holistically if the barriers to women's inclusion are to be overcome.

Women's associations can play a major role in fostering the development of gender responsive policies. An example is of Soulaliyat women from

Kenitra Province of Morocco whose initiative culminated in a circular issued by the Ministry of Interior urging provincial authorities to ensure that the principles of gender equality are upheld in the transfer of communal land. The Women Environment Programme in Nigeria (WEP) played an integral role in facilitating a National Action Plan on Gender and Climate Change, which is currently under review<sup>2</sup>. Women's voice and agency should therefore be harnessed for gender responsive and sustainable climate action. Their unique knowledge, skillsets and perspectives borne out of how they interact with food systems, technology, and institutions can improve the effectiveness of climate action.

Promoting women's voice in policy, planning and implementation needs to be supported by funding and capacity development. Building on the good progress being made with the Green Climate Fund Gender Policy and Action Plan, further work is needed to prioritise funding for grassroots and women organisations to empower local civil society and to complement the large financing mechanisms.

## Challenges of integrating gender in climate action

### Lack of capacity for gender mainstreaming

Where gender-sensitive policies to climate change exist, effective implementation in practice has not been achieved on the ground due to lack of technical capacity added to lack of understanding of structural gender inequalities (Ampaire *et al.*, 2019). There is a lack of capacity in governments and other agencies for gender mainstreaming in general and to undertake gender analysis and gender-responsive budgeting for climate action, calling for more gender and climate change experts and capacity development of the stakeholders.

### Framing of gender

Gender is often interpreted as being about women, which can serve to obscure differences among women, vulnerability of some men and the intersectionality with other issues such as ethnicity and disability. Although women's empowerment is a significant part of gender mainstreaming, it does not on its own constitute

<sup>2</sup><https://punchng.com/on-the-national-action-plan-on-gender-and-climate-change/>

gender mainstreaming. Gender mainstreaming is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality. As such, gender equality is the overarching and long-term development goal, while gender mainstreaming is a set of specific, strategic approaches as well as technical and institutional processes adopted to achieve that goal.

A number of climate change initiatives have operated from a women empowerment perspective and have therefore failed to meaningfully transform the gender norms and the associated power relations that inform gender inequality, thereby in some cases exacerbating already existing inequalities. Men, particularly those who perceive themselves as having something to lose if women are empowered, may be alienated by this framing. Approaches to gender mainstreaming must focus on differences between women and men, as well as among women and among men, in order to be inclusive and address social norms that present barriers to gender equality. Men are key players in achieving gender equality, and they must be part of the solution.

### Limited coordination

Although there are progressive laws at both global and local levels for the promotion of gender equality and women's empowerment, these are not harnessed effectively in climate change adaptation planning and implementation for the benefit of men and women, for desired outcomes, hence the notion of policy evaporation. Furthermore, synergies and coherence among stakeholders such as Ministries of Agriculture, Climate, Environment, Water, Land and Gender at national and subnational levels are often notably inadequate.

### Lack of data sex disaggregated and documentation of best practices and sharing platforms

There is a gap on the documentation of best practices as well as statistical infrastructure to better understand gender-differentiated climate impacts to inform policy design, planning and implementation. This is coupled by insufficient knowledge-sharing platforms to promote learning.

Where data exists, it is hardly ever disaggregated by sex.

### Gender considered as a cross cutting issue

Gender issues in general and within climate action in particular are treated as cross cutting rather than stand alone issues that deserve serious attention. As a result, the issues are lost or diluted along the way.

### Absence of gender responsive monitoring and evaluation (M&E) systems

Many climate change interventions prioritise productivity at the expense of issues such as gender equality and social inclusion. For effective assessment of progress towards gender equality in climate action and to adequately report on instruments, well-structured and robust M&E systems, with sex-disaggregated data and sufficient funding support, have to be considered. M&E systems generate key lessons and provide evidence of progress which will inform the strategic direction of a country's gender mainstreaming initiatives. It suffices to state that if something is not being measured or assessed in some way, then progress—or the lack of it—cannot be seen and it cannot be managed.

### KEY POINTS: WHY IS PROGRESS ON GENDER RESPONSIVE CLIMATE ACTION SO SLOW?

1. Gender bias in decision making: Women's issues tend to be poorly represented in decision-making fora on climate action. As a result, gender dimensions are rarely prioritised in national policies on climate and in implementation programmes.
2. An evidence gap compelling decision makers to make gender responsive climate action a priority: More tangible evidence is urgently needed on the benefits of addressing gender and climate issues in a coherent way.
3. Lack of capacity: More funding and support for capacity development is needed to ensure better gender-sensitive responses.
4. A tendency to interpret gender as meaning women only: Male champions are needed at all levels to work with women and support balanced decisions.  
([www.climatelearningplatform.org](http://www.climatelearningplatform.org))

## Opportunities for gender-sensitive climate change and agriculture actions

There are several windows of opportunities for integrating gender concerns into agriculture and climate change policies.

**Gender Action Plan (GAP):** At the global level, countries participating in climate change negotiations have developed a Gender Action Plan, created under the Lima Work Programme on Gender. The GAP seeks to advance women's full, equal and meaningful participation and promote gender-responsive climate policy and the mainstreaming of gender in the implementation of the UNFCCC, the work of the parties, the Secretariat, United Nations entities and all stakeholders at all levels. In December 2019, a review of the implementation of GAP was undertaken and recommendations for improvement made. This offers a renewed opportunity for integrating gender issues in climate action.

Additionally, calls have been made to integrate gender-responsive actions into national action plans, climate change policies and Acts, Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs), Reducing Emissions from Deforestation and Degradation (REDD+), Biannual reports and National Communications (NC). Although there have been challenges in terms of implementation at national and local levels, this remains an opportunity for gender responsive climate action.



**National Action Plans on Gender and Climate Change:** Under the Gender Action Plan (GAP), countries are required to develop national action plans on gender and climate change; this will also include a GAP for agriculture. This is an opportunity to undertake comprehensive gender analyses at national and local levels to identify the challenges and opportunities for developing gender

responsive policies and implementing strategies and programmes on gender and climate change in agriculture. The GAP also requires countries to appoint gender focal points to focus on climate negotiations, implementation and monitoring.

**Global Goal on Adaptation:** Within the context of the Global Goal on Adaptation, there is an opportunity to ensure that the indicators for adaptation and resilience measure progress towards gender equality.

**Gender Management Systems:** The presence of Gender Management Systems (comprehensive network of structures, mechanisms, and processes for bringing a gender perspective to bear on all government policies, plans, programmes and projects) is an opportunity that can be used to strengthen Gender focal points in agriculture on gender responsiveness in climate change and agriculture including relevant adaptation and mitigation strategies. This will enable them to ensure that the sector policies are gender responsive.

**Revision of Nationally Determined Contributions:** All countries are in the process of revising their Nationally Determined Contributions (NDCs) for submission in 2020. This also includes developing guidelines for integrating gender into climate change policies in the context of the different sectors, including agriculture.

### Case study 3: Gender Analysis of NDCs in Ghana and Kenya

Kenya completed an in-depth gender analysis of NDCs focusing on Agriculture, Water and Energy, using a multi-sectoral approach. The Ministry of Gender, the private sector and civil society organisations (CSOs) were represented in the analysis. A challenge emerged of lack of data, especially in terms of data on climate-related interventions. Coordination was successful and the State Department for Gender took a lead role to coordinate gender issues in the sectors. Implementation of NDC actions was hindered by lack of finance, so an NDC financing strategy was developed with funding mechanisms to address gaps.

In Ghana, an in-depth gender analysis was conducted to better understand the gender-differentiated impacts of climate change within two key sectors: energy and agriculture. The gender analysis reviewed the extent to which gender equality and women's empowerment considerations have been incorporated in Ghana's climate change and sectoral policies in the energy and agriculture sectors. It also set out to identify the locus of inequalities so that targeted support for addressing these gender gaps can be provided. The recommendations of the gender analysis provide a baseline for Ghana's gender work under the implementation of its NDC, while also informing other development and climate policies (<https://www.ndcs.undp.org/content/ndc-support-programme/en/home/our-work/focal/cross-cutting-gender.html>)



## Conclusion

Recognizing gender differences and working toward equality where possible are integral sustainability and climate resilience issues which can contribute significantly to a country's level of development. Recognising the unique differences in experiences, interests and needs of women and men in agriculture and climate change mitigation and adaptation responses has the potential impact of increasing productivity, reducing hunger and poverty and reducing gender inequality, ultimately leading to the achievement of sustainable development goals.

## Recommendations

### 1. Collect sex-disaggregated data and conduct gender analysis:

Regular and consistent gathering of sex-disaggregated data on various aspects of climate change should be prioritised. It can be made mandatory before any intervention. Such data will help in identifying men and women's differentiated perceptions, experiences, contributions, preferences and priorities for gender-responsive policy design and implementation in agriculture (including livestock) and climate action. Sex-disaggregated data to be gathered in agriculture should include but not be limited to access to land, finance, policy and decision making participation at local and national levels, access to information and extension services and agricultural tools. This data should be collected from men and women and analyzed by age, wealth, education, and ethnicity.

### 2. Integrate the tracking of gendered outcomes:

It is imperative that tracking of gendered outcomes be integrated into the monitoring of adaptation and mitigation interventions in order to capture their social equity impacts in addition to their environmental, economic, human and productivity impacts.

### 3. Develop tools/methodologies/guidelines and indicators for monitoring, reporting and verification:

Develop tools/methodologies/guidelines and indicators for the monitoring,

reporting and verification of the development and implementation of gender responsive climate policies and strategies in Africa to facilitate tracking of progress on this area. Data collection tools such as the women's empowerment in agriculture index (WEAI) and the Gender Empowerment Index for CSA (GEI-CSA) provide a good starting point to measure the impact of climate interventions on women and men and address areas of disempowerment.

**4. Capacity strengthening:** Governments need support to build their capacity to integrate gender into national adaptation and mitigation plans, and NDCs, and into sectoral plans and programmes through training in gender-responsive policy analysis, policy development, planning, budgeting, implementation, monitoring and evaluation. In addition, there is need to strengthen the capacity of farmers' groups for gender responsive service delivery in the face of climate change e.g. access to resources and services such as land, fertilizers, seed and markets.

**5. Gender audits:** There is need to assess the level of gender responsiveness across existing agricultural and climate change policies and budgets of African countries, both at national and sub-national levels and update those that need to be updated to ensure gender responsiveness. This will be critical for ministries addressing the priority areas in the NDCs.

**6. Promote women's voices:** Women's voices need to be heard—at all levels and especially in international fora. Gender balance in national delegations to the UNFCCC should be encouraged and women supported to maximise their voice, confidence and negotiation skills while 'at the table'. More funding at grassroots level will help empower women. Relatedly, gender and climate policies and practice need to be strengthened in climate funding instruments at all levels.

**7. Promote learning platforms:** There is need for promotion of platforms on exchange of good practices and case studies focused on gender-responsive climate change—among multilateral, regional and sub-regional, government and other stakeholders.

## Further Reading

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This policy brief was prepared with technical and financial support of the following partners:



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EAST AFRICA INSTITUTE



Canada  
International Development Research Centre  
Centre de recherches pour le développement international



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