



Food and Agriculture
Organization of the
United Nations



TACKLING
CLIMATE CHANGE
THROUGH
**RURAL WOMEN'S
EMPOWERMENT**

“FAO is committed to mainstreaming gender equality into climate-related planning processes, promoting inclusive and diversified sustainable food and agriculture systems to help reduce rural poverty and avoid crises linked to distress migration, conflict over resources and discrimination over social groups”

FAO's Corporate Climate Change Strategy, 2017



KEY MESSAGES



Rural women increasingly face the challenge of having to adapt their production systems to the impacts of climate change and natural disasters.



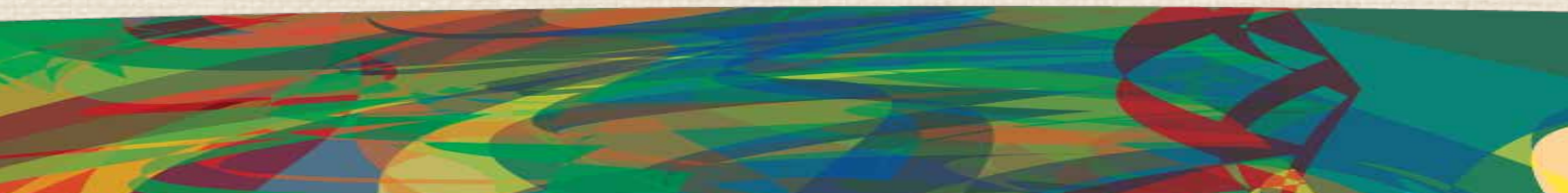
There are large differences between men and women in terms of impacts, vulnerabilities, responses and capacity to adapt to climate change depending on individuals' access to resources, assets, information, services and decision-making power.



Women play an important role in climate change adaptation and mitigation given their wide-ranging functions in the agricultural sector and in livestock, fisheries, energy, forestry, water and land management sectors.



Ensuring equal access for women to productive resources, climate-smart and labour-saving technologies and practices is crucial to enhance the sustainability of agriculture, achieve food security and nutrition, eradicate poverty and build the resilience of rural households and communities.



THE GENDER-DIFFERENTIATED IMPACTS OF CLIMATE CHANGE

The adverse effects of climate change and the unprecedented natural resource depletion pose serious threats to food security and nutrition, especially for small-scale food producers. Rural women have more limited access to productive resources, services, education and employment opportunities while experiencing, excessive workloads and limited decision-making power¹.

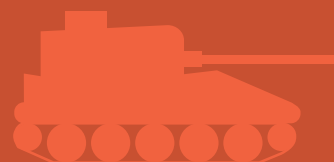
Climate change impacts
women and men differently.



CLIMATE CHANGE IMPACT ON GENDER EQUALITY

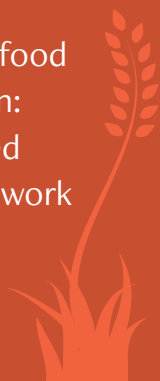
CONFLICT

Loss of lives and livelihoods;
violence against women



CROP FAILURE

Household food
provision:
Increased
agricultural work



WATER SCARCITY

Household water provision:
contaminated water; more time
for water collection

DISEASE

Lack of access to
health care; women's burden
as care givers



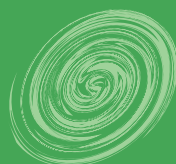
FUEL SHORTAGE

Household fuel provision:
more time for
fuelwood collection



NATURAL DISASTERS

Women's greater incidence
of mortality



DISPLACEMENT

Forced migration
increases women's
vulnerability



THE GENDER-DIFFERENTIATED IMPACTS OF CLIMATE CHANGE IN RURAL AREAS

GREATER FOOD AND NUTRITION INSECURITY

Climate change poses serious threats to the lives and livelihoods of small-scale producers, women in particular. Evidence shows that women are more likely to be food insecure than men in every region of the world².

After natural disasters hit in **India**, girls were more likely stunted and underweight than boys and in Andhra Pradesh, twice as many women as men reported eating less in response to drought.



INCREASED WORKLOAD OF WOMEN AND GIRLS TO COLLECT WATER AND FIREWOOD

The work burden of fetching water and collecting firewood usually falls on women and girls, who have to travel long distances to fulfill the needs of their families. Firewood and water collection exposes women to the risk of physical and sexual violence.

Around **66%** of households in **Sub-Saharan Africa**, **55 %** in **South** and **South-eastern Asia**, and **31%** in **Latin America** rely on firewood collection for cooking, done almost exclusively by girls³.

In **Sub-Saharan Africa** alone about **40** billion hours per year are spent to collect water; that's the same as a whole year of labor by France's entire workforce⁴.



In **Kenya**, fetching water may use up to **85%** of a woman's daily energy intake; in times of drought women spend up to eight hours a day in search of water⁵.



LIMITED LAND OWNERSHIP

Land is a fundamental resource for agricultural production, and provides a crucial source of resilience to climate risks. Women's lack of rights to land ownership denies them also user rights, including the rights to plant trees and build soil control measures.



Worldwide, less than **15%** of agricultural land is held by women⁶.

IMPACT OF DISASTERS AND MIGRATION

Natural disasters and their impacts on food insecurity may also fuel conflicts and migratory flows. Women usually migrate later than men and when they do, they may leave behind children with other family members. Additionally, they suffer more than men from the psychosocial impacts of migration because they have to take care of family members while disregarding their own distress and they are also victims of gender-based violence. Agriculture remains critical for the family remaining at home, in particular for female-headed households.



Studies show that women, boys and girls are 14 times more likely than men to die during natural disasters⁷. **70%** of fatalities from 2004 Asian **tsunami**, and **96%** of 2014 Solomon Island **floods**⁸ were women and children.

In **Tajikistan** men migrate for work in neighboring Russia, and as a result more than **55%** of those employed in agriculture are women. A similar trend is true across South and Central Asia. Conversely, in **Bangladesh**, crop failure and flooding disproportionately increase the rate of migration by women, especially those with less secure access to land⁹.

GENDER EQUALITY IN GLOBAL FRAMEWORKS AND NATIONAL COMMITMENTS



There is strong focus on gender equality and women's empowerment in the **2030 Agenda** for Sustainable Development, both in the form of a dedicated Goal on Gender Equality (**SDG5**) and a cross-cutting theme with more than 30 related gender targets across other SDGs.



THERE IS INCREASING GLOBAL POLITICAL COMMITMENT TO ADDRESS GENDER AND CLIMATE CHANGE

The **Gender Action Plan of the UNFCCC**, adopted at COP23 in November 2017 under the Lima work programme on gender, seeks to:

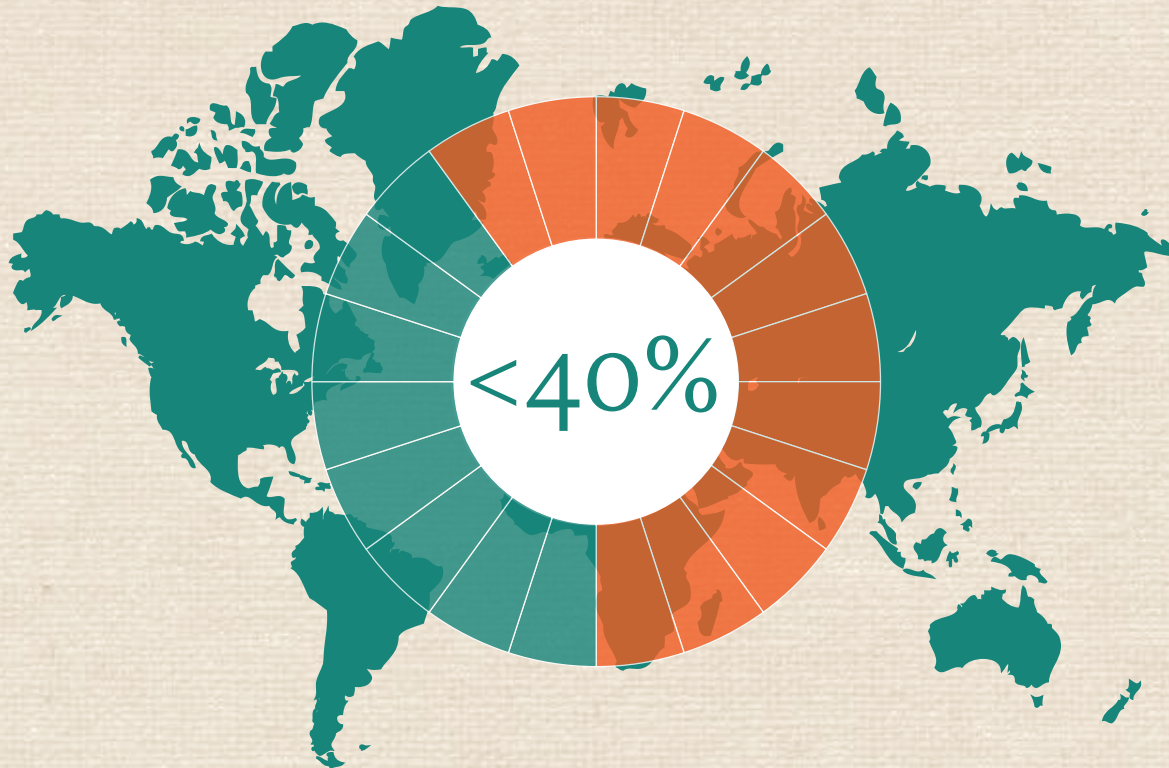
- ➡ Advance women's full participation
- ➡ Promote gender-responsive climate policy
- ➡ Mainstream gender perspectives in the implementation of the Convention and work of Parties and all stakeholders at all levels including adaptation, mitigation, capacity-building, technology and finance policies, plans and actions.

GENDER IN NATIONALLY DETERMINED CONTRIBUTIONS (NDC)

Over **40%** of NDCs make reference to gender.

98% of countries mention the agriculture sector in their NDCs.

Gender equality is mentioned in **75%** of NDC submissions from Sub-Saharan Africa.



65

countries made at least one reference to **gender equality or women**

18

countries **recognize the role of women in mitigation**, in relation to energy emissions, sustainable or biomass energy, and livestock

12

countries **recognize the importance of building women's resilience** capacity and disaster risk reduction

33

Identify **gender as a cross-cutting policy priority**, or commit to either integrate or mainstream gender in all climate change actions and strategies

32

countries refer to **women in the identification of vulnerable groups and regions affected by climate change**, while only 2 regard them as agents of change

OPPORTUNITIES FOR CLOSING THE GENDER GAP IN AGRICULTURE FOR CLIMATE RESILIENCE

Women play a major role in agriculture accounting for 43 percent of the agricultural labour force in developing countries, a figure that raises up to more than 60 percent in parts of South Asia and in Africa¹².

Women have an important role in conservation efforts, such as seed saving, growing and preserving underutilized species. These species also have value as potential gene sources in case of collapse of commercially viable varieties, that helps decrease their vulnerabilities to climate shocks and improve food security.

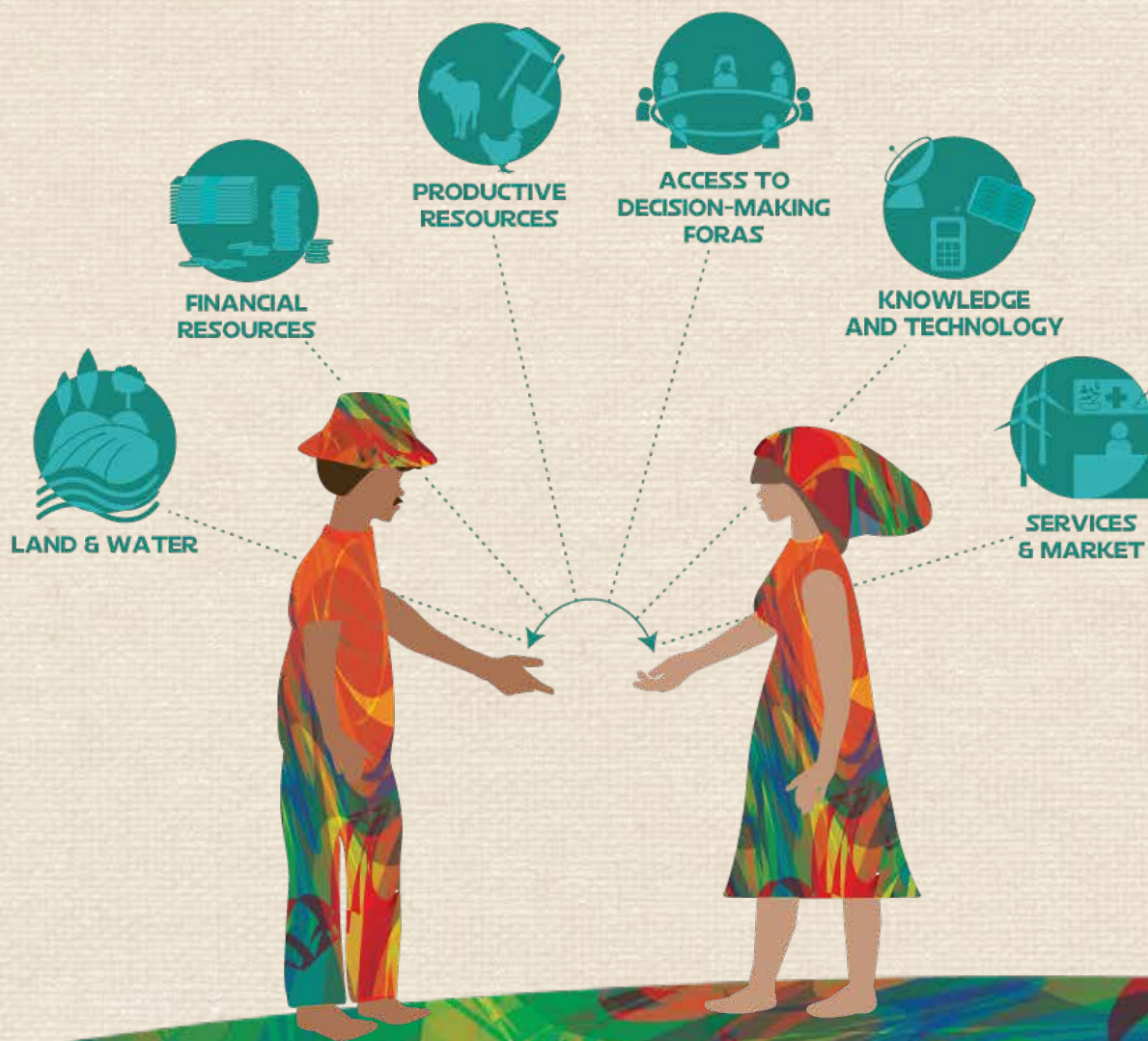
There are important untapped opportunities in the global phenomenon of the feminization of agriculture. Female farmers play important roles in maintaining knowledge about different plant varieties and deciding which crops to plant, particularly as many men migrate away from the farm. Their empowerment can significantly contribute to building the household resilience to climate impacts¹³.

Women's ownership of productive assets is positively linked to their uptake of climate-smart practices and soil conservation techniques. For instance, where women have secure land rights, greater yields and increased food security are also observed¹⁴.

Increasing women's awareness and access to information and knowledge about climate-smart agriculture options will lead to greater uptake of these technologies and practices, and enhance the resilience of entire households and communities and food systems to climate-related shocks and changes.



EQUAL ACCESS TO RESOURCES AND POWER FOR FOOD SECURITY IN THE FACE OF CLIMATE CHANGE



FAO'S GENDER-RESPONSIVE PROGRAMMING IN THE CONTEXT OF CLIMATE CHANGE

FAO support actions aimed at achieving sustainable and inclusive agricultural development for food security and nutrition under a changing climate spans interventions at various levels.

CLOSING POLICY AND INSTITUTIONAL GENDER GAPS

FAO supports countries in addressing gender issues into their National Adaptation Plans through the **Nap-Ag Programme**¹⁵. The programme's aim is to integrate gender equality into adaptation planning, i.e. into relevant budgets and policies for agriculture at various levels, working with Parliamentarians, Central Planners, District-level planners, and non-government actors.

The programme provides technical trainings on gender analysis and mainstreaming in adaptation planning; incorporates of sex-disaggregated data and gender analysis into agriculture censuses and impact evaluations; as well as tools for countries to promote women's empowerment and climate resilience in agricultural value chain development, as currently piloted in various countries (Uganda, Zambia, the Philippines, Nepal and Uruguay).

FAO's Mitigation of Climate Change in Agriculture (MICCA)¹⁶ Programme has mainstreamed gender issues into each of its work components. For example, in Kenya and the United Republic of Tanzania, sex-disaggregated data were collected to monitor and report on the barriers and incentives that men and women face in adopting climate-smart approaches and practices.

Women were involved in the selection of locally-adapted CSA practices and in the identification of labour-saving technologies. In addition, gender equality was integrated into the Kenya's Nationally Appropriate Mitigation Action for the dairy sector and into the CSA Guidelines prepared for the United Republic of Tanzania.



DEVELOPING CAPACITIES & SKILLS OF WOMEN SMALLHOLDER FARMERS

FAO's Dimitra programme is a participatory information and communication project which contributes to improving the visibility of rural populations, women in particular. More than 400 Dimitra Clubs¹⁷ were set up in Senegal as part of a FAO project to strengthen producers' capacities to handle shocks, adapt to climate threats, improve food and nutrition security and increase incomes.

Achievements in Mali include the upscaling of the **Farmer Field School approach** in over 130 municipalities; the adoption of improved seeds in 250 villages and the dissemination of 13 improved and adapted varieties. Four agroforestry zones were created through barriers made from trees and shrubs managed by producer organizations, 75 percent of whom are women. As a result of the project, the capacities of around 16 000 producers have been strengthened, with more than 5 000 women farmers. A training guide for facilitators on adaptation practices for Farmer Field Schools was also published.

SCALING-UP INNOVATIVE CLIMATE-SMART AGRICULTURE PRACTICES AND TECHNOLOGIES

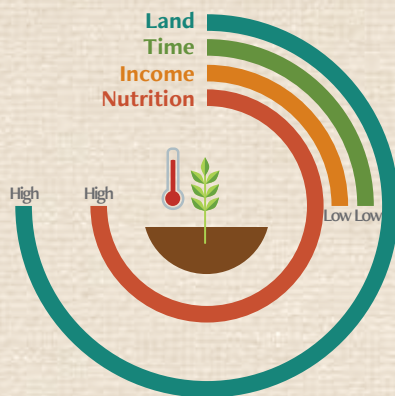
FAO has embraced the **climate-smart agriculture (CSA) approach** to support actions aimed at achieving sustainable agricultural development for food security and nutrition under a changing climate.

The introduction of climate-smart agriculture practices has direct implications on women and men's welfare, working conditions, agricultural production, gender power relations and empowerment.

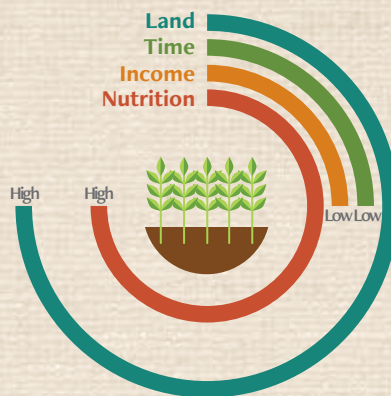
In order to be effective and have a long-lasting impact, CSA practices and technologies must consider gender-specific vulnerabilities, needs and capabilities. FAO systematically assesses the gender-related impact of selected climate-smart agriculture practices, to ensure socially sustainable programming.



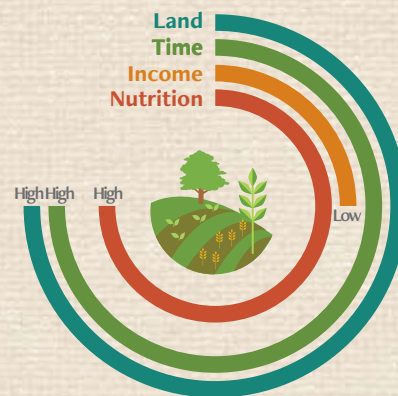
GENDER IMPACT OF CSA PRACTICES



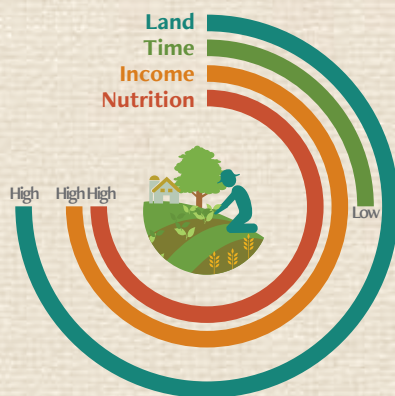
STRESS-TOLERANT VARIETIES



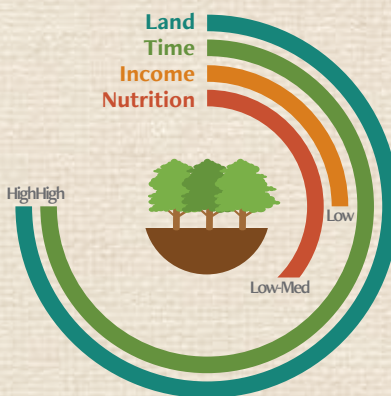
HIGH-YIELDING VARIETIES



CONSERVATION AGRICULTURE



IMPROVED HOME GARDENS



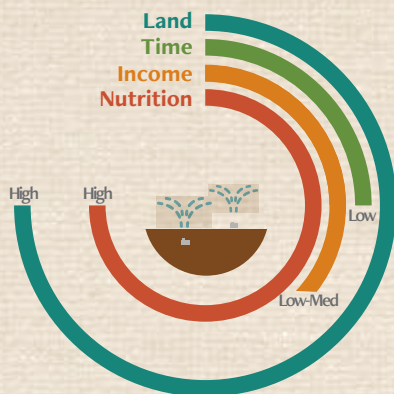
ON-FARM TREE PLANTING



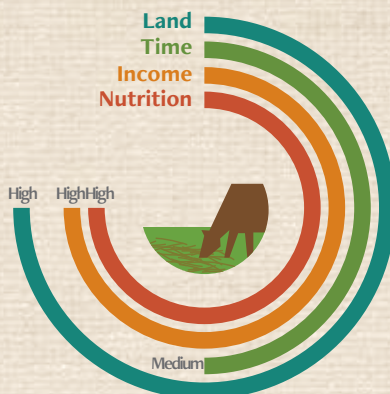
COMPOSTING

■ Women's access to land requirement
■ Time until benefits are realized

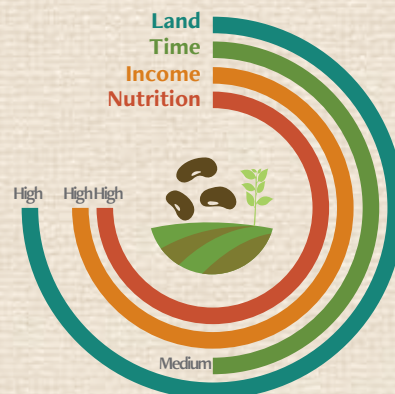
■ Women's income from practice
■ Food security & and nutrition impact



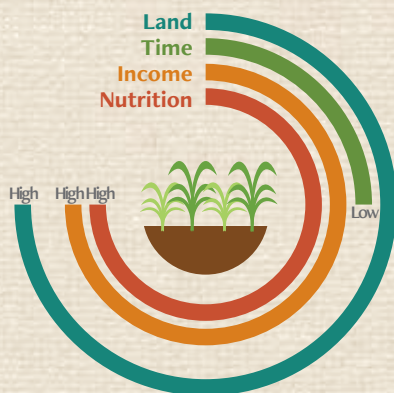
**SMALL-SCALE
IRRIGATION**



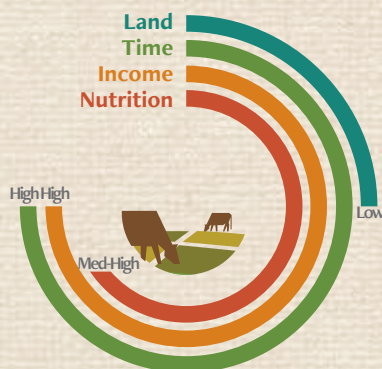
FODDER SHRUBS



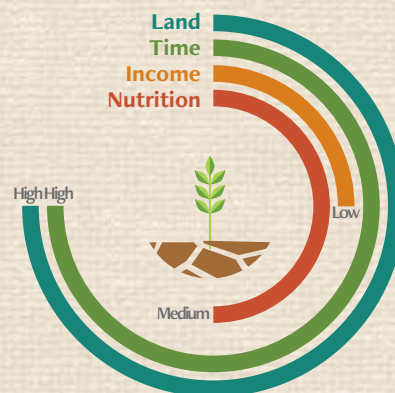
**HERBACEOUS
LEGUMES**



**IMPROVED
GRASSES**



**LIVESTOCK GENETIC
IMPROVEMENT**



**RESTORATION OF
DEGRADED RANGELAND**

GENDER IN CLIMATE FINANCE AND PUBLIC INVESTMENTS



Climate Official Development Assistance (ODA) that supports the achievement of **gender equality** accounted for **31%** of bilateral ODA to climate change in 2014 – a total of USD 8 billion

Where gender allocations are **systemically tracked, resources targeting gender equality** have increased: this is true for national public budgets and for climate funds⁹.

FAO aims to make a difference for gender equality as a large **Global Environment Facility & Green Climate Fund Implementing Agency**

Only **3%** of **Climate ODA** had **gender equality as a principal objective**, while 28 percent of it included gender equality as a secondary objective (OECD 2016)¹⁸ but more needs to be done

All aspects of climate change action – including **climate finance** – must actively promote gender equality in climate responses and upscaling of **climate-smart agriculture** practices and technologies

Innovative and **gender-responsive solutions** and the right policy environment can effectively address **climate-related risks** in the agriculture sector, including gender-differentiated vulnerabilities and capabilities

GENDER EQUALITY FOR CLIMATE RESILIENCE IN SMALL ISLAND DEVELOPING STATES

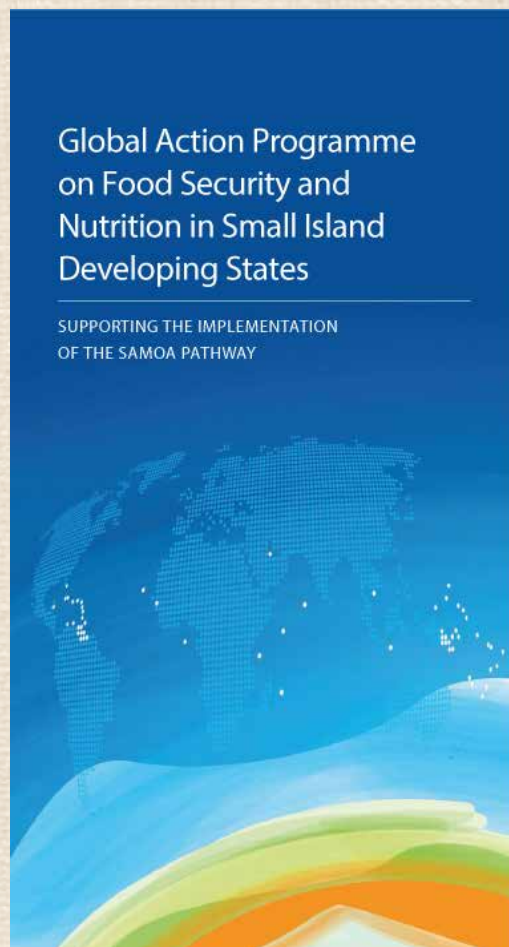
Small Island Developing States (SIDS) share unique and particular vulnerabilities, resulting in a complex set of **food security and nutrition challenges**.

Women play a central role in food systems in SIDS, as they make up **52 percent of the agricultural work force**. However, they still seriously lag behind men in terms of access to productive resources (including land and equipment), credit and other services and technology.

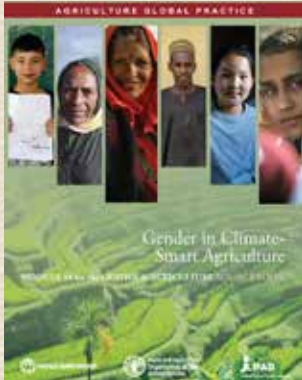
Gender equality can have a transformative and multiplier effect on sustainable development, climate resilience and become a driver of economic growth in SIDS. It is also crucial that women are fully involved in the development of climate change adaptation strategies and in capacity building related to climate change²⁰.

To meet the SIDS' complex challenges, FAO's recently launched **Global Action Programme on Food Security and Nutrition in Small Island Developing States (GAP)**²¹.

FAO and its partners believe that the agricultural sector can deliver significant adaptation benefits in SIDS and be a driver of resilience and food and nutrition security.



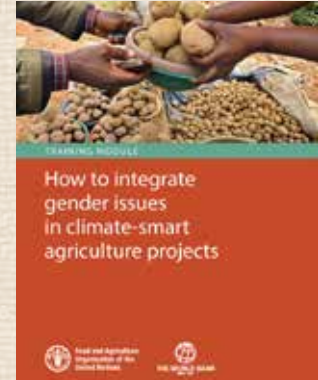
KNOWLEDGE PRODUCTS



Gender in Climate-Smart Agriculture
Module 18 for the gender in
agriculture sourcebook, 2015



Gender and Climate Change
Research in Agriculture and food
security for rural development, 2011



Training module
How to integrate gender issues in
climate-smart agriculture projects, 2017



Climate-smart Agriculture Sourcebook
Gender module -FAO, 2018



Gender-sensitive vulnerability
assessments in agriculture -FAO, 2018

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- 3 UNDESA. 2010. *The world's women – trends and statistics*.
- 4 UNDP. 2006. *Human Development Report: Beyond scarcity: Power, poverty and the global water crisis*.
- 5 Duncan, K. 2007. *Global climate change and women's health*. Women and Environments International Magazine.
- 6 Sub-Saharan Africa 15.4% North America 15.4% Latin America and the Caribbean 18.2% Middle East/North Africa 4.9% Central, East and South Asia 10.9% Europe 27.8% Oceania 9.6% Global 12.8% Developing regions only 12.1% Gender and Land Rights Database FAO 2015.
- 7 Peterson, K. 2007. *Reaching Out to Women When Disaster Strikes*. Soroptimist White Paper / DFID (2013) by Bradshaw S., Fordham M. Women, Girls and Disasters.
- 8 UN Women/GCF. 2016. *Leveraging co-benefits between gender equality and climate action for sustainable development*.
- 9 Gray CL, Mueller V. 2012. *Natural disasters and population mobility in Bangladesh*. Natl Academy of Sciences, USA 109(16):6000–6005.
- 10 Nationally Determined Contributions (NDCs) are specific climate actions outlined by countries in committing to the international climate agreement that was achieved at the conclusion of the U.N. Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP21) in Paris in 2015, to ensure the path towards a low-carbon, climate resilient future. INDC serve to clarify the overall scope of many national climate change plans and policies, including components such as adaptation and means of implementation.
- 11 <https://ccafs.cgiar.org/agricultures-prominence-indcs-data-and-maps#.WeifWZX2Tcs>
- 12 Slavchevska, Vanya; Kaaria, Susan; Taivalmaa, Sanna-Liisa. 2016. *Feminization of Agriculture in the Context of Rural Transformations: What is the Evidence?*. World Bank, Washington.
- 13 Howard P.L. 2006. Gender and social dynamics in swidden and homegardens in Latin America. *Tropical Homegardens: A Time-Tested Example of Sustainable Agroforestry*, eds Kumar BM, Nair PKR (Springer Netherlands), pp 159–182.
- 14 Bernier *et al.* 2016. *Who is taking up climate-smart agricultural practices and why?* CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
- 15 <http://www.fao.org/in-action/naps/overview/programme-activities/gender-mainstreaming>
- 16 <http://www.fao.org/in-action/micca/knowledge/gender>
- 17 <http://www.fao.org/3/a-i5531e.pdf>, <http://www.fao.org/dimitra/about-dimitra>
- 18 OECD-DAC Network on Gender Equality. 2015. *Making climate finance work for women: Overview of bilateral ODA to gender and climate change*.
- 19 Green Climate Fund and UN Women. 2015. https://unfccc.int/files/gender_and_climate_change/application/pdf/leveraging_cobenefits.pdf
- 20 Vulnerability of Pacific Island agriculture and forestry to climate change, Pacific Community. 2016.
- 21 Global Action Programme on Food Security and Nutrition in Small Island Developing States (GAP) <http://www.fao.org/3/a-i7135e.pdf>



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