6. Gender-sensitive climate-smart agriculture in southern Africa

Farmland managed by women are on average 25% less productive than land owned by men in Malawi.

In Zambia, average maize yield is 2053 kg/ha for male-headed household, 1058 kg/ha for female headed household, and 907 kg/ha for men, which is 49% less productive for women. Women earn 3 times less than men in rural labour.

Zimbabwe shows 753 kg/ha for women, which is 17% less productive than land owned by men.

There is a gender gap in agricultural productivity. It makes women farmers less climate-resilient.

Contribution of different factors to the gender gap in agricultural productivity in Malawi:

- 17.8% Access to machinery
- 1% Access to Pesticides
- 5.3% Access to fertilizer
- 45.2% Access to male labour
- 28.4% Lower likelihood to plant high-value crops

The gender gap in agricultural productivity in sub-Saharan Africa: causes, costs and solutions, Policy brief 11, UN Women, 2018.

CSA PATHWAYS TO REDUCE GENDER GAP IN AGRICULTURAL PRODUCTIVITY

Address gendered norms & customs → Reduce gender differences in access to agricultural inputs → Reduce gender gap in agricultural productivity and profits → Measure development impacts

- Division of unpaid work and reproductive roles in household
- Agency, women role in farm household decision making
- Unequal market opportunities
- Access to land and male labour
- Access to seeds, fertilizer and machinery
- Access to information, skills and extension services
- Compare female and male-manager plots productivity/profitability over time
- Poverty reduction, reduced inequality
- Environmental benefits
- Better climate resilience
Gender-based CSA trainings can address problems with agency and inequal access to inputs, information and services.

Climate risks are different for rural women and men. Solutions should be gender-sensitive and determined for each site.

Does the climate-smart technology respond to the needs and preferences of both female and male farmers?
Does it reduce time and labour for women farmers?
Is it accessible and affordable to both men and women?

Crop choices vary for men and women

I want legumes that reduce weeding and provide nutritious food.

"Can I sell it well?"

Cowpea, Lablab

Pigeonpea, Soybean, Common Beans

CSA can reduce significantly labour burden on women and children, depending on the farming systems

In conventional manual systems, women and children are often responsible for manual weeding and land preparation.

Climate-smart agricultural technologies like direct seeding, mulching and use of herbicide can reduce up to 25-45 days of labour in manual systems (Eastern Zambia, Malawi)

Mechanized farming systems require less fieldwork e.g. land preparation. CSA labour reduction benefits for women are less prominent.

Better family nutrition through climate-smart agriculture

Households adopting CSA have better food and nutritional security thanks to increased maize yields. Healthier diets with more protein-rich legumes improve the family nutrition.

Women in the three countries have gradually changed their diet preparing cowpea and pigeonpea alongside their daily maize meal (nsima).

"Passing-by neighbors will often exclaim ‘Is this your maize?’ because they can tell it looks much more vigorous and healthier than what they see in other fields’", Mary Twaya, Lemu community, southern Malawi adopter and lead farmer for climate-smart agriculture for over 12 years.

"We never knew of mulching until we interacted with CIMMYT scientists in 2009. Now I cannot imagine working in my field without applying mulch."
Reason Maravira, Zaka district Zimbabwe