Climate-Smart Agriculture and Gender

Dr. Wiebke Förch, GIZ
Programme Advisor
wiebke.foerch@giz.de

Overview

- Gender and rural development and agriculture
- Gender and CSA
- Gender responsive programming
- Conclusions

Gender and Rural Development - Background

- 70% of world‘s poor people live in rural areas in developing countries, generally depending on agriculture
- Women provide on average more than 40% of agricultural labor force
  - up to 50% in Easter Asia and Sub-Sahara Africa, 20% in Latin America
- Women generally produce food for (household) consumption, men are involved in wage labor and cash crops
- Women are often involved in unpaid or low paid labor
- Women and children are affected by migration of men

Gender and Rural Development - Background

- Less access than men to productive resources
- Men represent 85% of landholders in Sub-Saharan Africa
- Women are underrepresented in rural organizations and institutions
- Projections indicate that by 2025, one in ten Africans will live and work outside their country of origin
- In 2013 the Southern African region recorded over 4 million regular migrants, of which 44 per cent were female and 20 per cent were under 19 years of age

Gender in Agriculture

- Women make essential contributions to agriculture in developing countries, but their roles differ significantly by region
- If women had same access to productive resources as men, they could increase yields on their farms by 20-30%. This could raise total agricultural output in developing countries by 2.5 – 4%, which could in turn reduce the number of hungry people by 12 – 17%
- A gender gap is found for many assets, inputs and services – land, livestock, labor, education, extension and financial services and technology

The Gender Gap

The Global Gender Gap Index examines the gap between men and women in four fundamental categories:

a) economic participation and opportunity,
b) educational attainment,
c) health and survival
d) political empowerment.

Gender Gap Index 2015 of the World Economic Forum (WE):

- The highest possible score is 1 (equality) and the lowest possible score is 0 (inequality):
- Iceland – 1st rank, Score: 0.881
- US – 28th rank, Score: 0.740

SADC-Countries	Rank	Score
Namibia	16	0.760
South Africa	17	0.759
Mozambique	27	0.740
Tanzania	49	0.720
Botswana	55	0.710
Zimbabwe	57	0.709
Lesotho	61	0.706
Malawi	68	0.701
Madagascar	74	0.698
Swaziland	102	0.670
Zambia	116	0.650
Mauritius	120	0.646
Angola	126	0.637

Values for the other SADC countries are not available

Discussion in small groups (10 minutes):

How can women benefit from climate smart agriculture?

CSA practices and gender considerations

Table 18.1 Potential Gender Considerations of Various CSA Practices

	Contribution to CSA Goals Relating to			Gender Impact	
CSA Options/Practices	Climate Change Adaptation	Mitigation (Reducing GHGs)	Potential Household Food Security and Nutritional Impacts	Women's Control of Income From Practice	Relative Amount of Time until Benefits Are Realized
Stress-tolerant varieties	High	Low	High	Low	Low
High-yielding varieties	Low	Low	High	Low	Low
Conservation agriculture	High	Medium	High	Low	High
Improved home gardens	High	Medium	High	High	Low
On-farm tree planting	High	High	Low–Medium	Low	High
Composting	Medium	Medium	Medium	Medium	Low
Small-scale irrigation	High	Low	High	Low–Medium	Low
Fodder shrubs	High	Medium–High	High	High	Medium
Herbaceous legumes	High	Medium	High	High	Medium
Improved grasses (for example, Napier)	High	Medium	High	High	Low
Livestock genetic improvement	High	Medium	Medium–High	Low–High	High
Restoration of degraded rangeland	High	High	Medium	Low	High

Source: Author, based on a range of expert opinions.
Note: Beuchelt and Badstue (2014: 715) also provide useful guidance on key questions for exploring similar kinds of p

Uptake of CSA by women

- Improvements in women's access to information and credit enhance likelihood that they will adopt new CSA practices
- Local groups are key sources of information on CSA and for sharing labor
- Female farmers supported by extension officers are less likely to make transformative changes – need targeted support and services
- Gender productivity gap in agriculture due to
  - challenges women experience in accessing, using, and supervising male farm labor
  - women use less fertilizer, of lower quality, than men use
  - land ownership is lower among women than men
  - in some societies, women cannot plough their fields, relying on men for key agricultural activities

What is needed: Capacity Development

- Awareness creation about climate change and its impact
- How to use ICT for obtaining weather information
- Special technical training on adaptation techniques in agriculture
- Supporting women‘s empowerment in the production system
  - how to become more market oriented
  - basic business skills
- Making women more self confident

Pictures: C. Schubert

1. Involvement in decision making processes

- Understanding women's particular role, basic needs and threats as well as on-going changes
- Understanding how women influence decisions and what resources they have a greater control over
- Facilitate formulation of women`s interests (e.g. regarding forest/ land use)
- Facilitation and creation of opportunities where women can meet in groups:
  - Joint collection and processing of forest products
  - Joint production of seedlings and seeds
- Strengthen existing mechanism for participation in decision making processes:
  - Capacity building for women leaders, women authorities /representatives from female committees
  - Organization of exchange visits

Picture: Caritas

2. Avoid additional burden, increase efficiency of female working processes

- Child care taking facilities and possibilities
- Offer time-saving opportunities (improved stoves, water collection and harvesting methods, processing tools)

Pictures: C. Schubert

3. Increase income of women

- from processing and selling of livestock products, forage, nurseries, wildlife products, handicrafts
- from communal vegetable garden run by women
- from establishment of small scale forest product processing facilities (aromatic and medicinal herbs collection and drying)
- from the establishment of joint backyard nurseries, seed collection and processing
- from roadside tree plantation by women groups

Picture: Caritas

4. Labor-saving climate smart technologies

- Reduce burden on women through potential time and labor savings
- Provide room for choices
- Enhance climate resilience

But

- May alter labor allocation in the household
- May change distribution of benefits in the household
- Distinguish paid versus unpaid labor

Examples

- Cut and carry/zero grazing shifts or increases tasks
- Mechanical threshers reduce labor burden but also income (due to need for hired labor)

Flexi-Biogas

©IFAD/Karan Sehgal

- Provides cooking gas, lighting, and electricity for smallholder farmers with livestock
- Design consists of a plastic digester bag under a greenhouse covering, simple input and output pipes, pipes to transport biogas to home or storage
- Advantages compared to conventional biogas
  - Less cost, easier to install, use, and maintain
  - Portability makes it suitable for landless households
  - 1-2 cows are sufficient for a flexi-biogas system

Benefits:

- Alternative fuel -> 2-3 hrs saved (vs. fuelwood) -> **time** for income generating activities or leisure -> quality of life
- Use inside (vs. outside fires) -> time to engage family, increased **status**, men more willing to cook due to ease of use
- Women, girls, and others suffer less from chronic respiratory **diseases**, eye infections
- Reduced **methane** emissions (improved manure management), less need of fuelwood (reduced deforestation, land degradation)
- Enhanced crop **productivity** due to applied bioslurry, improving soil health, increasing yields by 6–10%, money saved from fertilizer
- Stoves help keep temperature suitable for chicks, decreasing poultry mortality, reducing women's labor, increasing women's income

© Biogas International

Conservation agriculture

Principles: maintain soil cover, minimize soil disturbance, diversify crop rotations

Benefits

- Improve climate resilience by improving soil structure, fertility, moisture retention
- Reduce effects of drought
- Reduce irrigation requirements
- Labor-saving benefits related to minimum tillage (mulching, cover crops, herbicide use)
- Who benefits and how?
  - specific gender relations
  - gender roles in decision making over adoption
  - form of farming currently practiced
  - access to and control over productive assets
  - women's roles in production

CIMMYT/Peter Lowe

T. Samson/CIMMYT

….Who benefits?

In hoe-based systems in southern Africa (women responsible for land preparation)

- CA disturbs soil on smaller area (planting basins) but increases women's labor in first years of adoption
- Increased weeds can increase women's time spent on weeding

In areas farmed with plows (men responsible for preparing land)

- Minimum tillage reduces time men spend on land preparation but can increase women's labor requirements for weeding (issues of women obtaining herbicides)
- If weeding is a source of income for women, promoting herbicide use can have negative consequences
- Definition of "weeds" – may be important foods collected by women
- Mulching can increase labor intensity of weeding, reduce availability of crop residues as feed, women may be forced to travel far for feed or purchase a resource that was previously free
- Reduced tillage may encourage men to enlarge area, which may generate more labor for women in harvesting and postharvest operations

Gender responsive climate policies/programmes

- Improve **policy and legal frameworks** for better participation of women
- Climate policy processes should go **beyond numerical representation** of women to create active mechanisms to express opinions, take initiatives, and influence decisions
- Institutions need to take into account **women's priorities and support their adaptive capacity**
- Support **women's access to productive resources** (land, water, wood, markets, knowledge)

http://www.futuroquotidiano.com/wp-content/uploads/2014/09/agricoltura-africa2.jpg

Gender responsive climate policies/programmes - continued

- A gender component as a qualifying criterion to access international funding
- Design that is based on needs assessment that distinguish women's and men's needs and priorities
- Monitoring and assessment indicators of real change in gender and social inclusion
- *Gender-transformative* interventions seek to transform gender roles and promote more gender-equitable relationships between men and women. They challenge the underlying causes of gender inequality

Photo: McKay Savage

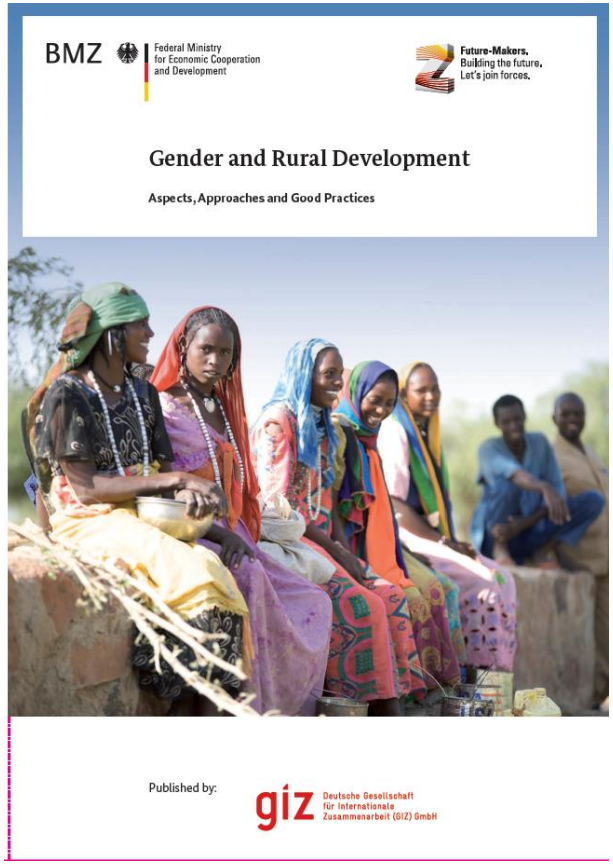
Conclusions

Gender-based constraints must be addressed to increase agricultural productivity, improve food and nutrition security, reduce poverty, and build the resilience of rural populations

CSA strategies are unlikely to be effective, let alone equitable or transformative, without active attention to gender

More equal gender relations within households and communities lead to better agricultural and development outcomes, including increases in farm productivity and improvements in family nutrition

Gender and Rural Development Factsheets



English:

http://star-www.giz.de/fetch/a0qn63gg01N0Qd00aX/giz2013-0060en-gender-rural-development.pdf

French:

http://star-www.giz.de/fetch/a0qni0ig01N0Qx00aX/giz2013-0060fr-genre-developpement-rural.pdf

Thanks a lot for your attention !!!