

Gender Equity in Agricultural Innovation Systems, Including Seed Systems

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Session: Gender and Equity in Agricultural Innovation Programmes
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Presentation Outline

1. Sustainable intensification of maize-legume cropping systems for food security in eastern and southern Africa (SIMLESA): Gender Equitable Benefits through Agricultural Innovation Platforms (AIPs) in Rwanda
2. Gender in the formal maize seed sector: (i) Women in the maize seed business in East and Southern Africa
(ii) Gender mainstreaming in seed companies: Uganda case
3. Capacity building
4. Conclusions & further areas of research



Sustainable intensification of maize-legume cropping systems for food security in eastern and southern Africa (SIMLESA)

- Ethiopia, Kenya, Malawi, Mozambique and Tanzania
- Botswana, Rwanda and Uganda, (previously in South Sudan)
- Funded by the Australian Centre for International Agricultural Research (ACIAR)
- Led by the International Maize and Wheat Improvement Center (CIMMYT)
- Initiated in 2010 (see simlesa.cimmyt.org for fuller details)
- 4 objectives, gender, capacity building



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Gender and Equitable Benefits through AIP in Rwanda

- Study underlying success factors in gendered generation and sharing of equitable Sustainable Intensification (SI) benefits through Agri. Innovation Platforms (AIP) in Rwanda. Through the following:
 - (1) Analyse successful (and not so successful) AIPs in Rwanda
 - (2) Document underlying success factors critical for realising and sustaining key benefits among the AIPs
 - (3) Inform national policy in Rwanda, and lessons for Africa

Reference: Adam, R., et al. (2018). Gender and equitable benefit-sharing mechanisms through Agricultural Innovation Platforms in Rwanda. *Community Development*, 49(4),380-397. Article DOI: <https://doi.org/10.1080/15575330.2018.1496465>

Methodology

- Integrated methodologies
 - Rwanda Agricultural Board (RAB) institutional memory, records on 22 AIPs
 - Visits and AIP interactive meetings – 9
 - Rapid analyses tools for Sustainable Intensification Benefits – 6 AIPs
 - In-depth case studies – 6 AIPs
 - Historical recounting – 6 AIPs
 - Focus Group Discussions – 6 AIPs
 - Key informant interviews – 9 informants
 - Observation and photography – each of the 18 sites



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AIS Analytical Framework

- AIS is an analytical framework, which is suitable for analyzing innovation through a gender lens because of its emphasis on **institutions** and **actors** that create “gendered” patterns of interaction.
- The AIS framework takes into account the many actors along the value chain, as well as diverse organizational forms that can facilitate education, research, and extension systems as well as practices, attitudes, and policies that frame agricultural production and trade (World Bank, FAO, and IFAD 2009)



Case studies

- Koperative Iharanira Amajyambere y'Icyaro (KIAI) or Cassava Innovation Platform
 - unique lesson on surviving collapse
- Huguka Mudende
 - Most successful AIP – good example of multi-functionality



Benefits, Level of Attainment and Estimated Attribution Among Mudende AIP Membership

A. Crop Related Benefits:

- Production volume: (i) potato=10 tons/hectare in 2008 to 25 tons/hectare in 2016; and (ii) Yield of milk=1 litre/cow in 2008 to 7 liters/cow in 2016 (local breed).
- Men and women benefit equally
- Germplasm was provided by RAB

B. Business Related Benefits:

- Investments in AIP partnerships, infrastructure, equipment, produce marketing networks, training skills, led to: (a) Credit access; (b) High income; (c) Better market access ; (d) Attract agribusiness farm inputs

C. Social benefits:

(i) youth and women participation was highly valued; (ii) societal harmony: AIPs brought together diverse actors at household and other levels to collaborate and rely on complementarity and reduce competition (increased yield, incomes, etc).

D. Environment related benefits:

(i) cow loans through URWEGO bank was able to get more quality farm manure; (ii) Agronomic and soil fertility trainings from RAB.



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Infrastructural Benefits for Mudende AIP



Green house gas



Preparing to killing microbes in the soil



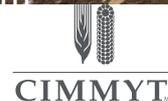
Potato pre-seed in the basin



Rented farm land used by members of Mudende to farm



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Infrastructural Benefits for Mudende AIP



Mudende milk collection Center



Principles that Anchor Equitable Benefit Sharing in the AIPs

- Government policy: (i)Rwanda policy clearly notes that each gender is entitled to equal pay or compensation for similar work; (ii)Implementation; and (iii) Policy awareness among key actors.
- Business ethics: Gained through trainings, which were seen as critical to the AIP success. Incomes at cooperative level are sustainably shared.
- Culture: Demand folks, “cannot reap where they did not sow.”
- Gendered access to benefits of SI depended on quality participation among women, men and youth.
- There are two stages of AIPs growth: (i)Stage I: scaling priorities, first 5-7 years of all AIP were dependent on donor, government and few private funds input; and (ii) Stage II: more private capital became available, in addition to initial investments in collective-action-based market concepts. At this stage the AIPs that survived initial challenges are realizing broader dividends.



Women in the maize seed business in East and Southern Africa



**Sylvia
Horemans**

Kamano Seed
Company Ltd



Zambia



**Josephine
Okot**

Victoria Seed Ltd



Uganda



**Cecilia Alphonse
Magesa**

Meru Agro Tours
& Consultants
Co. Ltd



Tanzania



**Stephanie
Angomwile**

Afriseed



Zambia



**Dr. Grace
Malindi**

Mgom'mera
Seed Company



Malawi



**Janey
Leakey**

Leldet Seed
Company Ltd



Kenya



**Dr. Zubeda Omari
Mduruma**

AMINATA Seeds



Tanzania



Sarah Muya

Suba Agro
Trading &
Engineering
Company Ltd



Tanzania



**Elizabeth
Sikoya**

Sementes Nzara
Yapera Lda



Mozambique

Reference: Adam, R.I, Sipalla, F., Muindi, P., and Kandiwa, V. (2019). Women in the maize seed business in East and Southern Africa. Mexico, CIMMYT..

<https://repository.cimmyt.org/handle/10888/20141>



Research findings for women in the maize seed business study



Production portfolio of the company include maize and legume seeds i.e. beans, cowpeas, pigeon peas and soybeans



They vary in production output ranging from 33.3 tons to 1411.3 tons of maize per year



Innovative mechanisms for marketing:



Bodaboda (motorcycle)



Maendeleo (development) seed pack

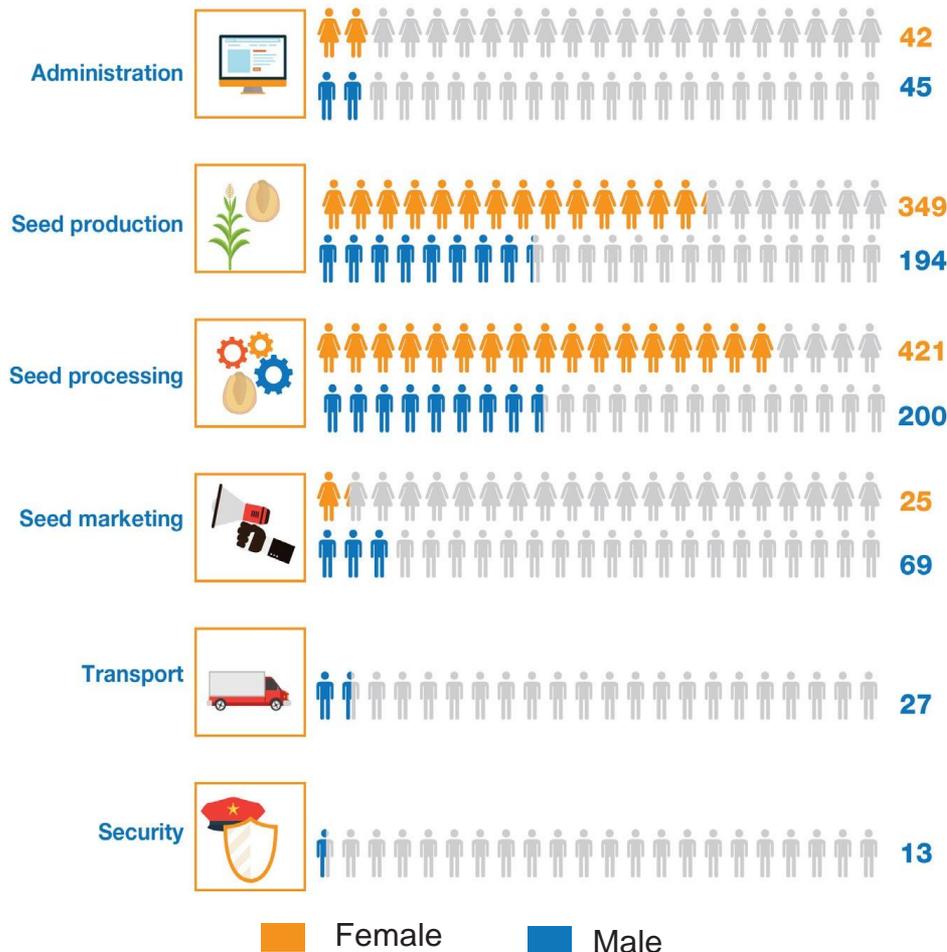


Work with women lead farmers



Women targeted branded materials i.e. maternity wards sheets

The number of male and female employees working in the seed companies



837 women
VS
548 men

Majority of the women are in **seed processing** (sorting, cleaning, grading, stitching, loading and packing)

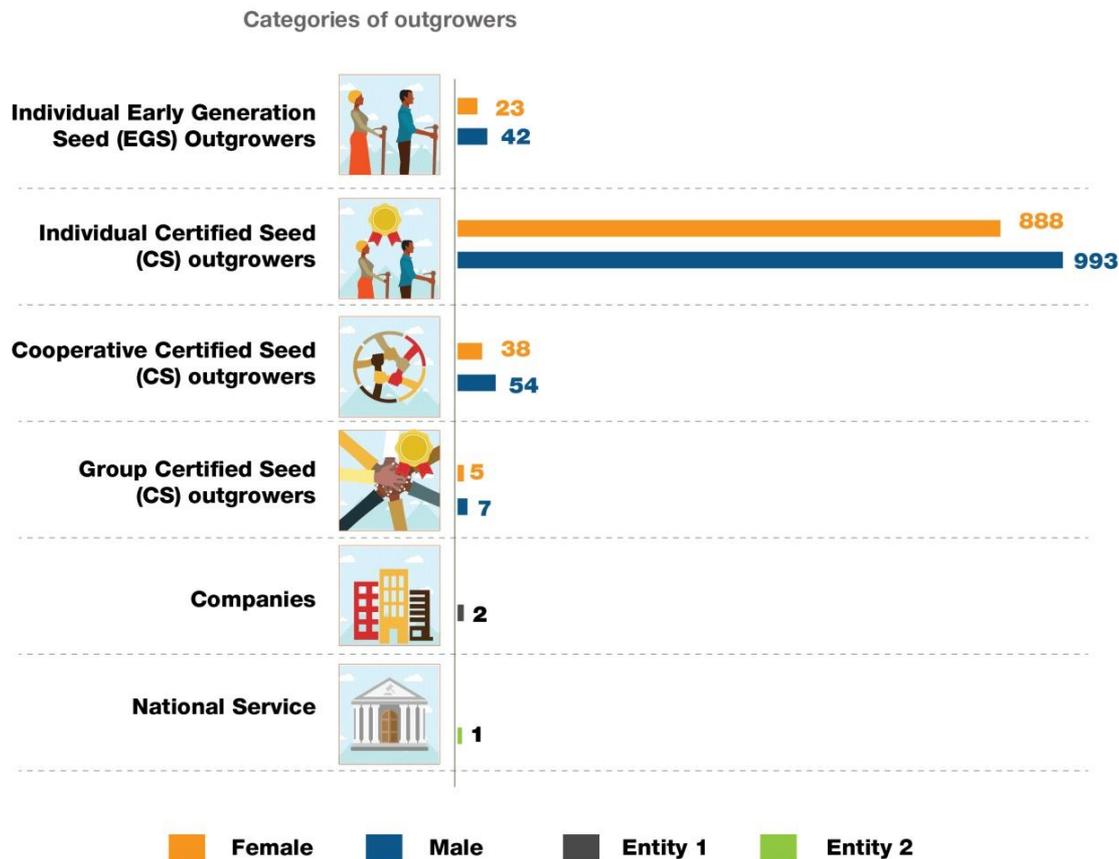


In **seed production** women are in planting, weeding, and harvesting and men are breeders, production managers, technicians and agronomists and mostly full-time employees



Men take the **leadership roles** in administrations as general managers, zonal managers and managing directors

Number and type of outgrowers used by the women owned seed companies



- In each category of outgrowers, there are more men outgrowers than there are female outgrowers
- The difference not big: 53% men and 47% women
- Large parcel of land ownership as a challenge for women outgrowers

Challenges and recommendations for women-owned seed companies

CHALLENGES

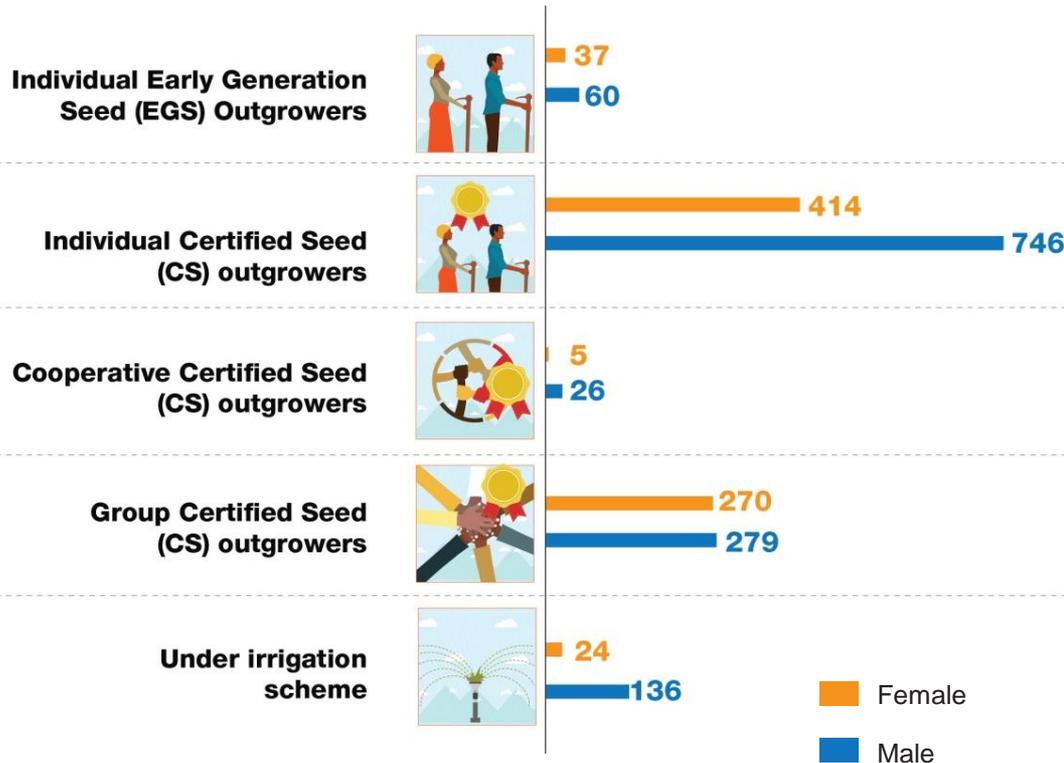
- Societal discrimination and bias of women's entrepreneurial and leadership skills in seed companies
- Limited infrastructure (e.g. processing plants, warehouse capacity and transport.)
- Women-owned seed companies have less start-up and working capital
- Limited human resources and retainment of skilled staff i.e. breeders
- Delayed payments e.g. by governments and agro-dealers affects business operations and cash flow especially for small seed companies

RECOMMENDATIONS

- Challenge social norms and stereotypes and build capacity on women's contribution in the seed sector
- Increased investments through loans, grants from public and private sectors.
- Facilitate women-owned seed companies to access affordable loans from public and private institutions
- Train and motivate staff through promotional strategies to retain skilled staff
- Encourage government(s) to invest in women-owned seed companies



Number of male and female seed outgrowers in 13 Uganda seed companies (80 market share)



62% of the outgrowers are men

- Women outgrowers have smaller land plots and less secure land ownership and produce lower quantity of seeds than men
- However, the quality of seeds produced by women outgrowers is much better than that of men
- Few seed companies have allowed women outgrowers to grow seed on their land

PROBLEM: Marketing strategy for selling of seeds is one size fits all

Capacity Building

Materials for strengthening integration of gender considerations in formal maize seed sector development



Gender-responsive approaches for the promotion of improved maize seed in Africa



Guiding tool for gender-responsive demos and field days data collection



Gender-responsive budgeting tool for the promotion of improved maize seed in Africa

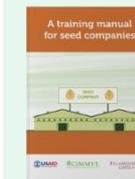
Training manuals



Gender-responsive approaches for enhancing the adoption of improved maize seed in Africa: A training manual for agro-dealers



Gender-responsive approaches for enhancing the adoption of improved maize seed in Africa: A training manual for breeders and technicians



Gender-responsive approaches for enhancing the adoption of improved maize seed in Africa: A training manual for seed companies

Conclusion & areas for further R&D

- **More than three fourth of the SSA population rely on agriculture and women occupy the largest share of that portion. We need to find ways to increase the number of women who are in the agribusiness sector than they are at present.**
- **The issue of land ownership for a majority of the women is a big set back for expansion of farming area.**
- **Heavy reliance of hand-hoe agricultural practices and less on mechanization, will not lead as far to achieving gender equity and economic development of the communities or countries in SSA.**
- **More needs to be done in terms of finding the best partnership model between farm groups/cooperatives, private sector, public and development actors.**

Acknowledgment

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Farmers, farmer Cooperatives, Agr. Innovation Platforms

All participating partners – private, NGO, extension

All the women seed company owners and leaders in East and Southern Africa whom we have interviewed and their employees

Ms. Pauline Muindi

Dr. Lone Badstue

Ms. Florence Sipala

Ms. Jessica Osanya

Dr. Michael Misiko

Kipenz Films

Maina Wainaina studio



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Thank you
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interest!



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Participatory Audit Tool for AIP Benefits

Benefits, Level of Attainment and Estimated Attribution Among Mudende AIP Membership

AIP type of Activity (specify)	List of main benefits reported/observed (by 2016) related to AIP	Level of direct attribution to					% sharing	
		Levels of benefits	Partnerships	Donor funds	Marketing	Trainings/visits	AIP Men	AIP Women
Social (e.g. Table banking, labor sharing)	Youth participation	3	0	3	0	3	50	50
	Women participation	3	3	0	0	0	50	50
	Better nutrition	3	3	0	0	0	50	50
	Better societal harmony	3	3	0	0	0	50	50
	Reduced drudgery	1		0	0	0	50	50
Environment related	Reduced soil erosion	3	3	3	0	3	50	50
	Reduced weeds	0		0	0	0	50	50
	Better soil health	3	3	0	0	3	50	50
	Better water retention	3		3	0	0	50	50
	More soil organic C	3	3	0	0	2	50	50
Infrastructural	New business building/s	3	3	3	0	0	50	50
	Better storage (potato/milk)	3	3	3	0	2	50	50
Sum of score in each category		60	48	39	23	39		
 Australian Government Australian Centre for International Agricultural Research		81 Less score ATES foundation		Key: 0=None. 1=Weak. 2=Average. 3=Strong. X=Unknown			CGIAR Stress Tolerant Maize for Africa	

