

Gender dynamics in formal seed systems in sub-Saharan Africa and worldwide lessons

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CGIAR Gender Platform Webinar



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Presentation Outline

1. Rationale for gender responsiveness in formal seed systems

2. Gender in the formal maize seed sector:

(i) Gender and the adoption of DT maize varieties in East Africa, including farmers awareness of the varieties.

(ii) Women in the maize seed business in East and Southern Africa

(iii) Gender mainstreaming in seed companies: A case from Uganda

3. Synthesis on trait-preferences by gender in East Africa

4. Capacity building

5. Conclusions & further areas of research



Rationale for gender responsiveness in seed systems



Women farmers are less likely to use improved seed than men in SSA, leading to lower productivity levels

The gender gaps in the uptake of improved seed, represent real costs to households, seed companies, agro-dealers and society

The role of Stress Tolerant Maize for Africa (STMA) project then is three folds:



Provide state of the art knowledge on gender in seed value chains



Understanding men and women product preferences



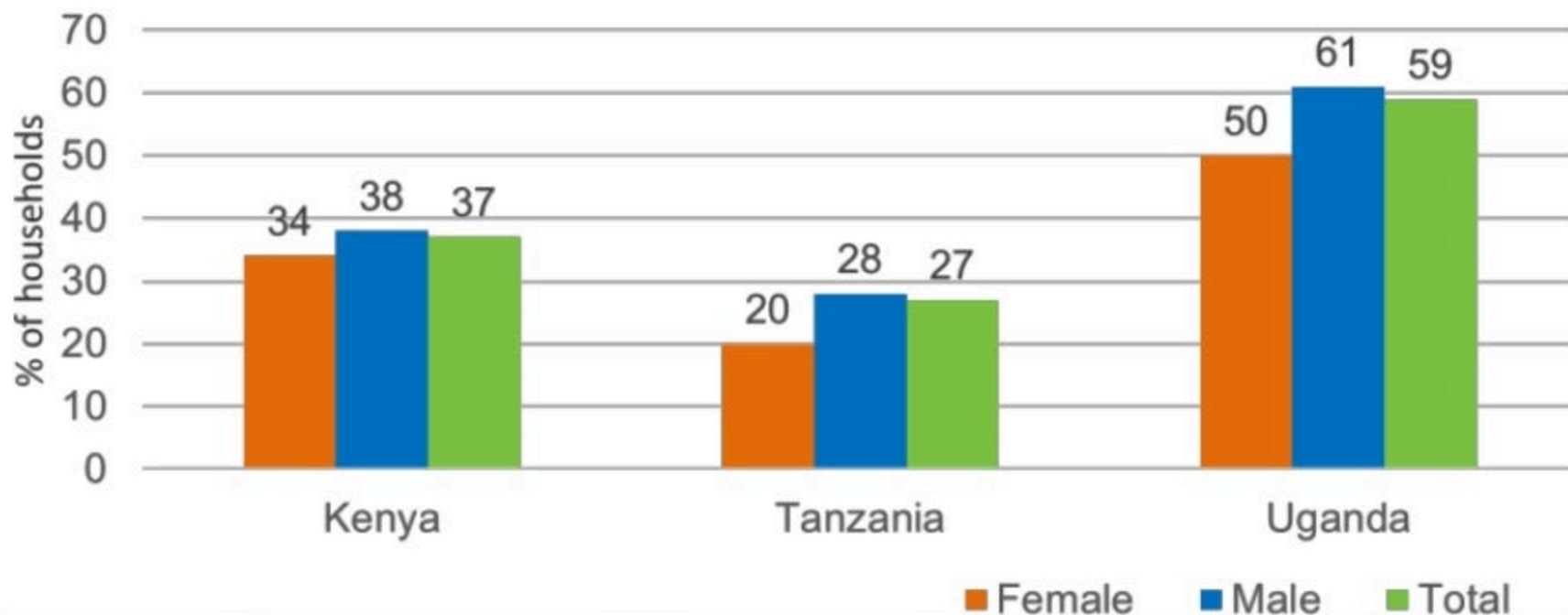
Awareness creation and adoption through alternative partners like NGOs, CBOs, and local extensions

I. Gender in the formal maize seed sector



Households awareness of Drought Tolerant Varieties in East Africa

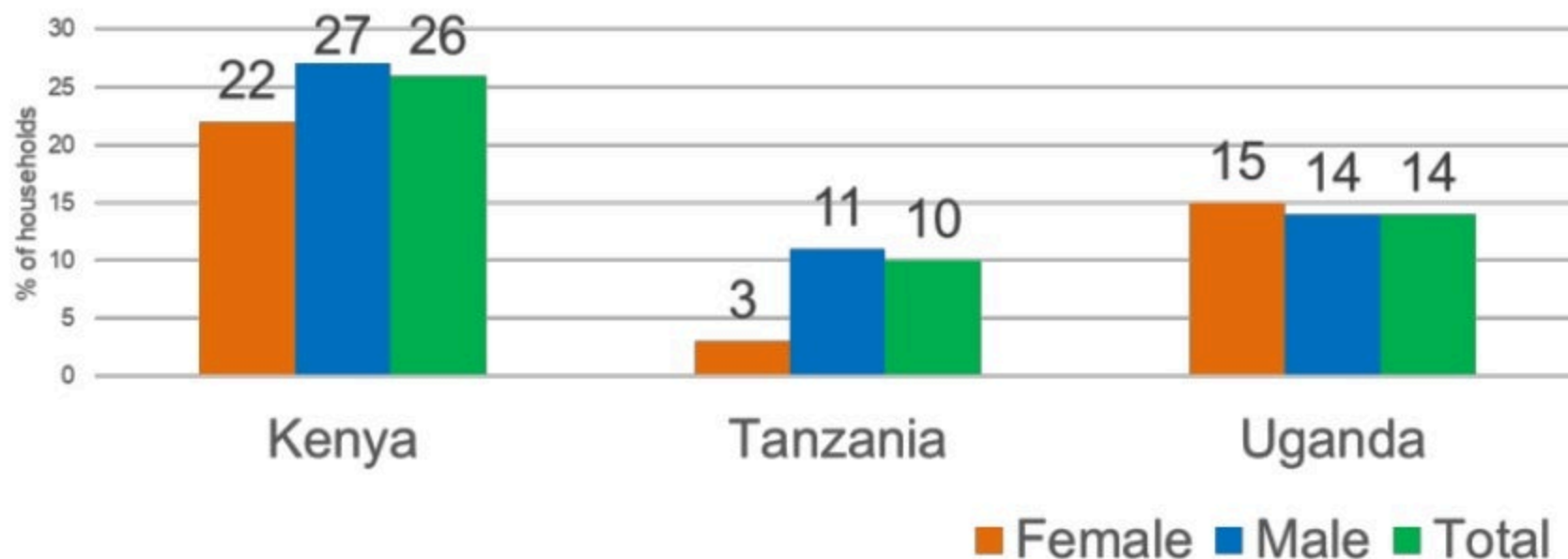
% households aware of DTMVs in Kenya, Tanzania and Uganda by Gender based on HH surveys



- More MHHs are aware of DT maize than FHHs, especially in Uganda and Tanzania
- Extension service biased towards men

Note: Datasets from Tanzania and Kenya are from STMA 2018 and for Uganda is DTMAS 2015

% households adopting DTMVs in Kenya, Tanzania and Uganda by Gender based on HH surveys



- More MHHs adopted DT maize than FHHs, especially in Tanzania and Kenya
- Provided that seeds are made available in Uganda, the FHHs are likely to adopt DTMVs the same way as MHHs.

Women in the maize seed business in East and Southern Africa



Sylvia Horemans

Kamano Seed Company Ltd



Zambia



Josephine Okot

Victoria Seed Ltd



Uganda

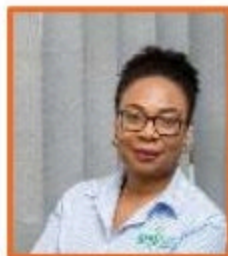


Cecilia Alphonse Magesa

Meru Agro Tours & Consultants Co. Ltd
Tanzania



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

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



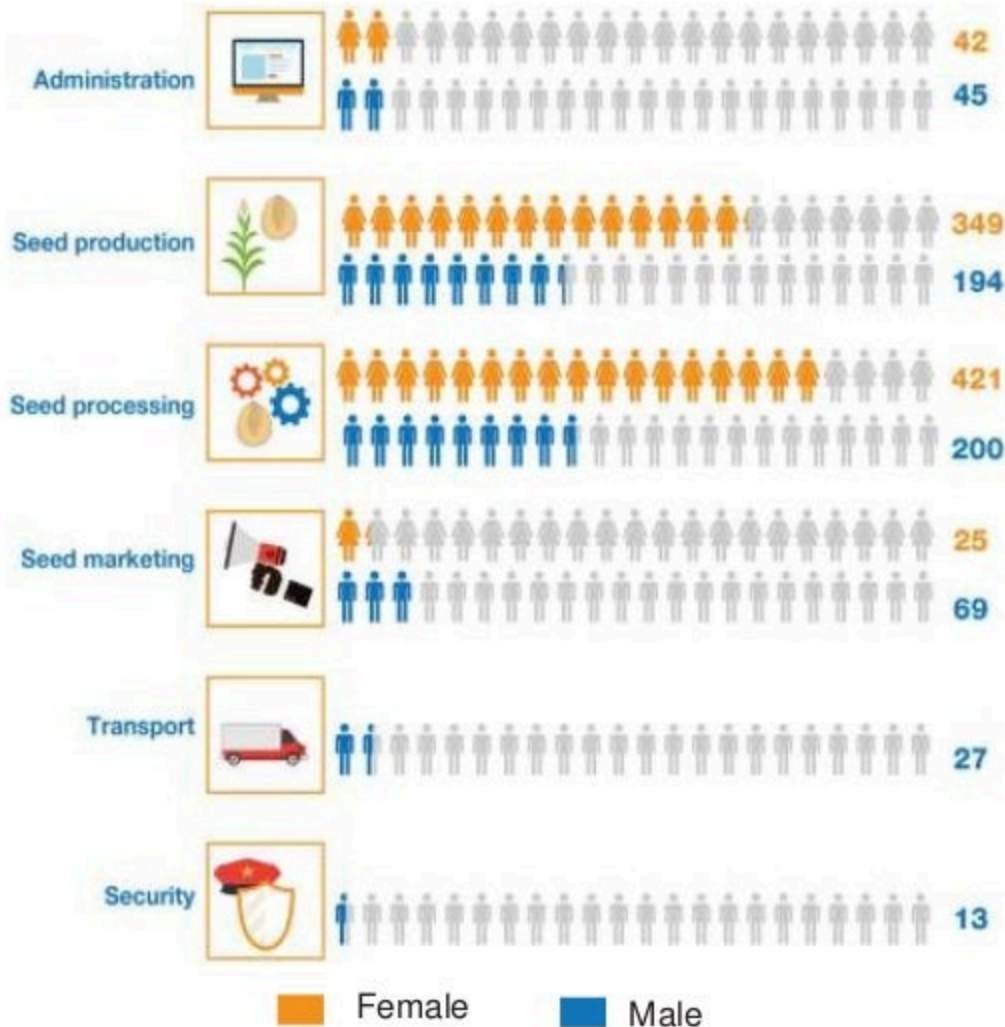
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The number of male and female employees working in the seed companies



837 women
VS
548 men



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

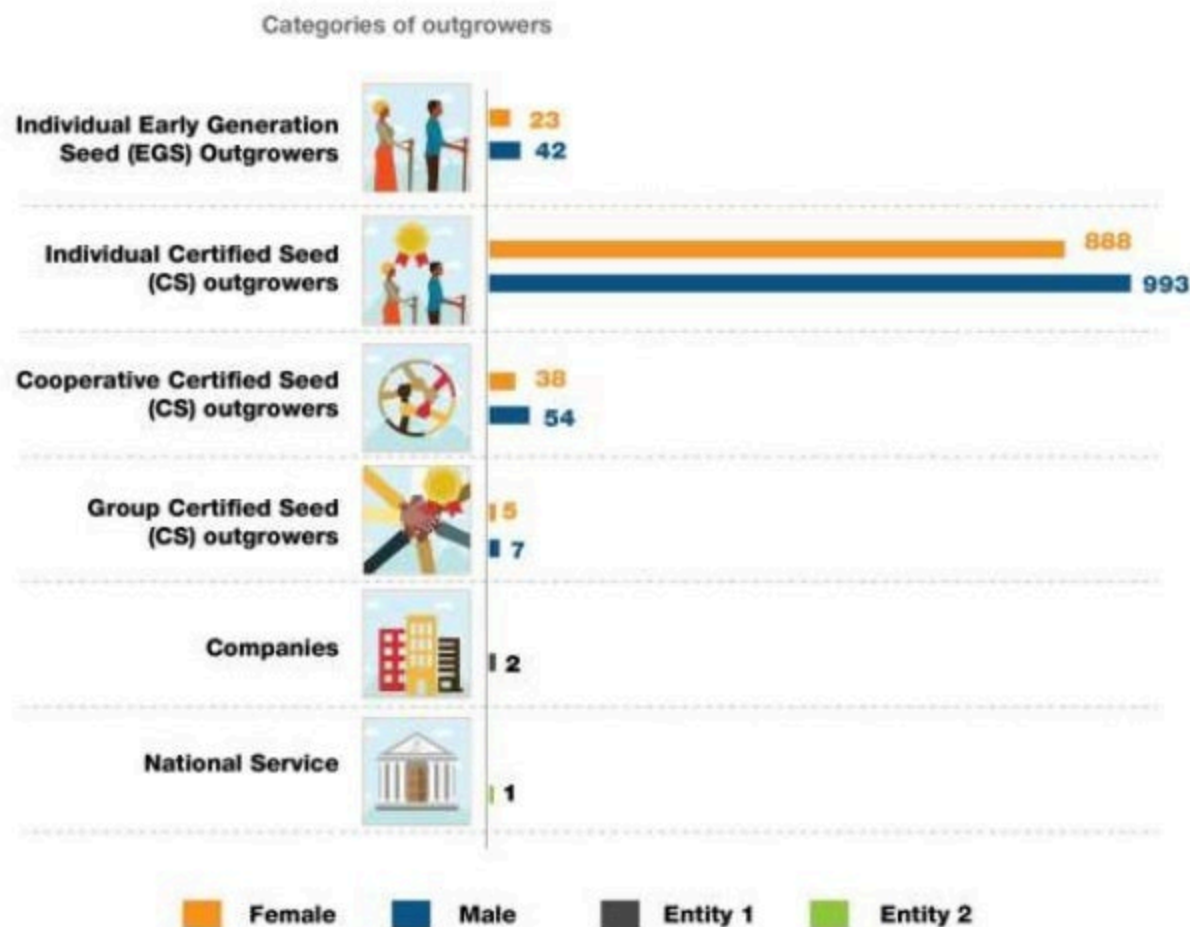


In **seed production** women are in planting, weeding, and harvesting and men are breeders, production managers, technicians and agronomists and mostly full-time employees



Men take the **leadership roles** in administration 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



Gender mainstreaming in seed companies: A case from Uganda

Number of male and female department heads in seed companies



13 companies, which represent 80% of the market share in Uganda were studied



Men hold **KEY** leadership positions, i.e., include seed production, processing, product development, sales & marketing managerial positions (men are the breeders, agronomists, technicians)

Number of male and female employees in each department in seed companies in Uganda



77% of the company employees are women

3567 females
810 males

Though majority of the employees are seasonal workers



- Women dominate the seed processing sector
- Men dominate the rest of the categories

Number of male and female seed outgrowers



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

II. Synthesis on trait-preferences by gender in East Africa

Method used: Farmers' participatory varietal
selection



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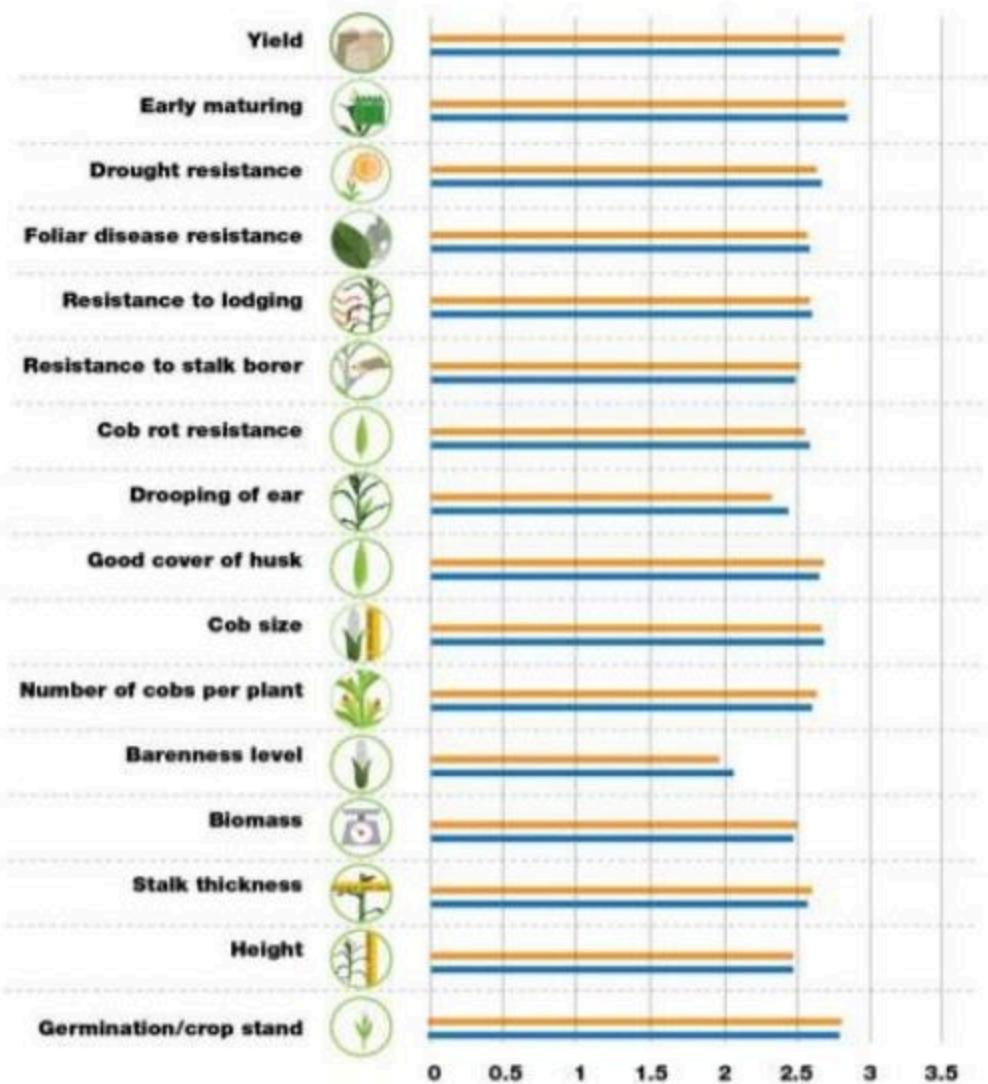
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Synthesis on trait-preferences by gender in East Africa: Cases from Kenya and Rwanda

Stated preferences of maize criteria by gender-Kenya



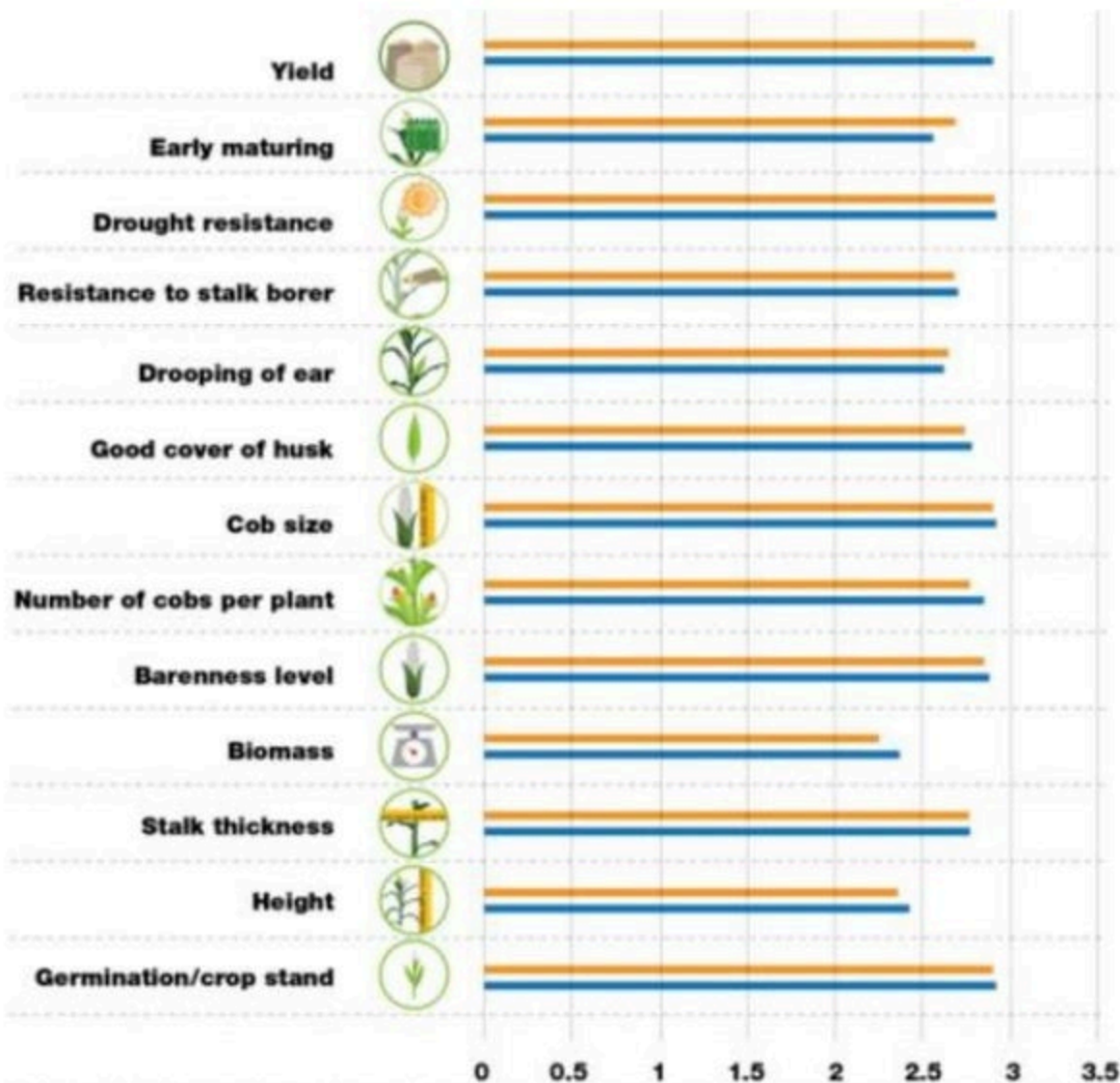
Stated preferences are the same for men and women

Men and women farmers though have give higher ranking for **germination, yield, and early maturing**

Female
Male

N= 1708
Female= 936
Male= 772
Year=2016-2017

Stated preferences of maize criteria by gender-Rwanda

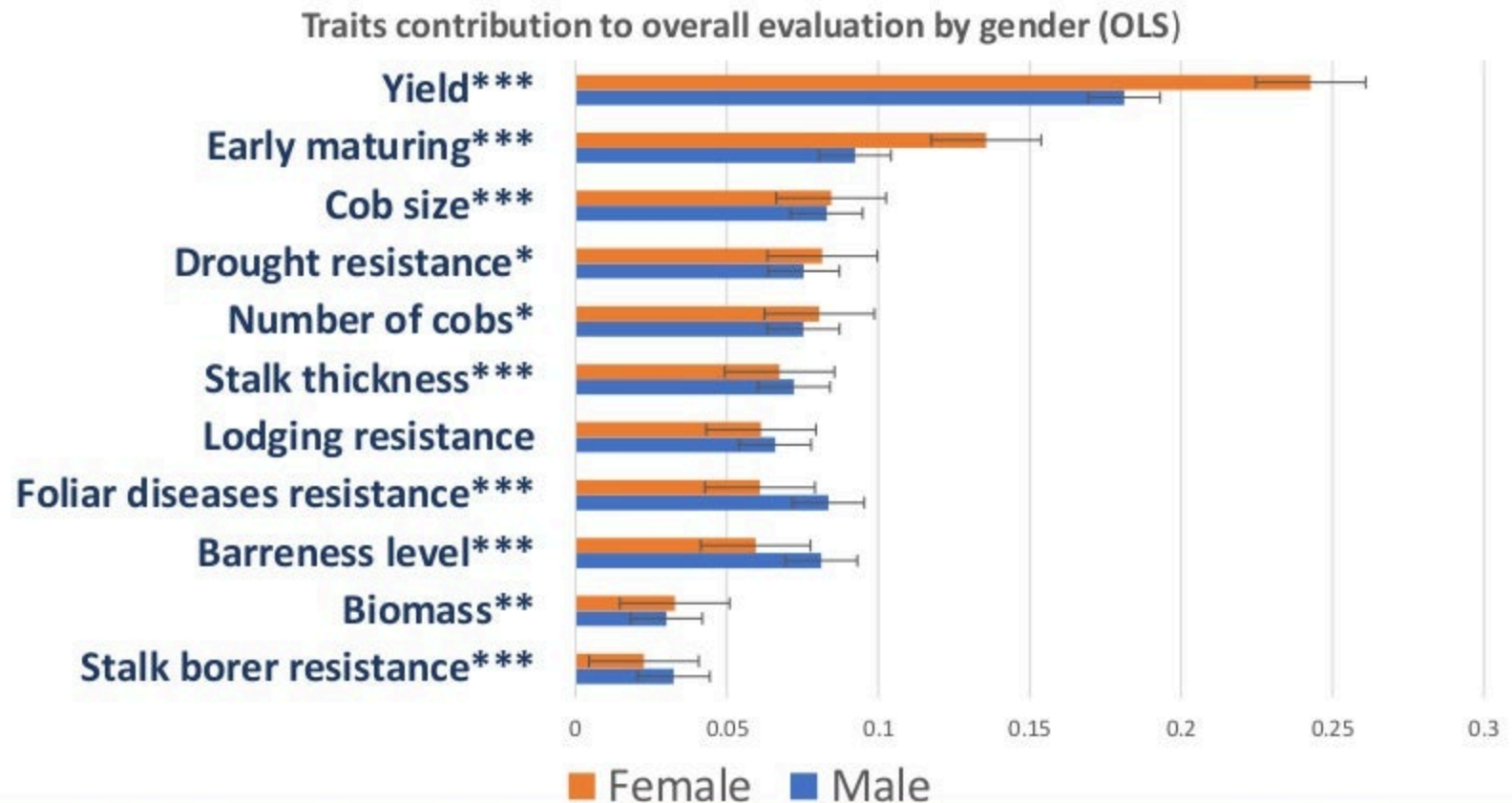


- Stated preferences are the same for men and women
- Though highest preferred traits for men and women were **germination, drought resistance and cob size**

Female
Male

N= 174
Female=97
Male= 77
Year=2016-2017

Revealed criteria contribution to overall evaluation by gender from Kenya and Rwanda



- **IMPORTANCE OF CRITERIA:** There were significant differences ($P < 0.1$) between men and women in the revealed trait criteria for all traits except for resistance to lodging
- **RELATIVE IMPORTANCE BETWEEN CRITERIA HAS NOT CHANGED:** More similar for both men and women
- As a result the evaluations of the different hybrids did not differ between men and women. **Importance of post-harvest and processing.**

- Similar findings was observed when comparisons of gender and maize trait preferences was done in Kenya, Uganda, Tanzania and Rwanda datasets



III.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

Capacity Building

Year	Training	Location	Numbers
2019	Maize technician training (NARS and seed companies)	Lilongwe, Malawi	35 participants
2018	Breeders training (NARS, seed companies, universities in Eastern, Southern and West Africa)	Kampala, Uganda	33 participants (26 male, 7 female) from NARS, private seed companies, and universities in Eastern, Southern, and West Africa.
2018	Maize technician training (NARS and seed companies)	Arusha, Tanzania	24 participants (19 male and 5 female)
2018	Maize technician training (NARS and seed companies)	Zambia	33 participants (22 male and 11 female)
2017	Maize technician training (NARS and seed companies)	Kampala, Uganda	34 participants (26 male and 8 female)
2017	Maize technician training (NARS and seed companies)	Zimbabwe	28 participants (20 male and 8 female)
2016	seed production and quality training in collaboration with other CIMMYT projects (DTMASS and WEMA) and partners	Uganda	33 participants (21% females, 18 seed companies, USTA, NaCRRRI, Prisoners)
2016	seed production and quality training in collaboration with other CIMMYT projects (DTMASS and WEMA) and partners	Kenya	(21.4% females, 8 seed companies, 5 research centers) participated in the training
2016	seed production and quality training in collaboration with other CIMMYT projects (DTMASS and WEMA) and partners	Tanzania	six seed companies (26 participants), one regulator (2), CIMMYT (8 one as participant trainee) and CIP (1)



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CIMMYT's Impact and success stories



Margaret Wafula, a farmer in Bungoma County is admires maize cobs from her field. She plants Western Seed's WH403 and WH505, varieties. Photo Credit: Joshua Masinule/CIMMYT.



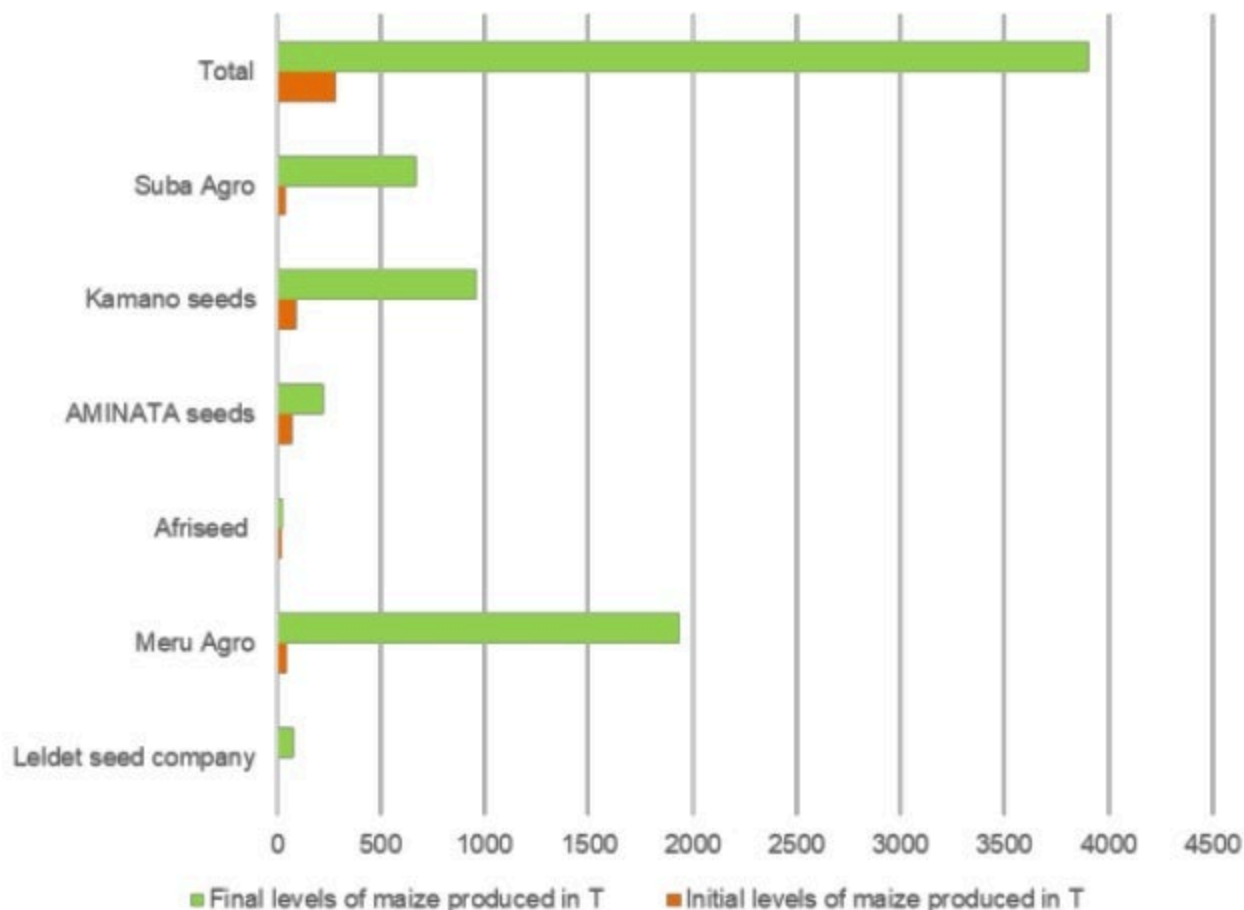
Farmers displaying the Bazooka Maize Seed variety. Photo Credit: NASECO.

- Public-private partnership, Nalweyo seed company (NASECO's) in Uganda annual seed production jumped from 20 tonnes in 1999 to 3,000 tonnes of maize hybrids in 2017, 10% of which was exported to DR Congo and Burundi, where there is virtually no seed and input distribution system available for farmers.
- With CIMMYT's support, the company established over 1000 demo plots every year from 2015-2018 in Uganda, expanded distribution networks and improved its quality control processes.



CIMMYT's impact and success stories

Production levels of maize for women owned seed companies, initial levels and current levels in Tonnes



- CIMMYT has provided the companies with: technical support, high quality breeder seeds and on-farm varietal demonstrations and trainings on various aspects of seed productions including gender trainings.

Conclusion & areas for further R&D

- Bridge the gender gap in the adoption of improved varieties of maize seed and strengthen better farming practices
- There is a need to strengthen seed companies gender responsive seed related product positioning and operations at the workplace
- The synthesis trait preferences: Further studies need to be done in the post-production characteristics, i.e., processing, cooking and consumption
- Need to do household surveys that are gender *dis-aggregated* at the plot level as well as deeper gender responsive qualitative studies

Acknowledgment

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Ms. Jessica Osanya

Dr. Franklin Simtowe

Dr. Hugo De Groote

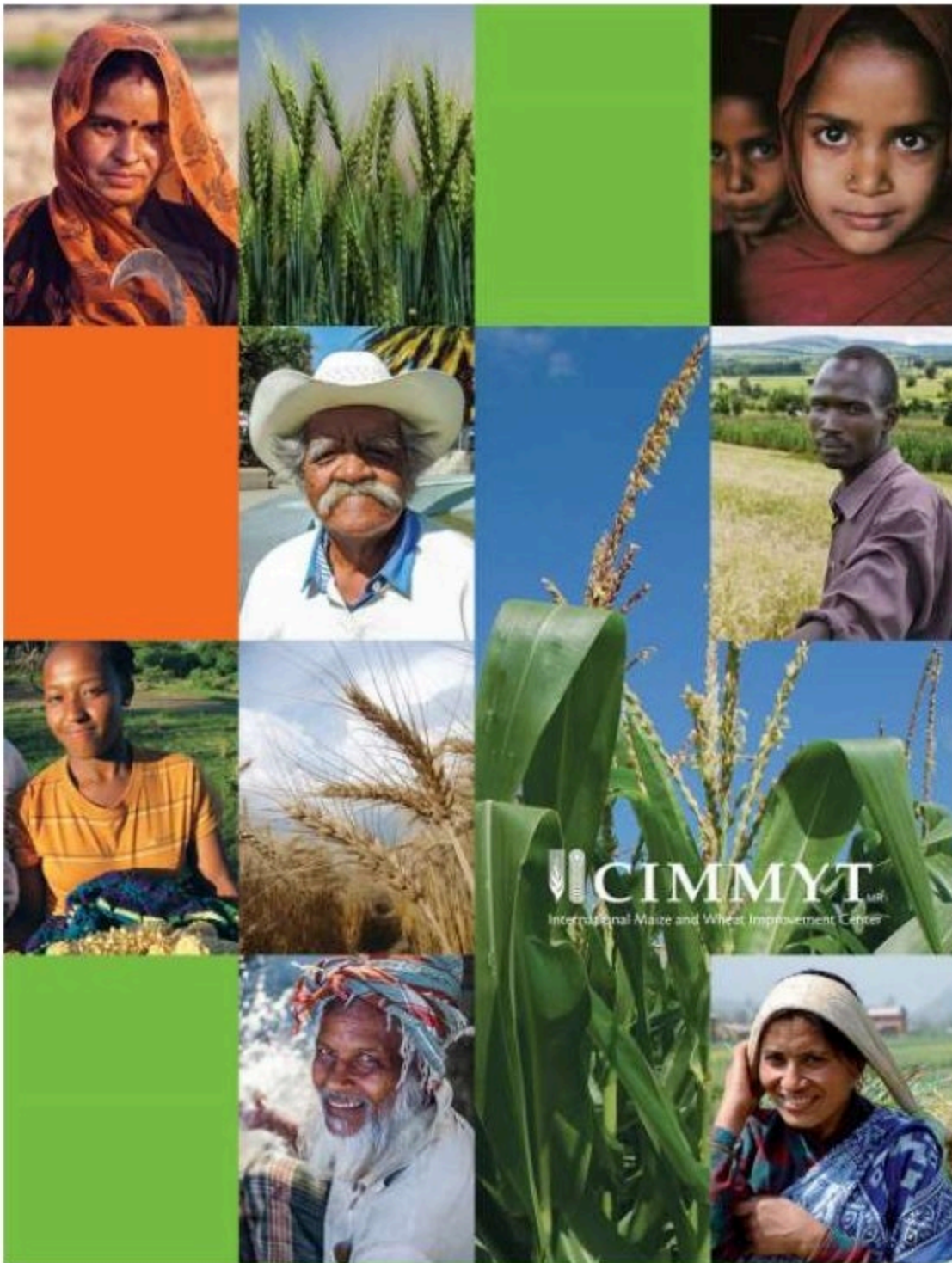
Dr. Paswel Marenya

Kipenz Films

Maina Wainaina studio

CIMMYT communications





Thank you
for your
interest!



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