

Evidences

Study #4388

Contributing Projects:

- P2099 - Accelerating Genetic Gains in Maize & Wheat (AGG)
- P2048 - Sustainable and equitable agricultural mechanization: a gender perspective on maize shelling
- P978 - Building Gender, Youth and Social Inclusion portfolio in MAIZE AFS, including strategic gender research and inter-CRP collaboration
- P979 - Synthesis of Gender case studies in MAIZE AFS
- P1775 - Gender, Maize and Mechanization: Manual and Mechanized Maize Shelling in Tanzania
- P1530 - CGIAR Global Study on Gender Norms and Agency for Agricultural Innovation
- P2283 - Conduct gender analysis of constraints to and opportunities for the adoption of improved postharvest technologies for maize at farm typology and intra-household levels in Tanzania
- P2282 - Gender analysis of soil and water conservation technologies

Part I: Public communications

Type: OICR: Outcome Impact Case Report

Status: Completed

Year: 2021

Title: Strategic gender research contributes to policy change in Sub-Saharan Africa and South Asia.

Short outcome/impact statement:

MAIZE and WHEAT researchers, together with colleagues within and beyond, published findings based on gender-transformative research and methods with clear policy implications for three countries Ethiopia, Malawi and Tanzania and contributed to policy impacts and practices in Morocco. Researchers also influenced policy-making, with potentially longer-term social change impacts in Nepal and Zambia. From a CGIAR-internal perspective, researchers expanded the reach of gender-transformative research and proposed innovations in gender-intentional maize breeding in sub-Saharan Africa.

Outcome story for communications use:

MAIZE and WHEAT researchers and their partners have been applying gender-transformative research and methods to unravel the complex dynamics of gender and social norms that play a part in agricultural innovation pathways. Much of this work was informed by GENNOVATE (Enabling Gender Equality in Agricultural and Environmental Innovation Initiative; 2014-2018), which received major funding support from WHEAT and MAIZE. GENNOVATE scientists developed 16 tools and resources by engaging 27 partner organizations. These tools and resources have been promoted by FAO.

Significant outcomes of gender research uptake (1: Lopez et al. 2021), as well as their application to inform policy changes, were:

- Looking at zero tillage users and subsequent herbicide applications in Bangladesh, India and Nepal, scientists observed that zero tillage does not reinforce existing inequalities within households (4: Brown et al. 2021). MAIZE & WHEAT researchers provided policy recommendations to those governments, underlining the significant gender gaps associated with agricultural technologies' adoption. For example, Paudel (5: 2020) estimated that with similar access to productive resources, many more women would likely adopt mini tillers in Nepal. Gartaula (7: 2020) proposed policy options to promote climate-smart technologies in India that could mitigate GHG emissions and reduce women's labour drudgery.
- The 'Gendered wage workers in Morocco' study (8: Najjar et al. 2018a; 9: Najjar et al. 2018b), contributed to a collective bargaining agreement between workers and the Government of Morocco and led to a new conservation agriculture in crop-livestock systems project in Tunisia (10: Najjar et al. 2021).
- In Southern Ethiopia, Gebre et al. (6: 2021) called for policies that not only ensure equal levels of productive resources, but also help households to build their capacity. These recommendations aim to improve both transitory and chronically food-insecure situations.
- Based on a representative Zambian household study, Simtowe and De Groote (11: 2021) recommend policies that promote equitable access to production resources, such as land, to reduce the gaps in market participation between men and women - and to help women take advantage of the inter-seasonal maize price movements.
- In gender-intentional maize breeding in sub-Saharan Africa (12: 2021, <https://doi.org/10.1177%2F00307270211058208>), researchers found that evidence for gender-differentiated preferences for maize varieties remains inconclusive. They proposed changes in research approaches and priorities: A more nuanced understanding of gender relations in maize production and seed decision-making, new gender-responsive approaches to measuring farmer preferences and seed demand, and research to address operational challenges in breeding.

Links to any communications materials relating to this outcome:

- <https://repo.mel.cgiar.org/handle/20.500.11766/12773>
- <https://repo.mel.cgiar.org/handle/20.500.11766/8915>
- <https://repo.mel.cgiar.org/handle/20.500.11766/8916>
- <https://doi.org/10.1007/s10584-020-02941-w>
- <https://gender.cgiar.org/news-events/gennovate-20-taking-it-further>
- <https://doi.org/10.1177/00307270211013823>
- <https://doi.org/10.1007/s12571-020-01106-y>
- <https://www.fao.org/3/cb1331en/cb1331en-15.pdf>
- <https://gennovate.org/>

Part II: CGIAR system level reporting

Link to Common Results Reporting Indicator of Policies : No

Stage of maturity of change reported: Stage 1

Links to the Strategic Results Framework:

Sub-IDOs:

- Gender-equitable control of productive assets and resources
- Improved capacity of women and young people to participate in decision-making

Is this OICR linked to some SRF 2022/2030 target?: Yes

SRF 2022/2030 targets:

- # of more farm households have adopted improved varieties, breeds or trees
- # of people, of which 50% are women, assisted to exit poverty

Description of activity / study: <Not Defined>

Geographic scope:

- Regional

Region(s):

- Sub-Saharan Africa
- Southern Asia
- Northern Africa

Comments: <Not Defined>

Key Contributors:

Contributing CRPs/Platforms:

- Gender - Gender Platform
- CCAFS - Climate Change, Agriculture and Food Security
- PIM - Policies, Institutions, and Markets
- Wheat - Wheat
- Maize - Maize
- Fish - Fish

Contributing Flagships:

- FP4: Sustainable intensification of maize-based systems for improved smallholder livelihoods
- FP1: Enhancing Maize's R4D Strategy for Impact

Contributing Regional programs: <Not Defined>

Contributing external partners:

- Thünen Institute - Johann Heinrich von Thünen Institute
- SAA - Sasakawa Africa Association
- UCT - University of Cape Town
- McGill University
- Kyushu University
- WUR - Wageningen University and Research Centre
- NMBU - Norwegian University of Life Sciences
- INRA - Institut National de la Recherche Agronomique (Morocco)
- IDRC - International Development Research Centre
- Western University
- HarvestPlus
- Hawassa University

CGIAR innovation(s) or findings that have resulted in this outcome or impact:

GENNOVATE methodology applied to household surveys and policy analysis

Innovations: <Not Defined>

Elaboration of Outcome/Impact Statement:

2018-2021 reporting and publications point to significant first user outcomes, namely policy-maker consideration of findings and farmer communities' uptake of gender research (1: Lopez et al. 2021):

The Solidarity Center NA and ICRW (Washington DC) drafted a collective bargaining agreement (2 & 3) between farm workers and the Government of Morocco, which triggered a new project on gender in crop-livestock systems in Tunisia (4: Najjar et al. 2021).

In Kenya, Malawi, Zambia, and Zimbabwe, researchers (5: 2021) observed significant challenges associated with technology adoption, such as metal maize storage silos; adoption may switch storage ownership and associated benefits to men, because women have less scope for bargaining over their rights. For Zambia, MAIZE scientists (6: 2021) recommended policies that promote equitable access to production resources (e.g. land) to reduce gender gaps in market participation. Based on a holistic approach (8: 2021), other researchers argued for more targeted policy interventions to address the unique needs of women in Malawi and Tanzania, who have different capacities to participate and realize technology adoption benefits (7: 2021).

For Southern Ethiopia, MAIZE and WHEAT scientists (9: 2021) called for policies that not only ensure equal levels of productive resources, but also help households to build their capacity to deal with food-insecure situations. Going beyond the dichotomy of male vs. female-headed households in Ethiopia, gender researchers looked at married women within male-headed households and women heading their own households, observing that customary norms often hamper women's effective use of productive resources and their ability to innovate (10: 2020).

In sub-Saharan Africa (13: 2021, <https://doi.org/10.1177%2F00307270211058208>), researchers reviewed the evidence on gender-differentiated traits and proposed changes to research approaches and priorities, including new gender-responsive approaches for measuring farmer preferences and seed demand and research to address operational challenges in breeding.

In South Asia (Bangladesh, India, Nepal), scientists observed that zero tillage does not deepen existing inequalities within households (11: 2021). WHEAT and partner researchers provided policy recommendations to those governments, underlining the significant gender gaps in adoption. Collaborating scientists (12: 2020; <https://doi.org/10.1016/j.techsoc.2020.101250>) estimated that with similar access to productive resources as men, women would much more likely adopt mini-tillers in Nepal. In a related study in India, scientists (13: 2020; <https://doi.org/10.1007/s10584-020-02941-w>) proposed policy options to promote climate-smart, GHG emission-reducing technologies that could reduce women's labour drudgery, whilst cautioning about possible negative implications for specific vulnerable groups.

References cited:

- [1] Adam, R. I., David, S., Cairns, J. E., & Olsen, M. (2021). A review of the literature on gender and chemical fertiliser use in maize production in sub-saharan Africa. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 122(1), 91–102. (<https://doi.org/10.17170/kobra-202104133655>)
- [2] Farnworth, C. R., Badstue, L. B., de Groote, H., & Gitonga, Z. (2021). Do metal grain silos benefit women in Kenya, Malawi, Zambia and Zimbabwe? *Journal of Stored Products Research*, 93, 101734 (<https://doi.org/https://doi.org/10.1016/j.jspr.2020.101734>)
- [3] Najjar, D., Idoudi, Z., Oueslati, D., and M'hamed, H.C. (2021). Integrating Gender into the Use of Conservation Agriculture in Crop-Livestock Systems (CLCA) Project in Tunisia. Beirut, Lebanon: International Center for Agricultural Research in the Dry Areas (ICARDA). (<https://repo.mel.cgiar.org/handle/20.500.11766/12773>)
- [4] Lopez, D.E., Farnworth, C.R., Rietveld, A. and Gartaula, H. (2021). GENNOVATE-taking it further. Cultivating Gender Equality Conference. Infographic. Wageningen University & Research, the Netherlands. (<https://gender.cgiar.org/news-events/gennovate-20-taking-it-further>)
- [5] Simtowe, F., & De Groote, H. (2021). Seasonal participation in maize markets in Zambia: Do agricultural input subsidies and gender matter? *Food Security*, 13(1), 141–155. (<https://doi.org/10.1007/s12571-020-01106-y>)
- [6] Najjar, D., Baruah, B., Aw-Hassan, A.A., Abderrahim, B., and Kassie, G. (2018). Women, work, and wage equity in agricultural labour in Saiss, Morocco. Canada: Institute for the Study of International Development. (<https://repo.mel.cgiar.org/handle/20.500.11766/8916>)
- [7] Gebre, G. G., Isoda, H., Amekawa, Y., Rahut, D. B., Nomura, H., & Watanabe, T. (2021). What explains gender gaps in household food security? Evidence from maize farm households in southern Ethiopia. *Social Indicators Research*, 155(1), 281–314. (<https://doi.org/10.1007/s11205-020-02600-8>)
- [8] Badstue, L., Petesch, P., Farnworth, C. R., Roeven, L., & Hailemariam, M. (2020). Women farmers and agricultural innovation: Marital status and normative expectations in rural Ethiopia. *Sustainability (Switzerland)*, 12(23), 1–22 (<https://doi.org/10.3390/su12239847>)
- [9] Makate, C., & Mutenje, M. (2021). Discriminatory effects of gender disparities in improved seed and fertilizer use at the plot-level in Malawi and Tanzania. *World Development Perspectives*, 23, 100344 (<https://doi.org/10.1016/j.wdp.2021.100344>)
- [10] Najjar, D., Baruah, B., Aw-Hassan, A.A., Abderrahim, B., and Kassie, G. (2018). Gendered Inequity in Wages and Working Conditions for Landless Agricultural Labourers in Morocco. Canada: Institute for the Study of International Development. (<https://repo.mel.cgiar.org/handle/20.500.11766/8915>)

Quantification: <Not Defined>

Gender, Youth, Capacity Development and Climate Change:

Gender relevance: 2 - Principal

Main achievements with specific **Gender** relevance: this is a gender OICR. see above

Youth relevance: 1 - Significant

Main achievements with specific **Youth** relevance: Gender analysis of wages in Morocco; CLCA project (Tunisia) advanced towards commitment of reaching 40 percent women and 20 percent youth as part of the target group; youth out-migration Zambia study; Innovative Financing for Sustainable Mechanization in Ethiopia (IFFSMIE) project: Youth & service providers for 2-wheel tractor mechanization

CapDev relevance: 0 - Not Targeted

Climate Change relevance: 0 - Not Targeted

Other cross-cutting dimensions: Yes

Other cross-cutting dimensions description: See above. Strategic gender research investigated male vs female-headed households, most vulnerable groups, wealthier and poorer farmers, among many other categories.

Outcome Impact Case Report link: [Study #4388](#)

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