



SIMLESA
Sustainable Intensification of Maize
and Legume Systems for Food
Security in Eastern and Southern Africa



Australian Government
**Australian Centre for
International Agricultural Research**

WORKING PAPER

Does Gender Matter in the Maize and Legume Value Chains or in Agricultural Innovation Platforms in Tanzania? What are the Prospects for Youth in the Agricultural Sector of Tanzania?

Executive Summary:

1. The patriarchal nature of Tanzanian society restricts the majority of women from participating fully in all the nodes of the maize and legume value chains. Women's participation as producers is restricted at the beginning of the value chains, and only a few women can penetrate the other parts of the chain as agro-dealers and buyers/traders; even these few must first overcome financial constraints (for example, seeking a loan) in order to start the business.

2. Agricultural Innovation Platforms (AIPs) show signs of providing hope to farmers, by training the women and men AIP members in better agricultural practices, i.e. Sustainable Intensification, and by providing a market for agricultural produce (maize and legumes), access to farm inputs, e.g. improved seeds, and even access to credit sources available within the vicinity (because of belonging to a group).

3. Youth are interested in agriculture because they see it as the backbone of their economy. Even those young people who are able to venture into other types of small business e.g. trading agricultural crops, face barriers such as lack of capital to run the business. Other challenges faced by youth that make it difficult for them to move from subsistence to more profitable agriculture include: (i) lack of access to financial services necessary to invest in improved inputs, labor, and machinery; (ii) problems in obtaining good returns from trading crops due to price fluctuations and lack of reliable markets; (iii) lack of access to knowledge, skills and information about farming; and (iv) gender-related barriers faced by young women, e.g. in relation to voicing their concerns and participating in meetings. However, a number of these challenges are not specific to young people, as they are also noted by older farmers (Ripoll et al., 2017).

Introduction to the problem:

Maize is the primary staple crop in Tanzania, accounting for a third of caloric intake¹ (Minot, 2010). In 2017, Tanzania produced over half a billion metric tons of maize², 85% of which was grown by smallholder farmers (Suleiman and Rosentrater, 2015). Legumes are also staple crops; they not only provide nutritious food for the household members, but they are also good complementary crops for maize and help to maintain the health of the soil. Value chains offer opportunities for development and for improving the competitiveness of smallholder activities (Kolavalli et al., 2015). Consequently, a thorough understanding of gender relations in the maize and legume value chains in Tanzania is necessary if we are to know the opportunities and challenges that women and men face as they participate in the production, processing and selling of these crops, and the lessons we can learn in order to scale up the country's maize-legume systems. Apart from understanding the role played by men and women in maize and legume value chains, it is also important to know the role of Agricultural Innovation Platforms (AIPs) in generating benefits to the men and women members of the platforms, as well as to know how youth perceive agriculture and the degree of their interest in it.

Research methods and results:

To gain this understanding of the role of gender in maize and legume value chains, we used the following methods to conduct the study: (i) a structured household survey; (ii) semi-structured key informant interviews with participants of the value chain; and (iii) sex-

disaggregated focus-group discussions with smallholder farmers. For studying AIPs, we used the participatory audit tool (P-Audit) to evaluate the benefits received by the members of six AIPs. The benefits were rated on a scale of 0-3, X in interactive focus group discussions (FGDs), with 0 = no benefits, 1 = weak, 2 = average, 3 = strong, and X = unknown benefits. Key informant interviews were conducted with leaders of the AIPs who possessed information and records about the association. The study of youth's perception of and interest in agriculture was done through conducting FGDs with female and male youths in order to get the perspective of young people in the agricultural sector. All three studies were conducted in the SIMLESA research sites.

The findings reveal that from production to processing, gendered social norms exist with regard to the roles performed by women and men smallholder farmers. Female farmers are more prominent in the production side of the value chain than in post-production. Men's dominance in the maize and legume value chains is seen throughout the various nodes of the chain, from input suppliers (agro-dealers) and maize producers, to buyers/traders and processors. As well as their involvement in the production of maize and legumes, women are seen in most cases to participate more as supporters of the chain than as leaders of the chain, who are usually men; for instance, by working as cashiers in agro-dealer shops or as seed sorters, and by generally performing less labor-intensive tasks in the processing part of the value chain. However, differences in control of income among couples was observed between two regions, the Northern (Arusha) and the Eastern (Morogoro) region. The data show that in the Northern region, women tend to be concentrated at points along the value chain with minimal resources, while men are more often found at the end of the value chain. In contrast, women in the Eastern region are involved in every aspect of the value chain, even in making decisions and controlling the money from crop sales. Further study is necessary to understand the different experiences of women in these two regions. We suspect that it has to do with differences in cultural norms and customs, with the Northern region being stricter and the Eastern region more liberal. However, in both regions, a majority of women have autonomy over the sale of particular legumes, specifically common beans, but not over the sale of commercial legumes such as pigeon peas that have a huge export market.

The study of the AIPs showed that women and men members in the area experienced an increase in the yields of maize and pigeon peas as a result of better agricultural training i.e. SI, and improved access to inputs, among other benefits. Moreover, in some AIPs, particularly in Bashay in Arusha, women and men members were able to access credit through Village Community Banks (VICOBA) and use it to improve their farm production activities, among others (Ubwe and Adam, 2017). Furthermore, the study of the perception and interest of youth in agriculture showed that young people could not abandon farming because it contributed to their food security, income and livelihood. Livestock also provided manure for their farms, and income from farming helped them to purchase more livestock and start other businesses.

Policy Recommendations:

1. Facilitate the ownership of assets, especially land, for women farmers, and improve their

access to credit for inputs, access to markets, and access to information, knowledge and training. In order to achieve this, government bodies, parastatal organizations and development agencies need to start creating financial products that are women-farmer friendly. All farmers – women, men and youths – must be trained in how to be effective in agricultural business practices, so that they can repay loans they have taken as required,

2. Achieving equality for women is not easy because of the patriarchal nature of communities in Tanzania, so there is a need for strong gender trainings and policies that target male farmers and teach them the importance of ensuring that their wives/women have an equal say in disposing of the revenue collected from agricultural sales, so that women are not left behind in terms of income/financial access and are able to reap the rewards of their hard labor.

3. Focus on crops such as common beans that give women the advantage of ownership. In order to achieve this, women should be encouraged to adopt improved legume seeds, and value addition through processing should be promoted.

4. Support women so that they can be involved in other nodes of the value chain as agro-dealers, buyers, traders, processors, among others. This can be done not only by the provision of capital so that they can start a business, but also by helping women to improve their basic business skills through adult education interventions.

5. Strengthen the existing AIPs, so that they can deliver to all smallholder farmers – women, men and youths – more robust services, such as access to more farm inputs, credit facilities and markets, and better provision of agricultural and business knowledge, so that farmers can identify and focus on a niche product/crop. In addition, link AIPs with the local and main government through the agricultural extension systems and services of the country, so that they can obtain the facilities and support that they need in order to grow and be sustainable.

6. Encourage the interest of Tanzanian youth in agriculture by also targeting young women and men farmers in interventions aimed at providing information about and access to good quality seeds, financing, and price discounts for the purchase of fertilizer, seeds and herbicide. In terms of market matters, there is a need to strengthen young women's and men's membership of producers' groups, to help them learn from and address input- as well as output-market challenges together with other farmers (FAO, 2012). This could also facilitate young farmers' exposure to extension information and improved agricultural technologies. Lastly, there is a need to take advantage of Information and Communication Technologies (ICTs) e.g. mobile phones, internet services, radio, among others, and to reach out specifically to rural youths, providing them with information that will enhance their agricultural knowledge, business skills and production capability.

Benefits of Action:

Failure to act on these recommendations will lead to an increase in gender inequality in the agricultural sector in Tanzania. Most importantly, it should be recognized that there are changes already taking place in some parts of Tanzania e.g. Eastern region (Morogoro), where women have autonomy in terms of revenue from crop sales. These examples of the development of women's empowerment should be applauded and lessons drawn from them so that these developments can be experienced by a large number of women in other parts of Tanzania.

Acknowledgements, Author & SIMLESA Details:

This study was conducted by the International Maize and Wheat Improvement Center (CIMMYT), the National Agricultural Research System (NARS) in Tanzania, specifically Selian Agricultural Research Institute (SARI) and Ilonga Agricultural Research Institute (ARI-Ilonga), as a part of Sustainable Intensification of Maize-Legume Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA), funded by the Australian Centre for International Agricultural Research (ACIAR). Many thanks to the SARI and ARI-Ilonga field research team: Frank Mmbando, Osmund Lupindu, Rose M. Ubwe, Upendo Titi as well as to the extension officers and village leaders, who participated in and made this study possible.

For further information, please contact: Rahma Adam (Ph.D), Gender and Development Specialist, International Maize and Wheat Improvement Center (CIMMYT), Nairobi, Kenya at R.Adam@cgiar.org

Notes

1. Cassava is second and rice is third, contributing 8% of caloric intake. Wheat and sorghum each represent 4%.
2. <https://www.indexmundi.com>

References

FAO (2012). Youth: The future of agricultural cooperatives. International year of cooperatives issue brief series.

Kolavalli, S., Mensah-Bonsu, A., and Zaman, S. (2015). Agricultural Value Chain Development in Practice: Private Sector-Led Smallholder Development. IFPRI Discussion Paper 1460.

Minot, N. (2010). Staple food prices in Tanzania. IFPRI. Paper presented at the COMESA policy seminar: Food price variability: Causes, consequences, and policy options. http://fsg.afre.msu.edu/aamp/seminar_3/AAMP_Maputo_24_Tanzania.pdf (August 2, 2013).

Ripoll, S., Anderson, J., Badstue, L., Büttner, M., Chamberlin, J., Erenstein, O., and Sumberg, J. (2017). Rural transformation, cereals and youth in Africa: What role for international agricultural research? *Outlook on Agriculture*, 46 (3), 168-177.

Suleiman, A.R., and Rosentrater, A.K. (2015). "Current Maize Production, Post-harvest Losses and the Risk of Mycotoxins Contamination in Tanzania." ASABE Annual International Meeting 2015. Paper No. 152189434.

Ubwe, R., Adam, R. (2017). Agricultural Innovation Platforms' (AIPs) benefits assessment of agricultural sustainable intensification (SI) in Tanzania. International Maize and Wheat Improvement Center (CIMMYT), Mexico.