



AgriFoSe2030

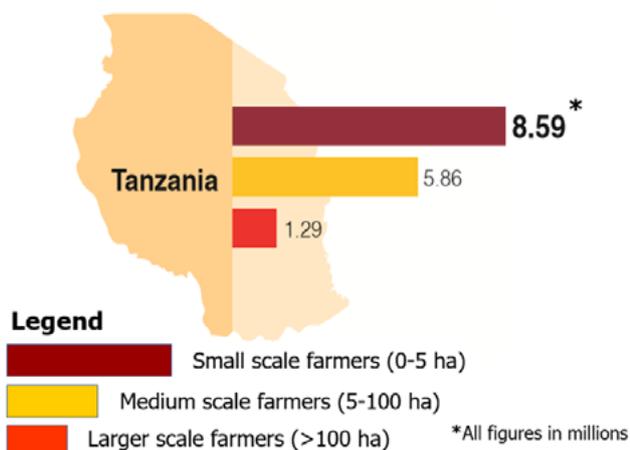
Agriculture for Food Security 2030
- Translating science into policy and practice



Overcoming barriers and seizing opportunities in Tanzanian smallholder farming

Agriculture is the backbone of Tanzanian economy contributing about a third of the country's GDP. It provides over 30% of all exports, employs more than 65% of the population, and accounts for about 75% of the incomes of rural households. The majority of farmers in Tanzania are smallholders, currently utilizing more than 80% of arable land in the country, and without mechanization. In addition, agriculture is primarily rainfed and suffers from low productivity. Smallholder farmers in Tanzania are vulnerable due to the small size of their farms, inadequate access to and use of modern agricultural technologies as well as low levels of income.

Food security in Tanzania is characterized by seasonal and regional food shortages. Currently, Tanzania ranks 94th out of 113 countries in the



Area controlled by small, medium and large-scale farmers in 2015 (from Jayne and Amey, 2016).

Key messages

- The main constraints for agricultural productivity and livestock keeping include limited access to inputs, markets and agricultural credit, high quality feed and agricultural extension services of high quality.
- The opportunities for smallholders to increase their productivity include engaging in high-value agricultural produce, enable the application of contract farming and use of drought tolerance crop varieties.
- The Tanzanian government should support an enabling environment for the agriculture and livestock sectors. It could increase access to stable markets for smallholder farmers and improve extensions services.

[Global Food Security Index](#) and one third of the population is undernourished, while underweight and wasting rates among children under the age of five remain high. This is linked to population increase, environmental degradation, urbanization and climatic change. To overcome these issues, and in agreement with achieving Sustainable Development Goal (SDG) 2 of zero hunger, decision-makers need to support



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Harvesting of seaweed in Tanzania.

smallholder farmers to transform and identify how this transformation can look like, in collaboration with scientists and the farmers.

Crops and livestock production in Tanzania

In Tanzania, about 24%, or 10.56 million hectares (ha), of the arable land (44 million ha) are used for crop production (food and cash crop). About 60-65% of the arable land is used for food crop production and the remaining area is allocated for cash crops. Maize is the most important cereal crop in Tanzania with annual production of about 6.7 million tonnes (MT), followed by cassava (4.9 MT) and rice (2.6 MT). Beans are the main source of crop protein and play a significant role in mitigating food and nutrition insecurity among smallholder farmers in Tanzania. Tobacco is the major cash crop, with over 0.7 MT produced in 2014, contributing US\$ 273 million or 36% of the country's foreign currency earnings. Cashew nuts is the second largest cash crop. In 2015, Tanzania exported 170,000 MT accounting about 24% of the total export worth US\$ 250.8 million. Coffee is the third most important cash crop (48,000 MT) accounting 14% or US\$ 115 million foreign currency earnings. In addition, livestock

keeping accounts for 3.8% of the country's GDP, and provides highly nutritious foods, such as milk, eggs and meat products, to Tanzanian households. The main livestock species kept are beef and dairy cattle, poultry, goats, sheep, and pig. Tanzania has the third largest cattle population in Africa, with over 24 million heads (in 2014) and these are kept almost entirely by smallholders, mainly pastoralists and agro-pastoralists on natural pastures. Likewise, smallholder farmers are keeping about 60% of Tanzanian poultry.

Constraints for agricultural productivity and food security

Although agriculture employs the majority of the Tanzanian people, it has failed to become an engine of growth for smallholder farmers and improve their livelihoods. Reasons behind this are for example:

1. **Production constraints:** This includes insecure land tenure, poor management practices, limited access to input and output markets as well as credit, inadequate agricultural extension services and low extension to farmer ratio (1:1500). This has been associated with limited technical capacity of extension services to

deliver agricultural information, practices and technologies to small-scale farmers and poor road infrastructure. Very few banks offer financial support (i.e. loans) to smallholder farmers due to low levels of guarantee that they can support their loans as well as high transaction and monitoring costs.

2. **Climate change and related food security challenges:** Climate change is already having and will have further significant impacts on agricultural productivity, and on the income and food security of smallholders in Tanzania. It is estimated that economic losses from climate change impacts on agriculture in Tanzania is around US\$200 million per year.
3. **Access to markets:** Physical access to markets is a major burden for smallholder farmers. Most roads are impassable at certain times of the year. This is undermining farmers' ability to sell their produce and buy agricultural inputs.
4. **Systemic constraints and upgrading opportunities:** This includes a lack of a business friendly environment. There are systemic barriers such as government policies, land-use policies and import and export tariffs that are limiting the development of farmers. Farmers are most often not well connected to the various levels of the value chain, from agricultural input, processors, and exporters to the local traders.

Ways forward for smallholder farmers

Smallholder farmers play a vital role in agricultural

production and food security in Tanzania. Despite the main constraints facing smallholder farmers, there are also many opportunities for them to move forward, importantly with the help of policy-makers. One such opportunity is to engage in production of high-value agricultural produce (HVA)- such as dairy, horticulture, floriculture, spices and aquaculture to increase household income and reduce poverty. HVA offers lucrative opportunities for employment, better access to credit, and technical support.

Other opportunities include better access to markets and competition among smallholder farmers. Improving competitiveness would push smallholder farmers to innovate and find ways to increase their production capacity.

Also, contract farming (a system where private sector firms provide smallholder farmers with inputs such as credit, seeds, fertilizers and technical assistance during the growing season in exchange for exclusive purchasing rights for the resulting crop) has the potential to link farmers to markets, give them access to credit and inputs, and to stimulate agricultural production.

Likewise, increasing private sector investment in agriculture, as well as improving private-public partnerships that promote agribusiness development among smallholder farmers, could be an avenue for improving food security, and reducing rural poverty. Lastly, climate change adaptation and mitigation



Poor road infrastructures can limit extension services to small-scale farmers.

strategies should be of highest priority. Farmers need to diversify their activities, adopt irrigation and water harvesting practices, improve the fertility of

the soil and use more drought tolerant crops. We also need to see an increase in the use of biofuels and a decrease in livestock production to reduce greenhouse gases.

Policy recommendations

To strengthen agricultural productivity and empower smallholder farmers in Tanzania, policy-makers can:

- support smallholder farmers through: strengthen extension services such as farmer field schools, promote skills development (e.g. management, entrepreneurship, and marketing skills), ensure farmers get access to market information, encourage farmers to produce more high value agricultural products, as well as reduce or abolish taxes on agricultural produce.
- enable contract farming: promote contract farming systems and link smallholder farmers with larger farms so they can gain better access to markets, and agricultural inputs such as seeds and agro-chemicals.
- provide financial services (credit, loans, and insurance): create a favourable policy environment to encourage financial institutions and mobile companies to invest in offering new financial products for smallholders farmers, and support them in e.g. formation of savings and loans groups.
- build and share capacity and research on climate change adaptation and mitigation strategies: policy-makers should invest in research to scale up existing local adaptation and mitigation strategies and to develop new ones, such as drought- and disease-resistant crop varieties, improved irrigation and water harvesting techniques, biogas and solar energy to reduce deforestation, and proper planting and harvesting dates.



Physical access to markets is a major burden for smallholder farmers.

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The brief is based on the AgriFoSe2030 report [Local and regional variations in conditions for agriculture and food security in Tanzania: A review](#). The objectives of the review were threefold: 1) to look at the distribution of key crops and livestock in the country, and 2) to identify constraints to increase agricultural productivity along agricultural value chains, and 3) to find ways for how policy-makers can help smallholders overcome these constraints.

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