

AgriFoSe2030

Agriculture for Food Security 2030

- Translating science into policy and practice









Opportunities and challenges for food security in Uganda

This study looks at the local and regional variations in conditions for smallholder agriculture and food security in Uganda. The sector faces challenges, such as climate change, crop/livestock diseases, weak extension system, land fragmentation and low soil fertility among others. To tackle some of these challenges, the Ugandan Government should increase the national annual budgetary allocations to the agricultural sector by 10%. In addition, the government should closely monitor the implementation of agricultural modernization programmes.

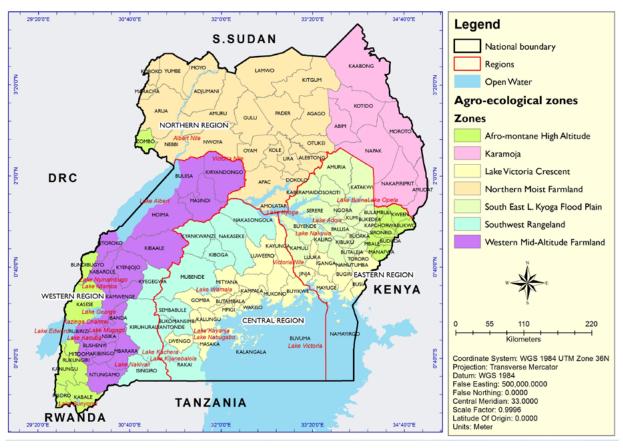
Uganda's smallholder agricultural sector

Uganda's agricultural sector is largely dominated by smallholder farmers, mostly engaged in crop farming and livestock rearing. Most of the farming activities are confined on land areas of less than 2 hectares, and farmers use a set of rudimentary tools such as pangas, handheld hoes and axes. Most of the farm produce is consumed at home, and the potential surplus is sold at local markets to meet the other necessities of the household. This growing smallholder- sector already today contributes to some 70% of the national agricultural production, despite a range of on-farm and off-farm challenges, including; climate change, crop/livestock diseases, land fragmentation, and depleted soils among others. These challenges are, in combination, limiting the country's competitive advantage of being a major food producer in East Africa, with fertile soils and

Key findings

- Crop farming and livestock rearing are facing threats such as water scarcity, weak extension system, underdeveloped road infrastructure, inadequate agroprocessing facilities, pests/vector and disease problems etc.
- Differences in food insecurity among smallholder farmers are caused by sociodemographic, economic and spatial factors such as education, poverty levels and remoteness
- Opportunities in the smallholder sector include provision of improved farm inputs and agrochemicals, increase market access, increased access to better agricultural management practices, investment in milk collection centres, and supply of milk tanks.
- Agricultural policies and programs favour large-scale farmers with incentives such as accessibility to land and tax exemption.

favourable agricultural climate. At the household level, the challenges are forcing farmers to change the way they live and to adapt to a new way of living, including migration, selling off livestock, reducing



Agriecological zones of Uganda.

their food consumption, and seeking food aid.

The women form the highest proportion of family members involved in smallholder farming and constitute the group most vulnerable to these changes. Presently, women make up more than half of Uganda's agricultural workforce, and a higher proportion of women (76%) than men (62%) are directly engaged in farming. Uganda's food insecurity situation is further complicated by the presence of more than 1 445 000 refugees from neighbouring countries (especially from South Sudan, Rwanda, Democratic Republic of Congo and Burundi), many of whom lack the means to produce or access food (Uganda Response Plan, 2018). As a result, parts of Uganda's farming population suffer from hunger, many adopt environmentally harmful strategies and experience a reduced quality of life, and many are in need of humanitarian aid. Over half of all agricultural production in the country is consumed domestically, because of low yields. However, food insecurity differences are influenced by socio-demographic, economic and spatial factors. These include age, education level of household members, household assets, access to non-agricultural income and size of landholdings. The food security gains recorded in the country largely arise from an improvement in the productivity of smallholder agriculture due to

rapid urbanization, provision of agrochemicals, free education and farmer trainings among others.

Distribution of key crops and livestock

The major key crops grown in Uganda are coffee, bananas, maize, beans, cassava and rice. Coffee and bananas are farmed in the highly productive highlands, located in the eastern (Mt. Elgon) and western (Mt. Rwenzori) regions, while the remaining crops have flourished in the flat plains and valleys (wetlands). The most common livestock kept by the smallholder farmers are cattle, goats, pigs and poultry. The cattle corridor (dry land) that stretches from north-eastern to south-western Uganda holds the highest numbers of livestock. The districts with the largest livestock herds are Kotido, Napak, Nakasongola and Isingiro.

Challenges for smallholder agricultural productivity

The crop and livestock sub-sectors are embroiled with challenges that have hampered productivity at different levels of the agricultural value chain. For instance, when cultivating the major food crops, the main challenges are; pests and diseases, limited access to improved varieties for planting, high

labour costs, weak extension services, shortage of local agroprocessing facilities, unpredictable and unfavourable weather conditions. The challenges for livestock farmers include low animal productivity, poor feeding and animal health; low adoption of improved management practices and technologies; inadequate infrastructure for the collection, storage and chilling of milk.

Institutional and policy frameworks

Due to the mounting challenges of increasing food security in Uganda, and the complexity of improving agricultural productivity, agricultural innovation is urgent and a functional public sector will be central in this regard. The public sectors in Uganda can broadly be categorized as (1) policy-making, (2) service delivery, and (3) oversight and accountability implemented by the various Government agencies and departments under the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and Ministry of Water and Environment (MWE).

The farming sector is guided by many institutional and policy frameworks, which have raised concerns about policy inconsistency and their actual impact on sector performance. The key policies, programs and strategies include the Sustainable Development Goals (SDGs), Comprehensive Africa Agriculture Development Programme, Vision 2040, the Second National Development Plan, Operation Wealth Creation, Uganda National Agriculture Policy, National Agricultural Extension Strategy, and Uganda

Nutrition Action Plan among others.

In addition, policies, laws, and regulations, although well-formulated, will not yield desired results unless responsible institutions and regulatory agencies are able to implement these effectively. Some of the key insights related to policy implementation recognized in this review are:

- Uganda has created a conducive agricultural environment that supports economic and agricultural growth aimed at reducing food insecurity, for example, agricultural equipment imported into the country is exempted from domestic taxes since 2010.
- The Ugandan agriculture sector is underfunded. Over the years, there is a widening financial gap. The agricultural domestic budget was projected to increase from 4.7% in 2011/12 to 5.2% in 2013/14; instead, it was reduced to 3.3%. This means that the sector has remained underfunded.
- Poor institutional planning in terms of jurisdiction and implementing obligations are still prevalent in the institutional framework of Uganda. This has created inefficiencies and duplication of roles between stakeholders, such as between the central and local Governments.
- Improved market availability for farmers can trigger enormous responses in agricultural production, also in small-scale farming systems.



Cattle rearing in the Kibuku district, Uganda.



A rice market in the Busembatia district, Uganda.

Opportunities in the agricultural sector

There are several opportunities to support smallholder farmers in Uganda and increase food security. These include:

- Investments are needed to increase access
 of smallholder farmers to technologies and
 interventions such as milk collection centres, milk
 supply tankers and pasteurized milk distribution
 systems. Informal actors needs to be upgraded
 to formal mini dairies, dairy plants, farming/
 processing dairy businesses and transportation
 tanker cleaning facilities.
- Improvements and investments in postharvesting handling and value addition which needs to be comprehensively carried out throughout the country.
- Training and increase of knowledge access: Both smallholder farmers and local agroprocessing actors need to be trained on agricultural value addition and assisted in procuring and using agro-processing equipment to improve standards and access to markets.
- Supporting farmers in changing their farm produce towards higher-value foods like fruits and vegetables.
- Investments and improvement of road networks, transport systems and setting up modern market infrastructure (i.e. slaughter slabs/abattoirs) through increased public/private investments.

Policy recommendations for improved agriculture in Uganda

To increase the local and regional productivity of crop and livestock farmers, the Ugandan Government should allocate 10% budget to agriculture yearly, in agreement with declarations such as African Union 2003 Maputo Declaration on Agriculture and Food Security which Uganda signed. This investment should be allocated to:

- Increase the income of smallholder farmers: the Government should help the development of markets, storage facilities, agroprocessing plants and value chains.
- Reduce crop and livestock diseases:
 the Government should provide farmer
 trainings and support effective weed
 and crop/livestock disease management
 (e.g. sustainable intensification practices
 including appropriate use of pesticides and
 animal vaccination services and disease
 vector control etc.).
- Increase access to stable markets for smallholder farmers.
- Government support for farmers to form cooperatives to increase their bargaining power and access to market information.
- Reduce duplication of responsibilities between the national ministry for agricultural and local Governments: the national Government could potentially merge some agencies/ministries to reduce expenses.

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