



NEC Policy Brief

FOOD SECURITY, ENVIRONMENTAL SUSTAINABILITY, AND BUILDING RESILIENCE IN SOMALIA¹

1. Executive Summary

Agriculture forms a significant part of the economy of Somalia. It contributes toward achieving major national priorities, such as eradicating poverty and hunger, boosting local and international trade and investments, economic diversification, sustainable natural resource, and environmental management, and creating jobs and shared prosperity. However, the sector is underdeveloped and constrained by a number of factors, including conflict, unpredictable and extreme weather patterns, underdeveloped and fragmented markets, poor value addition, and lack of access to quality inputs such as seeds, fertilizers, and animal vaccines. Other challenges in the sector include pre-and post-harvest losses, limited access to financial services, low public funding, limited capacities of rural financial services, gender inequality, and limited youth participation.

In addition, deforestation activities that create vast desertification and rangeland degradation in many parts of the country, unsustainable use of land resources, including land fragmentation, free-grazing, and illegal enclosure of land are critical factors that have significantly impacted people's capacity to withstand droughts.

Promoting agricultural productivity growth is essential in developing durable solutions to food crises and pervasive unemployment in Somalia. Reviving the agricultural sector will require significant investments in infrastructure rehabilitation; expansion of primary production

and market value through better and more modern input supplies (seeds and agrochemicals), production methods, transport and storage links; value addition through processing to provide the population with new income-generating opportunities through enhancing rural non-farm activities; improvement of the policy process and regulatory frameworks for agriculture; narrowing gender gap to unlock the productive potential of women, and strengthening financial institutions.

1. Introduction

The agricultural sector is a priority development area in Somalia, focusing on food security while sustainably managing the natural resources and protecting the environment. It contributes toward achieving major national priorities, such as eradicating poverty and hunger, boosting trade and investments, rapid industrialization and economic diversification, sustainable natural resource and environmental management, creating jobs, and shared prosperity. The sector remains the dominant component of the economy of Somalia, contributing over 90% of the country's total exports, 60% of its GDP², and employing over 45% of the active labor force³.

Somalia has been traditionally a pastoral society with livestock rearing part and parcel of the economy and society. Somalia's terrain consists

¹ Fredu Nega Tegebu, June 2022

² World Bank and FAO (2018) Rebuilding Resilience and Sustainable Agriculture in Somalia. Somalia Country Economic Memorandum, Volume I.

³ World Bank (2020) Somalia, Country Environmental Analysis: Diagnostic study on trends and threats for environmental and natural resource challenges.



mainly of plateaus, plains, and highlands with a year-round hot climate with sporadic rainfall. This has resulted in arid and semi-arid lands where livestock becomes a vital source of livelihood. Livestock provides a source of income as well as food in the form of meat and other animal products like milk which is an integral part of food security. The pastoral communities get their calories from milk and meat consumption and also support the families through sales of animals for their cereal and non-cereal foodstuffs. According to a UNFPA report of 2014, an estimated 26% of the Somali population are classified as nomads, for whom the livestock sub-sector is the sole source of livelihood⁴. It is estimated that around 65% of the population in some way or the other is dependent on the livestock subsector⁵.

Agro pastoralism is the second-largest practiced livelihood strategy in Somalia. Located primarily in semi-arid areas, agropastoral households engage in both crop production and livestock keeping. The crops grown include sorghum, maize, groundnuts, cowpeas, mung beans, sesame, and vegetables. These crops provide food for human consumption and animal fodder. Moreover, Irrigated agriculture is practiced in the floodplains along the permanent rivers in south Somalia (the Juba and the Shabelle) and along the seasonal streams and springs. In northern Somalia, water is available within pockets of deep soil for irrigated orchards or from shallow wells and springs, which are the major sources of water for crop irrigation, with water pumped to the fields. Irrigated crops grown on a small scale include maize, sesame, fruit trees, and vegetables, while crops such as bananas, guava, lemon, mango, and papaya are grown on a larger scale for domestic consumption.

In addition to cropping and livestock activities, fishing, forestry, agricultural labor, and non-farm activities also represent key livelihoods in Somalia. The diverse production systems determine the livelihoods of local populations.

2. Challenges and Opportunities for agriculture development and resilience building in Somalia

The agricultural sector in Somalia has many constraints and challenges that hinder sustainable development and economic growth. The underlying causes and effects of the major aspects of challenges and opportunities in agricultural development and resilience building in Somalia include

Poor infrastructure and institutions: Since the outbreak of the civil war in the southern regions, all infrastructures to harness river water and rainwater and extract groundwater have severely deteriorated as a result of lack of regular maintenance and repairs, prolonged insecurity, weak government institutions, and the absence of effective community organizations. This has affected the availability of water both for livestock and crop irrigation. Without largescale rehabilitation and new investments in water infrastructure and better management, the scarcity of water for sustaining livestock, raising crops, and serving household needs will only worsen. These problems will only worsen as population growth and the associated demand for water intensify. Besides harnessing river and rainwater and groundwater, floods, poor irrigation, and road network are hampering agricultural productivity.

Narrowing gender gaps in agriculture is essential in order to unlock the productivity potential of women as food producers: Women actively participate and engage in a number of agricultural value chains from production to sale and end-use of the produce. They are especially

⁴ UNFPA (2014) Population Estimation Survey 2014

⁵ UNIDO (United Nations Industrial Development Organization) (2021) Sub-Sector Mapping and Value Chain

Analysis of the Livestock Sub-Sector in Somalia, Technical Report, Mogadishu.



involved in value chains that require less land, skills, and capital, where production cycles are short (for example, quickly maturing crops) and profits low but recurring, while the more capital or land-intensive value chains mostly involve men. Women in Somalia face severe constraints in access to productive resources and services that hinder their productivity and limit their returns. Women's productivity in Somalia has been constrained by weak land tenure and limited access to agricultural information services, especially compared to men, with negative implications for food security, rural poverty, and overall economic growth. Women in Somalia are also heavily burdened by their double role as workers and family care providers, which limits their time and mobility to engage in more productive work. Other constraints that agricultural women face include lack of access to financial resources; extreme time poverty linked to domestic and reproductive constraints; insufficient market research on viable opportunities; and lack of access to formal networks to provide business guidance.

Diversification into rural non-farm (RNF) builds resilience, but the sector is underdeveloped in Somalia: The development of a strong rural non-farm (RNF) sector is of basic support for the creation and strengthening of an effective rural economy. It is also a relevant source of income for rural households, especially for the landless poor as well as for rural town residents. A strong and well-thought-out rural non-farm initiative does not exist in Somalia, and this needs to be reversed. The weaknesses in the sector must be addressed in order to improve the implementation of RNF initiatives in the country. Although strong limitations can be identified, a high potential for rural micro-enterprises development in Somalia exists in relation to: diversification, value addition to agriculture and agroforestry products, access to rural finance, technologies, and capacity building.

Enhancing environmental sustainability and climate adaptation for resilience building: The environment provides virtually all the assets on which contemporary Somali life depends. It is the

foundation for sustainable development in Somalia. Environmental goods and services underpin the livelihoods plans and strategies of the people. This may be realized but is too easily assumed and not actively integrated into rural peoples' strategies.

The country is vulnerable to droughts due to various social-economic and environmental factors, including the reliance on natural resources. The unsustainable exploitation of natural resources, especially forests and grasslands, has greatly amplified the country's vulnerability to weather shocks and climate change. By threatening the long-term viability of the already fragile ecosystems underpinning Somali agriculture, climate change poses a huge and unprecedented challenge for the country's weak institutions and limited capacity. In the absence of substantial investment in adaptation to make agricultural systems more climate-resilient, there is little scope for broader economic recovery or growth.

Lack of effective institutions and capacity in the agricultural policymaking process: although limited improvements in agricultural policymaking processes have been made in the last decade in Somalia, overall, available technical capacities; resources; coordination, and harmonization of agricultural and food security policy; clearly defined overarching policy framework to guide action in the agricultural sector to improve agricultural productivity, increase production, boost food security and enhance nutrition; and effective systems to monitor policy implementation and results in the agricultural sector are still insufficient and not well-coordinated.



3. Food insecurity and vulnerability to food insecurity are high in Somalia.

The humanitarian situation in Somalia is among the most complex and protracted emergencies globally. The population is exposed to multiple hazards and shocks, particularly recurrent droughts and floods, which have increased in frequency and severity because of seasonal climate variability. In addition, there are economic shocks, conflict, insecurity, and inter-communal violence, which collectively continue to restrict livelihoods, trade, and market functioning while contributing to population displacements, a vicious cycle of poverty, and vulnerability to food and nutrition insecurity.

Moreover, inadequate enforcement of disaster risk management and mitigation policies aimed at addressing climate change impacts to help build household and community resilience remains a critical gap. At the local community level, there are weak governance structures and a lack of basic services, financial, technical, and informational resources necessary to build resilience to food insecurity. As a result, every year, millions go hungry, requiring urgent actions to prevent food consumption gaps and acute malnutrition. The following figure indicates the population in Crisis (IPC Phase 3) and Emergency (IPC Phase 4) over the period 2016 – 2021. It indicates that million go hungry every year and the number of people in crisis is often higher during the post-Deyr (Jalaal) season than post-Gu (Xagaa) season for most of the years except for 2017 and 2019.

Food insecurity is more frequent and intense in parts of regions in the north (Awdal, Bari, Sool, Sanaag, Togdheer, and W. Galbeed), center (Galgaduud, Hiiraan, and South Mudug), and

south (Bay, Bakol, Gedo, Lower Sabelle and Lower/Middle Juba) and among IDP populations mainly concentrated around urban centers.

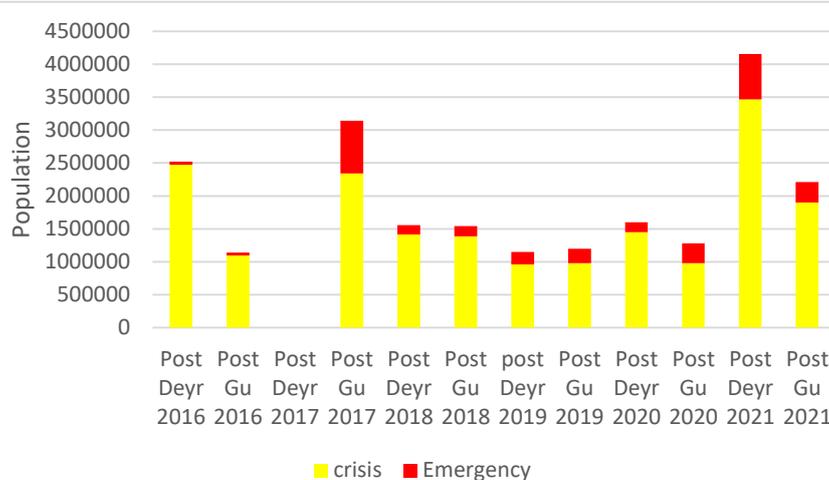


Figure1: Somalia population in crisis and emergency, 2016- 2021

Given the limited capacity to withstand shocks and stressors, coupled with the

- Source: FSNAU

- Note: Values for post-Deyr 2021 are projected figures,

frequency of droughts and flooding, food insecurity is likely to continue to rise in the absence of assistance.

4. Conclusion

Despite these prolonged challenges, the crop and livestock sectors remain Somalia's main sources of economic activity, employment, and exports, critical to economic recovery and long-term development. The country's vast landmass contains a variety of agro-ecological zones that, with proper attention, could support expanded and more efficient production for both domestic and export markets. There are large areas suitable for grazing and fodder production for livestock, as well as others with fertile alluvial soils for staple cereals, oil seeds, legumes, and horticultural crops. Somalia's forests provide gum and resin for both export and local markets and charcoal for cooking. Restoring the forestry sector after recurrent drought and improving



overall performance will not only strengthen and sustain economic development but also help cement peace and security.

Promoting agricultural productivity growth is essential for developing youth livelihoods. Rapid agricultural sector growth will absorb a large share of the rapid labor force growth while increasing sector incomes. It also helps the rural non-farm sector absorb labor sustainably. Given the high proportion of youth in Somalia, it is not possible for the country to create enough new employment opportunities outside the agricultural and broader Agri-Food System (AFS) sectors for all the youth expected to enter the labor force. Evidence elsewhere in Africa shows that where the AFS sectors offer opportunities to earn a decent living, youth enter, which benefits the AFS sectors as African youth today have more education than their parents and can be early adopters of new technology developed by local R&D systems.

5. Recommendation

- ❖ Low levels of resilience and chronic challenges to the agricultural (crops and livestock) sectors were found to be key issues facing many rural households. Consequently, support programs that improve food availability at the household level and stabilize access for the most food-insecure populations alongside resilience building are required. This could include activities that enhance access to agricultural assets, complemented by advisory services, including agropastoral field schools. Particular attention shall be given to the reduction of post-harvest losses by enhancing post-harvest technologies, such as improved storage techniques and structures at a farm or household levels, as well as through the promotion of improved technologies for milling and processing.
- ❖ Address challenges related to rainfall variations, which make rainfed agriculture unreliable and render agricultural households vulnerable to climatic shocks. Invest over the long term in irrigation infrastructure and equipment, water infrastructure for domestic consumption and livestock rearing.
- ❖ To be able to make adaptations to an increasingly changing climate, with more extreme and frequent droughts and floods, it is critical to work on improvements in catchment management resulting in improved water retentions; a greater emphasis on increasingly drought-tolerant species; and a reduced emphasis on rain-fed cultivation in such already risk-prone environments. Risk management and mitigation, combined with the enhancement of the resilience of the land use natural resource systems, are critical social strategies upon which Somalia's land use should be based.
- ❖ Incentivizing expansion of rural non-farm (RNF) activities according to the principle of livelihood diversification. There is a shared indication that RNF initiatives can strongly contribute to eradicating extreme poverty and hunger, promoting gender equity and empowerment, ensuring environmental sustainability, and building resilience. In order to tap into the comparative advantage and potential market demand, RNF activities should be designed in accordance with the skills base and project area.
- ❖ To be effective, agricultural and food policies, programs, and projects should be designed through an inclusive and participatory process that embraces dialogue, coordination, cooperation, and partnership between stakeholders (especially farmers and the private



sector) and the government, and the use of evidence to address institutional dimensions, i.e., resources should be invested in the planning, implementation, and monitoring and evaluation system of agricultural policies.

- ❖ Narrowing gender gaps in agriculture to unlock the productive potential of women to enhance food production and build resilience. This involves:
 - ❖ Prioritizing women in vocational training would enable them to get involved along with more lucrative value-adding nodes of selected value chains such as dairy production, drying, and storage techniques, marketing skills, and fruit juice production.
 - ❖ Greater employment of female extension agents should be encouraged in financial institutions, business services, investment services, and agricultural extension services to better handle outreach to women
 - ❖ Training in agricultural-related skills and distribution of agricultural inputs should be carried out, targeting women in the same way as men.
 - ❖ Time-saving, women-friendly technologies that ease women's workloads should be developed and available to women in rural areas.