

# A Policy Brief on the State of Agricultural Production and Food Security in Somalia





NATIONAL ECONOMIC COUNCIL (NEC) of SOMALIA

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# **Foreword**

This policy brief on agriculture and food security in Somalia outlines the most pressing issues and potential in this critical sector. Despite the challenges of climate change and conflict, Somalia's agriculture has enormous potential to drive economic growth and assure food security.

This brief, generated via joint efforts, provides actionable solutions to improve agricultural productivity and resilience, as well as a road map for long-term growth. Its goal is to provide essential insights into how the agriculture sector may be used to achieve food security and long-term development in Somalia. At this critical juncture, the insights in this brief provide a route forward for transforming agriculture into a driver of economic growth, food security, and prosperity for all Somalis.

I am grateful to the dedicated contributors from academia, thematic experts and policymakers who made the issuing of this policy brief possible. Together, we can create a more safe and prosperous future for Somalia.

Hassan Adam Hosow

Chief Economic Advisor to the President of Somalia Executive Director, National Economic Council

# **Executive Summary**

This policy brief examines the state of agriculture and food security in Somalia, focusing on recent developments, challenges, and potential opportunities of this sector. Food security refers to the consistent access to sufficient, safe, and nutritious food to meet dietary needs and preferences for an active and healthy life. It encompasses several dimensions, including the availability, accessibility, utilization, and stability of food sources. Achieving food security is a complex challenge influenced by various factors such as climate change, population growth, economic disparities, and global trade policies. Ensuring food security is vital for eradicating hunger and malnutrition, promoting public health, and fostering social stability.

The primary crops grown in Somalia are maize, sorghum, and beans, but crop yields are often low due to limited access to modern practices, irrigation, and seeds. The livestock sector is vital for the economy and culture. Somalia has a history of food insecurity and malnutrition due to factors like droughts, conflicts, and economic instability. The Somali government has started initiatives to enhance food security, improve agricultural practices, and increase climate change resilience.

The transition to a private sector-led agriculture economy requires thoughtful policy considerations and regulatory frameworks to ensure equitable, sustainable, and inclusive growth in the agricultural sector. Balancing private sector dynamism and public sector stewardship is crucial for achieving desired outcomes of increased agricultural productivity, economic growth, and improved livelihoods for all stakeholders. Somalia's agricultural production system is divided into subsistence rain-fed farming, small-scale irrigation and oasis farming, and commercial farming.

Climate change, instability, protracted conflicts, ecological destruction, a lack of investment, and inadequate infrastructure continue to negatively impact food systems. The current food crisis in Somalia is the worst in decades, with severe droughts killing livestock and resulting in crop failures.

Policy recommendations include accelerating the formulation and implementation of the national agricultural development plan, introducing agricultural policies and farmer rights regulations, limiting food aid distribution, returning IDPs to their farmlands, encouraging youth- and women-led initiatives for agriculture development and environmental conservation, and forming agricultural quarantine regulations and standards. Efforts to enhance food security also include sustainable agricultural practices, equitable food distribution systems, food fortification, and nutrition education. Additionally, building resilience against shocks like droughts or economic crises is essential.

## 1. Introduction

This analytical study provides an in-depth analysis of the state of agriculture in Somalia, with a focus on recent developments, challenges, and potential opportunities. Somalia's agriculture sector plays a pivotal role in the country's economy, food security, and livelihoods. However, it faces a complex web of challenges, including droughts, conflict, limited infrastructure, and the impacts of climate change. This study examines these issues and explores potential avenues for improvement.

# 2. Current State of Agriculture and Food Security

Somalia has a rich history of agricultural traditions, including crop cultivation and livestock farming. The sector has been the backbone of the economy and a source of livelihood for the majority of the population. Maize, sorghum, and beans are the primary crops grown in Somalia. Crop yields are often low due to limited access to modern agricultural practices, irrigation, and seeds.

Somalia is known for its large livestock sector, with camels, goats, and sheep being prominent. Livestock farming is vital for the economy and culture, with exports primarily to Middle Eastern markets. However, the sector faces several challenges, including frequent droughts, climate change impacts, political instability, conflict-induced displacement, limited access to modern farming technologies, and infrastructure deficits.

Somalia has a history of food insecurity and malnutrition due to various factors, including droughts, conflicts, and economic instability. Humanitarian agencies often provide food aid to vulnerable populations. Albeit, The Somali government, supported by international donors and organizations, has launched initiatives to improve agricultural practices, enhance food security, and build resilience to climate change. These efforts include seed distribution, training in modern farming techniques, and water infrastructure development. Various international organizations and donors have been involved in agricultural development projects and programs to help Somali farmers

improve their livelihoods and overcome challenges.

Promising opportunities, nevertheless, are promoting climate-resilient agricultural practices, such as drought-resistant crop varieties and improved water management, which can help mitigate the impact of recurrent droughts. Increasing investment in agricultural infrastructure, including irrigation systems and transportation networks, can improve access to markets and boost agricultural productivity, and encouraging crop diversification beyond traditional staples can enhance food security and reduce vulnerability to climate-related shocks.

Nonetheless, the state of agriculture in Somalia reflects a sector with enormous potential but plagued by numerous challenges. Addressing these challenges, including climate change adaptation, conflict resolution, and infrastructure development, is crucial to unlocking the full potential of agriculture in the country. International support and sustained efforts by the Somali government are vital to achieving food security and economic stability in Somalia.

# 3. Private Sector-led Agriculture

The concept of a private sector-led agriculture economy represents a significant shift in the approach to agricultural development and management. Historically, Somalia's agricultural system has been characterized by varying degrees of government intervention and control, with state agencies playing a central role in the planning, production, distribution, and pricing of agricultural products. However, in recent decades, there has been a growing recognition of the potential benefits of the private sector to take a leading role in shaping agricultural systems. Hence, a private sector-led agriculture economy is characterized by a shift in ownership, investment, and decision-making power from the public sector to private individuals, businesses, and organizations. In such a system, market forces, rather than government planning, guide choices about what crops to grow, how much to produce, where to sell products, and at what prices. This transition toward greater private sector involvement is often driven by the belief that market-oriented approaches can lead to increased efficiency, innovation, and economic growth in the agricultural sector.

This shift does not imply the complete absence of government involvement; rather, it emphasizes a rebalancing of roles, with governments focusing on creating an enabling environment, setting regulations, and ensuring equitable access to resources and markets. Meanwhile, the private sector, including smallholder farmers, agribusinesses, cooperatives, and large agricultural corporations, plays a more active role in the day-to-day activities of agriculture in the country.

Despite Somalia's deficiency in these components, numerous research studies state that key components of a private sector-led agriculture economy include competition among various actors in the value chain, private investment in research and technology, and a focus on profit generation. This approach can lead to increased productivity, job creation, and economic growth, making it an attractive model for many countries seeking to transform their agricultural sectors.

However, challenges arise in areas such as equity, environmental sustainability, and regulation, and ensuring that small-scale farmers and marginalized groups have equitable access to resources, markets, and benefits can be a significant challenge. Moreover, private sector-driven agriculture must address environmental concerns, such as the overuse of resources and land degradation and effective government regulation is necessary to prevent market exploitation, ensure food safety, and address externalities like environmental degradation.

The transition to a private sector-led agriculture economy represents a fundamental shift in the way agriculture is managed and developed. It offers numerous potential benefits, but also poses challenges that require thoughtful policy considerations and regulatory frameworks to ensure equitable, sustainable, and inclusive growth in the agricultural sector. The balance between private sector dynamism and public sector stewardship is crucial for achieving the desired outcomes of increased agricultural productivity, economic growth, and improved livelihoods for all stakeholders.

# 4. A Brief Overview of Agriculture context in Somalia

The agriculture sector is a significant economic activity and contributes significantly to the national GDP of Somalia, where many people rely on agricultural practices because one in two Somalis depend on agriculture for their livelihoods, and the agricultural sector accounts for a significant component of Somalia's GDP and exports. Although every government struggles to achieve self-independence through food security, which is regarded as a global issue. Historically, the concept of food security first came to light in the middle of the 1970s, during dialogues about the global food crises (ODI. 1997). However, there are numerous definitions for food security that were introduced for the first time in 1974 at the World Food Summit, with an estimated 200 definitions. Thus, food security was defined as "the availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices". (United Nations, 1975). Even though a widely accepted definition of food security was formulated at the World Food Summit in 1996, "Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life". From this definition, four dimensions of food security are derived: food availability, food access, food utilization, and food stability. (FAO, World Food Summit, 1996).

The majority of African nations, including Somalia, are suffering from constant political unrest, instability, and social injustices, which worsen food insecurity and food availability. According to the Integrated Food Security Phase Classification, it was anticipated that 6.6 million people in Somalia would have high levels of acute food insecurity in the year of 2023. Nonetheless, it is important to note that boosting agricultural output is a key factor in curbing hunger and poverty in Africa. For instance, it was learned that agriculture as a whole has contributed to eliminating poverty and is a major source of jobs in Ethiopian communities (Deron & Christiansen, 2011). Note that despite the

fact that Somalia has experienced long-running conflicts, frequent droughts, and political unrest, these circumstances have negatively impacted agricultural productivity, increased the prevalence of food insecurity, and caused economic instability.

# 5. Agriculture Productivity and Food Security in Somalia

Somalia's economy depends predominantly on agriculture. Although the nation has an abundance of fertile land, only a small portion of it is actually used for agricultural practices. Agriculture is the second-most popular activity across the country. In Somalia, agro-pastoralists and settled farmers live in areas with stable water sources, while nomadic pastoralists frequently move with their animals depending on the availability of water and pasture (FAO, 2014). Therefore, around sixty percent of Somalis are pastoralists, living a nomadic or semi-nomadic lifestyle and raising livestock, including camels, sheep, and goats. About 25% of the population who lives in southern Somalia's fertile agricultural region between the Juba and Shabelle Rivers a permanent (settled) farmer. The remaining portion of the population—nearly 15%-resides in urban areas.

A country's level of food security is correlated with its level of agricultural production. The countries

with enhanced food security are those that place a high priority on the development of agricultural productivity strategies, including farming practices and animal husbandry.

Mellor (2001) mentioned that the reduction in poverty can be accomplished through overall growth in the economy; hence, the direct impact of an increase in agricultural production is a major contribution to the decrease in that poverty. More sustainable food security is attained, and the rate of hunger decreases as long as a country produces more agricultural output.

In general, Somalia has a bimodal agricultural system with two agricultural seasons: The Gu season, which is marked by rainfall between April and June, and the Deyr season, which is rainy between October and December. From December to mid-March, the Jilaal has warm, sunny, and dry weather. The cold, gloomy, and dry Haggai season begins in July and extends through mid-September (FAO, 2021). However, it is important to remember that the ideal seasons for cultivation and harvesting can change based on the specific crop and location.

Typically, the Gu receives more rainfall per season than the Deyr rains. Seasonal rainfall is irregular from year to year in terms of timing and amount.

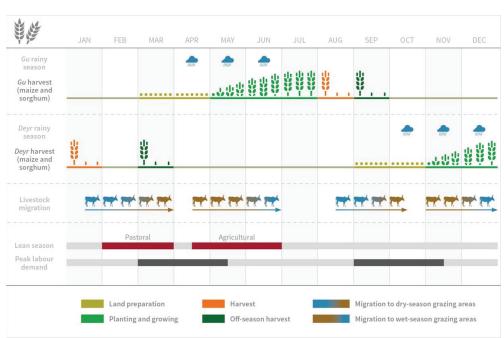


Figure 1: Seasons for cultivation and harvesting in Somalia.

Source: FAO. 2021.

The most important agricultural regions in Somalia are in the south, where the climate is more favorable for agriculture. The agricultural production system in Somalia can be divided into three categories: (a) subsistence rain-fed farming, which is frequently a component of agro-pastoral production systems, with a typical farm size of 2-4 ha; (b) small-scale irrigation and oasis farming; and (c) commercial farming, which is primarily large-scale and irrigated (FAO, 2014).

The most common type of agriculture in the country is rain-fed, so usually, rain-fed areas are used for cultivating field crops including sorghum, maize, soybeans, and sesame. These crops can tolerate extreme and dry weather and are generally drought-tolerant. Horticultural crops such as bananas, onions, spinach, and carrots are commonly

produced in irrigated areas because they are more vulnerable to water shortages than other crops.

According to the World Food Program (WFP), with 17.1 million people, Somalia is considered a low-income, food-insecure nation. While making less than \$1.90 per day, 70% of Somalis live in poverty. Climate change, instability, protracted conflicts, ecological destruction, a lack of investment, and inadequate infrastructure, however, continue to have a negative impact on food systems. (WFP, 2022).

Acute food insecurity significantly rose in 2022 and 2023, according to the Global Report on Food Crisis (GRFC), which stated that from 2016 to 2023, Somalia's level of food insecurity increased thus deteriorating the situation.

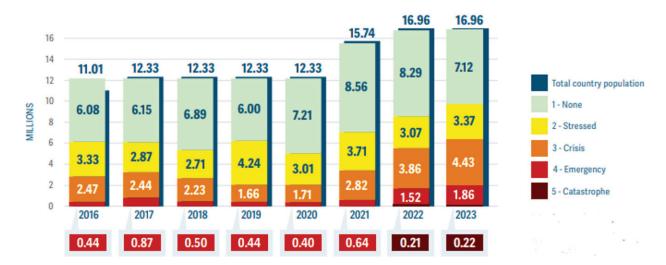


Figure 2: Level of food insecurity in Somalia (2016-2023)

Source: GRFC,2023

Nevertheless, the current food crisis in Somalia is the worst in decades. The entire country is currently being affected by a severe drought that has killed livestock and resulted in crop failures. Conflicts and economic difficulties have further exacerbated the drought. Millions of people in Somalia now face extreme food insecurity as a result of this.

It goes without saying that the growing effects of deficit agriculture production and food insecurity on

the economy have given rise to serious concerns. However, these consequences have had a negative influence on national economic development and vulnerable Somali communities at large.

# 6. Challenges

Due to decades of ongoing conflict, Somalia faces unique challenges to agricultural productivity and food security. But as the difficulties expanded across the nation, the country kept experiencing severe droughts, which in turn caused a number of humanitarian crises, displacements, and waves of immigration.

# 6.1 Climate Change and Environmental Degradation

Somalia has been grappling with climate change and its environmental implications. Many regions across the country have suffered from the adverse effects of climate change in the areas of food security, agriculture, livestock, water resources, and displacement, and this has resulted in a deterioration of socioeconomic and security status.

Deforestation is one of the most alarming indicators of climate change in Somalia. As vegetation declined by 429,000 hectares between 2001 and 2021, or 4.9%, resulting in 840,000 tons of emissions equal to carbon dioxide. (blogs.worldbank.org).

Somalia faces significant challenges in increasing food production due to its geographical location, changes in the climate, and outbreaks of disease. The country faces serious environmental threats to food security; however, Lal, R. (2011) studied that soil erosion poses a threat to food security and biodiversity, particularly in underdeveloped regions of Africa where residents lack access to agricultural inputs like fertilizers. Moreover, Understanding the specific factors involved in agricultural growth helps to determine the impact of land degradation and environmental changes on agricultural productivity in the country (Ahrorov & Niyazov 2015).

The insufficient agricultural output in Somalia is mostly due to hideous agronomic practices like burning animal manure and not preserving soil and water (Omuto et al., 2011).

Somalia is particularly vulnerable to the effects of climate change and extreme weather, such as droughts, floods, erratic rainfall, and other catastrophes.

As alluded to above, agriculture, including livestock, is a major component of the national economy of the country as the Somali population is considered an agro-pastoral people. However, Somalia has two rivers, namely Shabelle and Jubba, and the

riverine areas are susceptible to frequent floods, droughts, and displacement.

According to IMF, whenever severe weather affects agricultural production, subsistence farmers have less to eat for themselves and are unable to buy food elsewhere due to high food prices. However, poorer households are particularly impacted by food shortages and inflation, and this escalates inequality by lowering income and purchasing power. Many of the root causes of Somalia's current climate volatility and its implications, as well as the nation's lack of ability to adapt to climate change, are interconnected.

The vast majority of Somali farmers depend on rain-fed farming, similar to the large portion of the population in Sub-Saharan Africa that lives in rural areas and relies on weather-sensitive activities like rain-fed agriculture, herding, and fishing for their earnings (IMF, 2022). Nevertheless, every country in the world faces significant ecological threats, making climate change unquestionably a global concern. There has been a huge negative impact on the whole country of Somalia due to the ongoing phenomenon of climate change.

Climate change is certainly a global issue because it poses serious ecological threats to every country in the world. The continuous phenomenon of climate change in the country has had a profoundly detrimental effect on the entire population. This effect is particularly dire in rural areas, where people are facing widespread crop failures and livestock deaths. Furthermore, climate change has led to a sixth consecutive failed rainy season that has resulted in droughts in the country, as most of the people are overly dependent on agriculture and rearing livestock. However, this caused the deterioration of the economy and price fluctuations.

# **6.2 Government Engagement**

Somalia has been in a state of war, instability, and misery since the ousting of the former government in 1991. Since the agricultural sector is a government-dependent sector, a vacuum in the Somali government's support for agricultural production has resulted in decades of deterioration in the nation's level of food security.

In this regard, these are the primary roles that the government is required to accomplish with the objective of promoting the development of the agricultural sector and ensuring national food security:

## **6.3 Government Subsidies**

The pursuit of ensuring food security is the national priority of any country; thus, agriculture production in the country is not as ideal as many would like it to be. Unfortunately, only a few businesses and sectors are receiving financing from private investors to support smallholder farmers through investment means. The majority of agricultural cooperatives have difficulty finding advanced agricultural tools and farming inputs like tractors, seeds, fertilizers, and chemicals. Although some small-scale farmers manage to get these inputs by renting the necessary equipment, this will burden them financially. This is due to the reality that they will need to pay a daily or hourly rental cost, which may be a significant expense.

It is worth recalling that farmers are one of the main driving forces of national economic development in agriculture-based countries as Tiffin, and Irz, (2006) noted that it is commonly known that the value added generated by workers in agriculture has an advantageous effect on the growth of per capita income in emerging nations, as agriculture is the main driving force of economic development.

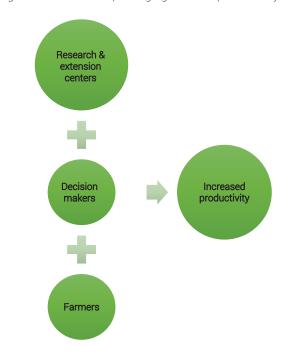
Therefore, it is necessary to strengthen government support for the agricultural sector in the country, i.e., the federal government must allocate at least the highest percentage of the total national budget to agriculture development. This will increase national agricultural production and end the country's persistent food insecurity and drought concerns. The agriculture sector in any country is a government-funded sector, and its development depends on how the government provides unwavering support and unlimited funding. But since the country is recovering from long-term instability and civil war and the state-building process is still underway, funding by the government in the farming sector will be challenging.

### 6.4 Research and Extension Centers

Over the past three decades, Somalia has faced a variety of impediments and bottlenecks that have hindered its economic development. The agricultural sector in Somalia has been severely impacted by the instability that has swept throughout the country. The agricultural sector has been significantly impacted by the country's political unrest and instability. As a result, crop yields have declined, and food insecurity has increased. This instability has made it difficult for farmers to access essential information, improve needed skills, and gain the necessary inputs.

Apart from the Ministry of Agriculture, Somalia has no other government-run institutions or research and extension centers. As a result, the farmers, stakeholders, and decision-makers were not given the proper consultation or guidance on agricultural-related issues.

Figure 3: Model for improving agricultural productivity.



Source: Author

Moreover, the research and extension centers play a dynamic role in the dissemination of agricultural delivery among farmers and publish studies on agriculture and food-related fields. Nevertheless, there is a pressing need for the creation of specialized governmental agricultural research centers across the nation with the goal of issuing agricultural-related studies, providing extension and advisory services to farmers, and guiding the stakeholders and decision-makers of the nation about agricultural and food system policies.

However, the role of research and extension institutions is essential to boosting agricultural production and food security. By utilizing cutting-edge agricultural technologies and methods, which can subsequently be spread among farmers, farmers can increase their yields, incomes, and resilience to climate change and other concerns.

# 7. Policy Recommendations:

The lack of optimum productivity in agriculture is the main cause of food insecurity and food shortages, and addressing this issue is a pressing need for achieving sustainable food security. Removing barriers, therefore, entails the collective action of all public and private actors in the country. Hence, improving agricultural production is a milestone in the lives of people and an indicator of the well-being of any population.

On top of that, the following recommendations can help the country mitigate the implications and improve the agriculture sector with the aim of becoming a food-secure and prosperous nation.

- A. Acceleration, formulation, and implementation of the national agricultural development plan in alignment with the 9th national development plan (NDP-9) that draws the nation's blueprint towards economic evolution, hunger reduction, and poverty eradication.
- B. Introducing agricultural policies and farmer rights regulations plays a crucial role in protecting farmers, encouraging agricultural productivity, and attracting foreign direct investment. However, in some parts of the country, agropastoral communities and farmers constantly face massive land seizures and violations of human rights. This can devastate farmers, forcing them to leave their territory and stop practicing farming.

- C. Limiting food aid distribution can contribute positively to increasing agricultural productivity. When food aid distribution coincides with the harvest season, the vast majority of farmers are frustrated because they are unable to sell their produce at a decent price. This is because farmers could be less motivated to cultivate if they know they can have it for free.
- D. Returning IDPs to their farmlands and assisting them by providing a conducive environment for farming, particularly through eliminating factors that encourage displacement such as clan conflict and security-related challenges.
- E. Encouraging youth- and women-led initiatives for agriculture development and environmental conservation with the goal of boosting productivity and improving environmental protection.
- F. The formation of agricultural quarantine regulations and standards plays an essential role in verifying and examining agricultural seeds as well as controlling the introduction of new varieties of diseases into the country and the movement of disease carriers across Somali regions. However, this will help in getting well-certified, high-quality, and disease-free seeds.
- G. Since the agriculture sector in the country is a non-government-owned sector, the government's engagement in the promotion of farmer cooperatives and establishment of agricultural research and extension centers will serve as a long-term solution to this issue.
- H. Connecting smallholder farmers to international markets so as to have access to efficient, transparent, and competitive markets is a crucial component of any strategy aimed at enhancing agricultural productivity and promoting sustainable rural development. This entails providing agricultural and food producers with the means to reach markets that exhibit these desirable qualities. With the growth of the rural economy and the development of rural-urban networks, there will be an increase in access to markets for non-agricultural goods and opportunities for non-farm wage jobs.

## 8. Conclusion.

In conclusion, the country's limited capacity to improve agricultural productivity to address food insecurity due to its fragile state and limited resources makes there a pressing need for local and international interventions to support the country in its efforts to recover and mitigate the impacts of these challenges. However, addressing food insecurity is a critical issue that needs to be addressed, especially since there are a lot of challenges as mentioned above, and other challenges like security issues as most of the farms are located in villages that are difficult to access, where terrorist groups are operating. To address the effects of food insecurity on the whole country, collective efforts are needed to work on the enhancement of agricultural productivity, develop of the deteriorating state of the agriculture sector in the country, and come up with strategies to mitigate the harmful impact of this phenomenon.

## **About the Author**

Dr. Mahad Mohamed Sheik Hassan is an accomplished economist with a PhD in Economics, specializing in labor economics. With a passion for addressing global economic challenges, he has contributed to various research projects aimed at promoting female labor force participation, sustainable growth, and equitable resource distribution.

Mahad has extensive experience in governance and economic development. Currently serving as a member of the National Economic Council, he has previously held notable positions, including a member of the Somali Petroleum Authority. Mahad has also played a pivotal role as the Coordinator of the Anti-Corruption and Integrity Unit as well as the Coordinator of the Recurrent Cost and Reform Financing (RCRF) project at the Federal Ministry of Education. Additionally, he has contributed his expertise as an advisor of policy and planning to the National Electoral Commission (NEC), showcasing his commitment to enhancing transparency and accountability in Somalia's institutions.

