

# Factors Affecting the Decline of Agricultural Investments in Somalia: A Case Study of the Farming Sector in Lower Shabelle Region

Ismail Ibrahim Abdullahi<sup>1</sup>, Dr. Amina Omar Mohamud<sup>2</sup>

Graduate Studies, SIMAD University  
Email: [injineerka\[at\]gmail.com](mailto:injineerka[at]gmail.com)

Faculty of Management Science, SIMAD University  
Corresponding Author Email: [aminasheikhomar\[at\]simad.edu.so](mailto:aminasheikhomar[at]simad.edu.so)

**Abstract:** *Productivity and investment in agriculture contribute to economic growth, food security, and poverty reduction in developing countries. This article investigates the decline of agricultural investments in Somalia by examining the farming sector in the Lower Shabelle region. By employing a multi-method approach involving surveys, interviews, and field data from 70 respondents, the study identifies climate change and environmental degradation, conflict and insecurity, and limited access to agricultural finance as the main barriers to investment. Repeated droughts, desertification, and land title disputes have discouraged both farmers and financial institutions from committing resources. The findings highlight a need for institutional reforms, climate-resilient infrastructure, and financial innovations such as credit guarantees and crop insurance. These measures are essential for rebuilding the agricultural base and promoting sustainable development in post-conflict Somalia.*

**Keywords:** Agricultural Investment, Climate Change, Conflict, Financial access, Lower Shabelle

## 1. Introduction

Agriculture provides the foundation for the Somali economy, which supports food security, employment, and well-being of rural communities (FAO, 2017; CIA, 2019). Prior to the onset of long-term civil conflict, Lower Shabelle represented the nation's agricultural hub due to the availability of fertile land and extensive irrigation systems (Jeilani, 2016). However, decades of conflict, institutional collapse, and little investment in infrastructure have dramatically diminished this base, leading to declining productivity, decreased investment, and increased vulnerability to food insecurity (Gyimah-Brempong & Corley, 2005).

Similar trends can be found throughout sub-Saharan Africa, where more than 60 percent of the workforce is employed in agriculture; however, it is subject to persistent underinvestment and structural challenges (FAO, 2017; World Bank, 2008). Since the early 2000s, the agricultural decline in the region has grown at an alarming rate, particularly in fragile and post-conflict areas due to issues related to weak institutions, climate variability, and limited access to financial resources (Hazell et al., 2010). As the challenges in Lower Shabelle overlap and intensify, recovery will be difficult. Therefore, it is essential to understand the various factors affecting agricultural investment in this area in order to formulate effective policy and undertake targeted interventions (Khan, 2011). This study is significant as it provides data-driven insights for rebuilding agricultural resilience in one of Somalia's most vulnerable yet agriculturally vital regions.

## 2. Literature Review

According to development theory and empirical research, agriculture plays a key role in promoting economic

transformation, reducing poverty, and improving social stability (Johnston & Mellor, 1961; Evenson & Gollin, 2003). The success of agriculture in transforming into a productive sector has been attributed to the adoption of new technologies, improved institutional frameworks, and substantial investment in the sector (Hazell et al., 2010; Diao et al., 2010).

However, in fragile states such as Somalia, chronic underinvestment in agriculture has resulted from a combination of environmental risks, limited access to finance, and prolonged periods of insecurity (Gyimah-Brempong & Corley, 2005; Khan, 2011). Literature indicates that climate change is a major cause of the decline of agriculture in many parts of the world, particularly those in which rainfed systems rely heavily on irregular weather events (IPCC, 2014; Mendelsohn, 2009). Research projects that, if no adaptation measures are taken, sub-Saharan Africa may lose 50 percent or more of the yields of staple crops by the middle of the century (IPCC, 2014; Nelson et al., 2009). Droughts and the deterioration of irrigation systems have exacerbated the challenges faced by farmers and investors in Lower Shabelle (FAO, 2018; Msangi et al., 2012).

In addition to environmental risks, the lack of access to finance limits the potential for agricultural growth. Banks in Africa and Somalia report allocating less than 1 percent of their lending to the agricultural sector, citing high risks, inadequate collateral, and the lack of supportive institutional frameworks (IFC, 2013; Toby & Peterside, 2014). Farmers, who typically do not hold formal titles to the land they cultivate, depend on informal financing sources or remittances, which are often insufficient to make large-scale investments (Betubiza & Leatham, 1995; Pyrtel, 2012). Literature comparing the experiences of different countries suggests that alternative approaches to addressing sector-

wide risk, such as credit guarantees, crop insurance, and public-private partnerships, are important tools for encouraging investment in agriculture (Hazell et al., 2010; IFC, 2013).

Conflict and ongoing violence also impact investment decisions, disrupting land tenure systems, damaging market infrastructure, and reducing confidence among both farmers and investors (Gyimah-Brempong & Corley, 2005; Jeilani, 2016). The disputes over land ownership, the presence of militias, and the lack of effective legal frameworks have resulted in the abandonment of highly productive lands and the fragmentation of agricultural production value chains (North, 1990; Collier & Hoeffler, 2004). Research demonstrates a direct relationship between the level of violence in a given region and the amount of investment withdrawn from that area due to the high levels of risk (Gyimah-Brempong & Corley, 2005).

Collectively, the literature emphasizes that the decline of investment in the agricultural sector in areas like Lower Shabelle results from a complex interaction of climate risk, financial exclusion, and insecurity (FAO, 2018; Diao et al., 2010; Khan, 2011). Long-term sustainability of agricultural development in such contexts therefore requires coordinated efforts by governments to address environmental risk, institutional weaknesses, and limited access to financial resources, and to create opportunities for innovation and growth (Hazell et al., 2010; Ruete, 2015).

### 3. Methodology

The study used a case study methodology for Lower Shabelle. The study employed a descriptive survey ( $n = 70$ ) in conjunction with qualitative interviews and field observations (primary data, 2019). Stratified random sampling was used to ensure representation of the districts and types of farms. Pilot testing was conducted to verify the validity and reliability of the survey instrument. Expert review and data triangulation (Cronbach's  $\alpha > .75$ ) were also performed to confirm data quality. Descriptive statistics and thematic coding were used to analyze the quantitative and qualitative data collected, respectively. The dependent variable was the decline of investment in the sector, while the independent variables included climate change, conflict and/or insecurity, and commercial bank involvement (primary data, 2019).

### 4. Results

#### Characteristics of the Sample

Of the 89 returned questionnaires, 70 were complete and analyzed (response rate: 78.7 percent). Approximately 77 percent of the respondents were men and approximately 66 percent were farm owners. Approximately 56 percent of the respondents had worked in agriculture for 5-9 years. Approximately 52 percent of the respondents cultivated irrigated farms and approximately 48 percent cultivated rain-fed farms, and were distributed among eight districts (primary data, 2019).

#### Access to Financing and Commercial Banking Services

Approximately 87 percent of respondents funded their own farms, and only 14 percent reported having very good

creditworthiness. Almost 49 percent of respondents rated commercial banking services in the sector poorly, and almost 86 percent rated them as either fair or very poor in quality. Limited access to commercial banking services is further complicated by the requirement for collateral and the limited financial knowledge available to many remote, rain-fed farmers (primary data, 2019; Betubiza & Leatham, 1995; IFC, 2013).

#### Climate and Environmental Factors

More than 64 percent of respondents indicated that climate change was the greatest impediment to agricultural investment in the sector. Droughts, desertification, and unpredictable rainfall mainly affected rain-fed farming (Mendelsohn, 2009; FAO, 2018). More than 42 percent of respondents expressed strong agreement that rain-fed farms are more susceptible to decline due to climate change; more than 77 percent believed that some form of governmental action is required to protect against environmental risks, as farmers themselves are unable to mitigate environmental risks (IPCC, 2014; Nelson et al., 2009).

#### Conflicts and Security

More than 71 percent of respondents experienced at least one conflict or security event that disrupted their operations; and more than 56 percent of respondents agreed that disputes regarding ownership of the land are a significant problem. Instability and confusion over land tenure laws undermine the confidence of both farmers and investors (Jeilani, 2016; Collier & Hoeffler, 2004).

### 5. Discussion

The study's findings demonstrate a correlation with previous research indicating that environmental risk, conflict, and financial exclusion collectively contribute to a cycle of under-investment and low productivity (Hazell et al., 2010; Mendelsohn, 2009). In Lower Shabelle, because there are fewer irrigation systems and many rain-fed farms suffer from limited access to formal finance due to the perception of high risk and lack of collateral, many farmers and investors avoid investing in the sector (Betubiza & Leatham, 1995; Toby & Peterside, 2014). Conflicts reduce the ability of farmers to gain secure access to land, and reduce their ability to participate in markets, and thus increase reluctance to invest (Gyimah-Brempong & Corley, 2005). The lack of institutional capacity and weak policy support exacerbate exposure to shocks and uncertainty for all parties involved in the sector (FAO, 2018; Khan, 2011).

#### Recommendations for Policymakers

- Develop climate-resilient infrastructure, including irrigation systems and flood-control structures, to address the region-specific vulnerabilities (Msangi et al., 2012; FAO, 2018).
- Create public-private risk-sharing mechanisms, including credit guarantees and crop insurance, to stimulate agricultural lending (Hazell et al., 2010; Ruete, 2015).
- Formalize land tenure, improve local governance, focus on resolving disputes regarding land ownership, and improve credit worthiness of local farmers (North, 1990; Khan, 2011).

- Increase access to financial services for small holder farmers, including agricultural microfinance, and enhance capacity building for farmers (IFC, 2013; Zepeda, 2015).
- Promote peace and conflict resolution in the major farming regions of the country as insecurity and conflict directly deter investment in agriculture (Collier & Hoeffler, 2004).

## 6. Conclusion

Declining agricultural investment in Lower Shabelle reflects the complex interactions of environmental, institutional, and financial obstacles (World Bank, 2008; FAO, 2018). To restore agriculture as the economic backbone of Somalia, it is necessary to implement integrated, multi-sectoral reforms focused on managing risk, establishing effective governance systems, and creating targeted financial instruments to support farmers (Khan, 2011; Ruete, 2015).

## References

- [1] Betubiza, E. N., Leatham, D. J. (1995). Factors affecting commercial bank lending to agriculture. *Journal of Agriculture and Applied Economics*, 27(1), 112-126.
- [2] Central Intelligence Agency (CIA). (2019). The World Factbook Somalia. <https://www.cia.gov/the-world-factbook/countries/somalia>
- [3] Collier, P., Hoeffler, A. (2004). Greed and grievance in civil war. *Oxford Economic Papers*, 56(4), 563-595.
- [4] Diao, X., Hazell, P., Thurlow, J. (2010). The role of agriculture in African development. *World Development*, 38(10), 1375-1383.
- [5] Dixit, A., Pindyck, R. (1994). Investment under uncertainty. Princeton University Press.
- [6] Evenson, R. E., Gollin, D. (2003). Assessing the impact of the Green Revolution, 1960-2000. *Science*, 300(5620), 758-762.
- [7] Food and Agriculture Organization (FAO). (2017). Prosperity through sustainable agriculture. FAO Country Programming Framework.
- [8] Food and Agriculture Organization (FAO). (2018). Agriculture: Building resilience. <http://www.fao.org/somalia>
- [9] Gyimah-Brempong, K., Corley, M. E. (2005). Civil wars and economic growth in Sub-Saharan Africa. *Journal of African Economies*, 14(2), 270-311.
- [10] Hazell, P., Poulton, C., Wiggins, S., Dorward, A. (2010). The future of small farms: Trajectories and policy priorities. *World Development*, 38(10), 1349-1361.
- [11] International Finance Corporation (IFC). (2013). IFC and agri-finance: Creating opportunity where it's needed most.
- [12] Intergovernmental Panel on Climate Change (IPCC). (2014). Climate change 2014: Impacts, adaptation, and vulnerability. Cambridge University Press.
- [13] Jeilani, A. O. (2016). The impact of civil war on crop production in Somalia. Proceedings of the Seventh International Conference on Agricultural Statistics, 315-317.
- [14] Johnston, B. F., Mellor, J. W. (1961). The role of agriculture in economic development. *American Economic Review*, 51(4), 566-593.
- [15] Jorgenson, D. W. (1963). Capital theory and investment behavior. *American Economic Review*, 53(2), 247-259.
- [16] Khan, A. R. (2011). Rebuilding post-conflict economies in Africa: The role of governance and institutions. *Journal of Development Studies*, 47(1), 45-67.
- [17] Lewis, I. M. (1999). A pastoral democracy: A study of pastoralism and politics in northern Somalia. LIT Verlag.
- [18] Mendelsohn, R. (2009). The impact of climate change on agriculture in developing countries. *Journal of Natural Resources Policy Research*, 1(1), 5-19.
- [19] Msangi, S., Utah, A., Batka, M. (2012). African agricultural futures: Opportunities, challenges, and priorities. Australian Center for International Agricultural Research.
- [20] Nelson, G., Rosegrant, M., Jawoo, K., Robertson, R., Sulser, T., Zhu, T., et al. (2009). Climate change: Impact on agriculture and costs of adaptation. International Food Policy Research Institute.
- [21] North, D. C. (1990). Institutions, institutional change, and economic performance. Cambridge University Press.
- [22] Poisot, V., Speedy, A., Kuenemanan, E. (2007). Good practices in crop insurance. FAO.
- [23] Pyrtel, M. (2012). Sustainable agriculture in Somalia: Challenges to building lasting agricultural development. *Somalia Strategy Review Journal*, 1(1), 15.
- [24] Ruete, M. (2015). Financing for agriculture: How to boost opportunities in developing countries. International Institute for Sustainable Development.
- [25] Toby, A. J., Peterside, D. B. (2014). Analysis of the role of banks in financing the agriculture and manufacturing sectors in Nigeria. *International Journal of Research in Business Management*, 2(2), 9-22.
- [26] Wagan, S. A., Jingdong, L., Shuanxi, X., Noonari, S., Memon, Q., AbdulRahman, A., et al. (2016). Significance of agricultural finance in agricultural and rural development of Pakistan. *European Journal of Business and Management*, 8(16), 64-70.
- [27] Wanga, J., Mendelsohn, R., Dinar, A., Huang, J., Rozelle, S., Zhang, L. (2009). The impact of climate change on China's agriculture. *Agricultural Economics*, 40(3), 323-337.
- [28] World Bank. (2008). World development report 2008: Agriculture for development. World Bank.
- [29] Zepeda, L. (2015). Agricultural investment, production capacity, and productivity. Food and Agriculture Organization.