

Historical Analysis of Post-Colonial Food Security Policies in Kenya, 1963-2020

Thomas Njiru Gichobi,^{1} John Ndungu Kungu²*

¹Laikipia University, Kenya

²Maasai Mara University, Kenya

*Corresponding Author

Abstract

This paper analyses Kenya's food security policies since independence in 1963 to 2020. The country has faced persistent food insecurity due to volatile harvests, corruption, and poor roads, which lead to poor food distribution in some parts of the nation. While initial policies favoured large-scale export farming, the 1980s National Food Policy shifted focus to sustainable agriculture and smallholder support through fertilizer subsidies, irrigation programmes, and a keen focus on improving road connectivity in Kenya. Despite these interventions, challenges persist. These include inadequate infrastructure, climate change impacts, limited smallholder financing, and inequitable land ownership. COVID-19 further exposed supply chain vulnerabilities. This paper evaluates the effectiveness of government interventions in irrigation, subsidies, and road infrastructure development and proposes new strategies for Kenya's food security.

Keywords: Food policy, food security, road network, subsidy, sustainability

Introduction

Food security in pre-independence Kenya was deeply influenced by both colonial policies and traditional agricultural systems. Before British colonization, most indigenous communities maintained diverse agricultural practices adapted to local ecological conditions. The Kikuyu, for instance, developed sophisticated intercropping systems that helped ensure food availability throughout the year (Mackenzie, 1989). Colonialism significantly altered traditional food security mechanisms. The establishment of the settler economy in the early 20th century led to the displacement of many African farmers from the fertile highlands to more marginal areas. This process, combined with the introduction of cash crops, impoverishment of Africans, and skewed road development, fundamentally disrupted existing food production systems (Lonsdale & Berman, 1979). The British administration's focus on export agriculture often came at the expense of local food security, pushing many indigenous farmers into less productive lands.

The colonial government's policies of labour extraction further complicated food security issues. Many men were forced to work on settler farms or in urban areas, reducing the available labour for subsistence farming in their home areas. This particularly affected women, who became increasingly responsible for maintaining household food security while dealing with reduced access to prime agricultural land (Kitching, 1980).

Since gaining independence in 1963, the government of Kenya has put in place several strategies to enhance food security and sustainability in the country. According to the Food and Agricultural Organization (FAO) definition, a country is considered food secure when all people at both household and national levels have access to safe and nutritious food with adequate dietary requirements for a healthy and productive life at any given time. Food

insecurity, on the other hand, means that people have inadequate or no access to adequate food required for an active and healthy life, thus leading to hunger, malnutrition, and other related indications that are deemed harmful (Maurice, 2024).

According to Njora (2023), food insecurity in post-independent Kenya results from several factors, including economic factors like poverty, unemployment, and income disparities. The availability of productive resources necessary in agriculture, including land, water, and capital, is restricted, thus reducing food production. Global warming and pollution are also evils; they impact food production and, consequently, the provision of sufficient food worldwide.

Political stability issues such as conflicts and forced displacement affect food intake and distribution in some ways (Renner, 1997). Despite the Constitution of Kenya, Article 43, guaranteeing everyone safe, quality, and nutritious food, Kenyans continue to suffer from food insecurities, with the Global Hunger Index (GHI) scoring Kenya at 23.0 in 2022, indicating a serious level of hunger (Global Hunger Index, 2022). Between 2021 and 2022, severe and prolonged droughts were experienced in Kenya and other countries in the Horn of Africa, specifically impacting Turkana County and other arid and semi-arid counties in Kenya (Ndondo, 2023). UNICEF reported that more than 900,000 children required humanitarian aid in Kenya due to the prolonged drought. Drought and food security challenges are closely linked (Tull, 2018).

Methodology

This study employed a qualitative historical analysis approach to examine Kenya's food security policies from 1963 to 2020. The research methodology involved a comprehensive review of primary and secondary sources, including government policy documents, agricultural sector reports, development plans, and academic literature. Key policy initiatives were analysed across three main dimensions: irrigation development, subsidy programmes, and road infrastructure, with particular attention paid to their implementation effectiveness and impact on food security outcomes. This multi-faceted analytical approach allowed for a nuanced understanding of both the successes and limitations of Kenya's food security initiatives over the examined period. More significantly, this approach helped answer the research question, *how have post-independence government policies in Kenya impacted food security, and what have been the primary successes and limitations of these policies?*

Irrigation and Food Security in Kenya

Kenya's economy has depended heavily on its agricultural sector, which has been the biggest contributor to its Gross Domestic Product (GDP) since independence (Gow & Parton, 1995). Irrigation is a critical factor in raising food production. Unfortunately, arable land in Kenya is approximately 5800,000 hectares, only 10.19 percent of the country's land area (Canton, 2021). Consequently, if Kenya relies on rain-fed agriculture, this would mean that only 10.19 percent of Kenya's land is suitable for agriculture, which would easily result in food insecurity.

After independence, through the Sessional Paper No. 10 of 1965, the Kenyan government developed initiatives to increase irrigation infrastructure and hence increase agricultural productivity. This was done by freeing farmers from relying on rain-fed agriculture which often end up frustrating in terms of harvests due to inadequate and erratic rainfall. It is imperative to underscore the fact that irrigation is an old phenomenon in Kenya. However, the colonial government is credited for having initiated large-scale irrigation projects to boost food production and resettle the landless (Kileteny & Wakhungu, 2019).

After Independence, the Kenyan government intensified its efforts to expand colonial irrigation infrastructure and set up new irrigation schemes. One notable initiative was the National Irrigation Board (NIB), which was established in 1966 to oversee irrigation projects nationwide (Republic of Kenya, 1966). Through NIB, the government established irrigation schemes while expanding the ones that had started with the colonial establishment. A casing

example is the Mwea Irrigation and Settlement Scheme, which was incepted during colonial times but was expanded mainly in the 1960s to settle the landless and boost rice production in Kenya (Munyua, 2020).

In 2002, when Mwai Kibaki became the president of Kenya, the government renewed its focus on irrigation development as part of its agricultural transformation agenda. During his presidency, Mwai Kibaki introduced Kenya Vision 2030, which focused on elevating small-scale agriculture from low-productivity subsistence farming to a modern, commercially-driven, and globally competitive sector, with an emphasis on innovation and value addition (Khatete & Chepkoech, 2018).

In 2017, Uhuru Kenyatta, the fourth president of Kenya, introduced the 'Big Four Agenda' to chart the course of the Kenyan economy. Four grand challenges within the Agenda included; manufacturing, food and nutrition security, universal health, and affordable housing. As stated by the President, the food security agenda objective was to get the country to a status of food security, meaning every Kenyan attaining physical, social, and economic access to adequate, safe, nutritious, and diverse food throughout the year for a healthy life (GOK, 2017). Food security and nutrition seek to increase the production of food crops on a large scale and, at the same time, support small farmers in developing and marketing their crops. To this end, the government began reforming the old policies, cardinal formulation, and new policies and strategies (Rwigema, 2022).

The government's Food and Nutrition Agenda outlines a ten-year plan called the Agricultural Sector Growth and Transformation Strategy (ASGTS) to promote affordable food and support farmers through better access to farm inputs, expanded extension services, and increased investment in research and technology. Policies related to food insecurity since the formation of ASGTS have seen government priorities change the focus of the primary fight against hunger to more political policies that have even aggravated food insecurity states in Kenya.

Through the Big Four Agenda, initiatives such as the Galana-Kulalu Irrigation Scheme aim to harness water resources for large-scale agricultural production (Oduori & Njeru, 2016). Large dams to serve as reservoirs for irrigation water, like the Thiba Dam in Kirinyaga County, have also been constructed as part of the government's wider plan to increase acreage under irrigation. Adopting smallholder irrigation schemes in Kenya has empowered local communities and enhanced food production at the grassroots level.

The success of smallholder irrigation has particularly been evident in regions like Central Kenya and the Lake Victoria Basin, where farmers reported significant increases in crop yields and income diversification (Ngigi, 2002). The implementation of the Water Act 2002 marked another milestone, introducing reforms that promoted more efficient water use and improved irrigation management. This legislation, coupled with increased investment in modern irrigation technologies, has contributed to the expansion of irrigated agriculture from approximately 52,000 hectares in 1963 to over 150,000 hectares by 2020, with a consequent increase in food security in Kenya (Mahgoub, 2014).

Additionally, there has been a recent integration of climate-smart irrigation practices and the adoption of drip irrigation systems, which are particularly beneficial in arid and semi-arid regions. These developments have helped stabilize food production in traditionally food-insecure areas, with some regions reporting up to a 300 percent increase in crop yields compared to rain-fed agriculture (Mutiga et al., 2010).

Despite these efforts, several challenges hindered the expansion of irrigation infrastructure in Kenya. One major challenge was inadequate funding and resource allocation, leading to delays and insufficient maintenance of existing schemes (Mutua, 2014). Additionally, land tenure issues and conflicts often complicate land acquisition for irrigation projects

(Nyamukondiwa, 2019). Ecologically related challenges like pest and disease shortages of water supply have also afflicted successful schemes such as Mwea.

Subsidy Programmes and Food Security

Agricultural input subsidies, whereby inputs are provided to the users at lower prices than they could have otherwise had to pay in the market, form the basis of this strategy due to the belief that it will enhance the adoption of recommended farming practices, increasing productivity, profitability and food availability and access and in the long run reducing poverty and boosting economic growth. They were frequent in developing agricultural countries in the 1960s and 70s. Their use was reduced in the 1980s and 1990s as African governments adopted the Structural Adjustment Programs (SAPS) to reduce government spending, a measure the World Bank and IMF recommended to stabilize their weakening economies (Saeed, 2024).

However, in 2007, the Government of Kenya, through the Ministry of Agriculture (GoK, 2007), revived the subsidy programmes following the adoption of the National Accelerated Agricultural Input Access Programme (NAAIAP) and the National Fertilizer Price Stabilization Plan (NFPSP). These subsidy programmes aimed to subsidize agricultural inputs in Kenya, especially fertilizers, lower the cost of agricultural production, motivate farmers to engage in food production, and boost Kenya's food security (Hoffmann & Jones, 2021).

The subsidy programmes have been critical to Kenya's efforts to promote food security since their adoption in 2007. This is because they have offered farmers subsidized access to essential inputs such as fertilizers, seeds, and agricultural machinery (Dorward, 2009). For fertilizers, the subsidy policy led to Kenyan farmers' higher fertilizer usage. From 1992 to 2013, the maize farmers using fertilizer in Kenya ranged between 62 percent to 65 percent in the quoted period (Mavuthu, 2017). The trend seems to have been the same in the years between 1997 and 2007, when the fertilizer use among smallholder maize farmers in Kenya was 63.15 percent (Dooso, 2019). The fertilizer subsidy contributed to the increased use of fertilizer by Kenyan farmers, and by 2009, the use stood at 75.4 percent among Kenyan farmers (Waweru & Owino, 2022).

The increased use of fertilizer led to improved maize production in Kenya, with a 5.0 percent to 7.0 percent point yield increase (Waweru & Owino, 2022). The improved yields helped improve food security by providing food and enhancing farm households' income levels (Sekabira et al., 2023).

Fertilizer Subsidy Programmes have contributed to increased agricultural productivity, thus enhancing food availability and reducing reliance on imports (Boulangue et al., 2022). However, despite their successes, the subsidy interventions are vulnerable to inefficiency, bias, and corruption. In Kenya, they have encountered several challenges that have limited their effectiveness. One major challenge is the issue of targeting and distribution, with subsidies often failing to reach the intended beneficiaries, mainly small-scale farmers in remote rural areas (Recha, 2018).

Subsidy programmes have also, however, been associated with corruption and mismanagement and have thus channelled their resources in other directions, leading to achieving food security goals (World Bank, 2015). Also, inadequate governance structures, coupled with poor monitoring and evaluation of the subsidy programmes, have been a hindering factor to the achievement of subsidy programmes (Tiffen et al., 1994). Lack of adequate financial resources and poor and scarce resource mobilization messed the government further in its bid to continue implementing and expanding on the subsidy programmes and other related schemes (Muyanga & Jayne, 2006).

Additionally, controversies such as those associated with the subsidy policies have raised concerns about the environmental and socioeconomic effects. Such approaches as chemical fertilizers have been viewed as having negative repercussions, such as degrading soil fertility

and polluting the environment (Ayala & Rao, 2002). Besides, when a farmer is fully dependent on these aids, the readiness to carry out agricultural research and create sustainable and feasible farms may be hampered, and the farmer may develop dependency syndrome (Parkinson, 2009).

As much as this research posits that subsidies have to cover more of these inputs, including agrochemicals, farm machinery, and seeds, among others, in addition to fertilizers, the subsidized inputs can only help the Kenyan farmer if they are available on time. Any delayed access to these inputs means delayed planting, which translates to low yields, especially during the short rain seasons. Besides this, there must be political goodwill in the fight against rooted corruption in the Ministry of Agriculture and related institutions like the National Cereals and Produce Board (NCPB), which have often misdirected the subsidies, making them not reach Kenyan farmers.

To improve the efficiency and effectiveness of the subsidy programmes, targeted and smart subsidies instead of blanket subsidy programmes should be adopted in Kenya. This would include a focus on the most vulnerable farmers and regions. This could involve using digital technologies for better identification and distribution of subsidies. Additionally, diversification of Supported Crops would improve the subsidies and make them more effective in boosting food security. Unfortunately, since independence, maize has been a focus of many subsidy programme. However, encouraging diversification into other nutritious and climate-resilient crops could enhance overall food security.

Road Development and Promotion of Food Security, 1963-2020

In the immediate post-independence period, Kenya inherited a road network primarily designed to serve colonial interests, focusing on connecting agricultural production areas to ports for export (Ochieng, & Maxon, 1992). The independent government sought to expand and improve this network to serve national development goals, including food security. In fact, road infrastructure development became the key focus of Kenya's national development strategy after independence in 1963, with successive governments of Kenya all having a Ministry of Roads to oversee road development.

In the post-independence era, the government of Kenya recognised the pivotal role that an improved road network could play in enhancing food security by facilitating the transport of agricultural produce from rural areas to urban markets (Kenya, 1965). This strategic prioritization was further emphasized in successive national development plans, with particular attention paid to connecting agricultural regions with major commercial centres (Cummings & Obwocha 2018). The expansion of rural access roads became a cornerstone of Kenya's agricultural development policy in the 1970s and 1980s, with significant investments made in upgrading earth roads to all-weather standards (Kishore, et al., 2014).

The government's commitment to road infrastructure was reinforced through various policy frameworks, including the District Focus for Rural Development strategy introduced in 1983, which emphasized the need for improved transportation networks to support agricultural commercialization (Lebo & Schelling, 2001). By the 1990s, Kenya had established one of the most extensive road networks in Sub-Saharan Africa, though maintenance challenges persisted (Wasike, 2001). Recent initiatives, such as the Road Sector Investment Programme, have continued to prioritize the rehabilitation and expansion of rural roads, recognizing their vital role in reducing post-harvest losses and improving market access for smallholder farmers (Sieber & Allen, 2016).

The previous decades of the 1990s and 2000s witnessed more integrated procedures involved in infrastructure development, and special attention was paid to the construction of rural access roads. The Kenya Rural Roads Authority, set up in 2007, has contributed the most to laying down rural infrastructure (GoK, 2007). From these observations, it was realised that there are challenges, such as the lack of proper maintenance of the existing roads and issues of

corruption in the road construction projects, that have affected the outcomes of the investments in infrastructure.

In recent years, there has been growing recognition of the need to link road infrastructure development more closely with other interventions to promote food security. This includes complementary investments in agricultural extension services, storage facilities, and market information systems (Qureshi et al., 2015).

In light of the foregoing discussion, while road infrastructure development has been an essential strategy for promoting food security in post-independence Kenya, its effectiveness has been limited by uneven implementation and a lack of integration with other critical interventions. Future efforts should focus on a more holistic approach that addresses the needs of smallholder farmers and remote rural communities while also tackling issues of corruption and maintenance in road development projects.

Conclusion

Kenya's food security history is marked by different government strategies and policy interventions to promote food production and availability. This paper has offered valuable historical lessons that policymakers and the government of the day can borrow from to boost food security in Kenya. From the discussions made in this work, key areas for policy improvement or strategic shifts have been suggested. Furthermore, for all government policies to succeed, various stakeholders, including policymakers, local communities, and agricultural advocates, must work together and commit to the fight against corruption that seems to affect all the policy interventions discussed.

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