



PRIMARY RESEARCH

Food insecurity and economic dependency in Nigeria

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Abstract

This study looked at Nigeria's food security and economic dependence. Nigeria has enormous agricultural potential but has remained a net importer of agricultural products over the past few decades. Due to intentional neglect of agriculture in the early 1970s, Nigeria lost its standing as a significant global exporter of agricultural products, including food, which had a detrimental effect on food security. This study examined the effects of economic dependency on food security in Nigeria because prior efforts to boost food production did not consider the systemic ramifications of economic dependency. A qualitative method was used in which published materials such as journal articles were consulted and analyzed using content analysis. Dependency Theory was the study's foundation. Based on findings, Traditional farming techniques and knowledge have been lost due to the nation's reliance on imported food. This disruption needs to improve the ability of the local communities to produce enough food. Additionally, it impairs their ability to grow a wide range of nutrient-dense foods. It makes it harder for them to adjust to changing environmental conditions, exacerbating malnourishment, hunger, inequality, illnesses, and other food poverty-related problems across the continent. Therefore, Nigeria should mobilize domestic resources to enhance local food production to achieve food sufficiency rather than relying solely on food imports. Food security requires deliberate strategies such as research, value addition, and infrastructure development.

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INTRODUCTION

The agricultural sector in Nigeria from 1960 up to 1970 improved with increased agricultural production. The sector during this period served as the backbone of Nigeria's economy, sustained until the 1970s when crude oil was discovered in commercial quantity. The discovery of oil posed a severe challenge for the agricultural sector. It was coupled with the existing state of agriculture structured to serve the interests of former colonial masters. At Independence, therefore, Nigeria and all other colonized countries found themselves in a disadvantaged position to serve as producers of raw materials and consumers of finished products from the former colonial powers. This economic dependence, therefore, diminishes the agricultural sector's performance in Nigeria, leading to food insecurity.

Nigerian agriculture is mainly rain-fed, characterized by

low productivity, low technology, and high labor intensity. This low agricultural productivity has been attributed to the low use of fertilizer, the loss of soil fertility, and traditional, low-technology, rain-fed farming systems. The literature has documented that Nigerian farmers across all regions are below their production frontiers, indicating there is room to increase agricultural productivity above existing levels, even without a change in their current levels of input use. Studying the menace of food insecurity as determined by economic dependency in Nigeria and how this can be addressed, therefore, served as the central focus of this study. The findings of this study will help shed more light on the state of Nigerian Agriculture (food insecurity). They will guide policymakers on what must be done to remedy the situation. Existing studies (Liverpool-Tasie, Kuku, & Ajibola, 2011; Oseni, McGee, Dabalén, McGee, & Siwatu, 2014;

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Idiku, Angba, & Ushie, 2012) examined Nigeria's low agricultural production and food insecurity with specific reference to the lack of mechanization. However, this study dwelled on the effect of economic dependency on food insecurity in Nigeria.

Research Questions

- What are the factors responsible for low agricultural productivity in Nigeria?
- How has the economic dependence led to food insecurity in Nigeria?
- What can get the agricultural sector back on track for improved agricultural production?

Research Objectives

- To find out the factors responsible for low agricultural productivity in Nigeria.
- To discover how economic dependence has led to food insecurity in Nigeria.
- To find out what can be done to reposition the agricultural sector for improved productivity.

LITERATURE REVIEW

Many scholars have studied the issue of food insecurity in Africa and Nigeria in Particular from different angles. In his assessment of food insecurity in Africa, Bibi-Farouk (2023) used qualitative methods by relying on published works to examine how African countries found themselves in the current state of food shortage due to over-dependence on importing food from other continents. Therefore, he recommended that African nations go beyond food importation and mobilize domestic ability to improve local food production to attain food sufficiency. African countries must adopt research, value addition, infrastructure development, and other deliberate strategies to attain food security.

Idiku et al. (2012) examined Food Insecurity Challenges and Sustainable Agricultural Development in Nigeria by focusing on the causes and effects of food insecurity in Nigeria. The study discovered that the root causes of food insecurity include poverty, corruption, and national policies that do not promote equal access to food for all. The study recommended solid political will to transform the agricultural sector.

In their separate but related studies, Liverpool-Tasie et al. (2011) and Oseni et al. (2014) examined the challenge of food insecurity in Nigeria by focusing on the lack of mechanization in which they argued that inadequate farm tools such as tractors improved the variety of seeds and fertilizers were responsible for low agricultural productivity in many third world countries. Therefore, they recommended

efforts to mechanize the agricultural sector for improved productivity.

In another study, Emmanuel and Peter (2012), observed that the consequential effect of the decline, like some countries of the world, the nation's economy is feeling the brunt of the rising cost of food items, especially the rise in the prices of staple foods. Significantly, the price of rice has increased by over 100 percent since 2006. It is instructive to note that Nigeria requires 2.5 million metric tonnes of rice annually, while local rice production is less than half a million metric tonnes annually.

As reiterated by Emmanuel and Peter (2012), beyond high prices of staple food items in Nigeria, drought and political situation in neighboring countries like Chad, Cameroun, and Niger seem to pose a threat to a state like Borno as they rely on the state for their food supplies. Another problem, according to the Ministry of Agriculture and Water Resources, responsible for the food crisis in Nigeria is not unconnected with the fact that "Nigeria's agriculture is mainly rain-fed, and she has not taken full advantage of its irrigation potential estimated between two and 2.5 million hectares". The area under irrigation is estimated at 220,000 hectares or less than one percent of the total areas under crops. The contribution of irrigated agriculture to crop production is, therefore, minimal.

According to Emeh (2013), the primary cause of food insecurity in developing countries is people's inability to access food due to widespread poverty and unemployment, inhibiting purchasing power and preventing assured access to food supplies. FAO (1983) affirmed that food price volatility has exerted considerable pressure on global food security, and many Nigerians depend on the market for their food supply and are vulnerable to high food prices.

Emmanuel and Peter (2012) further professed that, in contrast, while drought presents a significant problem for the affordability and availability of food items, excessive rain has also contributed significantly to the current price hike. Statistics from Gombe State alone, as compiled by Gombe State Emergency Management Agency (GSEMA), show that about 999 farmlands in the state were affected by floods that destroyed yams, maize, vegetable, sugarcane, and cassava farms in 2007 when data from other states are added together, no doubt, the ripple effect becomes staggering. Arguing for the reasons that accounted for food insecurity in Nigeria, Emeh (2013) submitted that the inherent characteristics of climate that manifest themselves as changes of climate over some time affect food security significantly in unpredictable ways as a result of their detrimental effect on pests, crops diseases, crop production, animal husbandry,

and humans. Changing climatic conditions affect certain preferred food items' physical and economic availability. Their impacts on income-earning opportunities can affect the ability to buy food, the availability of certain food products, and price. Changes in the demand for seasonal agricultural labor, consequent upon changes in production practices, will, in turn, affect income-generating capacity. Certain factors affect the quantities and types of food produced at the production stage. Likewise, food security activities like land clearing, crop production, animal husbandry, food processing and preservation, and food distribution lead to the production and release of GHG such as carbon dioxide, methane, and nitrous oxide) cause global warming and impact on climate change.

So also, the crisis in the North has forced some of the crop farmers and pastoralists to abandon their lands and relocate to the neighboring countries of Niger, Chad, and Cameroun. In March, the National Emergency Management Agency (NEMA) said about 65 percent of northern farmers had migrated to the South because of insecurity. The agency warned that the country will face a famine by the end of this year because most of the small-scale farmers and mechanized farmers in Nigeria's northeast are threatened by terrorist attacks. The attacks on these farmers who produce beans, onions, pepper, maize, rice, livestock, and catfish in the Lake Chad area for the southern states, have forced them to migrate since the Boko Haram insurgency broke out in Borno State in July 2009 (Emeh, 2013). Flood, drought, and desertification are environmental issues affecting food availability in Nigeria. Climate change affects food supply through loss of farmland, fluctuating food prices, increases in food-borne illnesses, and other food utilization issues. The recent environmental degradation through deforestation and flooding has broad negative implications for food production. For instance 2012, the country witnessed unprecedented rainfall due to extreme weather. The rainfall resulted in severe flooding, causing loss of crops, livestock stocks, and human lives. According to (Metu, Okeyika, & Maduka, 2016), the estimated loss of the country's GDP was worth N2.6 trillion. In the same period, the share of agriculture value added to total GDP declined from 23.89% in 2010 to 22.05% in 2012—other environmental factors affecting food security, including degradation, pollution, and deforestation. Also, air and water pollution from industrialization threaten both human and natural resources to the extent that food security capabilities are damaged.

In his contribution, Adebayo (2010), acknowledged that one of the main thrusts of the macroeconomic deregula-

tion program in Nigeria was the radical adjustment of the agricultural pricing policy. The fixing of commodity prices through commodity boards was dropped, and agricultural produce prices became determined by market forces. Rapid inflation resulting from the massive devaluation of the Naira immediately impacted the vast increase in nominal prices of agricultural and food products, even though the increase in actual prices was much less.

Metu et al. (2016) argued that government policies regarding agricultural production were rapid, with plans hastily put together and little or no participation from those engaged in agricultural productivity. Moreover, policy changes that championed increased incentives for local farmers for improved local food production were neglected. Urban and community farming and even home gardening were no longer encouraged as land agents made it too difficult for people to obtain land for building and agricultural productivity.

CONCEPTUAL CLARIFICATION

Food Security

The term "food security" was first used in discussions of global food issues in the 1970s. The 1974 World Food Conference defined it as the continuous availability of sufficient essential commodities globally to support a steadily rising food consumption level while balancing variations in output and price (FAO, 1983).

Food Insecurity

On the other hand, food insecurity is the term used to describe a temporary or chronic lack of access to enough food. Therefore, the lack of food insecurity is food security. Chronic food insecurity is caused by a chronically inadequate diet brought on by a lack of means to buy and prepare food, according (Metu et al., 2016; Jam et al., 2011). Since the physiological functions of food are determined by nutrition and health, FAO (1983) defines food insecurity as the outcome of inadequate consumption of nutrient-rich food. When people cannot provide adequate food for their families, they suffer from hunger and poor health. Ill health reduces one's ability to work and live an active, healthy lifestyle. Poor human development makes a country's potential for economic growth uncertain for future generations (Otaha, 2013). The opposite of food security, or food insecurity, is the inability of households or individuals to meet the necessary consumption level in the face of fluctuating production, price, and income (Maharjan & Khatri-Chhetri, 2006). Food insecurity is the lack of access to enough high-quality and quantity of nutritious food for an

active and healthy life. When a household lacks reliable access to food of high enough quality and quantity to support an active and healthy lifestyle, it is said to be experiencing food insecurity. Food insecurity is when people cannot guarantee what, how, why, and when they eat.

Economic Dependency

It is said that there is an economic dependency when one country or region is significantly dependent on another for its economic well-being, with the dependent nation or region being economically subordinate to the dominating one, distinguished by an unequal distribution of power and resources. Economic dependency can manifest in various ways, including trade imbalances, foreign investment, reliance on specific technologies, and financial dependence (Frank, 1967). Economic dependence can have both favorable and unfavorable effects. On the one hand, it might result in more international investments, accessible access to cutting-edge technology, and chances for trade-based economic growth. It may, however, also lead to a loss of sovereignty, a limited amount of domestic industrial development, and underdevelopment. Economic dependency entails the inability of a country and people to determine their economic fate and meet their economic needs at a particular time without relying on others.

THEORETICAL FRAMEWORK

This study adopted the Dependency Theory as a framework of analysis. Dependency is a sociopolitical and economic theory that aims to clarify why many countries in the Global South, particularly those in Africa, are underdeveloped and have high rates of poverty. It makes the case that these nations' economic development is constrained by their reliance on more powerful and affluent countries, who exploit their resources and uphold unfair trade practices. This theory has been used to assess the issue of food insecurity in Africa, and it highlights the structural factors that contribute to the continent's vulnerability to hunger and malnutrition (Emeh, 2013). Indeed, the earliest promoters of the Theory of Dependency, like Andre Gunder Frank, posited that underdevelopment is a product of a historical, political, and economic relationship with European capitalism that ensures the exploitation of the global South (Frank, 1967). Prebisch and Pollock (2006), while writing on Raul Prebisch, explained that the Prebisch-Singer idea explaining the effects of dependency on developing nations was developed from the experiences and studies on the United Nations Commission for Latin America and the Caribbeans when it was realized that the terms of trade in international

trade in primary export commodities including food crops did not favor exporting countries and is designed to keep them in perpetual bondage and underdevelopment. The central cause of Africa's food insecurity, according to dependency theory, is its long history of and ongoing reliance on outside parties for its agricultural productivity and food supply. During the colonial era, African agricultural systems were developed by European powers that were primarily focused on exporting cash crops to meet the demands of their local markets. Because of this, it was difficult to produce enough food as local food crops were neglected.

In addition, colonial governments frequently enacted exploitative land tenure systems that barred indigenous farmers from farming and limited their access to arable land (Emeh, 2013). After gaining Independence, many African states continued to rely on exporting agricultural products, minerals, and oil as a primary source of foreign exchange earnings. These countries' reliance on exports made them vulnerable to shifts in the prices of commodities on a global scale. When prices fell, less was invested in agriculture, which increased food insecurity and hurt African economies. The dependency theory argues against unfair trade relations between Africa and the industrialized nations. African nations frequently face barriers when attempting to access global markets due to trade restrictions by wealthier nations. These restrictions include high tariffs, incentives for domestic producers in industrialized countries, and non-tariff barriers like sanitary regulations.

Consequently, African farmers need help to compete globally to export their agricultural products. It limits their ability to invest in farming and increase agricultural productivity to improve food security (Rakotoarisoa, Lafrate, & Paschali, 2012). The theory further emphasizes that political factors like corruption and bad governance contribute to food insecurity in Africa. This idea holds that political elites in African countries frequently collaborate with outside parties to safeguard their wealth and power at the expense of the majority of the population. This cooperation could manifest in corrupt activities like embezzling public funds or giving foreign investors the upper hand over local farmers. These behaviors undercut the initiatives to boost agricultural output and food security (Emeh, 2013).

METHODOLOGY

This qualitative research relied on published materials such as journal articles and magazines. Thus, the study adopts secondary data analysis, which analyzes data from researchers who primarily collected data for other purposes. This analysis method provides the researcher with enough

information and saves time and resources.

Factors Responsible for Low Agricultural Production Leading to Food Insecurity in Nigeria

Onyeaka, Tamasiga, Nkoutchou, and Guta (2022a), highlighted some immediate responsible for low agricultural production in Nigeria and Africa in general, they are:

Inadequate Agricultural Infrastructure

Nigeria needs more irrigation systems, restricted access to cutting-edge farming technologies, and inadequate transportation networks. The ability to produce enough food to meet the rising demand is constrained by several variables, which reduce agricultural production.

Environmental Issues and Climate Change

Nigeria is highly vulnerable to climate change, which hurts agricultural production. Farmers face enormous challenges due to rising temperatures, shifting rainfall patterns, and a rise in the frequency of extreme weather conditions like floods and droughts. The difference between the amount of food produced and consumed can widen due to these climate-related issues, which can also result in crop failures, lower yields, and livestock losses.

Poverty and Restricted Access to Resources

A considerable percentage of the population in Nigeria lives below the poverty line, making poverty a pervasive problem. Farmers' capacity to enhance production is hampered by limited access to financial resources, land, and inputs like seeds and fertilizers. Low production levels are sometimes due to insufficient investment in agriculture.

Post-Harvest Losses and Food Waste

Significant food losses occur in Nigeria due to inadequate storage facilities and subpar post-harvest management procedures. Up to 30% of harvested crops are thought to be lost owing to poor handling or storage.

Limited Market Access

Because of inadequate infrastructure, constrained transportation alternatives, and a lack of market knowledge, many African small-scale farmers need help reaching markets. As a result, they cannot sell their food for fair rates, discouraging investment in agriculture and lowering production levels overall.

Dependence on Food Imports

Some African nations significantly rely on food imports to fulfill their consumption demands. Numerous aspects, including limited domestic output, trade restrictions, and eco-

nomical limitations, can be blamed for this dependence. The difference between consumption and output levels widens due to import dependency.

Lack of Agricultural Research and Development

Innovation and the adoption of better farming methods are hampered by a lack of funding for agricultural research and development. Farmers cannot maximize their productive potential due to limited access to information and technology.

ECONOMIC DEPENDENCY AND FOOD INSECURITY NEXUS IN NIGERIA

Englebert (2009), observed that Independence did not bring about the necessary cultural, political, and economic changes to ensure that governments met the needs of the people and connected economic development to societal goals. Therefore, understanding how dependency on imported food products has led to food insecurity in Africa comes in different dimensions. Still rooted in the historical experience of colonialism and imperialism, food dependency becomes a disturbing phenomenon through the following factors:

Foreign Grants and Aid

Nigeria, like many other African governments, is granted aid in the form of finished food produced for direct consumption by international donors, negatively impacting local productivity. For example, governments across the continent of Africa accepted nearly half of U.S. loans and grants in the form of cereals, which were sold at or below the cost of production in Africa, pushing down local prices and rendering local production unprofitable (Boussard, Daviron, Gérard, & Voituriez, 2006).

Market Price Volatility

Food prices have not been stable, thus making producers very vulnerable to price fluctuations. Governments discouraged investment in domestic food production and markets by maintaining overvalued currencies, zero tariffs on food imports, prescribing crops, and setting prices. They promoted the production of export crops (Goyal & Nash, 2017).

Dependence on Fertilizer

Due to the socio-economic conditions in Nigeria and, indeed, Africa, high fertilizer prices, a lack of infrastructure, shallow per capita income levels, and government market interventions were not feasible (Bjornlund, Bjornlund, & van Rooyen, 2020). Countries in Africa (Nigeria inclusive)

import more fertilizer than they produce. The application rate of African-manufactured fertilizer covers only 5.9 kg per hectare of the 20kg per hectare requirement. Despite the requirement estimate of 6.7 million tons per annum, Africa has a 0.9 million supply gap (RBA, 2022). Prices for fertilizer in Africa are at least twice higher than in Asia. Furthermore, most imported fertilizers do only sometimes suit Africa's soil specifications. It has presented problems of nutrient imbalance, soil pollution, and other environmental degradations that ultimately reduce soil fertility and yield.

International Development and Finance Institutions

Contrary to the development roles the Bretton-Woods institutions (especially the World Trade Organization, International Monetary Fund, and The World Bank) played in the rebirth of Europe after the Second World War, their relationships, especially as regards debt issues in Sub-Saharan Africa, especially from the 1950s significantly changed when they began to focus on developing nations of the global South. These changes were primarily brought about by the macroeconomic changes in the Global North, which required them to be more profit-reliant than benevolent development. The institutions could not cope with poverty and lack of development. Between the early 1970s and 1980s, the recession that followed the world oil crisis significantly negatively impacted the Global South's economic prospects because it worsened trade terms and increased current account deficits. The Bretton Woods institutions could have avoided the economic dependence and failure of the countries of Africa if they had altered their lending practices, backed initiatives that strengthened national economies, and established fair trade agreements for exports from Africa. The World Bank and commercial lenders sponsored projects without dependable evidence of their profitability or financial responsibility for their outlays (Adams, 1992). Several African countries, including Nigeria, could not pay back their debts because of careless spending, fluctuating currency values, the rise of the US dollar (1980–1985), high interest rates (Little & Watts, 1994), and declining commodity prices since the nineteen eighties. Between 1980 and 1998, South Sahara Africa made four payments on its original debt, but the outstanding balance tripled. It effectively classifies the debt burden as a debt trap! The IMF's Structural Adjustment Policies (SAPs), which included limiting foreign companies' access to natural resources and making significant cuts to spending on things like food imports, agricultural subsidies, education, health care, and housing, were subject to refinancing (Von Braun, Meinzen-Dick, et al., 2009; Wanja, Ludin, Lud-

wig Lisa, Muhlfeld, & Gerstlberger, 2020).

FINDINGS

From the data discussed above, the following were discovered.

The Nigerian agricultural sector is bedeviled with numerous challenges, which negatively affect the sector's productivity. These challenges include inadequate agricultural infrastructure, environmental issues and climate change, poverty and restricted access to resources, post-harvest losses, limited market access, dependence on food imports, and lack of agricultural research and development. This finding is similar to earlier studies conducted by others (Bibi-Farouk, 2023; Onyeaka, Tamasiga, Nkoutchou, & Guta, 2022b; Stepchenko, Chizhov, & Aleksejeva, 2018).

More so, the study also discovered that food insecurity in Nigeria is linked with the overdependence on the importation of foreign goods, which was made possible by the history of colonial rule coupled with the neglect of the agricultural sector by successive governments in Nigeria. This finding agrees with that of Bibi-Farouk (2023), who emphasized that Nigeria and, indeed, many other African countries are currently facing a food crisis due to economic dependence.

CONCLUSION AND RECOMMENDATIONS

Nigeria is battling low agricultural production, which has significantly affected its economy. The sector, which was the mainstay of the economy, should have been addressed with the discovery of crude oil in the 1970s. It has led to, among other things, a food shortage in the country. However, the problem of Food insecurity in Nigeria can be linked to the Economic Dependency faced by third-world countries. Due to the history of colonial rule, the Nigerian economy was structured to continue to rely on Western countries as producers of raw materials and consumers of finished products. It has a significant effect as foreign goods destroy local production, leading to food insecurity in the country.

However, it can be argued that food insecurity being faced by Nigeria might not be unconnected to other factors, which may include bad leadership, corruption, farming system, and others, which this research did not study and served as its limitations to have a proper and comprehensive explanation of food security challenge in the country. Future researchers may investigate the issue of food insecurity in Nigeria by investigating the above issues.

Based on the findings of this study, the following are therefore recommended:

- Both the federal and state governments should inten-

sify efforts to provide adequate agricultural facilities to farmers.

- There should be availability of funds to be given to farmers as loans, which will be paid back after the harvest.
- The government should reposition the existing agri-

cultural research institutes and provide them with the necessary facilities to conduct research.

- As a matter of urgency, the Nigerian government should establish local industries to produce fertilizers, pesticides, and other farm inputs to eliminate dependence on foreign inputs.

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