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Food Security and Trade Policy Effectiveness in the ECOWAS Region: A Review of Existing Evidence

Yahaya Umar Isah

Department of Economics, Nigerian Defence Academy, Kaduna State

Corresponding Author's Email: yahayaumar1406@gmail.com

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Abstract

Attainment of food security is one of the key objectives of the Sustainable Development Goals. The most popular way by which food security can be brought about is integrating trade in the international macroeconomics. Yet, the success or failure of achieving food security though trade integration is strongly dependent on the trajectory of trade policies adopted by several counties. This study was a thematic review of existing evidence on the effects of trade associated factors on food security in the ECOWAS region. Results from this study revealed structural factors such as burden of colonialism, government failure, excessive commodification of food among the proximate causes of food insecurity in the ECOWAS region. Findings further revealed that intra-regional trade in the ECOWAS region remains highly informal with an attending consequence of poor intra-regional food trade integration. The study therefore concluded that ECOWAS member countries have paid poor commitment at intra-regional trade integration as a key strategy to overcoming food insecurity in the regional context. Informed by this conclusion, the study recommended that in favor of further research commitment in understanding informal food trade dynamics in ECOWAS trade zone and proper harmonization of national agriculture and food security programmes with regional agendas.

Keywords: Food Security, Food Insecurity, Intra-Regional Trade, ECOWAS.

1.0 INTRODUCTION

In addition to being a most basic necessity of life, food availability and affordability give stability to the wellbeing of individuals, nations and the world at large (Iweoha *et al.*, 2017, Rosamond & Walter, 2010). Early economists were not oblivion of this. As far back as 1798 Thomas Malthus predicted that food insecurity is a consequence of overpopulation (Hendrix, 2011). Time and experience however have proven Malthus wrong as in recent times food production has grown even more rapidly than the growth in population, hence there is more food today at the macronutrient level to feed even more than today's world population. Still, however, the number of people suffering food insecurity in the world is reported to be on the increase (Simon, 2012).

Food security as it is known today goes far beyond what was conceived by Malthus and earlier thinkers as a question of food availability (Shaw, 2007). It implies a situation where all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets

their dietary needs and food preferences for an active and healthy life (FAO, 1996). This definition highlights the multidimensional perspective to food security which is mostly considered as the clearing house perspective of the concept. These dimensions including: access, availability, quality, stability, sustainability and agency are together equally useful as important tool for food security analysis (Clapp *et al.*, 2022).

Basically, there have emerged two polarizing paradigms to agricultural trade which have influenced nations in their food policies as they pursue food security. The neo-Malthusians still believed Malthus to be right at least with respect to Africa. They argued that food insecurity is an inevitable consequence of overpopulation mediated through the dependence of developing countries on the international food markets which makes them vulnerable to food price and supply instability. Hence, they advocate for restrictive self-sufficiency food trade policy (see Ehrlivh 1968, Donella 1972, Julian, 2009). The allure of this approach to food policy was made manifest during the 2007-2008 global food crisis with developing countries especially those in the sub-Saharan Africa have adopted policies with a leaning towards this school thought (Ugwuja & Chukwukere, 2021).

The second school is the neo-liberal school of thought who appear to support globalization in food policy have argued that though population and economic development contribute to food price increases, they are nowhere the near-term threats to food security. Rather, it is the distortions created by the political economy of food policy mediated through national agricultural policies that create vulnerabilities and amplifies food insecurity (see Von Braun & Paulino1990, Hendrix 2011). This neoliberal approach to economic policy was popular between 1986 and 2000 following the efforts to liberalize agriculture through Agreement on Agriculture (AoA) and General Agreement on Tariffs and Trade (GATT). Many developing African countries at this time began to abandon their food self-sufficiency goals to embrace the new neoliberal policy paradigm, hence, undertaking structural adjustments thus, focusing output in areas where they have comparative advantage such as cotton, cocoa and coffee. (Rakotoarisoa *et al*., 2011).

While food self-sufficiency is undeniably important as emergency measure especially in times of rising global food prices as painfully learned during the 2007 food crisis (Clapp, 2016), it is alone ineffective in bringing about food security as a national agenda of a developing economy (Glauber, 2019). Moreover, global trade in food is not only inevitable in view of the current environmental sustainability concerns but also domestic and regional trade is highly dependent on international food trade (Hendrix 2011). For example, trade restrictions as a result of the policy of food self-sufficiency is found to cause efficiency loss both on the supply and demand sides. In addition, though only about 15% of global food output enters the global food market, prices for the remaining 85% of food products traded on the local, national and regional markets are increasingly aligned with the global food prices. Such international prices are so important that they tend to pass-through even in heavily subsidized food markets and the most autarkic food markets (Ferrucci et al., 2010, Haggad & Holand, 2007).

Similarly, food trade globalization has not significantly helped developing economies in Africa reduce their food insecurity situations. Though increased openness temporarily helps developing countries reduce food insecurity by increasing their access to cheap food import in the short term, it has hampered the development of their agricultural sector (Enrique, Carmen & Luis, 2014). Developing African countries did not only become net food importers with adverse effects on their balance of trade (Clapp, 2016), food trade balance in Africa has consistently deteriorated overtime, with only about 8% to 13% of intra-regional food trade in West Africa (Carmen & Jeske, 2016).

The foregoing understanding seems to suggest that a more nuanced approach to food trade in the context of developing economies that can better help achieve food security is the policy of regional food trade integration. To develop this argument, it is necessary to first appreciate the fact that collapse of the DDA in 2008 provided an opening for a switch in market power in favor of developing countries. Following this period, imports and exports in developing countries recorded a linear increase reaching almost 60% of global food trade in the year 2016 (Glauber, 2019). With projected

50% increase in global food demand by the year 2050 (FAO, 2019), this trend in food market access and share by countries especially West African countries is expected to increase over the years (Carmen & Jeske, 2016).

West Africa is currently strategically placed to influence food demand and prices. Moreover, the regional dimensions of West African agriculture give countries in the region comparative advantages at virtually all levels. Favorable regional ecological diversity especially in rainfall patterns, shared bio-diversity reserves such as rivers, pastoral lands and underground aquifers not only provide complementarities between areas of production and consumption but also provides strong incentives for regional agricultural trade and policy integration in West Africa (ECOWAS, 2008).

The West African sub-region is believed to be home to half of the world's fertile land, however, food security concerns even more pressing in this region (Elbehri 2013, Maur & Shepherd, 2015). The realities of events such as the 2007-2008 global food crisis, the covid-19 pandemic and the ongoing invasion of Ukraine by Russia among others did not only bring to limelight the inability of the West Africa's food production capacity to meet domestic demands but also the shortcomings of the region to attain intra-regional integration through coordinated trade mechanisms (Glauber, 2019).

Unsurprisingly, these realities among other things have caused countries in the ECOWAS region to have painfully learned the imperative status of intra-regional food trade integration. Paradoxically however, the commitment of individual states to strategic promotion of regional trade to attaining food security has left much to be desired. Even as ECOWAS member states maintained their pledge to regional food trade integration, nations such as Nigeria, Ghana and Senegal for reasons of political economy such as national security, insulation against global supply chain disruption, inoculation against price shocks or even the reasons of a broader development strategy such as economic diversification; have continued to adopt individual rather than collective agro-industrial policies of food self-sufficiency and at the expense of regional food security agenda, hence, standing in the way of a sustainable regional food trade integration (Clapp, 2017). The main trust of this paper therefore is to analyze the peculiar nature and causes of food insecurity in ECOWAS region. The study will also investigate the place of integration in regional trade in achieving food security in the region.

2.0 METHODOLOGY

The relationship between trade policy and food security has always been an empirical question, hence, many studies have attempted to analyze the association between trade policies and food security. This study is a thematic review of relevant literature on the relationship between trade and food security in the ECOWAS region. In pursuit of this, secondary sources were consulted including journal articles, conference papers, thesis and other relevant documents on the internet. Identification of relevant documents was done via searches of keywords and terms associated with food security and trade policy. These include food security, food self-sufficiency, trade globalization, and tariff and non-tariff barriers. No restriction was placed on the materials consulted. Priority however was given to how recent the document is and its relevance with respect to the substantial contribution to the ongoing debate on food security in West Africa. This review is done under two major themes. While the first theme focuses on the nature and causes of food insecurity in West Africa, the second theme investigates the role of intra-regional trade integration in overcoming food insecurity in the ECOWAS region.

3.0 RESULTS AN DISCUSSIONS

3.1 NATURE AND CAUSES OF FOOD INSECURITY IN ECOWAS REGION

Prior to the 1960s, the region of west Africa much as the rest of Africa was known to not only be food self-sufficient but as a major exporter of food items to the rest of the world. But this situation has changed dramatically as the African continent that used to be food secure during pre-colonial and colonial eras is now a net importer of good products and grossly food insecure (Asongu & Odhiambo, 2018). This situation among other things has created a major continent-wide food crisis which seems to be more alarming in the West African sub-region (Ferrao *et al.*, 2021). There are three types of food insecurity including; occasional, acute and chronic

food insecurity. The west African population is threatened by all these forms of food insecurity. Though considerable progress was recorded with respect to achieving one of the millennium Development Goals (MDGs) of reduction in world's hungry people by half by end of 2015. Considerable difference remains between developing regions of the world. While regions such as Southern, Central and Eastern-Asia, the Carrabin and Latin America have already achieved the MDG hunger target, regions such as Southern and Western Asia and Sub-Saharan Africa have registered insufficient in reducing hunger and malnutrition progress even after the end of the MDGs target period (Fawole, *et al*., 2015).

In West Africa, an estimated 36 to 40 million people were found to suffer from chronic malnutrition in 2018. During the MDGs era, specifically between the year 2010 and 2018, prevalence of undernourishment increased from about 10.4% in 2010 to 14.7%, while 50% of deaths of under-five children was attributed to undernutrition during the same period. (FAO, 2019). Global Hunger ad Food Surety Initiative [GHFSI] (2019) further noted that access to safe water is a major nutrition problem in West Africa, as one-third of the population consume water that is potentially contaminated.

The problem of food insecurity in West Africa has been identified to be more of a structural problem than it is natural problem as the region is believed to be home to half of the worlds fertile agricultural land which largely remain underutilized (Maur & Shepherd, 2015, Bjornlund *et al.,* 2022). To this end, different authors have looked at the food insecurity situation of the west African reign from different perspectives. The views of these authors can be categorized into three themes including; structural, demographic and climatic factors.

A. Structural Factors

Different structural factors are considered by different authors as the ultimate cause of persistent food insecurity in West Africa. Many authors are of the conclusion that the burden of colonialism was a major cause of West Africa's food insecurity. They hold that the colonial system made this possible through reallocation of agricultural resources such as labor and most lands for the cultivation of export agricultural output at the expense of local food produce (Potts, 2012). Similarly, production of export crops was made by the colonialists a condition for access to land by African farmers. This further shifted the focus of production from food to cash crops (Frankema & Waijenburg, 2012). All these were made possible through an indirect rule system that adapted exiting traditional institutions to suit the needs of the colonial masters. Local chiefs were incentivized as they were meant to receive percentage of the taxes at the same time threated by loss of privilege in a case of disavowal (Boone, 2003, Frankema *et al*., 2014). This Machiavellian economic arrangement led to a major loss of traditional source of nutrition resulting in a slow deterioration of food security situation (Heldring & Robinson, 2012).

Another major cause of persistent food insecurity in West Africa has been identified as underdevelopment of the agricultural sector at national levels and weak trade policy environment at regional level. A study by Maathai, (2007) found that despite independence post-colonial countries in West African region failed to gravitate their economic, political and cultural into a monolithic force that guarantee the success of their societal objectives. The finding by Maathai (2007) therefore supports that of Sen (1981) who has earlier concluded that West African food insecurity is a result of failure by governments in the systematic integration of the food supply chain from pooling of rural smallholder farmers output to storage and distribution.

Following the same line of thought, (Dewaal, 2018) concluded that a weak regional agriculture and trade policy environment and inability or unwillingness of governments to properly mediate are inextricably linked to persistence food insecurity in West Africa. Such poor mediation can be seen in the inability of governments in the region to integrate agriculture into their national economies. As a result of competitive exports policies of the 1970s, and especially following the discovery of other viable non-agricultural sources of revenue, West African governments relegated agriculture to a second bests status. In Nigeria for example, agricultural sector contributed about 54.8% to the country's GDP in 1970. In the year 1975, there was already a significant drop to about 38.6%. While in 1980, the

share of agriculture to GDP in Nigeria as low as 21.1% (Oriola, 2009). This is evidence of early periodization of the oil sector. A situation which created wide spread food insecurity and micronutrient deficiencies throughout Nigeria (Adegbola, 2011).

Zerbe (2019) has also concluded that the growing food insecurity situation in this region despite the fact that more food is produced at the macro-nutrient level is due to excessive commercialization of food. This author noted that rising food insecurity is due mainly to commodification of food and changing its original purpose which has always been to feed the people to a mere tradable commodity subject to market forces. Agriculture is known to be the main stay in west Africa. smallholder farmers make up more than 60% of the population of the region and overall, the sector currently contributes about 23% to total GDP in most countries in the region (WFP, 2021). Sakho-Jimbira and Hathie, (2020) hold that owing to the increased commercialization of food, the smallholder farmers have gradually moved away from subsistence farming to commercial farming which is centered on consumer preferences. These farmers make their primary produce available to food processing industries who in line with consumer preference base on urban bias tendencies make food available at a relatively dearer cost for the small holder farmers. This reduces food access, thus increasing the food security situation.

B. Demographic Factors

Demographic factors such as increase in population growth rate, increase in rural-urban migration and change in the consumption pattern of the population are argued to be major causes of persistent food insecurity in the ECOWAS region. According to UN DESAPD data, the sub-Saharan Africa is the only region that is estimated to recurrently record a positive regional population growth rate, estimated to reach 516 million by 2030 from its 350 million in 2019. In addition to the increase in population, the structure of the urbanization as a result of rural urban population is also poses a major threat to food security. With a rapid increase in rural-urban migration, data from FAO suggest that 70% of the world's population will live in the cities by 2025. This is even more so for the West African regions whose rural population are attracted towards the city centers as a result of urban bias policies (Fawole, et al., 2015).

Another major burden of food insecurity and malnutrition in West Africa is unhealthy consumption habits. Owing to the increase in income of the region which is known for a pervasive demonstration effect, there is an increase in reliance on importation refined food items. The GHFSI (2019) has noted that unhealthy consumption such as of fat, sugar, and highly refined and processed foods are found to increase the rates of obesity among adult population in West Africa and are a direct link to diabetes and complex cardiovascular diseases. According to WHO estimate, 27% increase in such diseases are expected by 2030 and are projected to become the leading cause of death in the ECOWAS region. In the same vain, Vorster et al. (2011) asserts that a proximate cause of nutrition insecurity in Africa is the preferences of Africans for Western diet at the expense of their traditional diet. This situation created more reliance on costly processed food importation from the developed economies, reducing the chances of food access to the poor population.

C. Climate Change

The impact of climatic change on food security is gaining more attention in the literature. This is even more so for the African who though contributes the least to global warming but is found to pay the most price for its attending consequences on climate change. Hence, while factors have been identified to affect food insecurity, in West Africa, climate change is arguably among its ultimate determinants (Gueye & Mbaye, 2022). Some literature has drawn a link between recent climatic trends and rising food insecurity in sub-Saharan Africa. For example, findings by Dimitri *et al*, (2017) revealed that climatic trends in the Sahel show an overall rise in temperature, in addition to an erratic trend in rainfall, growing number of and intensity of natural disasters, all of which aggravate food insecurity in the region.

Similarly, Diop et al. (2007) have earlier observed that desertification, drought, floods, and rise in sea level among climatic related factors, affect the availability of natural resources in the West African sub-region, adding that in a context of West Africa

where natural resources are the main sources of livelihoods, environmental degradation and natural disaster significantly impact resilience of the people making them highly vulnerable to all forms of food insecurity. Adverse effects of climate change are further seen to have an indirect effect on food security in the ECOWAS region (Gueye & Mbaye, 2022). Climate change induced resource scarcity lead to increase in food prices, violence over resource scarcity induced rise in insurgency and distraction of public resources for disaster management and combating insurgency and ethnic conflicts, hence, acerbating economic and political vulnerabilities that further induce food insecurity in the region (Pelling & Dill, 2006).

Several attempts have been made to combat food security in West Africa. A major step in recent times is the School Feeding Programmes (SFP) which is being implemented by most countries in the region. These SFP which try to minimize food insecurity situation are found to the only source of nutritious meal of the day in most rural communities. These meals which consists of eggs, soy beans and corn flour does not only reduce hunger but also reduce the barriers that stand in the way of learning. Despite these programmes however, starvation is still prevalent in West Africa as recent evidence suggest that 90% of children are vulnerable to poor nutrition and are highly food insecure (WFP, 2021). To overcome the food insecurity challenges in West Africa, Ferrao et al. (2021) concludes that the region needs t invest in higher quality of locally produced

3.2 INTRA-REGIONAL TRADE AND FOOD INSECURITY IN THE ECOWAS REGION

Trade plays an integral role in achieving food security. At the simplest instance, trade allows the flow of food from surplus to deficit markets and regions (Joachim von Braun, 2008). The importance of trade to food security is even more vivid in developing economies. In addition to enhancing food access through effective allocation and distribution of food, trade in food is a potent tool of improving economic growth of developing economies of sub-Saharan Africa where agriculture is the main source of livelihood for an estimated 70% of the population (International Food Policy Research Institute [IFPRI], (2002). This argument is reflected in the fact that trade avails small household farmers the opportunity to exchange their surpluses for income and improve their overall welfare (Nwozor, & Olanrewaju, 2020).

Intra-regional trade policy has been recognized as a necessary condition for achieving West African food security and efforts towards food trade integration by the ECOWAS is well known and documented. The three most basic SDG food security aims of the ECOWAS are eradicating hunger in the region by 2025, attaining 6% average annual growth rate in the agricultural sector and attaining 10% annual budgetary allocation to agriculture in each of the 15 ECOWAS member countries (Nwozor, & Olanrewaju, 2020; Staatz et al., 2017). These tall aims however are faced with grim trade indicators. Intra-regional food trade among ECOWAS members is estimated at 10-15% of total ECOWAS trade, which is way-below intra-regional trade potential of the region (GHFSI, 2019).

These results show that West Africa is heavily reliant on food import especially cereal for its growing food demand. In contrast to the positive agricultural trade balance in ECOWAS region, the region's food trade balances have deteriorated overtime (Torres & van Seters, 2016). A major characteristic of West African cereal dependency is believed to reflect the realities of food import dependency of the entire region of sub-Saharan Africa, as food import which alarmingly stood at $43 billion in 2019 is projected to reach an even more alarming cost of $90 billion by 2030 (Fox & Jayne, 2020).

Intra-regional food trade flows in West Africa has a very complex structure. This trade flow can be categorized into three broad groups (Maur & Shepherd, 2015) each of which has adverse effect on food security pursuit in the region. The first is the arbitrage food trade which basically constitutes the engagements of profiteering arbiters in trade deflections and re-exporting of food items in large quantities that were initially imported from outside the region across different countries within the region. As a result, such food items pass-through different and sometimes varying import and domestic regimes of food policy leading to artificial price wedges between markets. Trade in rice and

poultry meat are well known examples of arbitrage trade in the ECOWAS region (Aker et al., 2014).
The second form of food trade is the border trade which is characterized by exchanges between country margins in border communities within the region. Such border trades are usually trade in staples usually informed by proximity and an avoidance of prohibitive costs associated with distant market access in addition to porous borders. Informal intra-regional border trade also reflects local patterns of excess supply and demand which brings to fore the importance of border markets especially in lean periods when stocks for self-consumption are depleted and households must turn to markets for their food consumption demands (Maur & Shepherd, 2015). The third form of trade is regional trade which happens along international corridors for a handful of foods. Such trades are usually formal with important consideration for complementarities between surplus production and demand areas. Trades in livestock and maize are the typical examples regional trade in the ECOWAS region (Aker *et al*., 2014).

It is important to note that each form of trade raises different policy questions. For example, while arbitrage trade poses the important question of addressing distortions among markets in the region., border trade raises the question concerning the extent to which sovereign nations in the region are willing to consider their borders as an integral part of a whole ECOWAS food market. Still, regional trade raises the question of policing regional transit and logistics corridors. In a nutshell, these policy questions can be summed up as a challenge of the extent to which nations in the ECOWAS region are committed to regional trade integration (Babatunde & Raphael, 2012).

It is in this context that Bjornlund *et al.*, (2022) concluded that because regional food trade comes as a second-best policy consideration by ECOWAS members; who consider first their domestic food trade usually in a pursuit of national food self-sufficiency agenda, food trade integration has not received the commitment necessary to combat rising food insecurity in the region. Torres and van Seters (2016) added that the most important factor that drives nationalist food self-sufficiency policies at the expense of regional trade integration seem to be political economy. For example, the huge economic heterogeneity of ECOWAS with Nigeria being the hegemon with a large consumer base that accounts for over 51% of total food import in the ECOWAS region and having a relatively well developed agro-industry gives it a lot of influence. Also, ruling elites seeking political survival often tend to pursue short-term national interests, such as export bans, import quotas, etc. Further, wild corruption and rent-seeking tendencies by border officials such as custom officers and police also lead to the erosion of inventive to formalize trade by private value chain actors who prefer to stay in the informal sector. Similarly, the rising conflict and insecurity in the region especially in Nigeria are a major intra-regional trade limiting factor that highly undermine food security efforts in the ECOWAS region (Fox & Jayne, 2020; Ugwuja & Chukwukere, 2021).

4.0 CONCLUSION AND RECOMMENDATIONS

This paper was a thematic literature review of the existing evidence of the impact of trade policy on food security in the ECOWAS region. Th findings of the study reveal that the food insecurity situation of the ECOWAS region is a structural problem caused by factors including the burden of colonialism, government failure, excessive commodification of food, demographic factors, climate change, rising insecurity and other forms of political instability. The study also found that that intra-regional trade in the ECOWAS region remains highly informal with an attending consequence of poor intra-regional food trade integration. This evidence therefore informs the conclusion that there is consensus among ECOWAS member countries on the prime role of intra-regional trade in overcoming food insecurity in the region, intra-regional trade integration has not received the necessary commitment.

This paper therefore recommends that there is a need for better understanding of the prevalence of informal trade in food that was repeatedly identified in this paper. Further research efforts need to be committed at understanding informal food trade dynamics this will help increase the accuracy of data on cross-border trade flow, will can better guide regional food trade policy implementation. Also,

there is a need for proper harmonization of national agriculture and food security programmes with regional agendas. This will help overcome the misalignment that truncate efforts at mobilizing essential resources for regional food security efforts at the regional level.

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