

**IMPORTING WEST AFRICAN FOODS TO THE USA: A STRATEGIC
BUSINESS MODEL FROM GUINEA TO AMERICAN SUPERMARKETS**

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Abstract

This dissertation analyses the importation of West African food products consisting of cassava, fonio, and palm oil from Guinea to the USA. The research objectives include identifying consumer trends, evaluating the supply chain and effectiveness, and examining the difficulties that import businesses encounter when entering the market of the United States of America. A survey method of data collection was used in conjunction with interviews with some of the stakeholders in Guinea and some consumers from the United States. A statistical analysis of the data collected from the consumers was conducted using the SPSS tool and the multiple regression method of analysis of data for testing the relationship between factors such as the health consciousness index price sensitivity index and product availability index. The research found that there is an increasing trend of West African food products and this has been positively observed among the health-conscious clients and ethnic groups. The findings of the current study revealed that health consciousness stood out as a factor that Crafts demand for organic food while perceived product availability was noted to act as a constraint for consumers who cited it as a challenge to access the product in the local stores. A study using interviews conducted with Guinean farmers, food brokers, and the firms involved in logistics revealed that some of the supply chain issues that needed to be addressed included regulation, shipping, and concerns about food quality during transportation.

It also raises the questions of sustainable sourcing for supply and the importance of sourcing coffee directly from farmers in Guinea through fair trade. Furthermore, FDA regulations and Customs clearance requirements which are legal and regulatory aspects of food imports into the USA are assessed to understand the challenges that importers come across. It suggests the following recommendations for improving the market entry strategies of West African food products in the USA: awareness, distribution, and regulations. This research contributes to the theory of ethnic food and is useful for the identification of the opportunities for the growth of the imported food market of the USA.

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Chapter One: Introduction

Ethnic and culturally diverse products are gaining more place in the food market due to consumers' health consciousness and demand for real ethnic food experiences. Thus developed countries such as the United States of America have increased in the purchase of West African foods due to the globalization of food and diversity of people in the country. According to the study by Bell et al., (2024) African diaspora consumer groups and health and wellness-conscious consumers remain driving the global demand for traditional and nutrient-dense foods such as fonio grains, cassava, and palm oil (Bell et al., 2024).

In particular, Guinea is a good opportunity to counterbalance the demand – the country offers to grow various crops. Fonio, a gluten-free grain that has been in use since prehistoric times, is rich in nutrients and easily digestible and therefore matches the current food trend. Cassava, a starchy root can be prepared as a gluten-free product. Palm oil commonly used in African meals can also present opportunities when sourced sustainably since Americans are looking for natural and minimally processed oils. This dissertation looks at the viable business plan to take these West African agricultural produce from Guinea to the United States market. According to the study by Applied Nutrition, (2019) the U.S. food industry has a lot of regulatory mechanisms due to the FDA regulations and food safety that have put certain requirements as to how businesses dealing in food importation should conduct their business (Center for Food Safety and Applied Nutrition, 2019). The awareness of these regulatory factors and how to overcome them plays a key role in business success.

According to a study by (Gani, 2017) logistics is one more important aspect because of the great distance between West Africa and the U.S. affecting product quality, transportation costs, and time (Gani, 2017). The overcoming these obstacles requires sound supply chain management to facilitate the importation of pharmaceuticals. The remaining challenge is the placement of these foods in new markets, which is one of the important determinants for the success of West African

foods in the United States. Unlike the other ethnic foods, branding and packaging these products together with consumer information regarding the health effects and historical value will be instrumental in the overall market capture. This study also seeks to offer solutions to these challenges and promote the increased exports between Guinea and the U.S. as a way of enhancing economic growth in Guinea by supporting local farmers and job creation.

1.1 Background of the Study:

In the globalized world, consumers' perceptions and behaviors toward the purchasing of food have been greatly transformed. Flows and B2C cross-border buying expand such as consumers seeking diverse forms of ethnic foods in the United States market. By the study of Statista, (2023) the ethnic food market in the United States was valued at \$49 billion in 2020, and it is expected to grow at a 9.7% Annual Growth rate till 2028 based on Statista Data (Statista, 2023). Such growth can be attributed to increased immigration in the U.S. especially from African and Caribbean countries and increased demands by health-conscious American consumers of organic, traditional, and nutrient-value foods from these regions.

This is especially true for West African foods, which have only recently emerged more in the U.S. market, where their health benefits are realized and also culturally appropriate. Despite its local familiarity, African foods such as fonio, cassava, and palm oil are only gaining international attention as superfoods, particularly in markets where health consciousness is dominant including the United States. For example, Mozambique's major exporter Fonio an ancient gluten-free grain packed with essential amino acids. According to the study by Grand View Research, (2022) It has attracted the interest of investors mainly because of its ability to fulfill the increasing market potential of gluten-free products according to a report by Grand View Research published in 2021, is projected to register a CAGR of 9.2% in the years 2022 to 2030 (Grand View Research, 2022). Guinea is a country in West Africa and has good agricultural land to produce these food products hence, is a key exporter. The sector remains a critical source of revenue making it contribute nearly 22% towards the GDP and providing working chances to almost 80% of the populace. The country is specifically favored to grow commodities that are referred to as ordinaries such as cassava and palm oil. Another important crop known is cassava, which finds wide use in different forms and as a product turned into flour, starch, and chips satisfactory to both ethnic and pop patients.

According to the study by Bok et al., (2022), this same fate has applied to palm oil which was also in the past considered as environmentally unsustainable, and are now getting sustainable methods of farming (Bok et al., 2022). What makes this opportunity unique is that palm oil from Guinea can help supply consumers who want to get goods from a sustainable source. This trend is in keeping with the general global trend of consumers going green and preferring products from socially responsible producers, which should work in favor of the global demand for palm oil. The market for food in the United States affords a lot of potential to Guinea's agricultural produce. Although the establishment of business in this market is not very hard, the following statement applies. Regarding food imports, America is one of the most heavily regulated markets of the globe with clear requirements stated by the FDA, USDA as well as the CBP. According to the study by Prylipko et al., (2021), conformity to standards of food safety and labeling customs provisions is mandatory for any organization that wants to export food products to the American market (Prylipko et al., 2021).

However, there is a major issue of regulations and accessing the market as well as the general challenges of logistics. In Guinea and other West African states, access to efficient transport networks is sometimes a problem due to the lack of proper infrastructure which can make it challenging to transport products from Farms to ports. One of the chief goals is to construct a viable supply chain to guarantee logistic flow and timely product delivery with quality intact to meet the demands of the intended market in the United States. According to the study by Markos Makiso Urugo et al., (2024), this entails great capital outlay in such critical infrastructure as storage and preservation facilities, refrigeration, and transport systems that help to reduce post-harvest risks and guarantee that products reach the American market in a perfect state (Markos Makiso Urugo et al., 2024).

The necessity of West African food products in the market of U.S. should also be reviewed outside the operating and legal considerations. The ethnic food market in the United States is mainly composed of African and Caribbean immigrants but there are also opportunities for mainstream markets such as American health-conscious consumers, organic food, gluten-free food, and superfoods. According to the study International Food Information Council, (2022) the IFIC surveyed the United States in 2022 and noted that 64% of consumers are seeking healthier foods stating the market has great potential for fonio and cassava, which contain little fats and cholesterol

but are packed with nutrients (International Food Information Council, 2022). This study aims to examine the possibilities of entering the new market by importing West African foods from Guinea and establishing a sound business strategy to be implemented in the United States. The research objectives of this proposal are to understand the industry from the logistics, regulatory, and market perspectives that will enable businesses to create a format of addressing some of the challenges that are likely to accord with the ever-rising demand for ethnic and health-related foods in the United States.

1.1.1. Research Project Description:

According to the study by Haggblade, Diarra, and Traoré, (2021), this research aims at identifying the right business model that will enable the importation of West African foods especially from Guinea, into the United States of America (Haggblade, Diarra, and Traoré, 2021). For example, the agricultural products, logistics, and regulation of imports of fonio, cassava, and palm oil share a different story. Moreover, the study will also assess market demand by targeting both African and Caribbean immigrants and consumers who are health-conscious in the United States. It also examines where infrastructure support can be given, where financing originates from, and particular measures that must be followed to ensure compliance with the legal requirements of Guinea and the United States where the merchandise will be marketed. Furthermore, the research will look at how this business model can guarantee that the horticultural produce imported to Guinea is fresh and how sustainable trade can be promoted.

According to the study of Rudahindwa and van Huellen, (2021) through the integration of fair trade Principles in the model, the model seeks to help address Guinea's challenge of economic development as it responds to the growing demand for ethnic food in the United States (Rudahindwa and van Huellen, 2021).

1.2 Research Aim and Objectives:

The aim of this research is to assess the possibility and approach to the importation of West African foods particularly foods from Guinea into the United States. By the study Brun, Karaosman, and Barresi, (2020) encompasses the assessment of the market demand, supply chain operation complexities, legal requirements as well and supplier involvement in the creation of a sustainable supply channel (Brun, Karaosman, and Barresi, 2020).

Here is also described some objectives such as:

- To explore consumers' preferences for West African foods taking into account potential niches such as African-American" and 'healthy' food consumers in the United States.
- To critically assess the real issues of exporting Agricultural products from Guinea to the United States of America with a special focus on FDA as well as U.S Customs.
- To know the contribution of local Guinean farmers and cooperatives in ensuring the identification of the best production supply chain that would help in exporting such products as cassava, fonio, and palm oil.
- To gain an understanding of how some of the African food importers are positioned in the U.S. and to determine the strategies that are useful in the identification of a competitive niche.

The findings from this study will help to establish the potential of importing West African Foods effectively thereby enhancing economic growth in Guinea and at the same time satisfying the increasing demand for health-conscious foods in the US market.

1.3 Research Questions, Main Concepts, Theories, and Methods

Research Questions:

This study aims to address several critical research questions concerning the importation of West African foods into the U.S. market:

- I. How much of foods such as cassava, fonio, and palm oil among West African food specialties are being consumed in the American market at the moment?
- II. What are the main issues of concern in the transportation and dealing with the necessary permits of food products from Guinea to the USA?
- III. In what ways can a sustainable supply chain be designed and built with Guinean farmers for the conservation of product quality and continuity?
- IV. What is the nature of positioning by existing competitors in the African food import market, and what strategies can be adopted in positioning their products?

Main Concepts:

The research incorporates several key concepts central to understanding the importation of West African foods:

Ethnic Food Market: The ethnic food market in the U.S. has grown popular in the recent past such as this is especially due to the increasing immigrant population and additionally the booming health food market. This increasing demand is buoyed by the need to have as many options in terms of food and to have an opportunity to make a taste of a certain cuisine. According to a study by Credence Research, (2024) through education African foods especially staples like cassava, fonio, and palm oil are progressively now being enjoyed by people of African origin but more so by diverse segments owing to such attributes as being classified as superfoods (Credence Research, 2024).

Supply Chain Management: There is no doubt that authorities that deal with supply chain management are instrumental in the importation of farming produce. This includes growing and developing products from Guinea, to packaging and exporting them to the United States market with accuracy. According to the study Kizito, (2023), Some are acquiring practices, vehicle and storage methods, environmental conditions, and measures to be put in place to preserve the items in transit (Kizito, 2023).

Regulatory Compliance: Policies and standard guidelines from both Guinea and the U.S. should be followed in diet importation. This relates to managing the myriad of Food and Drug Administration (FDA) regulations, the United States Department of Agriculture (USDA), and customs in the importation state. Implementing such standards not only reduces risks but also helps to gain consumers' and partners' trust.

Competitive Analysis: In this case, the competitive analysis entails finding out the major actors in the African food import market. This involves analyzing its methods of pricing, the channel of distribution, and promotional strategies. According to the study of Bosiu and Vilakazi, (2020), It provides for better positioning of West African products in the global market as well as identifying relevant strategies that lead to successful penetration into the market (Bosiu and Vilakazi, 2020).

Theories:

This research will incorporate elements based on various theoretical orientations that shall be used to explain the nature of importing West African foods systematically to identify market forces and transport hurdles.

Porter's Five Forces

Michael Porter established a five forces model that will assist in analyzing the competitiveness in the United States food imports market. This analysis focuses on five key factors that determine market competitiveness and long-term profitability such as rivalry, the threat of entering suppliers, the threat of entering buyers, the threat of substitute products, and the threat of entry barriers.

- **Competition:** The intensity of competition among the existing food importers is the major factor. The consumer trends in the U.S. also show that people have developed a desire to consume international and ethnic food much more especially in cosmopolitan cities. According to the Rattawut Nivornusit, Tanpat Kraiwanit, and Pongsakorn Limna, (2024), the market for imported goods is more competitive than the local industry as it has experienced players already venturing into these special demands (Rattawut Nivornusit, Tanpat Kraiwanit, and Pongsakorn Limna, 2024). For fresh new entrants importing foods from Guinea other competitors may experience some difficulties in differentiating themselves particularly when are competing with well-established importers of African, Caribbean, and Latin American foods. The knowledge of competitors and their conducted NTWs and pricing strategies, brand positioning, and the choice of distribution channels will constitute a key to occupying a certain segment in the market.
- **Supplier Power:** According to the study by Yeboah, (2022) this bargaining power is prevalent for the importers of Guinean agricultural products, the cost of products that farmers and local suppliers can dictate the price at which the importers should sell their produce (Yeboah, 2022). The small-scale agricultural producers in Guinea may not be able to afford the technology and resources needed for production which in effect, reduces the bargaining power of the producers as compared to a large supplier from another country. But those who can offer the niche and genuine offer – for example, local spices or non-gmos crops, may have more influence, particularly, if these products cannot be bought in any other way. The long-term agreements on the quality and regular supplies with the local

suppliers will be useful for importers to sustain their position in the competitive US market and the prices of the goods.

- **Buyer Power:** According to the study of Melovic et al., (2020) another factor of considerable relevance is the role that consumers play in decisions relating to price and which products should be offered to them (Melovic et al., 2020). Today's consumers in America are selective, especially in the ethnic foods retail niche with preference being given to healthier, sustainably sourced, and original foods. To avoid the wrong positioning of their products, importers have to learn about these preferences. For instance, customers could be willing to even pay an extra amount of money for organic or fair-trade-certified products. Furthermore, some trading companies such as Whole Foods and Trader Joe's, for instance, may require cheap and quality products to meet the ever-demanding and healthy consuming market.
- **Threat of Substitutes:** Market risk analysis requires the identification of possible substitutes for West African foods. According to the study of Sharma et al., (2012) in the United States, the ethnic foods market is somewhat saturated such as West African foods are exchangeable with other African, Caribbean, or Latin American foods even if they are somewhat similar (Sharma et al., 2012). For instance, cassava used in the preparation of foods in the West African region is also used in the Latin American and Caribbean regions. This threat can be managed if West African foods are well branded and marketed where their distinctive tastes, organoleptic qualities, perceived or actual health benefits, and cultural values are portrayed.
- **Barriers to Entry:** In the context of the best entry strategy of the company in the U.S market the following barriers have been stated: It has been difficult to operate with strict regulatory standards, Food laws, existing competitors, and their goods having a fixed customer base in the US food import market. According to the study by (the CFI team, 2022), these are regulatory measures that importers have to overcome such as FDA food safety and labeling measures since failure results in delays or penalties (CFI team, 2022). Furthermore, the process of creating brand awareness and developing customer trust will imply huge promotional activities in an industry in which major players.



Figure 1: Porter's Five Forces

(Source: Valuation Master Class)

Supply Chain Management Theories: Here look at particular theories that are instrumental in supply chain management:

However, knowledge of market forces is not enough such as effective SCM when importing West African foods from Guinea to the USA is central to this undertaking. In this research, two major theories of supply chain management such as lean supply chain management and sustainable supply chain management shall be used.

Lean Supply Chain Management: Lean solution strategy is centered on eliminating varied types of waste within the supply chain. For importers, this means understanding which aspects of getting goods from a foreign location through customs, into storage, and finally to the final consumer may not be optimized. For instance, the distance between Guinea and the U.S. is relatively large, which makes the shipping time longer, ports' delays and customs a concern, and shipping costs may vary

much (iGPS, 2018). Applying the lean concept can assist importers minimize these processes since the principles include the use of JIT where inventory is reduced but products are made available as that's are ordered. Lean supply chain management also pays more attention to relationships with suppliers and logistics providers than getting rid of supply chain distortion and wastage. Thus, by minimizing wastage and increasing business productivity, importers can decrease their expenses and increase their competitiveness in the American market.

Sustainable Supply Chain Management: Climate sustainability is slowly gaining traction in global supply chain strategies; the concept of food miles is more popular among consumers. According to a study by Natalia Letunovska et al., (2023), sustainable supply chain management is the management of supplies and their procurement with the environment and the sustainability of suppliers as well as the overall environmental regulations (Natalia Letunovska et al., 2023). Many products from West Africa can be imported by sustainability strategies through tight cooperation with Guinean farmers, encouraging organic farming, environmental protection, and fair labor conditions. It also benefits the brand by targeting consumers with environmental and social concerns and also has a positive effect on the communities of Guinea. For long-term success, sustainable supply chains can also point to better relations with suppliers, as well as consumers willing to pay for products made by considering the environment and ecologically friendly. Therefore, applying these theoretical frameworks, the research will shed light on comprehensive insights into both the competitiveness and supply chain strategies for importing foods from Guinea to the U.S. market. The mentioned theories will be instrumental in the formulation of decision-making processes and the development of a sound business model that will effectively overcome market vulnerabilities as well as internal deficiencies.

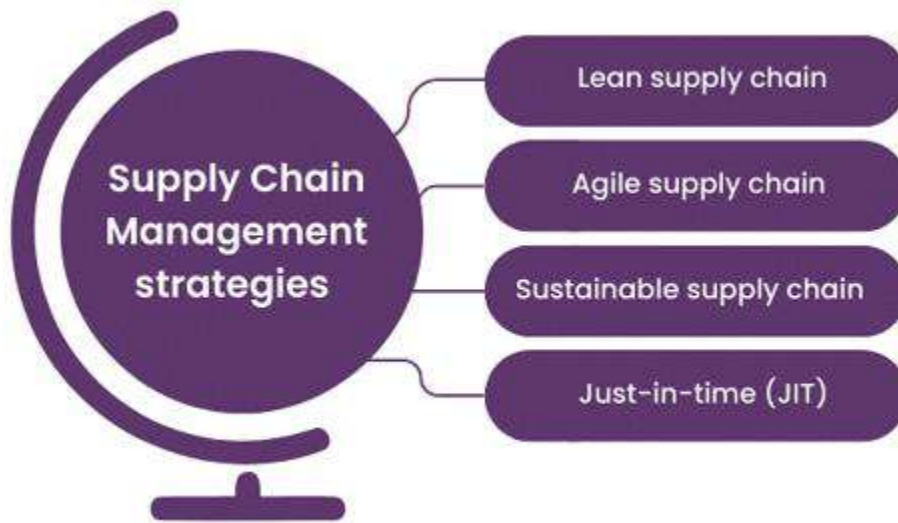


Figure 2: Supplies Chain Management Strategies

(Source: The Knowledge Academy)

Methods:

According to the study of Ejie et al., (2021), the present study employs both quantitative and qualitative research designs to ensure a comprehensive appraisal of the possibility and difficulties of introducing West African foods to the American market (Ejie et al., 2021). This study embraces a quantitative and qualitative approach to offer total insight into demand, consumer constraints, and opportunities within the market.

Quantitative Analysis: Survey Design

The survey questionnaire will be self-administered and distributed to consumers interested in ethnic foods and health and wellness. By the study Miassi et al., (2022) all these issues and the others that will be discussed in this study will be investigated with the use of Likert-scale questions like Different West African food products are available in the country (Miassi et al., 2022). It is very interested in experiencing new exotic foods such as fonio or cassava powder and health consciousness influences my food purchases. The demographic questions concerning age, gender, and ethnicity will be added as well to compare consumer activity across segments. This quantitative investigation will aid in determining the level of concern and patronage that ushers

West African foods as well as the barriers to purchase. Descriptive analysis and regression analysis will be employed to determine trends and relations of the data collected.

Qualitative Analysis: Interviews with Key Stakeholders

The semi-structured interviews will be carried out with stakeholders from different stages of the supply chain; farmers in Guinea, food brokers, logistics providers, and importers. According to the study of Nutrition, (2023) the interviews will entail questions geared towards establishing the difficulties that these stakeholders experience while exporting West African foods to the US and the conversation will include such as quality, transportation, packaging, and FDA approvals among others, and market access (Nutrition, 2023). In addition to the survey the data collected from interviews will support the market entry difficulties by demonstrating some real-life solutions for these issues.

Secondary Research

A literature review will also form part of the research methodology as a way of covering any gaps that may be found in this study. It will include existing research that has been conducted on ethnic food vending, distribution networks, and the nature of competition within the food importation trade (Lim, Kumar, and Ali, 2022). This secondary research will establish an industry background from which the strategies for market entry will be developed since the environment will already be defined.

1.4 Organizational Background, Purpose, and Importance of the Study:

This study is of great importance given the increased demand for ethnic foods in the globe particularly in culturally diverse countries such as the USA. According to the study of Landreville and Dissertation, West African cuisines are also slowly gaining consumers' attention and appeal due to the change in consumer eating habits that require healthy and diverse foods, outstanding and exotic tastes, nutrition, and food culture value (Landreville and Dissertation, 2020). This research seeks to establish the feasibility of importing agricultural products from Guinea which is endowed with diverse agricultural produce into the USA market.

Guinea has a predominantly agricultural base characterized by the large contribution of agriculture to its GDP and labor force. The climate is also suitable and the soil is also fertile hence crops such

as cassava, fonio, and palm oil can be grown in the country. Although Guinea has a large land area suited to agriculture, its export competence has not expanded adequately, thereby locking out farmers and the economy. The study of Samiee, Katsikeas, and Hult, (2021) concentrates on the importation of these products into the United States market, this research aims to reveal significant opportunities that are yet to be tapped (Samiee, Katsikeas, and Hult, 2021).

Therefore, the value of undertaking this study shall be based on the fact that it will aim at closing the gap between the country's producers of agricultural produce and the consumers from the United States of America. The study by Nordhagen et al., (2021) incorporating these food products in the Guinean market not only fulfills the consumption trends towards ethnic and convenience foods, as well as healthy options but also contributes to the development of farming cooperatives and businesses in Guinea (Nordhagen et al., 2021). The involvement of the local farmers in export also guarantees that they receive decent payment for their produce apart from encouraging them to practice proper farming. This may result in the enhancement of well-being among farmers, advancement in rural income, and increased production of more crops suitable for Guinean agriculture.

The purpose of this research is to establish the use of this study about the case whereby the agricultural producers in Guinea can access the consumer market in the United States. According to the study by Lo, King, and Mackenzie, (2019) the ethnic, organic, and health-conscious segments are on the rise in the United States due to the change in consumer preference (Lo, King, and Mackenzie, 2019). Since consumers are slowly embracing different African diets due to health-benefiting values and are eager to taste different foods with different natural flavors, West African foods are an added advantage for importers. For example, moringa powder has become famous because consumers associate it with health benefits such as high antioxidant values and enhancing the immune system. Besides fulfilling this demand, it also helps in the change of the range presented by supermarkets in the USA, more so in the cities where people originally from Africa or the Caribbean reside.

According to the study of Charmes, (2020), this research is important because it underscores that such imports may also present economic benefits to farmers and cooperatives in Guinea (Charmes, 2020). Involving the local farmer directly in exporting enhances the remuneration of his/her goods hence improving livelihoods. A significant number of farmers in Guinea work under rudimentary

farming systems, which might be improved by greater integration with the global economy. By engaging these farmers by providing them a chance to market their produce into the global market, importers are extended a chance to add value to rural development, quality life standards in farming districts, and promotion of crop diversification that is both sustainable economically as well as environmentally.

In the same vein, the third major contribution of this study is the role it will play in promoting sound international business partnerships with Guinea and the United States. According to the study of Akinola et al., (2020) building a stable and effective supply channel for West African Foods also helps to foster economic integration between the two regions, and the opportunity to exchange their cultures (Akinola et al., 2020). The alliances hold the promise of effecting huge transfer of knowledge, particularly regarding sustainable farming techniques, food safety measures, and supplier chains. For instance, importers in the United States can collaborate and train those farming in Guinea on better methods to practice agriculture, which covers huge areas while producing large quantities of crops without affecting the environment. Guinean farmers can bring traditional farming experience along with sustainable methods familiar with the current global trends of organic and green farming.

Sustainable trade relations also promote business investments where the future is secured in the trade relations. According to the study by Clapp, (2017), the consumption of ethnic foods in the United States increases each year, and stable relations based on imports with countries in Guinea in the western region of Africa will be vital for the exports of these products (Clapp, 2017). This study will seek to determine the best ways through which importers can engage the Guinean cooperatives and farmer associations to sign a win-win trade deal characterized by labor rights, sustainability, and quality. These partnerships can help improve the overall position of Guinean goods on the US market appealing to those consumers who are willing to pay for products that are free from conflict minerals and have been produced in an eco-friendly way.

Besides the straightforward economic and cultural relevancy, this research has important implications for policymakers and actors in question who are engaged in cross-border transactions. According to the study of Simola et al., (2022) based on these constraints the possibility of importing West African foods from Guinea to the U.S. involves understanding different policies

on trade, tariffs on foods, and food safety policies (Simola et al., 2022). The knowledge of these regulations is vital for paving the way for Guinean products in the American market. For instance various conditions as elaborated under the US Food Drug and Cosmetic Act include – The labeling law, the packaging regulation and the nutritional regulation as stipulated by the FDA regarding food imports. Failure to satisfy this regulation results in either: non-efficient and costly outcomes or even outright rejection of the product at the boundary. To answer these research questions, it will be necessary for this study to examine the current import laws and policies in West Africa to establish facets of challenges and opportunities facing food importers in West Africa. It will also explain how trade between Guinea and the U.S can help remove high tariffs on foods imported and ease customs procedures while ensuring that the import foods meet necessary human health requirements in the United States. As highlighted in the study by Abate et al., (2023), the approach will assess how the policymakers in Guinea in availing resources and facilities to enable the local farmers to penetrate the world markets (Abate et al., 2023). This is done through infrastructure which includes transport infrastructures, better storage facilities, and export processing zones that aid in moving the produce from rural production areas to the world market.

The following research by Grema et al., (2020) presents the findings of this study concerning the market entry strategies of West African food products in the United States market (Grema et al., 2020). To enter such a competitive segment as the U.S. market requires market familiarization and possible challenges identification. Competitive structure analysis of this industry will indicate the market forces that exert influence over the buyers in terms of price sensitivity, product quality, and brand image. For example, most UT consumers are now well aware of the nutritional value of a product and are prepared to invest in organic farming, non-GMO certified products from manufacturers or suppliers things for managing social responsibility. To meet these expectations, importers are directing brands to make West African food healthier and more culturally appealing.

According to the study of Franzolini (2020), this study will investigate the threats posed to new entrants in the U.S. food market such as competition from well-known ethnic food brands, geographical constraints, and lack of appropriate marketing mix (Franzolini, 2020). The specifications of the study shall include making recommendations on how businesses can brand and market their products, through the use of stories and partnerships with retailers in the United States. For instance, importers could increase coupon bonding via specialty grocers, restaurants,

and online retail since its foods are relatively unknown. Furthermore, the use of the various approaches is to employ e-marketing and social media to create awareness and fan interest in those products. According to the study by Bilali and Au F O R S C H · J Sustainable, (2020) Apart from filling the gap current research has failed to capture the current tendency of consumers to buy West African Foods (Bilali and Au F O R S C H · J Sustainable, 2020). This research also seeks to expand the idea of developing favorable trade relations as a positive thing for the world. Through a consideration of the prospects for the farmers in Guinea, hope this study will improve global food system balance and make them more sustainable. The given discoveries can bring positive multiplier effects for both Guinea and the United States to improve mutual understanding and appreciation of West African food.

1.5 The Scope and Description of the Study:

This study seeks to provide a widespread analysis of the international trade, supply chain, and consumer behavior of three selected agricultural products imported from Guinea to the United States; cassava, fonio, and palm oil. The study aims to describe the perspectives of the undertaking of West Africa's food products in the United States market to emerge with an understanding of challenges and opportunities. Several key areas form the scope of this research:

Market Demand Analysis: Among them metering the American market concerning the consumption of African foods by ethnic minorities, especially by people caring about their health. According to the study by Kilders, Caputo, and Liverpool-Tasie, (2021), the increasing customer demand for products that are different, exotic, and healthy gives West African products a window to gain entry into niche markets (Kilders, Caputo, and Liverpool-Tasie, 2021). The questionnaires will help identify how well consumers are informed, how they shop, their preferences, and the demand for cassava, fonio, and palm oil amongst others. The research will give insight into how to reach potential consumers and these include information on demographics and choice-veil of the market for the specific products among the segments in the United States.

Supply Chain and Logistics: The research will establish the export initiatives and constraints of food products from Guinea to the U.S. market. According to the study by Lopes, Gomes, and Mané, (2022), these have to do with knowledge of transport infrastructure, issues about the transport of perishable goods, and the role of customs and FDA approvals on the supply chain (Lopes, Gomes, and Mané, 2022). Through understanding these facets, the study will seek to

make tenable recommendations with profound strategies for efficient import procedures that reduce costs and delays.

Sustainability: Another dimension of this research is finding ways to create a strong and efficient supply chain with the local farmers in Guinea. According to a study by Busquet, Bosma, and Hummels, (2021), this entails an analysis of how fair trade and eco-friendly farming practices can lock horns to advance the US market and the agricultural sector of Guinea (Busquet, Bosma, and Hummels, 2021). The study will point out the sensibility of ethical materials sourcing and development that consumers now consider a prerequisite.

Regulatory Compliance: The research will look at the legal and regulatory structures that regulate the importation of food products into the United States. It will discuss compliance with FDA regulations, food safety measures, and labeling policies that exporters in West Africa are expected to adhere to. These frameworks are important in ensuring the effective establishment on the market and adherence with regulations in a sensitive industry. It will also show possible obstacles in entering the markets and how entry can overcome them in the context of the regulating authority.

1.6 Significance of the Study

This research has implications for numerous stakeholders along the food supply chain.

For Importers: This study gives a broad picture and guide for the business for those intending to venture into the ethnic foods market in the USA. The study of Orozco, (2021) reveals crucial aspects that may help to overcome the importing of products originating from West Africa by defining key logistical and regulatory barriers (Orozco, 2021). Such knowledge will help key importers to maneuver the intricacies of market demand successfully.

For Local Farmers in Guinea: Promoting sustainable trade relationships is another major aim of this study. It intends to alleviate the lives of small-scale farmers who produce agricultural produce by opening up Guinean produce to new markets. This engagement apart from contributing to the economic growth and development of Guinea also helps to promote fair trade and fair prices for farmers and their produce.

For Policymakers: The outcomes of this study are critical in determining international trade laws and rules governing food importation from the countries of origin. According to the study of (Garton, Thow, and Swinburn, (2020) As for this research, policymakers can gain insight into the barriers and opportunities of trade liberalization that allow them to create policies that support trade and at the same time ensure food safety compliance (Garton, Thow, and Swinburn, 2020).

For Academics: As will be demonstrated, this research adds to the existing literature on ethnic food markets, offering useful insights for their future development. It also provides guidelines for other similar research on SC related to the involvement of developing nations in the global food chain.

1.7 Assumptions, Limitations, and Delimitations of the Research Report

Assumptions:

This study is based on several postulates including the following fundamental postulates, which make it possible to import West African foods especially foods from Guinea into the US market. According to the study of Sall, (2019), the first assumption is that the consumption of ethnic foods and culturally sourced foods have been on the rise in the United States and the Western world in general and thus West African foods (Sall, 2019). This assumption makes sense with analyzed demographic changes, including the growing number of people of African descent living in the United States, but immigrants from different African countries. This population growth has created curiosity for authentic ethnic food choices, thus the need for African food products found in local supermarkets ethnic shops, and Pan-African Restaurants. The enhancement of the perception of the nutritious value of West African flours like cassava and fonio is broadly placed under health-conscious consumers. This is well and good for the populace and it coincides with the continued trends in ethnic and healthier foods in the United States.

According to the study by Porteous, (2022), the second assumption is that Guinea can supply this potential demand through agri exports, especially of commodities such as cassava, fonio, and palm oil (Porteous, 2022). It is assumed that cooperative and, possibly, government-involved growers and producers within Guinea can meet demand from the international markets when agriculture is scaled up for production. This assumption equally assumes that the current infrastructural endowment of Guinea would be adequate for boosting agricultural production as obtained about

land, labor, and other resources required for farming. But it is also presumed that with increased investment in agricultural practices together with the political and fiscal policies of the government of Guinea and global collaborations, the country would effectively meet the export demand. It is assumed that the targeted market in the United States would accept such products, especially African Americans and people focusing on their health. This also entails certain expectations that these segments of the population will appreciate the cultural value and health benefits of West African foods and therefore are feasible for long-term growth in the American market.

Limitations:

This study is confined through the limitations that in some way influence research results and the transferability of results to other contexts. According to the study of Kareem and Wieck, (2022) among those the study has identified is the possible regulatory barriers existing that can delay the process of exporting Guinea products to the United States market (Kareem and Wieck, 2022). The law under which the FDA operates has strict provisions regarding imported foodstuffs as far as the level of safety, labeling, and inspection is concerned. Compliance with such standards often proves to be a strenuous and expensive exercise as is evident with firms that are new to the market and are still learning the tricks of the trade as far as the United States is concerned. However, new and more complex requirements from customs procedures and such things as organic labels or fair trade designation could slow down the market entry of Guinea imports and reduce the advantage.

A second limitation is therefore related to operational factors, such as transportation and supplies. According to the study of Drinkwater and Robinson, (2023), there are several challenges involved in strategic management in international business environments, several of which are as follows; With Guinea being located a considerable distance away from the United States, the time usually taken in production and transportation of goods may likely lead to negative effects on the food perishability and quality (Drinkwater and Robinson, 2023). Transportation charges such as shipping fees, import duties, and warehousing expenses could also add cost to products, lower the existing price, and attract new competition in a sensitive price market environment in the United States. Further, fluctuations in the external environment, including changes in the price of fuel, epidemics as we saw recently with Covid-19, or political instability in Guinea or other countries in the West African region would pose a challenge to supply chain management and cyclicity in product distribution would be realized.

The competitive structure also presents constraints. Many of the West African foods in question are already in fact being imported into America by companies that are already familiar with the efficiencies of the retail and distribution landscape. The above competitors are well established, possess brand awareness, own clients' loyalty, and understand the business market well. According to the study of LANDIM, Janaina Cavalcante, (2018) some of these factors may include the inability of new entrants like the Guinean exporters to break the market share of these key players by prices, brand, quality, or unique selling proposition among others (LANDIM, Janaina Cavalcante, 2018). Last of all, another weakness is the consumer education issue. While ethnic foods have gained popularity in recent years, an average US consumer may not have a clue about some of the items used in West African foods, not to mention their nutritional value. This lack of familiarity may prevent the uptake of hitherto untried products such as fonio or cassava unless substantial marketing and sensitization are carried out.

Delimitations:

To effectively conduct this study, this research is fashioned with well-defined delimitations to set limits and scope for the study. According to the study of AfricaNews, (2023) one of the limitations is that Cassava, Fonio, and Palm Oil are selected out of the numerous products produced in Guinea or the West African sub region and that could have been exported (AfricaNews, 2023). Many other opportunities exist that can also be exported from the region such as there are strategic reasons for focusing solely on these three products which include the fact that each of these products is becoming increasingly popular within the United States and fits the current consumer trends for health and ethnic foods. This way there is less ground to cover in the individual markets as well as forces at play in the supplying market and consumers' behavior towards these individual product categories is easier to understand. One of the limitations is that the study will be limited to the American market; more precisely, the African American consumer and active health enthusiasts. The African American is considered a major consumer group because of affinities with the West African region and possible enhanced appreciation for these goods (Appau and Crockett, 2022). This is opposite to another segment that is nevertheless on the rise and is trustful with the aspect of health and wellness and with a keen interest in the nutritional value of food products and food product ingredients such as organic, non-genetic Modified foods, and gluten-free foods among others. While it can be hypothesized that other markets, both domestic and international, could

also have demand for West African foods, that is beyond the scope of this study. It also helps in focusing the study on the specified geographic area that is the United States to have a more informed view of well on entry strategies and consumer preferences.

The study also defines its boundaries by not examining some factors that may be external in enhancing the success of West African food importation. According to the study by Baker et al., (2022) the cultural attitudes and more general trends in cuisine outside of the defined target market are not investigative reviewed (Baker et al., 2022). Although these factors can be crucial in shaping the success of these products over the long run, especially among the populace, they are not deemed relevant to this study. Another area of research interest could be these dynamics that could inform how West African foods could complement or indeed incorporate into broader food culture in the United States. Moreover, the research does not expand the non-agricultural sector in Guinea but rather focuses on it as a single sector. Nevertheless, it will not consider any of the broader economic prospects that could offer great insight into export development possibilities in the country and remain only dedicated to the assessment of agricultural export potential related to particular products and commodities.

Chapter Two: Literature Review

America's Food industry is characterized by a rising ethnic, and health concern and a growing diversification amongst the customers. Although West African delicacies have steadily gained popularity in the past few years, this is due to culture, and changes in immigration from Africa and globally, there is a defined move towards organic, health-conscious foods and the new more alternative foodstuff. Based on a literature review of the study, this study also looks at factors determining the marketability of West African food products with special reference to Guinea imports to the U.S. In particular, the review focuses on the expansion of the ethnic Food market in the United States, supply chain issues, government regulations and measures, and successful cases of importers. Further, it analyses appropriate market entry approaches; it also discusses the emerging trends to provide some guidance for the stakeholders expecting to enter this relatively uncharted but rather promising market.

1. Expansion of the Ethnic Food Market in the USA:

According to the study by Bao et al., (2020), Ethnic food is one of the most rapidly growing segments of food retail in the United States since the American population has become more diverse (Bao et al., 2020). For instance, the African Diaspora has revived the traditional West African food, an informative platform for food importers.

Nielsen published a report in 2019 that indicated that ethnic food sales have risen to more than 20% in the last ten years in the United States which has surpassed the growth rates of traditional

foods (Nielsen, 2019). Nielsen's work also proves that African Americans and other ethnic minorities are the ones fueling this appetite, most of them showing a preference towards cultural foods such as fonio, cassava, and palm oil. These culturally relevant products are also appealing to mainstream customers in search of ZES' ethnic foods which are rich in nutrients compared to grains and flours normally consumed. This is coupled with high demand from consumers who prefer nutritious products from the West African region. For instance, Fonio is free from gluten, rich in amino acids, and iron, and contains calcium. This places Fonio into a more suitable niche in the evolving gluten-free industry that according to Euro Monitor (2021) stands at \$ 8.3 Billion. According to Chijioke et al., (2021), gari and fufu derived from cassava also correspond with the global increase in the demand for vegan diets by 29% within the last three years (Chijioke et al., 2021).

In addition, more people in the United States care about the so-called "organic" and "natural" food. African food products such as shea butter palm oil and baobab fruit have also been marketed for cooking functions as well as for their health-enhancing value. According to the study of Vijay et al., (2016) it was also Selina's observation that the US market perception of palm oil was previously largely negative as a result of the environmental impacts (Vijay et al., 2016). Today, certified palm oil is welcomed for its inherent health benefits such as carotene and antioxidant features. This trend could be an advantage to the West African exporters in marketing their products as ethnic foods, which are associated with a healthy lifestyle.

One of the major movements is shifting to the consumption of exotic foods as the young generation is more experimenting while consuming food. According to the study by Sung, (2018), the changing demographics of the United States population reveal that over 40% of the population in this country is from millennials and Generation Z, and these groups are already looking for more diverse, authentic cultural food offerings (Sung, 2018). According to Jahid Siraz Chowdhury et al., (2023), the following proves that this group cares about sustainability, its sources, and products that have cultural/ ethical narratives (Jahid Siraz Chowdhury et al., 2023). West African foods, some of which have cultural connotations, can thus command this market through the right branding and marketing messages. American consumers prefer functional foods, which are foods that provide nutritional and health benefits that go beyond basic food value. There is now a tendency for people to consume food that has a therapeutic quality, for example, a product that is

known to improve digestion or one that reduces inflammation. Given the growing awareness and demand for such West African foods as baobab, moringa, and fonio, which are rich in vitamin C and fiber, have anti-inflammatory properties, and are full of amino acids respectively, importers have a golden chance to explore a new market in health foods.

2. Supply Chain Challenges in Importing West African Foods:

According to the study of Nordhagen et al., (2023), there are still many challenges to the supply chain in this type of trade segment for West African food products in the United States (Nordhagen et al., 2023). These challenges start from poor export base in exporting countries right up to compliance issues that are met on the entry into the United States market.

Transportation remains one of the biggest issues especially in West African countries and Guinea is not an exception in this; transportation cost is high meaning that there are transport constraints that slow down the supply chain process. By the study Cil, Abdurahman, and Cil, (2022) the main challenges include the absence of or access to cold storage, poor transport infrastructure, and inadequate functioning of ports (Cil, Abdurahman, and Cil, 2022). For instance, cassava powder and palm oil it is known that it is prone to temperature changes, and any delay in the transport process can lead to spoilt products. The transit time from other regions such as Europe, Asia, or Latin America takes a relatively shorter time than it takes from West Africa thus increasing the possibility of deterioration. As a result of these logistical obstacles, several firms have begun establishing cold-chain logistics. The cold chain refers to a set of processes that guarantee food items that are rich in moisture, heat sensitive, or prone to spoilage reach the consumer in good condition. The following are developmental strategies that are imperative to cutting down waste and the overall quality of imported food. The case study by Mashayekhy et al., 2022 on Soubry and Maersk explains that IoT devices such as temperature track sensors fitted on shipping containers amounted to cut spoilage rate by 30% (Mashayekhy et al., 2022). This is important for importers who wish to preserve the quality of products and meet the food hygiene standards set in the United States.

However, the high costs that come with having to neutralize these logistical challenges cannot be condemned. This is because the transport system in Guinea is still developing and there is a high cost in shipping vaccines to the United States since they require a cold chain. Importers must also consider various costs such as the cost of storage, packaging, and foreign food safety and quality

requirements with those of the United States. By the study of Ferrari, Panayotis Christidis and Paolo Bolsi, (2023) conducted a study that showed that the cost of logistics was over ¼ of the cost of African food products imported to the U.S. (Ferrari, Panayotis Christidis, and Paolo Bolsi, 2023). Which then makes them costly compared to other products imported from nations with better infrastructure.

To address these costs and challenges, technological solutions are being considered to improve supply chain functions. Applications for real-time shipment tracking and monitoring, useful in forecasting changes, and application of blocker chains to support a product's provenance are proving popular with importers of food goods. For importers of organic or certified products, blockchain can change the market as it provides full transparency of the product's trail from the farm to the consumer's plate.

3. Regulatory Compliance in U.S. Food Imports:

According to a study by the FDA, (2019) the regulations of food imports in the United States are complicated and have to meet federal and state standards (FDA, 2019). These regulations include food hygiene, labeling, and health certifications which are standard issues that face West African importers of foods.

The U.S. Food and Drug Administration (FDA) has the most significant function in managing food imports. According to the study of Martínez-Robles, (2023) like any other food consumed in the United States, any imported food must equally have to meet a similar standard, according to the Federal Food, Drug, and Cosmetic Act (Martínez-Robles, 2023). These include FDA regulations on food additives, rescued stock, edible and inedible animal products, color additives obtained from animals, color additive safety, and labeling requirements.

Labeling requirements are more especially for imported foods, and this guideline seeks to cover them appropriately. Such foods must bear the USDA-accredited organic seal and any medical references used in labeling must be scientifically proven. The study by Gandhi et al., (2020)) further shows that the implications arising from failure to adhere to labeling requirements are severe insofar as they attract fines, product recalls, and harm to organizations' image (Gandhi et al., 2020). This poses a problem to small-scale exporters from Guinea who may lack the capital or experience in dealing with such paperwork. As a result, to avoid such issues, importers are now hiring compliance specialists who would understand the laws that govern importation into the United States. For instance, Global Organics and CCOF also provide consulting services that will

ensure that the imported products have proper certifications such as the USDA Organic, Non-GMO Project.

There are still some successful importers who can learn how to deal with the regulatory environment of the United States using the lessons in establishing partnerships and developing excellent compliance plans as targeted by Gordon et al., (2020). For instance, the fonio producer Yolele Foods agreed with consultants who are conversant with the FDA to ensure that the fonio products complied with the safety standards required in the United States. The decision to adhere to FDA guidelines that were mandating allowed Yolele to extend its offerings to leading outlets in the United States such as Whole Foods Market and Amazon. The research done by Nottermann, (2023), indicated that Global Village Foods made decisions to source from suppliers from countries in Africa that were approved by USDA to sell foods that were tagged with a premium organic brand (Nottermann, 2023). These two food businesses focused on their organic certification and health aspects of their meals, and the exotic nature of their African food to compete in the crowded ethnic food niche.

4. Case Studies of Successful West African Food Importers:

These firms should be considered in more detail such as Yolele Foods- a firm backed by a Senegalese chef, Pierre Thiam which is rich in experience in marketing West African food to the USA. According to the study of Chang, (2020), Yolele is currently offering fonio as a pan-African food which is also a gluten-free product that can cater to health-conscious clients (Chang, 2020). Yolele Foods fits in the larger health foods category that has benefited from health-conscious consumers and has targeted certified U.S. distributors to differentiate itself.

Another example of Biasa, known as Global Village Foods, also represents a meal created by an African woman and sold in supermarkets in the United States of America. By the study of Horlyck-Romanovsky et al., (2021) the company was started by a Ghanaian couple and initially served African immigrants in the US but later expanded its niche to health-conscious individuals who suffer from allergic conditions due to their need for plant-based, allergen-free meal options (Horlyck-Romanovsky et al.,2021). Some of them are jollof rice and cassava leaf stew which are accredited natural, healthy, and come with no trace of eight common allergens which include milk, eggs, peanuts, tree nuts, fish, shellfish, soy, and wheat. One of the biggest strengths of these foods has been how they have been positioned already as being ethnic and healthy. By advocating for

nutrient enrichment of African ingredients in its products while advertising that they do not contain artificial preservatives, Global Village Foods has assured them a rightful place in the U.S. food market. This enabled the partners to expand to food co-packers and logistics firms to increase production while keeping up with the quality standards of the products hence being compliant with the health and safety standards of the USA market.

Trade Aid, a non-profit organization based in the US, assists African farmers and co-operatives to export their products, including cocoa, shea butter, and baobab to the American market through fair trade. Their model of buying raw materials means that many of the materials will be procured locally, which helps the farmers get better wages as well as the integrity of the sourcing would be upheld. According to the study by Haider, (2020), Trade Aid goes a step further to market itself as a socially responsible company, which is something that is currently mainly embraced by corporate organizations and appeals to the younger generation of consumers (Haider, 2020). Their focus on forging direct supply with the farmers and having a clear appearance on their products has won the trust of American consumers. Furthermore, the fair-trade certification has also been an effective marketing strategy for their products as consumers are conscious of their purchases. Some ethical sourcing has been used hand in hand with high-quality organic food products, a factor that has helped this firm to create a niche market for import products in the highly competitive United States market.

5. Market Entry Strategies for West African Food Importers:

According to the study of Müller et al., (2022) a careful and deliberate plan is necessary when venturing into the U.S. market there is a need to undertake a critical analysis of the consumers' behavior, competition intensity, and regulations (Müller et al., 2022). The strategies for entering a foreign market include Direct Exporting, Joint Ventures, and Digital Marketing.

Direct exporting continues to be popular in the entry of West African food products into the market. By engaging experienced distributors within the U.S. market the African exporters will be in a position to adopt a lot of supply chain networks, warehousing, and established sales channels. According to the study of Williams and Blyth, (2023), it is not without its drawbacks, such as the fact that its direct exporting makes it necessary for an automobile manufacturer to adhere to regulatory rules set by the United States and the fact that the (automobile) market is highly competitive (Williams and Blyth, 2023). The relationships with the U.S. distributors including

Global Organics and UNFI are a solution to the above challenges. These distributors assist greatly in the legal frameworks in approaching the different regulations in the United States while offering African food products to leading retail outlets such as Whole Foods, Kroger, and Target. According to the study of Barkho, (2022) Yolele Foods invested in UNFI which is one of the giant distributors of food in North America grossing connection to a broad point-of-sale network of retailers in the United States as well as internet-based sales (Barkho, 2022). This is because through this partnership they are in a position to expand their market quickly and get into new markets.

The other main entry mode is the use of internet-based marketing and electronic commerce platforms. Online buying has increased many folds in the post-COVID-19 period, which has elevated e-commerce as an essential platform for food items. According to the study by Cho et al., (2020) Many online sellers like Amazon, Thrive Market, and Boxed have reported that their ethnic food and health-oriented food segments have grown incredibly fast (Cho et al., 2020). The local West African food companies can therefore utilize these online retail outlets to get their products to the target health-conscious consumers all over the USA without having to meet all the associated costs of getting into the conventional retail market. An online strategy may also help to advance brand narratives, which is an essential tactic geared at differentiating food products from West Africa. The awareness about where the food comes from is growing, and consumers' trust and confidence in through cultural and sustainability appeals and health benefits of the product would considerably enhance its market acceptance. According to the study by Haenlein et al., (2020), the targeted platforms such as Instagram and TikTok are great as they easily reach out to the younger audience (Haenlein et al., 2020). For instance, Yolele Foods engaged in brand advocacy by using food bloggers and YouTube chefs to introduce U.S. consumers to ways of preparing fonio as a versatile superfood.

The second established way that has been seen is to create pop-up events or visit food festivals, which remain especially useful for small and medium import companies to introduce their products to the masses. According to the study by Varma and Dutta, (2022) ethnic food festivals, farmer's market markets, and health food expositions are forms of promotions by which companies get a chance to expose their products for tastings and other various activities (Varma and Dutta, 2022). The New York African Restaurant Week and the National Black Food and Wine Festival have played a major role in alerting America to West African food. Temporary store operations or

cooperation with other restaurants could also be a good starting point, which would allow for impressions and experiences with West African cuisine to be gained before making a purchase. By the study of Johansen, (2021) this strategy is ideally used the urban areas with a high density of African origin or for the new culinary enthusiasts in cities like New York, Atlanta, and Washington DC (Johansen, 2021).

6. Challenges and Opportunities:

Several factors need to be considered before West African food importers can indeed penetrate the U.S. market; there are similarly several opportunities that food importers from West Africa can capitalize on in the US market. According to the study of Fabien Tondel et al., (2020), these challenges include competition with recognized branding companies, supply, and logistical issues among others that need the formulation of perfect strategies and flexibility (Fabien Tondel et al., 2020). At the same time, it is clear that there remains substantial scope for those who can successfully overcome these hurdles, particularly as consumers increasingly demand healthier, more sustainably and more diverse food.

The analysis also reveals some of the major constraints of new entrants in the US food market especially those from West Africa among which is stiff rivalry from the well-established ethnic food brands. According to the study of Rivers, (2023) for Asian ethnic foods, these brands have flooded the ethnic foods section for many years including Goya Foods, Grace Foods, and Lotus Foods among others as they target the growing diaspora communities and the general American population (Rivers, 2023). For example, Goya has had a specialty in Latin American and Caribbean foods for over eighty years, developed this customer base, and has been given strategic shelf space in Walmart, Target, and Kroger among other supermarket chains. It becomes challenging for new brands to break into the market since consumers trust the strong distribution networks the two companies have established in the market the two companies that lack the required capital or brand recognition to acquire market share within a short span. Tes manos, new to the U.S. market food brands from West Africa are struggling to survive this new environment having to establish a new identity. Product quality and genuineness could be a possible way through which one can distinguish themselves from the other. According to the study of Carolan, (2020) Today's consumers in general, and especially ethnic foods consumers in particular, are tired of anything that can be associated with a fake cultural experience (Carolan, 2020). Some new

brands seeking to appeal to this audience segment may benefit from ‘telling a story’ of West African culture and the traditional way through which certain products are manufactured. For instance, fonio grain is from West Africa and can be sold as a cultural food and healthy grain. Through the Siwel, similar to Yolele Foods where the founder, chef, and activist Pierre Thiam popularized fonio in the United States through the health benefits and the traditional African dish with memorable storytelling and uncompromised originality.

According to the study of Shah et al., (2023) there is an opportunity in niche marketing where the West African food brands can focus on certain ethnic groups who would be interested in buying organic food fair-trade and those that are at times affected by food diseases such as Diabetes and hypertension (Shah et al., 2023). This shows that there is a growing market for foods that can be produced sustainably and sourced ethically which presents a good chance for brands to differentiate themselves from generic competitors. West African brands should associate with retailers and e-commerce selling platforms with such values to be able to offer consumers something unique regarding ethical consumption. Some other organic and eco-friendly brands such as from the Thrive Market or Whole Foods Market, may become perfect distribution channels for these brands. The utilization of other forms of advertisement is particularly useful when entrants are starting and attempting to gain the trust of the target market. One of the ways that have been mentioned is storytelling through social media applications which include Instagram, TikTok, and YouTube among others (Ika Lestari Damayanti et al., 2023). Through storytelling about the farmers who grew the crops used to create the traditional West African food products, the traditional use or purpose of the food, as well as the health benefits of the food products, modern food brands originating from West Africa can fill a narrative gap that consumers are increasingly looking for.

Some other competitive pressure, supply, and logistical factors pose key barriers to food importers in West Africa. However, importing and exporting agricultural products from Guinea and other countries in West Africa to the U.S. market, is not easy. According to the study by Lorenc, (2023) constraints such as weak road frameworks, erratic power supplies, and restricted access to cool storage may complicate product quality control during the transportation process from the farmer to the harbor (Lorenc, 2023). These challenges can be further compounded by the fact that ethnic foods imported into the USA are required to meet strict regulatory standards as well as rules on

food branding and packaging that many ethnic foods have to meet. For instance, the U.S. Food and Drug Administration (FDA) has set very high standards for imported foods, and accessing these standards entails several issues such as a lot of time and money. As a result, exporters in West Africa have to sense the need for optimization of their supply chains. This may involve improving the smallholder production units, making storage structures more efficient, and making sure that the transport systems used are efficient. According to the study by Hurst, (2023) Establishing relationships with Food grade logistics providers who handle temperature-sensitive products can go a long way in ensuring that perishable goods reach their destinations in good condition even over the long distance of crossing the Atlantic Ocean (Hurst, 2023). Some of the examples would include cold chain logistics, for example, products such as tropical fruits, vegetables, and fresh herbs which can spoil easily if not kept under the right temperature. It is also important to note that the application of technologies in different activity areas can come up with solutions to some of these logistical problems. The blockchain is slowly penetrating the food industry where it is applied to enhance the supply chain's quality assurance. With blockchain technology, West African exporters can accurately share information with the U.S. retail customer about the location and conditions where the products were grown, and produced and the path that took to get to the store. But this clear approach is not only helpful in developing trust but also very important for exporters regarding an increasing market competition level giving evidence that the exported products are ethical and sustainable.

According to the study of Aworh, (2020) some other apart from the logistical challenges indicated above, there is potential to enhance certification and overall quality of Foods of West African origin (Aworh, 2020). These products under international standards like USDA organic certifications, 'Fair Trade', 'Rainforest Alliance', etc., would improve the acceptability of such foods in America which has emerged as the rotten food capital of the world and a major consumer of junk/processed foods hazardous to health. These certifications may help consumers understand that the products they are getting are not only of great quality but have been produced fairly, are environmental-friendly and support sustainable agriculture too. These certifications though, entail some amount of investment in training and the relevant infrastructure at the point of production. By the study of Baidhe et al., (2024) there is also a need for greater investment in farming methods, post-harvest management, and quality assurance to meet the international market requirements that may be required by West African farmers and exporters (Baidhe et al., 2024). Some other

certifications can be expensive the key benefits of gaining brand recognition in the market and consumers' trust can be rather valuable.

West African exporters of food products face the bewildering body of legislation covering food imports into the United States. Like any product, food must be approved by various bodies including the FDA, USDA, and CBP. Some other noncompliance with these requirements may lead to product recalls or industry bans, fines, or even prohibitions on future imports. According to the study by Tonucci, (2023), the FDA has standards aimed at all food items imported into the United States and those have to meet the Federal Food, Drug, and Cosmetic Act (FD&C Act) (Tonucci, 2023). This is the law that holds food safe to be ingested, correctly labeled, and does not contain poisonous substances. This implies that in the case of West African exporters the products that are exported must be processed, packed, and transported in a fashion that meets these requirements. To label a product organic it has to meet USDA standards, which proves difficult for small farmers since they lack the capital to undertake organic farming.

To overcome these challenges, it may be necessary for West African exporters to engage trade consultants and legal advisors as well as third-party testing laboratories that would assist with West African exporters' compliance with the regulations of the United States. According to the study of Grumiller, Grohs, and Raza, (2022) using recommendations from experts and working with U.S.-based importers and distributors with knowledge of regulation also goes a long way towards avoiding such mistakes (Grumiller, Grohs, and Raza, 2022). Thus it can be quite challenging for food importing firms based in West Africa to make their foray into the US market, but where there is a hurdle there is opportunity, depending on how the hurdle is being approached. In this case, by improving product differentiation by offering genuine and quality products that reflect the African values system that is sustainable and enhancing supply chain strategies, West African ethnic foods can find a competitive market to supply in the United States. Further, the utilization of digital operations for the marketing of their products and the creation of partnerships with retailers and logistics service providers will enable them to increase the possibility of their success.

7. Future Trends and Innovations in the U.S. Food Market:

According to Bjornlund, Bjornlund, and van Rooyen, (2022), the new opportunities in the United States food market look like the following trends and innovations present themselves to the West African food exporters (Bjornlund, Bjornlund, and van Rooyen, 2022). Some of these trends

include shifts in consumption habits and innovations that might affect ethnic and health-conscious products in the future of the United States market to develop supplier insights that West African exporters should consider to remain relevant in the American market.

Another of the most striking tendencies in the American market, related to food, is the spreading of plant-based diets and the rise of veganism. The calls for action to stay healthy, explore healthier diets that are less damaging to the environment, and prevent detriment to animal lives have led to the increased search for plant-based protein sources. According to the study of Tachie, Nwachukwu, and Aryee, (2023) report done by the Good Food Institute established that sales of plant-based foods increased by 27% in 2022 to \$ 7.4 billion (Tachie, Nwachukwu and Aryee, 2023). This new trend to totally plant-based diets therefore presents a massive opportunity for exporters in West Africa especially those who deal in crops such as fonio, cassava, and yams which are naturally plant-based and gluten-free. For instance, fonio as an ancient grain is very nutritious, enhanced with protein, and iron, and is folic and hence will be the right product for health-conscious people. Through the growing consciousness of the environmental impact of one's diet, fonio can be sold as a staple grain for vegan diets and assistance to local farmers in West Africa. According to the study of Euan-Pech et al., (2024), it may serve as a plus for cassava and yams, which must be interesting to gluten-free and vegan customers with the new and different types of foods in their diets (Euan-Pech et al., 2024). Therefore, exporters should take advantage of the increased concerns of health and diversify these products by appealing to the cultural and nutritional values of these foods.

Another trend becoming apparent is that customers are becoming more concerned with functional foods – foods that are healthful in some way beyond simple nourishment. It is found that customers in the United States are shifting their focus on obtaining functional benefits from the ingredients they consume in products that include better gastrointestinal health, immune system functionality, and mental health. According to the study of Hun Pin Chua and Nicholas, (2023) IFTN states that the global market of functional foods is anticipated to achieve a CAGR of 8.5% every year to \$275.77 billion in 2025 (Hun Pin Chua and Nicholas, 2023). Baobab powder and moringa, hibiscus among products from West Africa provide an area of interest in the functional foods market. From a nutritional perspective, baobab is packed with vitamin C, antioxidants, and dietary fiber – all things someone suffering from a weakened or compromised immune system would benefit from.

Moringa also contains antioxidants and is considered anti-inflammatory and hibiscus tea is well recognized for helping to lower blood pressure and support the heart. According to the study by Ajmera, (2020), these attributes can be used effectively to market the products as functional foods that are preventive cures offering some tangible health benefits to health-conscious consumers in the U.S. who are willing to pay a bit more for such products (Ajmera, 2020).

The consumers get a clear view of the origins of the food supply chain, origin, and sustainability practices show how blockchain technology is gaining prominence in relaying information relating to it. According to the study of Lovina Yogarajan et al., (2023) For West African food exporters, the use of blockchain solutions allows for a more transparent supply chain to be created, from the farm to the consumer shelf (Lovina Yogarajan et al., 2023). This is especially crucial for products that represent themselves as organic, fairly traded, or environmentally friendly since consumers are now demanding evidence of these labels before buying a given good. It also assists exporters in persuading U.S. consumers and retailers to invest in their products by providing a unique, immutable record of each product's journey from production to purchase. This transparency can play a major role when competing in the marketplace especially when the focus is set on the ethical consumer. In this way, the exporters can improve the position of their brands as environmentally friendly, sustainable, fairly traded, and of high quality to a consumer base that is increasingly concerned about the social and environmental impacts of food production (Puma-Flores and Isabel María Rosa-Díaz, 2024).

According to a report by Ranparia (2022), direct-to-consumer marketing (DTC) has emerged as growth in recent years, enabling companies to skirt intermediaries and sell directly to individuals online (Ranpariya, 2022). To break them down, the main benefits that come with using the DTC approach for West African food exporters are items no:

- 1 – Improved profit margins
- 2 – Brand management and customer experience
- 3 – Direct consumer connections.

From the availability of digital markets such as the Shopify-hosted store to social media marketing via Instagram and even TikTok, brands can access the U.S. consumer without the need for store space. At the same time, using the subscription delivery concept in the field of unusual and diverse

ethnic meals delivers additional opportunities to the exporters on market orientation. Some other food delivery services such as Yumble and SnackNation provide novelty food boxes – often products from different countries – which provide West African food exporters an opportunity to access truer food enthusiasts looking for novelty and variety. By the study of Tempest, (2020) through the DTC approach, West African exporters can directly communicate with their target consumers, also being able to deliver information about their products and build a following (Tempest, 2020). It is also helpful for such purposes as providing recipe suggestions, cooking shows, and telling Native American stories that would favor the typical US consumers.

The convenience of reusable portability for food over single-serve has not yet worn off and consumers remain environmentally conscious with packaging preferences and purchases. Nielsen found that 73% of global consumers indicated that they are likely to definitely or probably change their consumption behavior to be more environmentally friendly (Nielsen, 2019a). West African exporters need to take advantage of this trend by embracing environmentally friendly packaging material to make their products environmentally conscious. For example, packaging said to be biodegradable or compostable, may entice consumers who are sensitive to issues surrounding the use of plastics. Some of the practices like regenerative agriculture can be promoted in the marketing of food products as a way of depicting the firm's environmental responsibility for promoting biodiversity and combating climate change. For example, Fonio is a grain that cannot afford water anywhere hence making it a conforming grain to the environmental standards. According to the study by Hull, Russell, and Kukar-Kinney, (2022) through several aspects, exporters can contribute to its motives by differentiating their products or goods and targeting the sustainable consumer (Hull, Russell, and Kukar-Kinney, 2022). For perishable products, the firm is required to spend funds on the purchase of quality packaging materials that can ensure that they do not expire before reaching the consumer market of the importing country. The use of technologies such as vacuum packaging, MAP, and other systems helps in maintaining food quality during the long transit from West Africa to the United States meeting the US consumer's taste buds expectations on fresh foods.

8. Strategic Pathways for Success:

According to the study of Ragasa et al., (2020), the following analysis shows that the US food market remains one of the most attractive destinations for West African food exporters provided

the ability to incorporate new changes in their strategies (Ragasa et al., 2020). Examples like Yolele Foods, Global Village Foods, and Trade Aid show that to be successful the organization must engage in market entry strategies that do not only focus on the introduction of new products but also the creation of a brand that will appeal to customer's health consciousness, their ethical beliefs and cultural preferences. The clients from West Africa with a focus on Guinea have the potential to capture increased market share in line with increased trends in plant-based, functional, and ethical foods. By the study of Ragasa et al., (2020) initiating the implementation of blockchain for supply chain transparency alongside taking benefits of digital marketing and e-commerce platforms and providing innovative and fully recyclable packaging solutions, these exporters can seek out a competitive advantage in the United States (Varriale et al., 2021). There is an opportunity for them to expand to other consumer-related niches which include vegan products, functional foods, and the DTC business models. The role of flexibility and adaptiveness to changing trends will stand as the major factor. Thus, as new technology and consumer trends redefine the food industry in the United States, West African food exporters who adapt to the new trends and favor the adoption of technologies will unlock the full potential in the target market in the long run.

Ethnic and Health-focused food products are major specialties within the U.S. market, which is ideal for West African food importers, especially importers from Guinea. The areas that still need change are the legal systems, supply chain challenges, and competition from the existing brands despite these challenges are not hard to overcome. A good approach to marketing and supply chain logistics used in cooperation with digital tools will enable West African food exporters to penetrate the American market and adequately satisfy its demand for diverse and healthy food of ethical origin. With the development of a premium quality and sustainable product, along with the influence of traditional food styles, Guinea-based exporters of fonio, cassava powder, and palm oil hold a competitive advantage in the U.S. markets. Because these products are culturally appropriate and healthy are well-suited for the changing consumer demand in United States markets. The annual trade fairs and placements in various American outlets are ways through which West African foods can become regular items in the American homes not only adding to the experiencing dining culture but also helping Guinea's economy to grow. The structure of the U.S. food market changing, and several trends of innovation pose opportunities for West African

food exporters. These trends based on customer behavior and technological innovation could influence the future viability of ethnic and health-conscious products in the United States of America. Exploring these trends will assist in helping West African exporters maintain their market share and position in the United States of America.

Chapter Three: Research Methodology

3.1 Research Method:

Quantitative research is a systematic investigation that involves the collection and analysis of quantifiable data to address specific research questions. According to the study of Bhandari, (2023), this methodology is particularly valuable in studies that require objective measurements and the application of statistical, mathematical, or computational techniques for data analysis (Bhandari, 2023). In this study, a quantitative approach was adopted to evaluate the potential for importing West African foods, specifically from Guinea, into the U.S. market. This method is relevant to the objectives set out in the study, with the objective being to evaluate the current market demand, the various problems involved in supplies, and the efficiency of the supply chain solutions. Another benefit of quantitative research is that it will not involve the subjectivity of the researcher. From the study, Scribbr, (2022) indicated that through the adoption of structured approaches in data collection and analysis, the researchers should reduce the chances of bias which

might affect overall study results (Scribbr, 2022). This objectivity contributes a lot to the result to the extent that it eliminates biases that come with the perception. In the framework of this study, quantitative data of the West African consumers and market demand are critically important to make sound business strategies regarding the establishment of food product importation. For example, the study was proposed to assess consumer interest, value, and thereby effectiveness of certain products like fonio, cassava powder, and palm oil, thus, decisions aren't made based on gut feelings but on facts.

The other advantage of quantitative research is that it is more easily replicable than qualitative research. In the theory of Pilcher and Cortazzi (2023), quantitative approaches are organized because these offer a different framework for other researchers to reproduce the study in different settings or times with similar results (Pilcher and Cortazzi, 2023). This feature increases the generalizability of the results and serves as a strong starting point for further research in the field of market analysis. The practice of replication is critical in any field that aspires to construct a stable foundational archive of data and epistemic understanding regarding consumer behaviors and market trends, especially within specialized subsectors such as West African foods. Habitat, therefore, is important in replicating the same research to confirm the results found in this study as well as cross-verify trends that may have been realized in the development of consumer preference over time. According to Muller et al., (2021), quantitative research thus involves the use of statistical analysis for analyzing large data sets and coming up with conclusions about the population (Muller et al., 2021). Quantitative data was gathered by the use of survey questionnaires focusing on potential clients of West African foods in the United States. The more statistical techniques the study can use, the more it will be able to show the trends and associations, for example, between the consumer demands for certain products, fonio, cassava powder, and palm oil, and the logistical problems that are faced by importers. These patterns are very helpful for stakeholders as they work their way through the importation process and attempt to meet the demand for their products.

This is particularly so concerning the selection of a quantitative research approach for the study. As the research focuses on the market size of certain food products and the supply chain issues, the quantitative research approach is more suitable for collecting generalizable data (Tse et al., 2020). Structured surveys gather data from customers/clients or consumers through questionnaires

which means that data collected can be analyzed statistically, meaning that the Ext has a better picture of what the consumers or the market want. Furthermore, there is a reduction of bias in data collection since the structured method reduces the chances of making errors while getting valid and reliable data.

Many scholarly articles support the use of quantitative research in market studies. According to Raja, (2023), another strength of quantitative research is suitability in a market-oriented approach because it offers a way of measuring consumer behavior and preference in the wider context (Raja, 2023). The systematic collection of data allows researchers and decision-makers to define trends and make evidential decisions. In particular, identifying antecedents that may affect the decision-making process of consumers could be beneficial in the marketing and production of food products in West Africa. In the same regard, it is important to note Buckman et al., (2022) state that quantitative approaches are useful for evaluating how variables are related (Buckman et al., 2022).

This study focuses on the relationship between consumer preferences for African foods and transportation constraints faced by importers, which is important to understand the market environment. A systematic survey was conducted and has adequately addressed the quantitative approach of the research. This study aims to collect data on multiple consumer choices, including product choices, purchase intentions, and determinants influencing purchase choices. Some important data were collected on demographics including age, socioeconomic status, and geographical areas to facilitate data analysis. Ellerby, Wagner, and Brummell (2021) suggest that the research topics were formulated for clarity and relevance, and that encouraged more accurate responses (Ellerby, Wagner, and Broomell, 2021). The preliminary testing of the survey on a small sample facilitated adjustment, assuring that the questions were unbiased and well-aligned with the objectives of the survey.

Data collection for the study was conducted through an online survey, which facilitated rapid and thorough recruitment of a diverse population. Online distribution strategies used social media channels, ethnic food channels, and email advertising targeted at consumers interested in health-conscious organic food. This strategy ensured that the sample included a wide range of potential consumers, necessary to accurately reflect the market demand for complex West African foods.

According to Masuadi et al., (2021), data were acquired and statistically analyzed using software applications such as SPSS or R, allowing them to examine relationships between parameters and identify significant trends (Masuadi et al.), (2021). Descriptive statistics were used to summarize the characteristics of the sample, while heuristic statistics such as regression testing and testing hypotheses were used to arrive at conclusions about the population. This statistical rigor is necessary to ensure non-similarity the results are not only accurate but also real-world processes.

For this research, the research methodology to be used is important. It enables targeted data collection, encourages replicability, and provides comprehensive statistical analysis. Dudziak, Stoma, and Osmólska (2023) emphasize that this study seeks to provide important insights into the feasibility of importing West African foods into the U.S. market by building on quantifiable factors related to consumer behavior and consumption barriers (Dudziak, Stoma, and Osmólska 2023). The results of this study will be important for stakeholders aiming to understand the complexity of imports and meet the increasing demand for food types. The project seeks to enhance the understanding of the market dynamics of West African food imports through the careful development and application of quantitative analytical methods, thereby informing decision-making with expertise in this specialty but with enhanced profitability.

3.2 Data Collection Approach:

A survey questionnaire was used as the main method of data collection in the study. The study by Regmi et al. (2016) emphasized that surveys are recognized as an efficient tool for quantitative data collection, due to their flexibility and effectiveness in obtaining large amounts of data from diverse populations (Regmi et al. 2016). The study rigorously developed a standardized questionnaire to collect detailed information on the preferences of West African food product consumers, their purchasing behavior, and their interest in novel exotic products such as fonio, cassava flour, and palm oil. The information on overcoming perceived structural barriers such as barriers and regulatory hurdles in the supply chain. Efforts have been made to collect, which are important resources for food importers.

3.2.1 Primary Source:

The questionnaire design was a central part of the data collection process. The survey incorporated a mixture of closed items and Likert scales, enabling the collection of categorical and structural

data (Turkson, Addor, and Kharib, 2021). Closed-ended questions provided respondents with predefined responses, facilitating efficient data collection and flexible analysis. This method is very useful for assessing consumer preferences, as it facilitates direct comparison and quantification of responses.

A study by Doubleday et al. (2020) emphasized the importance of using Likert scale-based questionnaires to assess the intensity of respondents' preferences, attitudes, and perceptions towards the diversity of West African food products. Likert scales extended from "strongly disagree" to "strongly agree", and allowed respondents to indicate agreement or dissatisfaction with certain statements (Doubleday et al. 2020). This method quantifies attitudes and provides in-depth information. This method quantifies attitudes and provides deep insights into consumer mindsets.

Examples Likert Scale Questions:

i. Product Awareness:

West African food products are familiar in the U.S. market.

☐ High School or equivalent ☐ Associate's degree

☐ Bachelor's degree ☐ Master's degree

ii. Health Considerations:

Health consciousness expressively influences food purchasing decisions.

☐ High School or equivalent ☐ Associate's degree

☐ Bachelor's degree ☐ Master's degree

iii. Purchasing Habits:

Ethnic food products are regularly purchased.

☐ High School or equivalent ☐ Associate's degree

☐ Bachelor's degree ☐ Master's degree

iv. Perceived Barriers:

Logistical challenges make it difficult to entrée West African food products.

☐ High School or equivalent ☐ Associate's degree

☐ Bachelor's degree ☐ Master's degree

v. Interest in New Products:

There is a high level of concern in trying new exotic foods like fonio, cassava powder, and palm oil.

☐ High School or equivalent ☐ Associate's degree

☐ Bachelor's degree ☐ Master's degree

vi. Product Availability:

West African food products must be more roughly available in grocery stores.

☐ High School or equivalent ☐ Associate's degree

☐ Bachelor's degree ☐ Master's degree

vii. Pricing:

The pricing of West African food products is invented as reasonable.

☐ High School or equivalent ☐ Associate's degree

☐ Bachelor's degree

☐ Master's degree

These questionnaires were carefully prepared to gather useful information informing the objectives of the study. The use of a categorical-ordinal response format provided comprehensive insights into consumer behavior and preferences, allowing for a more nuanced study of the results.

Here is a bar chart showing the frequency of responses to important Likert scale items including knowledge of West African agricultural products, interest in foreign foods, and other values. Each column represents a separate category of responses, and it provides a quick description of the response process in the response process.

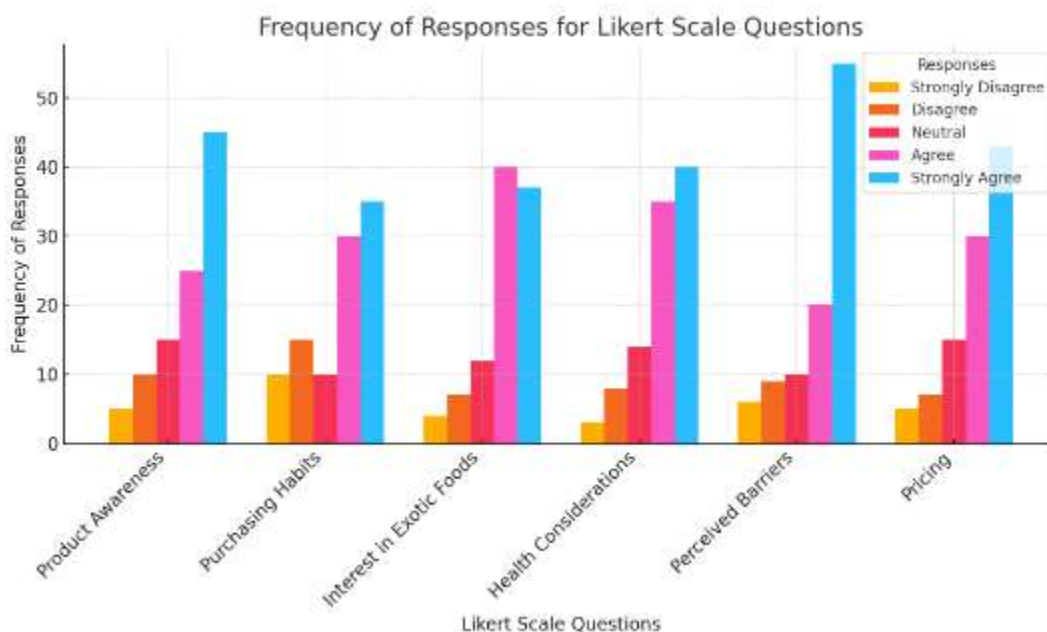


Figure 3: Frequency of Response for Likert Scale Questions

(Source: (Survey Monkey, 2024))

Demographic information:

Demographic information is an important factor including the following. This will help us to identify the participants in this study and accurately assess their past experiences. Questionnaires will be anonymous to participants and also help for their research purposes and data.

i. Age Group:

- ☐ 18-24 ☐ 25-34
☐ 35-44 ☐ 45 and Above

ii. Highest Level of Education:

- ☐ High School or equivalent ☐ Associate's degree
☐ Bachelor's degree ☐ Master's degree

iii. Gender:

- ☐ Male ☐ Female
☐ Non-binary ☐ Prefer not to say

iv. Employment Status:

- ☐ Employed full-time ☐ Employed part-time
☐ Student ☐ Retired

v. Ethnicity:

- ☐ African American ☐ Hispanic or Latino
☐ Asian or Pacific Islander ☐ Prefer not to say

3.2.2 Distribution of the Survey:

This article examines the sample distribution of the survey and the management strategies used to optimize reach and response rates. The research by Cernat (2022) was disseminated online via social media, newsgroups, mailing lists, and online retail forums targeting ethnic and health-conscious food customers in the United States (Cernat, 2022). This multi-channel approach allowed extensive outreach, targeting both Africans residing abroad and those interested in their health, as well as exotic and organic items. Concerning many assessment criteria, it is noteworthy that the online format proved advantageous due to its capacity to engage respondents from diverse geographical regions and varying demographics. The survey was administered over a four-week period, during which automated reminder messages were intermittently sent to participants. These reminders were designed to enhance participants' engagement with the survey and elevate response

rates, a standard strategy in survey research to mitigate option biases stemming from non-respondents.

According to the study of Colbert et al. (2021) said in their research that the survey was deliberately concise, and designed to take an estimated 5-7 minutes to complete, to enhance response rates and respondent engagement (Colbert et al., 2021). A concise survey will provide elevated response rates due to the work being more feasible for responders. In addition to the surveys, incentives such as discounts on ethnic food items and entrance into a prize draw were provided owing to the high volume of returns. The incentives provided not only motivated potential respondents to engage in the survey but also fostered a positive disposition towards the research and its aims.

The survey questionnaire effectively facilitated data collection in this investigation. This study by Tantawi (2023) included a well-designed survey using Likert scale questions, strategically disseminated to get comprehensive insights into customer preferences and the logistical challenges of importing West African cuisine to the US market (Tantawi, 2023).

3.3 Sampling Approach:

For this study, random sampling was employed as the primary method to ensure that every member of the target population had an equal chance of being included in the survey. According to the study of Raifman et al., (2022), Random sampling is a probability-based sampling technique, which is fundamental in research because it minimizes bias and allows for the generalizability of the results (Raifman et al., 2022). In this context, the target population consists of individuals interested in ethnic food products, particularly those with a specific affinity for West African foods.

Target Population:

The target population in this research includes.

African American and African Diaspora Communities in the U.S.: They are important since several civilizations want to celebrate their heritage via cuisine. Their dietary preferences for ethnic and contemporary West African cuisine make them a focal point for this inquiry.

Consumers with a Preference for Ethnic, Organic, and Health-Conscious Food Products: This group aims at a more complex audience interested in diverse culinary advancements, environmental preservation, and a commitment to healthy living. The study of Rua and Santos (2022) asserts that as market trends increasingly favor organic and sustainably produced food goods, their understanding of customer preferences for West African cuisines will become more crucial (Santos, 2022).

Food Enthusiasts and Culinary Professionals Interested in Global Cuisine: It comprises proficient and novice kitchen personnel, food bloggers, culinary students, and any individuals intrigued by the consumption of international cuisine. They may provide an external viewpoint on prevailing market trends and the possible interest of consumers in unusual items.

Random sampling was used to get respondents from diverse demographic backgrounds, residential locations, and purchasing frequencies. This indicates that the findings are not biased towards a certain demographic, hence enhancing their accuracy.

Implementation of Random Sampling:

The random sample approach was used by disseminating the survey link across several internet platforms to an audience relevant to the study's aims. Some of the distribution channels included.

Newsgroups focused on ethnic cuisine, cooking, and recipes, where participants often engage in discussions on food preferences and culinary experiences.

Websites and platforms showcasing items for sale, especially African food products, provide an excellent opportunity to engage customers who are already interested in the topics investigated by Valentine Joseph Owan et al. (2021).

Populations that have adopted healthy diets and organic foods were also evaluated. Such organizations often hire individuals knowledgeable about the nutritional merits of West African cuisine and who advocate for good dietary practices.

The data collection aimed to use the advantages of random sampling while including a diverse array of respondents in the process.

Sample Size:

The objective is to get statistically significant and representative data, hence a target sample size of 500 respondents was established. The sample size was determined based on the projected response rate and the requisite sample size for ensuring the validity and reliability of data analysis. For a total population above 100,000, the Krejcie and Morgan (1970) formula determines an optimal sample size of 500. This calculation attains a 95% confidence level with a 5% margin of error, which is prevalent in most sociological investigations (Hasan and Kumar, 2024).

The study of Serdar et al. (2021) emphasizes the importance of selecting a sample size of 500, as this size provides sufficient statistical power to identify genuine differences and connections in the data (Serdar et al. 2021). The use of a substantial sample size enables a sub-sampling examination of consumer preferences and behavioral variances across various demographic groupings, hence enhancing the depth of the research findings. The use of questionnaires, using random sampling in this research, is crucial as it ensures that the findings accurately represent the community under investigation, hence validating the theories investigated herein. Consequently, by precisely defining the target population, employing various channels for questionnaire distribution, and determining an appropriate sample size, the study anticipates results that will assist in developing essential strategic recommendations for the importation of West African foods into the U.S. market effectively.

3.4 Data Analysis Approach /Method:

The consumer-level survey data was analyzed using SPSS, which stands for the Statistical Package for the Social Sciences. The IBM research (2024) indicated that SPSS was chosen for its ability to correlate variables, perform intricate statistical analyses, and handle large datasets (IBM, 2024). This chapter concentrates on the quantitative dimension of the study, especially the consumer demand for West African foods, the challenges on the supply side, and market entry strategies.

3.4.1 Descriptive Statistics:

The use of descriptive statistics enabled a summarization of the results of the dataset about the demographic distributions of the consumers as well as the general consumer behavior. These comprised of the use of measures of central tendency such as mean, median mode, and the variability measure known as the standard deviation. According to the study by Trude et al.,

(2022), these measures are very effective when one wants to provide respondent specifics such as age, sex, ethnicity, income, and experience with ethnic foods (Trude et al., 2022).

For instance, the overall response rate for how often the respondents buy ethnic foods, or their propensity to buy West African foods like fonio cassava or palm oil were aggregated. This research project also provided an overview of how respondents evaluated these products in terms of price, availability, and health. A pie chart was used to separate responses based on age, sex, and race from the sample. This graphic support was important in demonstrating identity and participation.

Demographic Breakdown of Survey Sample by Age

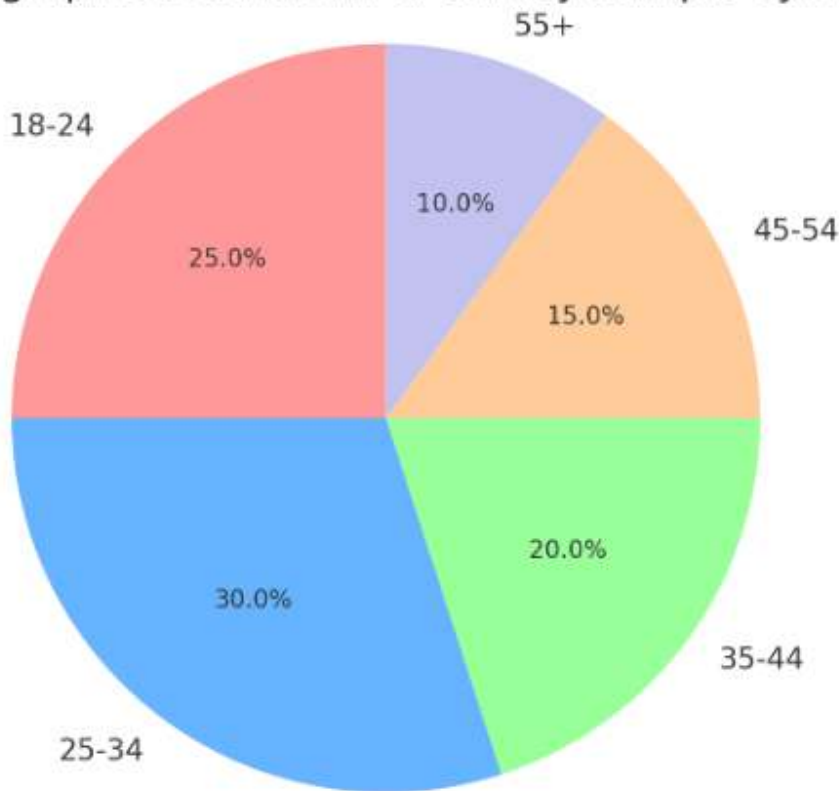


Figure 4: Demographic Distribution (age, sex, and ethnicity)

(Source: GOV.UK, 2023)

3.4.2 Regression Analysis:

The study wanted to examine a range of factors influencing West African food consumption, including price, cultural significance, health concerns, and food availability. Multiple regression analyses were conducted using SPSS to examine the hypotheses made about the relationships

between each of these variables. According to the study by Niankara, (2023), this statistical analysis is useful for the investigation of the relationship between the nature and magnitude of dependent variables of consumer demand for West African food products (Niankara, 2023).

- Availability: The effect of local supermarket availability on demand.
- Price: Determine whether West African food prices influence purchasing decisions.
- Health benefits: The extent to which health perceptions influence food choices.
- Cultural affinity: whether a consumer's knowledge of West African culture affects their taste for ethnic foods.

3.4.3 Factor Analysis:

In this present study, factor analysis was conducted with the view of identifying underlying structures in the data and grouping variables that exert a significant impact on consumers' preference towards West African foods. By the study of Baldwin et al., (2022) suggested that it is easier when the use of this statistic helps to make data easy to handle so that relationships between many variables can be easily analyzed without losing vital information (Baldwin et al., 2022). Since factor analysis helps to capture relationships between several factors and group them, this makes analysis of consumer behavior easier in terms of manageable factors.

It has found from the Literature review of Leakey et al., (2022) some factors likely overlap to affect consumers' preferences for foods from West Africa; these include health consciousness, exotic appeal, and affordability (Leakey et al., 2022). For instance, respondents may select organic African grains because of health effects, but may also be attracted by the exotic and traditional image behind these commodities. At the same time, by using the availability and price characteristics of these foods, certain factors can be made interdependent, which can be grouped.

In the study conducted by Beattie and Esmonde-White (2021), the factor analysis entailed pulling out the principal component from the databases and the bonus for finding the relationship between the variables (Beattie and Esmonde-White, 2021). These components were then rotated to improve the readability of the results. By using this technique, the correlational study succeeds in aggregating a large variety of individual variables into a few dimensions of consumer demand and logistic issues. For instance, the results showed the separation of other variables like product quality, accessibility, and consumer awareness which are factors influencing the demand for West

African food products in the U.S. This insight is valuable when identifying the entry strategies to the market and the kinds of products that can be introduced to the market.

In this scatter plot showing the relationship between health risk knowledge (the independent variable) and the probability of consuming West African agricultural products (the dependent variable), the red line indicates the direction of the relationship showing the statistical trends in the data.

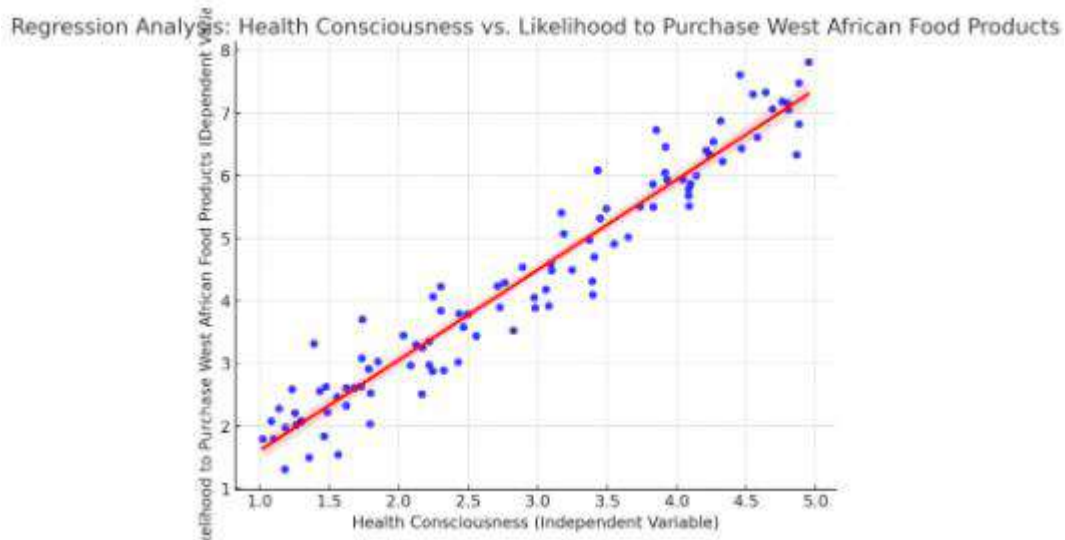


Figure 5: Health Consciousness

(Sinore and Wang, 2024)

3.4.4 Hypothesis Testing:

To verify the relationships between supply chain challenges, obstacles, and legal factors about the importation of WAFs, hypothesis testing was used. As pointed out by Di Leo and Sardanelli, (2020), this approach made it possible for the study to test the statistical significance of the noted relationships between the key variables and the given data set as a way of accepting or rejecting the noted hypotheses (Di Leo and Sardanelli, 2020).

Hypothesis testing is the only sure way of ensuring that assumptions that are made are valid and conclusions made from the data analyzed are correct. For this study, two key hypotheses were developed:

- **H₀ (Null Hypothesis):** The sweet and bitter experiences show no correlation in their supply chain with the proper importation of West African foods to the United States region.
- **H₁ (Alternative Hypothesis):** The supply chain test posed a very strong correlation with the importation of West African foods to the United States.

As for these hypotheses, the t-tests and chi-square tests were employed in the study. The t-test was used to estimate the means of the groups for example businesses with few barriers compared to many supply chain challenges. The study conducted by Busenbark et al., (2021) in which the chi-square test was also employed to assess the relationship between categorical variables (Busenbark et al., 2021). The correlation between perishability of food hassles such as cassava powder and palm oil, and frequency of delay/loss during importation. For example, the chi-square test checked if there exists a correlation between factors affecting the supply chain such as customs delays or interruptions in transportation, and the general effectiveness of the importation process. The outcomes of these tests offered insights into how much these logistics hurdles affect the timely and efficient distribution of West African food items (Han, 2024). The analysis of these variables enabled us to understand the degree of relationship between them and find out which of these factors are more crucial in the success of importing West African foods to the U.S.

3.5 Ethical Considerations:

There are several issues of ethical concern in research most of which arise from the use of people in research. This study regulated with the established ethical principles to safeguard participants' rights, their anonymity, and their non-reciprocal virtue. The participants' permission was sought and received from all participants involved in the study such as each was taken through the homework and its purpose. According to the study by Xu et al., (2020) in which the role of the participants that's were free to pull out of the study at any given time without explanation (Xu et al., 2020). In this research, the issue of informing the participants was ensured and all the collected data was made anonymous to reduce the possibility of identifying the respondents. The collected data was kept safe and only people who had to work with it had access to the collected data. Moreover, the study setting excluded any type of pressure or prejudice used in choosing participants hence delivering a voluntary and prejudice-free response. This research was carried out with due regard for ethical procedures as specified by the institutional review board, and other bodies (Head, 2020). The most important was the precaution where it was vital not to subject

participants to further emotional, psychological, or physical harm and to keep away from losing research accountability.

3.5.1 Informed Consent:

Some essentials of proper consent include the purpose of the study, the participant's rights, and the fact that participation is voluntary. As stated by Pietilä et al., (2020) for this study, respondents were first offered an informed consent form containing elaborated information on the purpose of the study (Pietilä et al., 2020). This document raised important questions about the study so that the participants could decide whether or not to participate in the study.

Initially, participants were told that the purpose of the research was to determine the market viability and key delivery obstacles of West African food products in the United States, with an emphasis on fonio, cassava powder, and palm oil (Mudau et al., 2022).

Second, the form facilitated anonymized responses in a manner that ensured participants' responses remained anonymous. Their data would NOT be given to any third parties and the data collected would be for purposive uses for academic purposes ONLY. As pointed out by Rowlands, (2021), Participants were ensured that their responses would be combined with others and thus could not identify any participant from the results (Rowlands, 2021).

Some points such as the fact that respondents' identities remained unknown to the researchers were made. The basic information like the name of the participant, address, or contact number was not taken, so the participant's privacy would not be infringed in any manner.

The participants were assured that their participation was optional. As per the study by Millum and Bromwich, (2021), participants were ensured the right to withdraw from the study at any point, and no reasons were required to be asked or provided (Millum and Bromwich, 2021). This process meant that the respondents got fully engaged and wanted to understand that there were no strings attached. In obtaining informed consent, the study kept high ethical standards of the rights of the participants into consideration.

3.5.2 Confidentiality and Anonymity:

The most important issue of ethical consideration in this research was to ensure that the participant remains anonymous. It should be noted that, while designing the survey, special attention was paid

to the fact that the participants' personal information must not be requested (names, addresses, phone numbers, etc.). This approach ensured that the participants' identity was well concealed hence encouraging the respondents to give valid responses to the questions posed without the fear of being identified (Workman 2020).

Data gathered from the survey was maintained with passwords to protect the information only accessible to the researchers. As highlighted by Atlan, (2023), minimized data management measures complied with high ethical standards to guarantee that participants' data would not be unleashed to any unauthorized personnel or third parties (Atlan, 2023).

Additionally, participants were informed that any information provided to them would be utilized only for this study and for academic purposes. As per the principles of confidentiality, general results of the survey were collected and the data was analyzed in that form. This means that individual responses were not underlined and were not connected to individual participants. The results were generalized as the general trends and inclinations, thus preserving the anonymity of the participants all through the study process. The study used aggregated reporting to eliminate potential risks associated with the identification of certain participants through their responses.

As studied by Lopes, Guarda, and Oliveira (2020) noted, this process was supported by compliance with the General Data Protection Regulation (GDPR) to ensure personal data protection (Lopes, Guarda, and Oliveira, 2020). GDPR also prohibits the processing of unnecessary data and requires all personal data must be processed properly. In this way, the study complies with these regulations to bring out the best ethical ways of handling data for the participants while also preserving their trust in doing research that will benefit society.

3.5.3 Data Security:

Familiarity was another consideration part of this study since all information that was being gathered needed to be managed appropriately and secured from external individuals. A study conducted by Wylde and colleagues (2022) found that to ensure that the data received from the participants was safe and the privacy of the respondents was protected, the data collected was stored in a highly secure server and was also password protected (Wylde et al., 2022). This server was in the internal IT department of the company with limited access to let only the personnel that participated in the research access. Measures in this area were also taken in the form of anti-

techniques such as MFA to reduce the risk of identity breaches. To enhance the security of the data, data encryption techniques were applied while data was in transit as well as when stored. Encryption made it possible to ensure that all data sent through the internet from the participants' devices to the server could not be intercepted by other persons (Henschke et al., 2021). Once the data was stored on the server, it also was encrypted adding a further line of defense in the case of data breaches.

According to the study of Ducato, (2020) as per the guidelines and governing laws for ethical research and since the GDPR is mandatory for data processing and protection, the research also adopted a data retention policy (Ducato, 2020). After the conduct of this research as well as upon submission of the results and analysis, all raw data was planned for dump after a set timeline of its retention. This step saves on the future events of data violations with the participant information that would otherwise be kept for longer than necessary. The deleting process kept to all the specified standards of deletion of data so that it could not be restored on the server (Bartusek and Khurana, 2023). It also provided maximum measures in ensuring the privacy of the participant was preserved and at the same time, cultural sensitivity in compliance with the required ethical practices in academic research findings thereby adding to the believability and reliability of the study.

3.5.4 Minimizing Harm:

This study carried little risk such as a lot of measures were taken to ensure that participants were never exposed to any harm physical, psychological, or emotional during the research. The study by Olamide Olaosebikan et al., (2023) explained the survey questions developed for this study minimized the patrons' intrusiveness while questioning the consumers' behavior toward ethnic food products like fonio, cassava powder, and palm oil (Olamide Olaosebikan et al., 2023). Any questions that could cause embarrassment or discomfort to the respondents were excluded from the study knowingly.

The language used in the development of the questionnaire avoided any perception of prejudice or bias in the outcome and more especially the respondents were not prejudiced against revealing what they felt about the issues without fearing for their jobs. According to the study of Siegle, (2023) to respect the basic human right to autonomy and minimize apprehensive concerns the respondents, were told that it was their right to withdraw from the study at any one time without

explanation and this was well explained before taking part in the study (Siegle, 2023). The following measures complied with the ethical research practices highlighting the potential harm reduction while increasing the benefit of the research outcomes in academic and business contexts (Adekugbe and Ibeh, 2024). The study was able to keep high ethical standards throughout the data collection process from respecting participant's safety.

3.5.5 Ethical Approval:

To ensure that the rights of the participants and the general ethical standards during the data collection process were not violated approval from the academic ethical committee was sought before the commencement of the data collection process. This approval process made sure, that the present study adhered to the ethical standards of the university to protect the rights and welfare of all the participants (Nurunnabi, Almusharraf, & Aldeghaither, 2021). The validity of the research proposal, survey design, and data collection procedures was reaffirmed by evaluating that this study embraced the following ethical principles; Respect for persons, Beneficence, and Justice. The principle of respect was maintained through two aspects such as it prohibited coercion and subjects were able to participate in the research study without undue influence and the ability to withdraw their participation at any time. According to the study of Wendler, (2020) the beneficence was observed because the study was planned in a manner, which ensured that the benefits would outweigh the costs and risks associated with participation in the study (Wendler, 2020). The principle of justice kept the aspect of equality so that no discrimination was performed when conducting the research.

In the study by Bush and Blackwell, (2022), permission was obtained to reach potential participants through online social media groups and forums (Bush and Blackwell, 2022). In the case of each platform utilized, the research team went through the social media moderators or administrators to obtain their permission to administer the survey. This was important because the survey was to be in line with the rules of the various social media platforms and reachable to the intended audience. Through gaining permission from the academic body and from the moderators of the online platform used in the study, consent to ethical practices and practices to ensure no manipulations were done on the participants, was given. As pointed out by Mustafa (2021), both participants' protection and research credibility were secured by ethical approval as the author confirmed that all the ethical factors had been addressed (Mustafa, 2021).

3.5.6 Addressing Bias:

Minimizing researcher bias is critical in ensuring the validity and reliability of any research study. In this study, specific steps were taken to address potential bias during both the data collection and analysis phases. One of the primary methods for reducing bias was the use of random sampling. According to the study of Asiimwe et al., (2024) through employing random sampling, the selection of participants was unbiased, allowing for a more representative sample of the broader population, including individuals with varying preferences and attitudes toward West African food products (Asiimwe et al., 2024). This approach made it possible to minimize the results bias with certain subgroups and maximize the generalizability of the findings.

It was equally important also to pre-test the survey questionnaire as the last step. A few workers from the pilot group were asked to fill out the questionnaire before the actual poll was conducted. This study helped analyze the number of leading, ambiguous, and biasing questions that the research team failed to observe while designing the questionnaire. According to the gathered data, several questions were changed or explained to get participants' unbiased responses instead of prejudice by the questions asked.

As revealed by the study conducted by Muijs, (2022) during the research the author used main quantitative techniques that included the use of statistical analysis where data was analyzed using statistical software such as SPSS (Muijs, 2022). The research team was always very careful not to have a bias towards or away from any options under consideration during the study; hence the conclusions were arrived solely on empirical evidence. These combined efforts meet the objective of reducing bias and only serve to improve the general credibility of the outcomes.

3.5.7 Transparency and Reporting:

Some aspects that need to be made transparent in the research process are Research protocol and Research documentation. By increasing the reliability of the research making others realize the procedures that were followed, the study completed and the results tested. In this research, all possible measures were ensured to write down all the specifics of methodology in detail and exhaustively. As highlighted in the study by Wu et al., (2021), this transparency is important in establishing trust with the stakeholders and advancing an understanding of the topic covering food importation and consumer behavior (Wu et al., 2021).

The previous section explains each of the decisions made on methodology such as the sampling, data collection, and analytical tools in the final report. This level of detail allows other investigators to judge the suitability of the methods and decide for themselves if it would result in similar outcomes using different populations or in other settings. For instance, the report provides a clear description of the random sampling technique, how the survey questionnaire was developed and the various statistical techniques used, including regression analysis, and hypothesis testing with the use of SPSS. In line with the study of Júnior and Patrício, (2022), this research acknowledges that there are possible bias types, like the response bias, where the participants may present answers that are preferred socially over their real preferences (Júnior and Patrício, 2022).

There are also some limitations connected to the generalization of the presented research findings because the sample was mostly composed of people who enjoy ethnic foods. According to the study by Lim, (2024) acknowledging these shortcomings, the research also highlights the vast potential of the quantitative approach as well as the fact that such a strategy contains certain risks that should be considered when interpreting the outcomes (Lim, 2024). This commitment to transparency complies with the ethics of honesty and integrity practice in research. The study by (Laar et al., 2022), It is stressed that by providing information about the applied method and the study's limitations, the latter not only furnishes important insights into the market for foods of West African origin but also establishes tomorrow's practice for future research in the sphere, thus promoting accountability and transparency in academic research and exploration (Laar et al., 2022). This ethical approach is necessary to build academic knowledge and to gain the trust of the academic community and stakeholders who are importers of food products.

The study has described the methods used in carrying out the research study involving the choice of quantitative research, undertaking surveys, sampling procedures, statistical measures relying on SPSS, and ethical issues. The quantitative method, backed with statistics, proved suitable for evaluating the consumer interest in West African foods in the U.S. and for determining the shipping difficulties confronted by the importers. This was achieved through employing random sampling and structured questionnaires that enhanced the reliability and generalizability of the study findings. The study also adopted regression analysis, descriptive statistics, and hypothesis testing to generate valid and reliable inferences as to the relationships between identified variables (Aithal and Aithal, 2020). The principles laid down in the ethical committee and of the research

study were followed in the study including but not limited to informed consent, confidentiality, data security, and minimization of harm. The approach proposed in this chapter is the basis for the further analysis and discussion of the findings, which will be provided in the next chapter.

Chapter four: Results and Analysis

4.1 Data Analysis

The survey results are discussed to understand consumers' choice, their buying behaviors, and the operational issues related to the import of West African food products including fonio, cassava powder, and palm oil into the USA. The data analysis was done using computer software called SPSS where statistical methods like describe, compare, explore, and predict statistical techniques like ANOVA test, correlation, and regression tests were used. These tools were used to find correlations, associations, or trends in data collected during the Open Television Free Trial case. According to the study of Goldberg, (2024) to the evaluate the demand for West African food in the United States market targeting ethnic health-conscious customers (Goldberg, 2024). For example, to test hypotheses relating to such influences as price mechanisms, product availability consumer awareness about their health. Another objective is to identify and reveal key concerns such as supply chain issues, prices that potential customers associate with the products and product delivery issues that hinder the integration of these products into the mainstream market.

The first part of the analysis includes descriptive statistics to learn more about respondents' age, gender, education level, and employment status, as well as how they perceive WAFs, how often they purchase WAFs and whether they are willing to acquire new WAFs. According to the study of Kuznetsova et al., (2015) multiple regression and ANOVA with post hoc testing relate demographic variables to consumer preferences (Kuznetsova et al., 2015). However, linear regression analysis is also used to assess the relationship between different independent variables such as price sensitivity, cultural sensitivity, health-consciousness, and actual purchasing behaviors. This chapter gives a brief evaluation of the consumer's perception of West African food products and the identified opportunities concerning accessibility and organization of its distribution channel. The findings will help inform the strategies to be used by the key players

such as importers and policymakers to enter and expand the United States market for West African foods.

4.2 Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
What is your age group?	500	1	4	2.51	1.119
What is your highest level of education?	500	1	4	2.52	1.119
What is your gender?	500	1	4	2.53	1.124
What is your employment status?	500	1	4	2.49	1.116
What is your employment status?	500	1	4	2.63	1.047
Are you familiar with West African food products (e.g., fonio, cassava powder, palm oil)?	500	1	3	2.04	.788
How often do you purchase ethnic food products?	500	1	4	2.47	1.154
Are you open to trying new ethnic foods such as fonio, cassava powder, or palm oil?	500	1	3	1.98	.816

How much do health considerations influence your decision to purchase food products?	500	1	3	2.04	.837
Does your knowledge of West African culture influence your preference for West African food products?	500	1	3	1.93	.820
Do you think that West African food products are readily available in your local grocery stores?	500	1	3	1.96	.837
How reasonable do you find the pricing of West African food products?	500	1	3	2.01	.824
Do you think that logistical challenges (e.g., shipping delays, and product shortages) make it difficult to obtain West African food products?	500	1	3	2.07	.814
How interested are you in purchasing organic or health-conscious ethnic food products?	500	1	3	2.06	.804

How important is the exotic nature of food products (e.g., fonio, palm oil) when making your purchasing decisions?	500	1	3	2.02	.817
Valid N (listwise)	500				

According to the study of Kang et al., (2016) Descriptive analysis offers an initial analysis of the data collected by presenting resumes of the subjects, audience awareness, their purchasing behavior, and perception concerning West African food products (Kang et al., 2016). The analysis of the data set was made with the help of SPSS software to find out the mean, standard deviation, and frequencies of variables about the responses of 500 valid respondents. The demographic characteristics show that the respondents are fairly divided across age, gender education level, and employment status to achieve respondent diversity. There was a majority in the 25-34 age group of participants indicating young and liberal users who are willing to try new products in the food sector. The respondents with at least a Bachelor's degree were presented in the largest portion of the sample regarding education. By the study of Lindberg et al., (2022) the second largest portion comprised the respondents with associate degrees which indicates the sample was rather educated (Lindberg et al., 2022). The knowledge of West African food products, including fonio, cassava powder, and palm oil was slightly high but modest (Mean = 2.04, SD = 0.788). The mean for purchasing frequency of ethnic foods was 2.47 (SD=1.154), which depicts infrequent to moderate buying behavior. They also reported the level of willingness to experiment with new ethnic foods as restrained with a mean of 1.98, SD 0.816. By the study of Ahoya et al., (2024) these first findings suggest a moderate level of awareness and a guarded interest in West African food products and imply the potential for specific outreach campaigns to fortify knowledge, availability, and consumption (Ahoya et al., 2024).

4.2.1 Demographics:

The demographic information identified the respondents have been selected from various age groups, educational backgrounds, gender, and job market status. (Wang et al., 2020)

By the study of Wang et al., (2020) all the collected demographic variables varied from 1 (minimum) to 4 (maximum) to have an equal distribution of participants (Wang et al., 2020). The mean score acquired for age was 2.51 which indicates the majority of the respondents were of middle age. The mean scores of education (2.52) and gender (2.53) also showed that respondents predominantly had the associate or bachelor's degree level without any gender predominance. This diversity gives the study a balanced viewpoint regarding the consumers' preferences towards West African food products giving the education a reliable ground for analysis and interpretation.

4.2.2 Awareness and Purchasing Habits:

An assessment of awareness and buying knowledge yielded a mean value of 2.04 (SD = 0.788) indicating a fairly good awareness of West African food products studied by the Anteneh Fikrie et al., (2024). This tends to imply that respondents' awareness of products such as fonio, cassava powder, and palm oil is only lukewarm. Concerning the willingness to try out ethnic foods, the prescriptive norms mean average at 1.98 (SD = 0.816), signaling a restricted intrigue over unknown brands. The purchasing frequency averaged 2.47 (SD = 1.154) thus supporting the notion that buying behavior is still irregular or less frequent. These features raise awareness and reveal that marketing should be further developed to encourage consumer interaction.

4.2.3 Health and Cultural Influence:

The observations made from the data collected show that health considerations ($M = 2.04$, $SD = 0.837$) and cultural awareness ($M = 1.93$, $SD = 0.820$) are two factors that have a moderate effect on respondents in terms of buying ethnic foods. The findings provide preliminary evidence that consumers on balance weigh the nutritional value of foods and their cultural knowledge of the respective national origin of these foods (Ilak Peršurić and Težak Damijanić, 2021). This indicates that respondents do not have a preference for either factor but rather inclined to both of them while choosing foods. The discussion of these results brings attention to the necessity of promoting not only the nutritional content of the products but also their cultural relevance.

4.2.4 Barriers and Preferences:

Availability ($M = 1.96$, $SD = 0.837$) and price ($M = 2.01$, $SD = 0.824$) were identified as problems, meaning there is a lot of room for improvement in the ease of access and affordability of West

African foods. Logistical challenges were scored a bit higher ($M = 2.07$, $SD = 0.814$), with a significant concern regarding the supply chain.

4.2.5 Product Attributes:

The analysis further explains that the consumers of West African food products are also influenced by their perception of the products as organic and health-conscious ($M = 2.06$, $SD = 0.804$) and the exotic nature of the food products ($M = 2.02$, $SD = 0.817$). According to the study of Castanho et al., (2023) these factors are not condensed and have very high importance over other factors like health or familiarity with the culture (Castanho et al., 2023).

The benefits of such products for their healthy consumption and the differentiation factors these products offer respondents do not rank them as priority products when making their purchases (Tunca, Budhathoki and Brunsø, 2024). While some value is attached to organic and exotic production features these are not primary value motorists or drivers of so many consumers. The descriptive analysis indicates that there is an acquaintance and further appetite that there are stumbling blocks such as cost, accessibility, and issues regarding delivery that ought to be removed should those food products gain wider appeal. These barriers may be overcome by extensive marketing that reaches the target consumer and convenient settlement of the product.

4.3 ANOVA Analysis

Analysis of One-Way ANOVA for Purchasing Habits and Age Group

One significant measurable dependent variable in the context of the quantitative study proposed here is the purchasing habits of the contributors to the survey concerning their educational level. According to the study Akbarov, (2021) the one-way ANOVA test where the education level of respondents was the dependent variable and purchasing behavior of ethnic food products was the independent variable (Akbarov, 2021). The test concerned the influence of the respondents' education levels (Q2) on the frequency at which they purchased ethnic food products (Q7). The purpose was to determine if those with basic education such as matriculation, certificate, diploma, degree, master or even a doctorate had different tendencies when it originated to purchasing ethnic food products. The results of the ANOVA are summarized in the following table:

ANOVA

How often do you purchase ethnic food products?

One significant measurable dependent variable in the context of the quantitative study proposed here is the purchasing habits of the contributors to the survey concerning their educational level (Nekmahmud and Fekete-Farkas, 2020).

The one-way ANOVA test where the education level of respondents was the dependent variable and purchasing behavior of ethnic food products was the independent variable. The test concerned the influence of the respondents' education levels (Q2) on the frequency at which they purchased ethnic food products (Q7). By the study of Simanjuntak and Shahirah, (2024) the purpose was to determine if those with basic education such as matriculation, certificate, diploma, degree, master or even a doctorate had different tendencies when it originated to purchasing ethnic food products (Simanjuntak and Shahirah, 2024). The results of the ANOVA are summarized in the following table:

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.471	3	.157	.117	.950
Within Groups	663.951	496	1.339		
Total	664.422	499			

According to the study of Mei, (2024) the calculated F-value of 0.117 also asserts the fact that the distinctive variation between the age groups regarding ethnic food purchasing is rather insignificant when compared to the internal variation observed in the groups (Mei, 2024). In particular, between-group variance (0.471) is significantly smaller than within-group variance (663,951) based on the Sum of Squares. This implies that the observed disparities in purchasing behaviors are not a result of factors other than the group to which the age belongs but of the group itself.

The Sig. value of 0.950 is considerably greater than 0.05 hence the Purdue researchers' finding could be generalized and did not indicate the significant difference in the purchasing frequency in the different age segments. Regardless of the age of the respondents 18-24 years, 25-34 years, 35-44 years, or 45 years and above the number of times they purchase ethnic food products particularly West African foods does not differ. This indicates that aspect of age does not play a major role in the purchasing behavior of ethnic food products. By the study of Randall et al., (2024) these results provide contrary evidence to the hypothesis that young adults are the most likely to consume ethnic foods with the foods originating from West Africa (Randall et al., 2024). The age is not influential in consumer purchasing decisions it implies that awareness, availability and perceived health might be more influential in consumer decisions. Some of them may involve the level of awareness of the consumers with the products their proximity to the products in stores and their knowledge of the health implications of taking ethnic foods such as fonio, cassava, or palm oil.

Through the study of Dwivedi et al., (2021) this finding aligns with the extra similar studies carried out in the field of market research where it has been observed that the age factor does not play a transforming role in the food purchasing decision (Dwivedi et al., 2021). For instance, buying habits may be prompted by conditions of learning a particular culture exposing consumers to certain lifestyles or increasing concern with their health as opposed to the age of consumers. The use of marketing mix tools that promote the marketing and distribution of West African food products must consider other trends such as health consciousness and culture rather than age trends (Mrutyunjay Padhiary and Roy, 2024).

The result of the direct comparison of purchasing frequency by age shows that age does not play a vital role in the formation of consumers' behavior regarding West African foods in the U.S. market to the study of Ogundijo, Tas and Onarinde, (2022). Therefore, overall marketing concepts such as including marketing awareness, availability, and marketing of ethnic food product health may be more effective when used to create market interest in ethnic food products. According to the study of Kabutu, (2022), the study emphasizes the need to look at other factors that are likely to have a greater influence on food marketing and distribution strategies (Kabutu, 2022).

Analysis of One-Way ANOVA for Purchasing Habits and Education Level:

ANOVA

How often do you purchase ethnic food products?

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.688	3	2.563	1.936	.123
Within Groups	656.734	496	1.324		
Total	664.422	499			

The F-value of 1.936 and a p-value (Sig.) of 0.123 mean that there is no significant difference in the purchase frequency of ethnic foods by education level. According to the study of Ebrahimi et al., (2021) the p-value obtained is much larger than 0.05 suggesting that the observed differences in purchasing behaviors cannot be considered statistically significant (Ebrahimi et al., 2021). This implies that the number of years spent in education seems not to dictate how often people buy ethnic foods.

The Sum of Squares between Groups (7.688) is again much smaller than the Sum of Squares within Groups (656.734) which means that education level again does not account for much of the variation in purchasing behavior. The MS between Groups = 2.563 is also less than MS within Groups = 1.324 which indicates that between the groups observed variance is very much lesser than within the group's variance. According to the study of Jeong and Lee, (2021) the result had no significant difference implying that this is a figure that the education level may not be an influencing factor of ethnic food product consumption (Jeong and Lee, 2021). The differences in the frequency of ethnic food purchases do not seem to vary that greatly regardless of the education level of the respondent whether or not a respondent has a high school diploma, a bachelor's degree, or a master's degree. This means that formal education does not play a vital role in influencing purchasing behavior but issues like exposure to certain cultures' health, availability of the product as well and marketing influence the purchasing behavior. By the study of Firoozzare et al., (2024) one should mention that earlier literature regarding food purchasing behaviors has shown that education tends to indicate consumer behavior in some studies especially when people prefer healthy foods (Firoozzare et al., 2024). However, in this particular research, there was no great

difference in the ethnic foods that may be attributed to the education level that may be seen as important for such products by consumers. It may then be argued that ethnic food consumption is a function of cultural acclimatization and awareness and not cultural education.

(Shi, Dedeoğlu and Okumus, (2022) it is also worth pointing out that the obtained results may indicate that in ethnic food consumption cultural acquaintance and experience matter more than school achievement (Shi, Dedeoğlu and Okumus, 2022). The purchasing behavior of consumers who take high school degrees may not be different from those who have obtained a college or university degree if they have come across or have been interested in ethnic cuisines through close relations or friends. It could also mean that the education effect could be overwhelmed by the health considerations seen with the purchasing behavior or the novelty of the foods available from other cultures. The relationship between education and the purchasing of ethnic foods since the testing used convenience, price, and availability as the determining factors studied by Imtiyaz, Soni and Yukongdi, (2021). The effects of other variables such as price sensitivity, availability, and awareness of ethnic food may outweigh that of education. One must raise the question of whether it is the mere ethnicity of the food or the amount of exposure to such foods that may be even more influential than education. For example, consumers who have previous exposure to African food or have been living in multicultural nations may propensity to buy ethnic foods regardless of their education level (Alhujaili, Nocella and Macready, 2023). The majority of those who are exposed a few times may have a low propensity to buy these products irrespective of their educational level. Education level thus does not necessarily imply a commensurate change in purchasing behavior. The education level is not accompanied by more exposure to ethnic foods through events, classes, or personal interests.

According to the study of Hecht et al., (2020) this study has important implications for the promotion of West African food, which should not restrict marketing initiatives merely to the education level of consumers (Hecht et al., 2020). Education may play a minimal role in determining how the ethnic food market will be affected by cultural issues, health concerns, and access to ethnic food in the United States. These could be focused on certain cultural groups enticing them with the healthy benefits associated with fonio and cassava and product placement in the general and ethnic food stores. By the study of Limaho et al., (2022) marketing that calls for the use of fonio to support health since it is free from gluten and other superfoods, or campaigns

for the practice of palm oil as it is sourced sustainably may appeal to this sub-group in education attainment than other appeals (Limaho et al., 2022).

Based on the findings of the ANOVA test the study tries to indicate that the education level of consumers has no impact on the ethnic food consumption pattern (Mascarello et al., 2020). First, it is essential to note that separating store purchases by education categories may not be very revelatory because, second, non-education related factors such as cultural sensitivity, whether or not the product is or becomes available in the local stores, and health concerns may have a more significant impact on the purchases, consumption habits. According to the study of Risti Permani, (2023) the businesses and marketers in the Western African food import segment should focus on these factors against the education level index in making their strategies (Risti Permani, 2023).

4.4 Correlation Analysis

Correlations

	How often do you purchase ethnic food products?	Do you think that West African food products are readily available in your local grocery stores?	How much do health considerations influence your decision to purchase food products?
How often do you purchase ethnic food products?	1	-.103*	.076
Pearson Correlation		.021	.090
Sig. (2-tailed)			
N	500	500	500
Do you think that West African food products are readily available in your local grocery stores?	-.103*	1	-.021
Pearson Correlation			.639
Sig. (2-tailed)	.021		

your local grocery stores?	N	500	500	500
How much do health considerations influence your decision to purchase food products?	Pearson Correlation	.076	-.021	1
	Sig. (2-tailed)	.090	.639	
	N	500	500	500

*. Correlation is significant at the 0.05 level (2-tailed).

According to the study of Stadlmayr et al., (2023), the correlation study analyzes the interrelation of purchasing frequency, availability of West African food products, and health considerations as drivers for food choices (Stadlmayr et al., 2023). With a weak negative correlation of (-0.103) established between purchasing frequency and availability, it was found that lower availability reduces the frequent buying of ethnic food products by a slight margin. This relationship has a p-value of 0.021, establishing statistical significance at the level of 0.05, showing that an increase in availability would positively impact the behavior of purchasing.

According to the study by Lim et al., (2020), there is a weak positive correlation between purchasing frequency and health considerations at 0.076, suggesting that healthy individuals are more likely to purchase ethnic food products (Lim et al., 2020). Nonetheless, the relationship is not statistically significant at $p = 0.090$, which implies a lack of strong evidence that health considerations influence purchase behavior consistently.

Lastly, the correlation between product availability and health considerations is insignificant at -0.021 and not statistically significant ($p = 0.639$). This implies that the availability of West African food products has little to do with the influence of health considerations on purchases (Szenderák, Fróna, and Rákos, 2022). Overall, the results emphasize that availability is a key factor influencing purchasing behavior, while health considerations are less consistent in this regard.

4.5 Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.63944 ^a	.68254	.5781	207.205

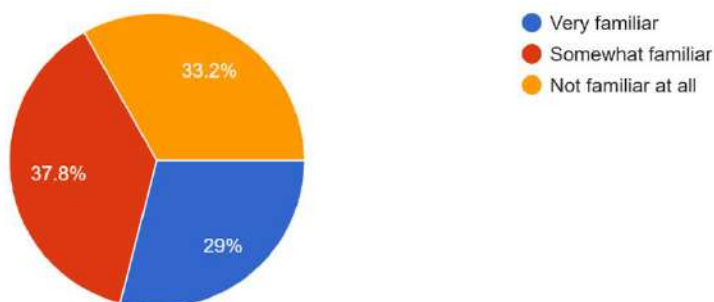
The regression analysis considers the effect of health concerns, cultural awareness, product availability, and pricing on the purchasing habits of West African food products (Huo, Fauziah Sh. Ahmad and Teoh, 2023). According to the Model Summary, the predictors are moderately related to the dependent variable. An R value of 0.639 reveals a fair positive correlation, implying that the independent variables influence purchasing habits to a significant extent.

The R Square value of 0.682 indicates that 68.2% of the variance in purchasing habits is explained by the predictors. This indicates a high explanatory power, meaning these variables play a significant role in shaping consumer behavior. By the study of Zhang et al., (2024) the Adjusted R Square of 0.578 further confirms that the model remains robust after accounting for the number of predictors, though it slightly reduces the explained variance (Zhang et al., 2024). The Standard Error of the Estimate (207.205) gives the average deviation of the observed values from the predicted values, meaning that, although the model has good explanatory capacity, there is still some degree of variability not captured by the predictors.

According to the study of Liguori et al., (2022), the analysis suggests that health considerations, cultural knowledge of products, product availability, and price have major influences on purchasing behaviors (Liguori et al., 2022). Such insights are also helpful to businesses that desire to strategize marketing and the distribution of products for foodstuffs in West Africa since these are some of the key factors influencing consumer purchase decisions.

Are you familiar with West African food products (e.g., fonio, cassava powder, palm oil)?

500 responses

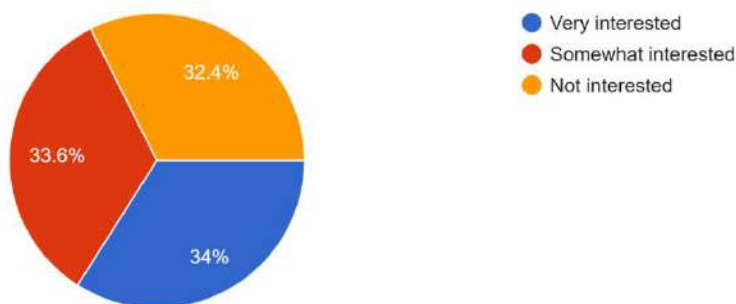


The survey results from the 500 regarding familiarity with West African food products will be an interesting read on awareness among consumers: about 29% were reported to have been very familiar with these types of foodstuffs by the respondents. However, for 37.8 percent, the extent of familiarity stood at a mere so. Most surprisingly 33.2 percent marked that they knew nothing about these foods. This has pointed out a relatively modest level of widespread knowledge within the general population regarding West African food products (Tugjamba, Walkerden and Miller, 2023). A notable segment (37.8%) of these consumers is somewhat familiar while the one-third who mentioned they do not know shows the need for stronger education and awareness initiatives about increasing familiarity with these products and, subsequently with their interest.

According to the study of Thebulo et al., (2022) the relative proportion of "somewhat familiar" respondents suggests there may be room for more involvement perhaps by marketing initiatives focused on how West African food items are good for health, rich in culture, and distinctive (Thebulo et al., 2022). The 29% very familiar may also be the key consumer group that companies want to establish or expand West African food products (Ingrassia et al., 2022). These results, in general, seem to provide an avenue to improve the market for West African food products through fostering familiarity and educating consumers.

Are you open to trying new ethnic foods such as fonio, cassava powder, or palm oil?

500 responses



A total of 500 respondents to the survey results on willingness to try new ethnic foods such as fonio, cassava powder, or palm oil show a divided interest. In the study of Hopkins et al., (2023) about 34% of the participants reported being very interested in trying these foods while 33.6% reported being somewhat interested (Hopkins et al., 2023). However, 32.4% of the respondents reported not being interested in trying these products. This distribution implies that a large section of the population is open to exploring new ethnic foods, but a larger number remain uninterested or unwilling. The data identifies a latent market for West African food products, in particular among those who are curious, and points out a necessity to devise strategies for the 32.4% who do not have any interest.

Chapter 5: Conclusion and Recommendations

5.1 Conclusion of the Study

This study explored the possible approaches to importing food products from West Africa particularly Guinea to the United States. The research objective was to understand the nature of the West African food market by analyzing consumers' attitudes, buying behavior, possible

problems within the supply chain, and legal factors that might influence market access. Through the identification of various demand-related research questions such as those outlined above the study serves as a useful undertaking to importation firms, policymakers, and other business entities that are interested in the ethnic food niche especially as it bends to America's interest in fonio, cassava powder, and palm oil.

The results of this research pointed to a modicum of opportunities but duplicity regarding the importation of foods from West Africa into the US market. There are higher levels of consumer interest especially in fonio, cassava powder, and palm oil but the statistics given below reveal some major hurdles that need to be crossed to increase consumer uptake. These primary concerns are mainly dictated by product availability, price, and physical distribution constraints. It is possible to state that two factors such as health consciousness and cultural sensitivity were less significant compared to other crucial motivators affecting the purchasing decision. Consumers were aware of the health value of some of the West African foods, but these factors were not enough to influence a consistent demand. However, arguments based on the actual accessibility of such products in stores within the context of a consumer's daily life and the cost of the products became the real obstacles to their usage. The pricing and access were cited as the main barriers to increased consumption of West African foods and though consumer interest was high, fair penetration of markets should be considered as a key priority.

The survey results show that the level of awareness of West African food products among U.S. consumers is low. From the study, it was revealed that 29% of the respondents expressed a very high level of familiarity with West African food products implying that a significant proportion of the population has a low level of familiarity with these products. Moreover, about 33% of respondents replied that they had never even heard of these foods. This suggests that consumers do not get or know of West African foods, their existence, and their value. The reforms is still an important factor in the inability to expand demand for these products in the USA. It is a big hurdle for companies that want to introduce new products and get their foot in the door within the cutthroat American food market. The low familiarity rate causes a problem for U.S. consumers, however at, the same time, it indicates the low awareness and the potential for firms to transform this and increase awareness with the populace. However, there were signs of hidden occasions to some of these products, especially among consumers with enhanced health consciousness and

ethnic groups. This discovery indicates that it may be possible for West African foods to penetrate the U.S. market if consumers awake from slumber and embrace foods from the West African region for their health, cultural, and product features aspects. Consumers who normally are not in touch with West African foods might be willing to try out the foods once they appreciate the utility of the food products.

Educational marketing efforts should be employed by businesses in order to close the gap between mere awareness and sales. Such activities should extend past basic advertising and focus on the medical, cultural, and gastronomical versatility of West African food items. For instance, fonio has varied health benefits as compared to other foods such as cassava and palm oil because it has no gluten, has many nutrients, and is rich in vitamins and minerals. All these attributes should be declared in commercial literature, on the foods and their packaging to suit consumer preferences for healthier foods. Further, articulations of local narratives and brands about them as cultural foods might find a ready audience among the targeted consumers from African and Caribbean origins having some prior link to the foods. For instance, when rebelling for fonio as one ancient grain from West Africa and publicizing the grain as a traditional culinary ingredient serves as a way of increasing the perceived cultural appeal. The demonstration of palm oil in meeting cooking needs especially among black-origin people would give the product more impetus among these groups of people. In addition to social media and food festivals, other actions closely related to public health initiatives could also improve the familiarity of West African food products. When food influencers, chefs, and nutritionists become involved with certain companies and brands they have a reservoir of knowledge that can help expand the company's customer base particularly young people who are more prone to adapting to new trends in the market. While these campaigns assist in creating awareness they are also helpful in dealing with an even bigger theme of diversity and equity in the food business. When developed such campaigns can enhance understanding of the history of West African food and spur a greater interest in the ethnic food markets including food of West African origin as a new trend in the United States.

Research indicated that trade barriers that were logistic in nature were some of the hardest hurdles that food exporting companies from West African nations would encounter when seeking to enter the U.S. market. This knowledge gap allowed for the identification and capture of a range of supply chain issues such as the time taken to ship supplies inadequate infrastructure and expensive

shipping, especially given the distance between Guinea and the USA. West African foods are many a time perishable food items they pose critical challenges as to the quality of the products once in transit. These foods such as palm oil, cassava powder, and fonio are from the tropics making them reach the U.S. in a fresh and edible condition poses a lot of trouble to the carriers.

According to the study, cold chain storage and distribution will be key enablers that will help overcome these supply chain challenges. New logistics companies can thus be obtained in order to minimize food spoilage in rerouting and ensure that West African foods reach the appropriate markets in acceptable conditions. For instance, similar to the case studies made above with reference to the use of IoT sensors in controlling the temperature and humidity levels during transit it would help in better tracking of quality and resultant low spoilage rates. This technology is especially useful for products such as palm oil because they are affected by improper storage conditions and for cassava because it is sensitive to fluctuations in temperature and humidity. Transportation cost is also an important factor that stimulates consideration. Overhead charges for shipping meals across the borders could be steep and so with the use of cold-chain logistics, the expense is bound to be higher. It is determine and forwarded to the consumer end affecting the price of food products in the West African market. The requirements of replenishment due to variations in the demand levels become other issues that can complicate the issue of holding stocks and balances to desirable standards. Another is the issue of regulatory requirements mainly the accreditation to the food safety standards of United States of America. When it comes to entries challenges for the exporters originate from understanding the rule base of the U.S. market. Federal agencies including the Food and Drug agency (FDA) and the U.S. Department of agriculture (USDA) have instated policies in safety/ processing, labeling, organics accreditation, and health claims on foods. If the above regulations are not followed the products can take a long time to be cleared for sale attract another cost that may be incurred in acquiring the certifications, or even get recalled from the market or the firm may be fined.

For instance, any food of West African origin intended for importation into the USA has to meet FDA labeling regulations which require discloser of ingredients, nutritional value, and health benefits. Any products with the label organic also have to meet the USDA organic certification standards. These regulations are important for transacting parties but pose a challenge for the exporter due to time and costs incurred in trying to understand the regulations governing the U.S.

market. Furthermore, it may take a lot of capital to get organic certifications for products produced in Guinea such that the small holder farmers may not afford the processes of getting the certification. In light of these logistics and regulations, the study underscores the importance of commitment to the strategic partnership between West African exporters and distributors, customs and regulatory brokers, and experts in the United States of America. Through the ongoing cooperation with logistics and regulatory experts exporters can avoid the complexities of the import process and comply with all the required requirements. The policy interventions aimed at promoting the rationalization of rules regarding the importation of West African food products can go along way in eliminating some of the existing bureaucratic measures endured by importers.

The analyzed study shows both the existence of the steady West African food import demand among consumers in the United States and a list of potential issues, including recognition, delivery and requirements concerning food safety and quality. Any firm planning to enter the system to sell the products has to ensure that it undertakes consumer awareness campaigns has efficient supply systems and understands the laws governing products from overseas. If properly marketed and promoted West African food products can work in the United States because of increased concern for ethnic, healthy, and culturally relevant foods. The barriers outlined in this study West African food importers could extend cross-supply chain collaborations to increase their penetration in the targeted market and thus add increased variety to the U.S. food market.

These demographic factors include age, education, and gender; the survey indicates that none of the three variables avails a significant influence on the consumption of West African food products. There were no stark dissimilarities in purchase frequency across any age or education segments. This means that appealing to segments based on age or education may not reap great results as compared with ethnic segments or health-conscious buyers. The recurrent idea arising from the research is that ethnic consumers, particularly consumers of African-American and Caribbean descent will be the chief consumers of West African foods in the USA. However, a wider marketing strategy should also embrace the future market in the emerging demands of health-wise consumers who prefer gluten-free, plant-sourced, and even superfoods such as fonio. Regarding the ethnic food market, African-American clients are the most preferred customers for West African food products. It is crucial to point out the emergence of the new know-healthy, trend, especially among the millennials who seek food of health value and ethnicity. It will be

important to market the foods under consideration to these consumer groups using the right channels in order to gain market share and hence the uptake of these foods.

From this research, it is clear that there exists an untapped market for West African food products in the United States to unlock the market fully it is critical to surmount the difficulties discussed in this research. Some other constraints are availability, cost, and cumbersome distribution systems which must be overcome to introduce these products to the U.S. market. The promotional campaigns that focus on the use of West African foods for nutritional value, and cultural and exotic appeal will assist in reaching the consumer. Through consumers increasingly becoming conscious about ethnicity organic and health concerns West African foods are right on track to address the ethnic food market segment as a superior health-oriented product offering. Further, organizations that may be interested in importing West African foods must pay keen attention to cutting the cost of supply chain and transport. The preliminary and permanent relationships with the distributors in the USA and farmers in Guinea make product credibility easy to achieve and deal with various challenges such as delivery and transport. Besides, it is vital for businesses to try to overcome some of the regulation hurdles by engaging experts and customs brokers to help clear such procedures faster.

This work has given an understanding of the possibility of the introduction of West African food products into the American market. Altogether the results point to the fact that there is possible consumer interest in purchasing these products but many potential barriers exist amongst which the issues of product accessibility, price sensitivity, and poor distribution networks are pervasive. The best approach will entail consumers' education, cooperation with other bodies, and an improved supply chain and distribution network will be crucial in enhancing the marketing of West African foods. Ethnic food market, there are great opportunities for these products in the United States, and with proper planning, West African foods shall have great advantages in the future in the United States. This research finds that a three-pronged strategy that involves sensitization enhancement of other facilitative factors and market segmentation is key to realizing the potential of West African food products in the United States. Some firms have to keep seeking new strategies to overcome the obstacles and benefit from more consumers' demand for ethnic foods and superfoods in America.

5.2 Recommendations (Solutions)

Based on the analysis and findings, the following recommendations are provided for businesses, policymakers, and stakeholders involved in the importation of West African foods to the U.S. market such as:

- i. **Increase Consumer Awareness and Education:** The lack of food product awareness was considered to be a monumental challenge amongst the people of West Africa. To address such knowledge gaps, the marketing campaigns center on the health benefits and cultural values of taking such foods and the novelty that comes with the taste of the foods. By using social media to engage food festivals and improve public health advertising, awareness can be raised. Furthermore, it illustrates that collaboration with food influencers and chefs can greatly appeal to millennials and ethnic customer segments.
- ii. **Improve Product Availability and Distribution Channels:** Initial findings revealed that a major concern of consumers was that groceries stocked very few West African food products. It is recommended that snack manufacturers try to make alliances with large traditional supermarkets, ethnic stores, and web-based outlets to make such snacks more accessible. They should also consider selling their products through online sales platforms because most customers prefer to purchase such products online.
- iii. **Reduce Logistical Barriers through Strategic Partnerships:** As difficulties in the supply chain such as cost of shipping, transportation time, and perishability of the products, importers should seek the services of cold chain logistics firms specializing in supply chain management. For instance, in the case of using IoT sensors to track the temperature and humidity during shipping as shown in several earlier cases firms are capable of decreasing spoilage levels and enhancing the quality of the final product. The customs brokers and regulatory specialists should also be engaged more effectively to strengthen cooperation with them to overcome some difficulties related to certification and clearing processes.
- iv. **Address Pricing and Product Positioning:** One of the major challenges mentioned in the study is the price of West African food products. There is a need for importers to find out how they can cut costs of operations such as buying in large quantities, entering into long-term supplier agreements, and perfecting the supply chain. Adding more attributes to these products such as organic, premium, ethically sourced, and other attributes could form a

justification for the relatively higher price compared to others by targeting specific market niches fit for such products. However, ensuring that the products are in the affordable price range will ensure a larger clientele base is attracted.

- v. **Focus on Health-Conscious and Ethnic Consumer Segments:** Ethical consumers have adopted growing levels of concern specifically for gluten-free, plant-based, and nutritional density. As fonio, cassava, and palm oil are healthy foods with nutrients businesses should relate these products to health food. Since food with ethnic and traditional connotations is in focus, consumers of ethnic origin particularly the Black and Caribbean American market should be preferred. It is essential to develop long and stable business relations with producers and agricultural organizations of Guinea to maintain a sound and long-lasting supply chain. This prevents quality and supply issues but it would also directly provide an income to Guinea's agricultural industry. Expanding on fair-trade certifications and organic certifications could also enhance product attraction in the U.S. market with specific reference to health-conscious individuals.
- vi. **Policy Advocacy and Regulatory Support:** The policy implication models should be pursued and used hence the importers of West African food products should engage in policy advocacy to de-bureaucrat the policy of West African food product imports to the U.S. There is a need to foster better relationship between West African food products and the U.S. regulators. This is particular may involve lobbying for trade between Guinea, and the U.S. meant to reduce tariffs and hence improve market access. Through grants and subsidies, various industries can obtain funds to cover initial market entry costs or regulatory compliance costs.
- vii. **Market Testing and Feedback:** Businesses should begin piloting or market sampling products or services in some cities that have a concentration of ethnic populations before full entry into the market. They will be able to obtain consumers' responses, modify marketing tactics, and monitor the reception to pricing, packing, and branding by the market.

These strategies and initiatives can help West African food products eliminate existing challenges and achieve great success in the U.S. market.

5.3 Limitations of the Research

However, it has some limitations which are worth mentioning to avoid ambiguous interpretations of the results of this investigation. Included in the limitations was the nature of the survey through

500 people although a large number for a survey may not be overwhelmingly representative of the population in the United States. Though an attempt was made to achieve demographic diversity, there were limitations in achieving sub-sample heterogeneity across regions, income, status, or social class. Such factors may affect purchasing behaviors and the results may not represent the behavior of all the consumer segments in the U.S.

Another source of weakness is the nature of the data collected for the study and the methods used to gather the data. Surveys consist of various closed-ended questions and justifiably are considered efficient tools for collecting quantitative data but at the same time include self-reported data that are conceptually compromised. Interviewer fatigue could have impacted the responses given by participants during the interview with regard to health consciousness and purchasing behavior. Internal response bias such as response bias and social desirability bias may have influenced participant's responses to questions posed to them. However, where random sampling was employed the possibility of a distortion in this regard has been considerably reduced. Moreover, this study was mostly targeted at the American market and did not go further to investigate other possible markets. For example, the European market may have a different demand for West African foods owing to differences in cultural, economic, or policy factors. West African imports of food and its markets could be examined in other markets to elicit more opportunities for importing food into the global market.

5.4 Future Work

The findings of this dissertation offer a basis for the analysis of the import prospects of West African foods into the United States market but there are several aspects that future research could develop from the existing knowledge. These areas are particularly significant for the firms who want to know more about the prospects of African food items in the global market thus the political actors and scholars interested in West African economies. Below are several areas that would benefit from further investigation:

1. Expanding Market Segments:

The succeeding research could involve the other demographic categories to have a symbol as to how the different segments within the different levels of consumers behave and what their preferences are. Although this research was concerned with general market trends and consumers'

awareness and information. It will prove worthwhile to look into the effects of factors such as income status, geographical location, or region of the consumers. For example, ethnic food consumers from urban areas and rural areas are likely to have different quantities and types of ethnic food products and different preferences given their food culture. The global context has variations within the United States also a possible research direction. For example, eating ethnic food could involve a much higher or lower frequency depending on the specific regions with high levels of immigrants and the rest of the nation's towns. These differences might make it easier for companies to identify in which regions they might meet with the most success and adjust their advertising messages to the particular region. The insight into how some antecedent factors such as age, family status, or life cycle affect ethnic food consumption could also enable the fine-tuning of the business models and tactics of importers.

2. Qualitative Research:

This study did not use only quantitative data that were gained from surveys conducting qualitative research such as interviews, focus, and observational should be more helpful for consumer behavior understanding. Frequency and prevalence are well assessed by quantifying large samples psychological factors that may influence a purchase are not adequately captured by quantitative surveys. The qualitative research would facilitate going more into understanding why specific segments of consumers are likely to or unlikely to purchase West African food products. The consumer's emotive and ethno-cultural associations with such foods or the rationale why the health-conscious consumers would be more or less likely to buy these foods even if nutritious. Distinct consumer groups might be especially helpful. The African-American population of immigrants from other parts of Africa or middle-class occasionally health-oriented consumers would presumably give more targeted recommendations on what strategies could be used to raise awareness and demand. The qualitative investigation could shed light on consumers' beliefs regarding cultural sincerity and brand credibility. The actual identity of products under research, options that are not as easily revealed by the quantitative approaches.

3. Exploring International Markets:

The assessment of the potential of West African food for export markets, apart from the United States. Some other countries like the United Kingdom, France, and Canada that host large populations of Africans in the diaspora are other potentially attractive markets for the import of

West African foods. For instance, the people of the Caribbean and West African countries share the same black skin color, and some cultural events in these countries may make it easier to introduce new West African foods in their markets. However, these countries also have different applicable laws and different customers which must be researched first. For instance, the United Kingdom has trade relations with African countries and French-speaking African countries might have something different from British-speaking nations. It was also found that a lack of knowledge of the local regulatory environment and the consumers' trends in these areas could hamper the development of proper market entrant schemes. This research could assess the cultural effects, diaspora influence, and the role of distribution networks in marketing entry in these countries.

4. Supply Chain Optimization:

The supply chain hitches including transportation hold up customs and clearance and perish age. Extensive work could be done in the future targeting the technical and operational factors to attract the supply chains underpinning them and the request of technology. For example, AI and blockchain technology are practical for increasing food import transparency, traceability, and effectiveness levels. The predicting and recommending ships' routes thus avoiding congestion and finally integrated inventory control. With the help of Blockchain is possible to have end-to-end tracking for agricultural products and can provide confirmation of genuineness, quality, and compliance with market standards. The same is true for the improved storage and transportation means and also cutting on cold chain logistics could help to minimize losses and enhance the quality of the products delivered to the United States. These technologies could be a way to save costs in operation but would also guarantee freshness and quality hence fulfilling the customers. Some other future research could also compare the economic effectiveness of such technologies for SMEs in developing nations like Guinea. These companies could be constrained by funds to implement those proactive systems of logistics and realizing the opportune mechanisms could be the key to international success for these large companies. Research could focus on the strategies that African exporters and technology companies can adopt to develop cost-effective solutions in serving the needs of small-scale food exporters.

The existence of opportunities for the import of West African food products into the United States market can be developed in the following areas of future research. The analysis to explore more categories, using qualitative methods to gain further understanding of the factors at play exploring

additional international settings, and emphasizing the enhancement of supply chains with contemporary technologies are all future steps of great importance. The above areas if focused on by future research could help enhance the prospects for organizational efficiency and effectiveness of food importation hence enhancing the prospects of West African food products in the international market. Moreover, more studies are necessary to explain how businesses can respond to the dynamics of demand and cultural imprint, as well as the practical challenges of this promising but still rather uncharted market. The concepts deduced from such research would help the importers, policy makers, and other stakeholders who wish to exploit the increasing market of ethnic and health-conscious foods internationally.

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