



# FOOD IMPORTATION BUSINESS IN SOUTH SUDAN



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## ABSTRACT

South Sudan is heavily reliant on food import to feed its population due to the lack of domestic food production and infrastructure. In 2019, South Sudan spent approximately \$1.8 billion on food imports, making it one of the largest importers in Africa. The high cost of food imports and the depreciation of the South Sudanese pound have made food unaffordable to most. The main objective of the study was to understand the food importation business in South Sudan; to discuss feasible policy approaches for the economic management and suggest areas of improvement. The study also aimed at reviewing policies in order to understand reasons as to why policies are not being implemented and present recommendations on how the country's heavy dependence on the importation business could be mitigated by using both short term and long term sustainable solutions. A total of 50 respondents were selected for the study, 30 respondents were food consumers/ households, and 20 were food retailers and wholesalers. The respondents were selected using random sampling techniques. 5 key informant interviews were conducted with the Director General of research and planning in the national ministry of agriculture, executive director of a Non-Governmental Organization, FARM STEW South Sudan, director of planning and research in the national revenue authority, the national bureau of standards and specific farmers. Both quantitative and qualitative analysis methods were used and the results were analyzed using Microsoft Excel and SPSS package. Results from the study show that the country imports most of its food items from Uganda, Kenya and Sudan. It also shows a high percentage of the population has been negatively affected by the inflation and the dependence on neighboring countries for food items. Farmers faced the largest issue of insecurity and bad roads to reach their products to the market and the main challenge for retailers is the fluctuating prices and high taxes imposed on them. This boils down to the absence of policies required to regulate the business and help encourage local production. Lack of implementation of the policies and weak policies according to the key informants were due to the lack of political will and insecurity in the region forcing farmers out of their homes in rural areas to try and earn a living in towns. The recommendations from the study are; strong policy reforms, formation of farmers' support groups and innovation in our agricultural systems which should involve the youth. All the recommendations hinge on the arms of policy reforms and political stability with which nothing can be done in its absence.

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## **Abbreviations and Acronyms**

CPA : Comprehensive Peace Agreement

FAO : Food and Agriculture Organization of the United Nations

FCSI: Food Coping Strategy Index

GDP : Gross Domestic Product

JCC : Juba City Council

JICA : Japan International Cooperation Agency

MoA : Ministry of Agriculture

NGO : Non-Governmental Organization

SSCCSE: South Sudan Center for Statistics and Evaluation

SSNBS: South Sudan National Bureau of Standards

SSP : South Sudanese Pounds

UNDP: United Nations Development Programme

UNHCR: United Nations Higher Commissioner for Refugees

USAID: United States Agency for International Development

USD : United States Dollar

WFP : World Food Programme

WTO : World Trade Organization

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## CHAPTER ONE

### 1.0 Introduction

The peculiarity of the African continent with regard to food production is its advantage in terms of abundant labor and available land resources that can be utilized to address the food deficit challenge. Unfortunately, most African economies still lag behind in ensuring that there are enough staple foods (Akinboyo, 2008). Most African countries are neglecting the agricultural sector and gradually becoming service-oriented economies while the industrial sector remains grossly underdeveloped. This has led to their parade of weak service sector dominance. Agriculture plays an important role in Africa and has a great potential to contribute to poverty reduction and stimulate economic growth. The sector employs and supports the livelihoods of 60 to 80 percent of the population. However, compared to other regions in the world, low agricultural productivity remains a fundamental problem (Fuglie, 2012).

There have also been increasing policy responses by African governments in reducing food insecurity. In particular, their somewhat approaches either implicitly or explicitly to augment domestic food supply through resort to allowance for food imports in spite of its delimiting effects calls for more research to this effect.

South Sudan, the youngest country in Africa, had one of the longest civil wars in modern African history, since 1955, which destroyed most of the infrastructure in the country. Despite being the newest country, conflict has made South Sudan one of the poorest countries in the world. The country is ranked 187th out of 189 countries on the Human Development Index. South Sudan has an oil-dependent economy characterized by high payment deficits. For example, over 90% of the food consumed in the country is imported. The decline in oil price has further deepened the economic hardship in the country. Poverty levels have worsened from about 44.7% in 2011 to more than 82.3% in 2016. This among other issues has seen the country face huge food deficits with more than 80% of the country's population living below the poverty levels. In an effort to salvage the issue, many agencies and international aids have come up with food aid programs with relief food taking the prime quota. However, as it has been found by a number of studies in other areas such as that of (Leichenko, 2010) in Malawi, (Blackwell, 2011) and (Spevacek, 2010), food aid has over the years depressed the local food production in those areas. South Sudan depends largely on import of goods, services and capital, mainly from Uganda, Kenya, other East African Community (EAC) states, the Republic of Sudan, Ethiopia, and to a minimal extent, the Democratic Republic of Congo and

the Central African Republic. The country imports practically all its needs, including food and fuel which vastly exceed exports (Kuorwel, 2018).

To avoid lack of food, countries that do not produce enough for their people, resort to food importation to fill gaps. When the gaps become huge as to substantially drain national resources that would have been used for other needs, great concerns are bound to be expressed. This is particularly germane when the importing country is believed to have what it takes to produce enough food internally without the embarrassment of importation (Kuorwel, 2018).

Cereal imports make up a significant proportion of the calories consumed in South Sudan. These increased significantly in the years between the signing of the Comprehensive Peace Agreement (CPA) in 2005, which coincided with an oil boom, and the re-start of conflicts in 2013. South Sudan's transition towards dependence on imported cereals reflects wider patterns, although its transition has probably happened at a faster pace. In 1980, Africa's food imports were worth about USD 7 billion: the same as its food exports. Over the next two decades, exports stagnated and imports grew. In 2007, FAO estimated that imports exceeded exports by about USD 22 billion. Cereal imports made up almost half of the total. In 2015, the African Development Bank estimated that net food imports were at USD 35 billion, and that on current trends, net food imports would be worth over USD 110 billion by 2025 (ADB, 2015).

## 1.1 Background of study

The definition provided by the World Food Summit in 1996 is one of the most well-established and widely accepted definition of food security: “Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (Summit, 1996). This definition provides four main dimensions of food security: Food availability: addresses the supply side of food security. On the national level, food availability is a combination of domestic food production, commercial food imports and exports, food aid and domestic stocks. Food access: is ensured when all households have adequate income or other resources to obtain food in sufficient quantities. Food utilization: covers what and how much people eat. People must eat an adequate quantity and quality of food so that their bodies can get the proper nutrients. Food stability: is the ability to obtain food permanently. It is related to the ongoing availability, accessibility and effective usage of food. There are several challenges that have prevented many countries, especially African states from achieving food security. Having an underdeveloped agricultural sector is one of the most important challenges to food security in Africa. Others identify poverty, barriers to market access, and effects of globalization, rapid population growth and climate change. Agriculture is also hampered by inadequate policies, weak institutions, and poor regulatory frameworks that undermine research and development in the sector. Most modern technologies with the potential to ensure adequate food security require policy support that is backed up by adequate regulatory frameworks and functional institutions. In most cases these are either absent or very weak and thus unable to support agricultural development. Poverty and lack of market access are major obstacles in achieving food security. Therefore, even when food is available in the market places, poor people do not have the adequate income or purchasing power to acquire it. In certain African countries, poor urban households spend from 60 to 80 percent of their income on food; that makes them highly vulnerable when food prices rise or their income falls. Barriers to market access inevitably affect agricultural productivity in Africa from the production stage through the value chain stages to the consumption stage. The rural population, which represents 63% of the total population, has limited access to food because of poor infrastructure and barriers in penetrating the market. This is caused by the limited resource base, lack of information, lack of or inadequate support institutions and poor policies among other factors. Where rural infrastructure, storage facilities, and financial services are underdeveloped, farmers often have to sell low at harvest time and buy high during the lean season thereby exacerbating their food

security conditions. Rapid population growth results in the rise in demand for food by 70%, yet the capacity to increase food production is declining. Major social and political crises threatened governments as well as social stability in South Sub Saharan Africa. Massive public protests in response to higher food prices erupted in countries such as Burkina Faso, Cameroon, Egypt, Guinea, Haiti, Indonesia and Senegal. Population growth is one of the most important factors that challenge food security in Africa. This is because population growth has greatly increased the amount of food required to adequately feed Africa, especially sub-Saharan Africa. Sub Saharan-Africa's population is projected to more than double from 856 million to about 2 billion in 2050, even if couples choose much smaller families over the coming decades. Unfortunately, population growth is not proportional to the amount of food produced to feed the same population, and therefore, countries rely on food imports to satisfy the population. Africa is currently partially dependent on food imports yet a sufficient increase in food imports is unlikely to occur. This is due to globally occurring population growth and increasingly challenged modern agricultural systems with high dependency on non-renewable resources. The rising global population will cause national governments to decrease food exports in order to meet national food demand. Declining non-renewable resources on which the agricultural sector depends will cause an increase in food prices and a decrease in yields, both contributing to impaired global food production and reduced opportunities for food imports to Africa (Dioume, 2015).

Stabilizing local food production has been argued to be one of the permanent solutions to food shortages in many countries across the globe. This has been evidenced by countries like Israel, which has stabilized its food accessibility as a result of enhancement of local food production mechanisms. In Africa, countries like Egypt have seen their food security increase systematically as a result of better strategy application in local food production through government support and other agricultural-support agencies. Studies have it that local food production is determined by how much food is accessible to the locals. In most cases, it emerges that as the support programs come with rescue missions to salvage the wounds speared by inaccessibility to food, they make the condition worse (Mattee, 2006).

Food imports and global food price spikes Import dependence exposes countries like South Sudan to international cereal and food price volatility. That volatility has increased significantly over the course of the twenty-first century. In South Sudan, the global cereal price increase was one of the main drivers of significant price increases for all food commodities in all markets. In October 2008, prices for sorghum in Juba were about 50 per cent higher than in

October 2007. In Malakal, sorghum prices doubled over the same period. The 2011 food price spike was implicated in the famine of the same year in conflict-affected Somalia. South Sudan's food prices increased dramatically too. But it is difficult to quantify the influence global cereal price rises had on South Sudanese prices, or to quantify the effect on South Sudan's already-precarious household food security. International prices were only one factor affecting domestic cereal prices in South Sudan; climate, conflict, currency crises and relations with Sudan were also influential. And just as the causes of food price inflation are multi-factorial, its effects are multi-dimensional. In 2008 and 2011, FAO and WFP reported that agricultural wages and livestock prices increased in South Sudan. In 2011, when households were asked to list the main shocks they face, 'food too expensive' was the most common response (WFP, 2011) (FAO, 2008).

Many African cities witnessed food riots during the price spike of 2007/08 (Thomas, 2020). In South Sudan, these food price spikes coincided with serious rural unrest. The 2008 unrest in Greater Upper Nile was linked to several factors. The government's violent, ill-sequenced, ethnically-targeted civilian disarmament campaign was the most visible factor. The disarmament took place in areas of historic, structural food deficits, such as the Lou Nuer areas of northern Jonglei. Over decades of conflict, local people adopted new strategies for dealing with food deficits. One was the food market: Jonglei became highly dependent on purchased food, although it was a state where little money circulated. Another was guns and cattle raiding, which became adjuncts to food production (Thomas, 2020).

In many countries, policymakers have pushed people towards dependence on cereal markets that are geared to international price mechanisms. The rise in cash transfers is one of the ways in which humanitarian agencies foster market dependence. In the whole of 2014, WFP distributed USD 1.3 million in cash transfers: in December 2019, it distributed USD 3.6 million in cash transfers in one month alone (Thomas, 2020).

Part of the reason that cash transfers worked is that they were implemented during years of declining international cereal prices. This decline may have helped South Sudanese deal with the dramatic increase in food insecurity resulting from conflict, food price inflation, and linked economic crises. Basic food commodities, priced in South Sudanese pounds, quickly became unaffordable. Cash transfers were able to help South Sudanese beneficiaries to manage food price inflation because they were backed by US dollars and rose in value as the South Sudanese pound fell. And in any case, international US dollar prices for those commodities were

undergoing a decade of decline. A global price shock, triggered by the pandemic, may well upend this system. If local currency cash transfers do not keep up with rising international prices, in US dollars, the utility of those transfers may come into question (Thomas, 2020).

Today, food insecurity is devastating South Sudan. This insecurity is linked to South Sudan's conflicts, but also to a less visible factor in its move towards markets. Producing food for markets rather than for home consumption, turning food into a commodity and turning farmers into wage workers—all these shifts appear to be implicated in the country's hunger crisis. The move towards markets has acquired enormous momentum. Conflict intensifies hunger, displaces farmers and accelerates the process. The civil war that began in 2013 has deepened food insecurity. In December 2011, the widely used Integrated Food Security Phase Classification found that 25 percent of the South Sudanese population faced crisis (Phase 3) or emergency (Phase 4) levels of food insecurity. In January 2020, 45.2 percent of the population faced crisis or worse-than-crisis levels of food insecurity, and that figure was projected to rise to 55 per cent between May and July, the pre-harvest dearth (Thomas, 2020).

FAO estimates that South Sudan's 2019 cereal harvest, which forms the basis of 2020 consumption, was 818,486 metric tonnes (better than the previous two years). It estimates that the cereal deficit, which forms the basis of demand for imports, was 482,504 metric tonnes. Some of this deficit was met by food aid—in recent years, WFP supplies have amounted to about half of FAO's deficit estimates. The deficit leaves South Sudan with a significant dependence on imported food. The process creates winners and losers, and losers are likely to become more dependent on markets for basic foodstuffs, which are mostly supplied by regional producers.

South Sudan has the third largest oil reserve in Africa. It also has the largest wetland in Africa, the Sudd wetlands, which is home to a diverse species of animals and birds. Despite its significant natural resources and continued economic growth, poverty remains widespread due to political instability. An estimated 70 percent of South Sudanese live on less than US\$1.25 per day and more than 65 percent of the population is food insecure. In addition to that, South Sudan is characterized by high reliance on food imports; it is the leading agricultural importer in sub-Saharan Africa. In addition to coping with persistent poverty and food insecurity, the country imports approximately 70 percent of its food needs.



Although much has been argued about the necessity for every economy to ensure the availability of staple foods, especially through domestic production (FAO, 2013), the tendency among African economies to meet this need through the importation of food, most notably brings to bear a great deal of strain on each country's foreign exchange reserves (Davies, 2009). Consequently, mercantilists recommend import restrictions in order to force the local economy to grow (Bhatia, 2006). Allowance of imports, especially in African developing economies, however, paves the way for the local economy's market to be flooded with foreign products: Thus the continual emphasis on restrictions on imports results from the socio-economic implications of high levels of food imports (Olofin, 2001); (Umo, 2007).

### **1.1.1 Problem Statement**

The demand for food is expected to grow substantially by 2050. Food self-sufficiency is only one route to food security and in reality most countries are forced to rely on a combination of domestic production and imports, sometimes supplemented by food aid. However, depending more on imports of food consumed by the inhabitants is not only wasteful but detrimental to the overall growth and future of the agricultural sector of the nation's economy. Almost all sub-Saharan African countries are listed by the United Nations Food and Agriculture Organization (FAO) as low-income, food-deficit countries (LIFDC). They heavily rely on food imports to supply the growing demand for food and this without supporting policies which promote national agricultural production. The number of developing countries that are net-food importers has increased since the mid-1990s from 74 to 90.9 percent, but there are big differences in the degree of dependency and accordingly in the extent of food insecurity. African countries' over reliance on food imports to mitigate food shortages has social, political and economic impacts. A bulk of African countries have difficulty covering their food imports bills, as their export revenues are limited. This highlights the problem of food import dependency, especially the difficulties facing households and governments in these countries in finding ways to pay for the rising import bills. Moreover food imports dependency exposes countries with precarious economies to soaring and volatile food prices.

Hunger and malnutrition have remained rampant, resulting in limited agricultural activities leading to insufficient food supplies and consumption. The greater population of the country depends on food aid which is often inadequate to meet human food needs. As a result, the majority of the populations have resorted to various coping mechanisms to address food insecurity such as eating of wild fruits, bush meat or foods whose safety has been compromised.

Although a very small proportion of food is produced in the country, this limited food production has potential safety problems along the food supply chains of production, handling, packaging, processing and transportation. Over reliance on food imports is a band aid solution to food insecurity and does not bring about sustainable development. Increased food import costs tightened foreign exchange constraints; this directly affects food security and the economy through the accumulation of external debt and the reduction of merchandise and services imports that are vital for development. Poverty also increased as households struggled to meet the high cost of food. A mixture of policies at the micro- and macro-economic levels can help food producers and consumers to adjust to price upswings and downswings. Social safety nets, non-distorting market-smart input subsidies, prudent trade policy and direct market intervention, efficiency enhancing policies and good budget management can effectively offset part of the negative impact of the food price episode. Both upswings and downswings in food prices require government expenditures. Food price increases threaten the wellbeing of the poor and rising input prices result in a smaller food supply (Dioume, 2015).

Industry analysts have warned that food prices inflation could be between 10 percent and 15 percent by the end of the year. The war in Ukraine has had an impact on energy cost but it will also affect the prices of grain and food oils. Ukraine and Russia are big producers of wheat and sunflower oil (BBC News, 2022). The expected rise in food prices will be damaging to South Sudan's already vulnerable economy and the dependence on other countries for food will make it even more insecure.

### **1.1.2 Research Aim and Objectives**

#### **1.1.3 Main Objective**

The main objective of the study was to understand more about the food importation business in South Sudan; to discuss feasible policy approaches for the economic management and suggest areas of improvement to relevant stakeholders.

### **1.1.4 Specific Objectives**

1. As a first step to policy assessment, the paper also focuses on the examination of the nature of the food price episode, the analysis of its impact on both household and wider economy levels and the examination of the policies that have been, or are currently implemented in other African countries.
2. To understand the food importation business and its significance in South Sudan.
3. To examine the reasons behind the food price boom and slump and propose policies for the management of both price upswings and economic slowdowns.
4. To assess the impact of increased food costs on the well-being of households in developing countries.

### **1.1.5 Research Questions**

1. How many food items importing companies are operating in South Sudan and what percentage is owned by South Sudanese?
2. How much does the country spend on imported foods?
3. What are the profit margins of these food importing companies and stakeholders?
4. How much is the government receiving through tax?
5. What are the issues of quality assurance, safety and other security concerns in food items importation business? Are they insured including drivers?
6. What percentage of the population can comfortably buy food and feed their families?
7. By how much has the food price increased the last ten years and what were the causes for such inflation?
8. How has price inflation affected the economy and the population?

### **1.2.0 Significance of the Study**

This study is focused on analyzing the continually rising food imports to South Sudan and understanding the root cause of food insecurity and other hindrances to local food production resulting from the dependence of the country on imports in an attempt to find a solution to food insecurity in order to achieve sustainable development.

### **1.2.1 The Government**

The results of the study will contribute towards the development of short and long-term policies aimed at fostering sustainable food security in the country. The policy makers and the government will also benefit from the study findings in that they will use the findings to identify the key areas to focus on when formulating policies for local food production in South Sudan and a reduction in the dependence on imports.

### **1.2.2 The Farmers**

Agriculture is one of the most important economic sectors in many African countries and provides livelihoods for large parts of the population. As there are many smallholder farmers and fields are heterogenic and scattered with a large variety of crops grown and dynamic interactions between crops and livestock, many characteristics of African households in rural areas are not well known or uncertain. The findings from the study will help the producers of food in South Sudan to identify the dimensions that they should focus on so as to enhance their production. Other investors in the food sector and other sectors in South Sudan will also benefit from the study findings in that they will realize the areas they have to focus on to promote growth of their ventures through food production and supply.

### **1.2.3 Researchers and Policy Experts**

This study will come in handy to provide a podium, eminent discussions and dialogue amongst scholars, academicians, policy makers, and professionals and provides a basis for further research regarding local food production. The study will contribute to the available literature on food production thus giving future scholars a chance to critic and fill any gaps as well as getting evidence materials for their work.

### **1.2.4 The General Population**

Once the policies are set in place and implemented, the general population will have more stable food prices, and as such, can lead to increases in production. This in turn, results in price upswings in the domestic market becoming shorter in terms of time and less pronounced in terms of magnitude, thus benefiting the consumers. The development of a competitive rural finance sector can assist rural households to smooth consumption effectively during price booms and slumps. Similarly, as the economic recession leads to unemployment and poverty, countercyclical policies are required in order to stimulate the economy, sustain exports and protect the vulnerable population groups.

### **1.2.5 Scope of the Study**

The study was located in Juba, the capital city of South Sudan. The area was deemed appropriate since it harbors the main target group for the study which were; the World food program department and the South Sudan Agricultural Producers Union (SSAPU) also with its headquarters Juba. The data was collected in a period of two months However, similar to other studies, the current study experienced limitations during data collection. One of the limitations experienced during the study was that the respondents targeted were reluctant to provide the necessary information because they felt that the information requested was confidential. Others were unwilling to co-operate or busy with their work. To overcome this challenge, the researcher first explained the purposes of the study to the respondents and requested for co-operation. The researcher also assured the respondents that the information collected would be kept very confidential and used for academic purposes only. The study was limited to the main offices of the targeted groups which are in Juba; the findings did not incorporate the views of the parties in the other areas of the country. Due to limited time and resources, the study failed to conduct household surveys from the general population. A few respondents were selected for the study.

### **1.3.0 Structural Outline**

This chapter introduces the context of the study, the research objectives and questions have been identified, and the value of such research argued. The scope and limitations of the study have also been discussed. The existing literature is reviewed in the next chapter to identify existing literature addressing the same issue and key skills development approaches and strategies within the context of fast-moving industries, especially technology-intensive industries. In the third chapter, the method used is presented. The adoption of a qualitative, inductive research approach will be justified, and the broader research design will be discussed, including the limitations thereof. The rest of the paper consists of the analysis of the data and interview answers, recommendation and remarks on the importation business and a concluding summary.

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

The present chapter lays the foundation of the food importation business, the agriculture sector, policies concerning the business and its impacts in Africa in general and more specifically in South Sudan. This chapter dives into secondary data to understand the previous achievements and recommendations other researchers have on the subject.

### 2.1 South Sudan's Agricultural Sector- a Sleeping Giant

In the past, particularly before oil discovery and its exploitation by the Khartoum government in the 1990s-2000s, agriculture has been the life-line of the economy in Sudan, employing about 80% of the country's labor force. About 71% of the 644,329 square kilometers of South Sudan is suitable for agriculture, 24% is forest and the remaining 5% is arid/semi-arid. Approximately 330,000 square kilometers, or about half of the total land space, is estimated to be suitable for cultivation. With its high potential for agricultural production, some expert observers have said that, with the development of appropriate and adequate infrastructure, South Sudan could become the breadbasket of Africa (FAO, 2011). This indicates that good agricultural lands and climatic conditions would likely allow for the cultivation of a variety of crops, including cereals, oil crops, cash crops, root crops, vegetables, pulses, beverages, fruits as well as various tropical crops. The potential for producing cash crops such as cotton, tea, sugar cane, coffee and many others is great but remains unexploited. If productivity were improved, it could meet the subsistence needs for food security and remain with a surplus for domestic and export markets. Unfortunately, out of the total land suitable for agriculture, less than 2% was under cultivation during the war (FAO, 2013).

Fortunately, most of the fertile agricultural lands are in Southern Sudan though most arable land has been under traditional farming for subsistence livelihood. Modern farming has always been confined to Northern Sudan, hence creating imbalances in terms of agricultural progress. Worse still, since 1956, agriculture in South Sudan has largely depended on rain, which is unreliable. The crops include sorghum, rice (in Aweil), groundnuts (throughout South Sudan), sesame, sugarcane, cotton, tea and coffee. Agriculture sector includes livestock and forestry. The Republic of South Sudan is well endowed with a vast land area of 648,051 square kilometers. Over 90% of its population resides in rural areas. However, the agriculture sector, which is supposed to be the engine of growth, continues to fail to meet its production potential

as a result of sustained conflict, associated with population displacement, unpredictable and poor weather patterns, crop pests and diseases. These difficulties exacerbate food insecurity in the country (Tadu, 2023).

### **2.1.1 Mangalla Irrigation Scheme**

Mangalla is located at the confluence of the White Nile and one of its tributaries in Central Equatoria state. The area has considerable potential for large commercial farming using irrigation to produce sugar cane. The region has rich alluvial soil within a vast marshy plain from the overflow of rivers during the rainy season. It is estimated that approximately 250,000 hectares can be irrigated. Mangalla is only 45 km from Juba. It has good market access and power supply from bagasse and presents opportunities for operating a cane processing plant that could supply domestic and regional markets (JICA, 2015).

### **2.1.2 Aweil Rice Scheme**

Rice is an important staple crop in South Sudan. Current rice consumption in the country is approximately 23,000 mg a year<sup>-1</sup> of which more than 75% is imported. The rice scheme, located in the southern bank of the Lol River (Northern Bahr el Ghazal), founded in 1944 by British officials, expanded in 1976 by the government of Sudan with international aid, and partially rehabilitated in 2007 (FAO, 2013). At its peak in the 1980s, the scheme benefited about 1000 tenant farmers, but it ceased operations in 1986. In 2012, around 600 ha were planted with rice, and the area doubled in 2013.

### **2.1.3 Other Agricultural Potentials**

South Sudan has a huge but largely unrealized agricultural potential. Favorable soil, water, and climatic conditions render more than 70 percent of its total land area suitable for crop production. However, less than 4 percent of the total land area is currently cultivated and the country continues to experience recurrent episodes of acute food insecurity. Limited use of productivity-enhancing technologies, capacity constraints, non-tariff barriers, high labor costs and poor infrastructure hinder progress and also constrain production, productivity and the competitiveness of South Sudan's agriculture relative to its neighbors.

Domestic production makes up 10% to 15% of the total supply in Juba's markets. In Konyo Konyo, much of this consists of local fruits and vegetables, such as okra/bamia, kudra and tomatoes, grown on the islands and in the outskirts of Juba and sold by local women in small quantities. Some traders specialize in the sale of local produce. In the Customs market, a whole street is dedicated to the sale of South Sudanese maize, sorghum, simsim and groundnuts. Many

of these traders either only procure locally, or buy locally seasonally, importing produce the rest of the year when local supplies are unavailable.

Before the start of the conflict, the main local source of sorghum was Renk, the only large-scale mechanized farm in South Sudan. However, production in 2012 was already half of what it had been previously because of the departure of the Sudanese who made up three quarters of the workforce. Most of Renk's sorghum production was destined for Sudan, but some of it also fed the Greater Upper Nile area and Juba markets. Several large traders interviewed mentioned that they used to regularly go to Renk to buy sorghum, as often as once or twice a month, bringing back around 500 to 1,000 bags each trip. There is potential for farming in the country but the majority of the population still carries out production at subsistence level, owing to various conflict-related factors. The main crops are sorghum, maize, sesame and beans. Conditions are also ideal for large-scale groundnut production, which are transported to markets in Juba (FAO, 2021).

#### **2.1.4 Overview of the Food Importation Business**

Trade, imports and exports are of course part of every economic development. However, if they lead to dependency, like negative trade balances and accordingly to negative balances of payments, they can become problematic. Similarly, food imports itself are nothing negative. Experience shows that imports of basic foods on which many people, especially poor people can become “a weapon”. This is what India experienced in the 1960s, when the USA withheld food deliveries under the programme PL 480 for political reasons, or Southern Africa in 2002, when the US insisted on sending GM-maize as food aid. Market forces too can create havoc, as the current food crises underlines: Because of mechanisms, which are beyond the control of the people and the government themselves, people are not getting enough food. Thus, States are losing their food sovereignty (Global Policy Forum, 2013).

Though endowed with vast expanse of arable land for crop production and fresh waters for fish breeding, reports still show that Africa's youngest country cannot produce food crops required for her rising populations and had thus been depending on food importation to meet her domestic demands. Imports are largely financed by foreign exchange obtained from oil exports. The volatility of oil exports as well as commodity price shocks contribute to South Sudan's vulnerable food availability (FAO, 2013).



### **2.1.5 Effects of the food importation business on local food production**

The studies that have been carried out previously on the effects of food aid have shown a conflicting argument on the relationship between food aid and local food production such as (Lakwo, 2010) and (Medani, 2011). Other studies were also conducted in countries such as Niger, Malawi and Ethiopia which face totally different situations as in South Sudan. Food aid may have adverse effects on local production, since it could lead to lower prices, hence discouraging local producers. The lower prices could reduce the incentive to invest in production, while increasing demand for the commodity, which could further increase dependency on food imports and food aid. Furthermore, food imports and food aid could reduce the urgency of solving food security problems as it increases the availability of food (Kenya case study). A country's dependence on counterpart funds for budget support may cause it to fail purposely to develop its agricultural sector in order to continue to receive this cheap form of budget support. Such practices are common in low-income countries that devote little resources to their agricultural production but are known to always beg for assistance from donors to feed their rural populace.

(Dorward, 2013) defines food accessibility as the ability of people to obtain food for their daily use at an affordable rate and with little or no limitation: According to the journal, accessing food is a matter that is determined by how best the people themselves work against the natural conditions that limit production and come up with strategies to curtail the emesis from turning severe.

Recent surveys in South Sudan indicate that food accounts for 79% of average household expenditures. With such a large share of expenditures allocated to food, many households are vulnerable to food price inflation and food shortages. According to the recent South Sudan Center for Census, Statistics and Evaluation report, 47 percent of the population is undernourished. These vulnerabilities point to the importance of expanding domestic food production to supply domestic markets and lowering the costs of imported food items. As the subsequent discussion indicates, improved infrastructure will play an important role in achieving these objectives. Food imports have been shown to reduce domestic food prices, stifle domestic food production and act as a disincentive to farmers and hence reduce food production in importing countries (South Sudan Center for Census, 2010).

## **2.2 Impact of crisis on the food importation business and markets**

The 1994 Human Development Report also stated food security was one of the seven pillars to ensure human security. Food security is a crucial criterion for leading a healthy life and pursuing livelihoods. If there is a lack of food to eat, both in terms of magnitude and quality, then life could be at peril. Availability and access to a basic minimum food basket in terms of both quantity and quality can augment aspects of human security. Food insecurity is inherently interlinked with political security, socio-economic development, human rights and the environment.

Even many of South Sudan's rural households depend on markets for accessing food. Although 80 percent of South Sudan's population produces food for own consumption, the quantities produced are small and vary seasonally. Especially in the lean period (April to May), market purchases are overwhelmingly the primary source of food for most South Sudanese households covering 58 percent of total dietary energy consumption requirements. More than 80 percent of surveyed households reported "high prices" as a major shock, further suggesting high reliance on markets (Thomas, 2020).

The economic crisis in South Sudan has led to an inflation rate which has at times reached as high as 800%, which has plunged millions of people deeper into poverty and food insecurity. For example, in January 2015 a 3.5 kilo bag of sorghum cost 16 South Sudanese pounds in Juba stores, whereas in October 2017 it cost 395 pounds, and during the lean season in June 2017 the price was as high as 462 pounds (UNICEF, 2017). As a result of the conflict government revenues have collapsed due to the disruption of oil production, which accounted for over 90% of receipts and has thus resulted in the depreciation of the South Sudanese pound. As a result of declines in oil production and agricultural productivity, GDP has contracted significantly, which has led to a decline in household purchasing power and a sharp increase in poverty. Additionally, this impacts on the ability to import food to cover for the loss of production, as the increase in poverty and decline in government revenues makes importing too expensive (UNDP, 2017). In early 2018, 55% of households in the three Equatoria regions reported less purchasing power than in early 2017, whilst 60% of households reported that the markets were their main source of food commodities, making inflation a direct inhibitor to access to food. As a result, 97% of households surveyed in the capital Juba reported only eating one meal a day (USAID, 2019).

### **2.2.1 Effects of Agricultural Policy Changes on Food Import Dependence in Selected African Countries**

In the 1980s, the regional government planned to make the region self-sufficient in food by encouraging food production through small-holding farming. This policy was not realized due to lack of cash flow, infrastructure (bad roads and other means) and poor communication. Although agricultural development alone is incapable of eliminating hunger and malnutrition, it is an element of this process. Higher agricultural productivity and more efficient markets for agricultural products reduce food prices, thereby enabling access to food for the poorest rural and urban population. After reviewing agricultural policy from the 1960s to the present date, we conclude that the agriculture sector in Nigeria and Senegal is hampered by inadequate policies, weak institutions, and lack of continuity and assessment of previous strategies. Most modern technologies with the potential to ensure adequate food security require policy support that is backed up by adequate regulatory frameworks and functional institutions. In most cases these are either absent or very weak in both countries and thus unable to support agricultural development. Despite the huge revenues received from oil, the environmental and human potentialities, Nigeria remains a largely food insecure country. The reliance on food imports to supply an increased demand for food is not a working solution for both countries because food insecurity has become endemic over the years as the countries' food imports have increased.

For countries that mainly export agricultural goods, (e.g. Senegal), persistent food imports becomes a problem when the high and rising food import bills take money away from important development agendas without resolving food insecurity. Policies aimed at promoting international or intraregional trade and weather conditions were found to be the prime determinants of the level and seasonality of informal cross-border trade, especially of food commodities. Whereas comparative advantage exists in the production of some commodities, trade in many of the commodities is driven by demand and supply factors. The gains from informal trade include job creation and provision of both agricultural and industrial goods that would otherwise be unavailable. Informal trade thus plays an important role in food security by moving food from surplus to deficit areas and by providing income to those involved in it (Ackello, 1997).

The study concludes that a large trade potential exists between Kenya and Uganda and that trade liberalization through regional cooperation initiatives will enhance the realization of this potential. More appropriate trade policies are needed. While policies are being considered, and to some extent implemented, emphasis should be given to the elimination of trade obstacles,

such as nontariff and institutional barriers, which increase transaction costs for importers and exporters. The objective of maximizing revenue collection through high tariffs is sometimes considered by governments in a short-term perspective, and overrides other important criteria, such as efficiency in production through increased trade. Concern over domestic food security is often used to justify import and export restrictions on maize and other staples, but this takes little account of the role of intraregional trade as a source of external markets and of stabilization of domestic food prices (Ackello, 1997).

In summary, trade and food security are likely to be improved between Kenya and Uganda if the following are implemented:

- Harmonization of domestic food policies, which may require governments foregoing some autonomy in their design and implementation
- Access of emergent small-scale producers and traders of adequate capital and new methods of risk management
- Removal of trade constraints such as poor trade information, poor trade infrastructure, licensing, tariffs, quotas and administrative bottlenecks and political commitment to all these initiatives.

A number of studies have been carried out on the food policies and local food production across the globe. For instance, (Quisumbing, 2013) conducted a study on the effect of food policies on local food production in 39 sub-Saharan African countries and found that there was an insignificant relationship between food policies and local production. In many African countries like South Sudan, there are very little food policies put in place to control the food aid that the country receives. This has notably made the countries receive numerous food aids thus flooding their local markets and discouraging local food production (Ncube, 2010). As noted by (Tapio-Bistrom, 2001), making and implementing policies such as charges for failure to underutilize land play a key role in promoting food production where farmers come up with new and better ways to utilize their idle land. These policies should be given a positive approach and the attractive ways so that they can be implemented to encouraging local food innovation.

### 2.2.2 Nigeria (Case Study)

In the 1970s, agriculture was the economic mainstay and primary foreign exchange earner in Nigeria. The country produced and exported cocoa, cotton, palm oil, palm kernel, groundnuts, and rubber. The government revenues were heavily dependent on taxes on those exports. Between 1974 and 1980, agricultural exports as a percentage of total exports declined from about 43 percent to slightly over 7 percent. The neglect of the agricultural sector has been due to the oil boom. Also, policies towards agricultural producers have shifted significantly over time, with agricultural producer support first declining after the country's independence, then increasing again between the mid-1970s and the mid-1980s, and afterwards moving towards an incentive-neutral stance.

The agricultural sector, which is estimated to account for 22 percent of the GDP and offers employment to almost 70 percent of the population, has significantly declined in productivity following the discovery of oil. Nigeria was at one time a leader in the exportation of agricultural products, but now it is a net importer of core food commodities such as rice, sugar, wheat flour, fish, and milk. In 2010 alone, Nigeria spent \$17.5 billion on imported food. Rising food imports are said to have served to erode the viability of many small livelihoods, commoditized food security, and fostered unsustainable levels of urbanization and increased poverty (Dioume, 2015). Although it has suffered from years of mismanagement, inconsistent and poorly conceived government policies, neglect and the lack of basic infrastructure, agriculture remains the largest contributor to the Nigerian economy. The agricultural sector accounts for about 33 percent of the 2013 GDP and provides employment for about 70 percent of the labor force. Food production growth rates are estimated to be 3.7 percent in 2013, which lags behind the growth rate of food demand at 6.5 percent. As a result of slow growth in the agricultural sector and rapid increases in population, Nigeria shifted from being self-sufficient in food production in the 1970s to being heavily dependent on food imports since the 1980s.

There has been a lack of coherence in the implementation of Nigeria's agricultural policy. Also critics regret the absence of continuity in policy and the fact that the successes, failures and lessons learned in preceding programs have not been analyzed. As a result of the ineffective agricultural policies, the agricultural sector declined and food production could not keep pace with its increasing population. Nigeria began to import foods as a solution to the food shortage. Statistics reveal that the more Nigeria imported food, the more food insecure the population became. The food security situation deteriorated over the years. The food self-sufficiency ratio fell from 98 percent in early 1960s to less than 54 percent in 1986, 18 percent of the population

(14.4 million) was estimated to be critically food insecure in 1990 and increased to 36 percent (32.7 million) in 1992 and 40.7 percent in 1996. The country food insecurity status keeps increasing and the recent estimates put the number of undernourished people in Nigeria at over 53 million, just less than 30 percent of the country's total population estimated at 170 million.

### **2.2.3 Kenya (Case Study)**

In Kenya, before the 1990's, food imports were low since food consumption was almost commensurate with domestic food production. However, after 1992 imports have been high because of the decline in domestic production. The largest amounts of imports constitute cereals, sugar and dairy products from developed countries that include the USA, EU and Australia. These are countries where food production is highly subsidized and pose a threat to domestic production of food commodities in Kenya. Rising poverty levels and poor performance of the agricultural sector have aggravated the food security situation in the country. The aggregate measures of the country's food security per capita food production, self-sufficiency ratio, ratio of food imports to agricultural exports and ratio of imports to total exports are worse since the reforms started in 1993 than before the reform period. The indicators show a better food security status between 1986 and 1989, a period during which the government put great emphasis on the development of agriculture through substantial domestic support measures and some level of protection through quantitative and high tariff level restrictions on imports. However, the food security status deteriorated just after the government committed itself to the implementation of the reforms in 1994. This may be attributed to political and structural economic constraints faced in the country. The implementation of policy reforms in 1993-1994 resulted in recovery and improved status of food security (between 1995 and 1996), but this did not last long; the food security status has deteriorated since then. By year 2000, Kenya was relying more on imports to meet food needs, using about 18% of the value of agricultural exports and 15% of the total value of exports to import food. Food insecurity and poverty in the country may be attributed to the poor performance of agriculture, since this sector dominates the Kenyan economy. The major challenges to the agricultural sector include low farm level productivity, poor marketing and infrastructure, limited access to credit, and high cost of farm inputs. The sector is also subject to lags in development and implementation of policy and an unfavorable legal framework, which are not agreeable to the policy reforms associated with a liberalized economy (FAO, Agriculture, trade and food: Country case studies, 2014).

#### **2.2.4 Gap Analysis**

Based on the results of previous studies listed, the researcher has noted a number of gaps. In order to avoid exacerbating tensions in the sector, it is assumed that addressing the issues relating to food insecurity and food importation. The ultimate goal in this is to understand the food importation business in South Sudan and discuss the policy approaches for economic management with the aim of examining the impact of pricing on households and the economy as a whole.

The gaps identified are as follows:

A lack of quantitative analysis on knowing just how many food importation businesses are operating in South Sudan and qualitative analysis to understand the consumers' perceptions on the business. In addition to this, previous research undertaken on the topic did not clearly state the issues of quality assurance, safety and other security concerns facing the business. A third key gap was the lack of a long-term strategy for addressing food insecurity in South Sudan.

The study of food import dependency has largely ignored the role of food retailing. This study will contribute to the limited amount of literature on the nature and characteristics of small retail food shops, known as trade stores.

## CHAPTER THREE

### 3.0 METHODOLOGY

This section summarizes the methods used by the researcher. The information gathered from the region through face-to-face interviews with government and non-government organizations, households and other stake holders. It presents the research design, study population, sampling method, sample size, data collection tools, validity and reliability, measurement of variables and data analysis. The main findings are presented, alternative fuels discussed, and recommendations are put forward.

#### 3.1 Study Area and Target Population

The area selected for conducting the study was Juba. Juba is the seat of the Government of South Sudan as well as the capital of Central Equatoria State (CES). It comprises of three of the 16 Payams of Juba County: Juba, Kator and Munuki. The border of the municipality is however not clearly defined, and as the city has expanded it has incorporated surrounding rural Payams, namely Northern Bari and Rajaf. The urbanized area of Juba was estimated at around 52 km<sup>2</sup> in 2009 (JICA, 2009). Since 2005, Juba has mainly expanded westwards (west of Munuki Payam towards Gudele, Gurei and Northern Bari) and southwards, towards Rajaf Payam, including Tokimaan on the Yei road. Population density tends to be much higher in un-demarcated areas than in the demarcated areas in Juba and Kator Payams in the center of town.

The survey was conducted in four market areas of Gudele, Konyokonyo, Gumbo and Munuki. The different areas were selected due to the presence of a strong working class, government employees and self-employed business persons in the informal sector especially in Gudele, and Munuki. Juba na Bari and Kator are old established localities. The former predominantly a business centre with many government institutions and whole sale markets, while the latter more of low income households to get a wider view from the different income level households.

The survey consisted of 20 market traders from the above listed locations and 30 households. The sample size selected was due to the fact that the research aims and objectives require a more qualitative approach with detailed answers than a quantitative approach.

##### 3.1.1 Research Design



The main objective of the study is to understand more about the food importation business in South Sudan, to discuss feasible policy approaches for the economic management and suggest areas of improvement to relevant stakeholders. To achieve this goal, the following tasks were delivered to understand the food importation business and its significance in South Sudan, and to examine the nature of food pricing strategies, find the reason behind the pricing and analyze its impacts on households and other stakeholders: The research study used a mixed methods design that comprised a case-control quantitative study, qualitative interviews in the Ministries/institutions and residents in Juba city. It was formally under; key informant interviews and focus group discussions and personal observation. To extract the required information needed to meet the objectives of the study, four major techniques were employed in the study: household survey questionnaires, key informant interviews, focus group discussion, personal observation, secondary data and document review. Data for this report was gathered from this survey carried out by the CSPS office in Juba city which collected the data regarding the food importation business.

The research type used was an inductive approach. Generally, the application of inductive approach is associated with qualitative methods of data collection and data analysis, whereas deductive approach is perceived to be related to quantitative methods, although the study uses a quantitative approach to some extent. Since the research aims to understand and paint a bigger picture of the market, empirical generalizations are made to identify preliminary relationships as the study progresses. No hypotheses can be found at the initial stages of the research until the study is completed.

### **3.1.2 Data Collection**

Data collection techniques refer to the device used to collect data, such as survey, interview guide and a paper questionnaire or computer assisted interviewing system. The survey targeted a sample size of 20 traders and 30 consumers. The key informant interviews included the involved ministries, the national revenue authority, farmers and nongovernmental organizations. The survey was done in Juba City and was conducted under the Statistics Act, which makes it mandatory for all business establishments operating in Juba to respond to statistical data requests. The Act also stipulates that the content of individual returns received would be kept confidential and used only for statistical purposes. An invitation letter signed by the Statistician General was enclosed with all questionnaires to encourage the sample

population to provide the relevant data relating to their businesses and to assure them of the confidentiality of the data collected.

### **3.1.3 Key Informant Interviews**

Key informants were selected from institutions that are directly involved with the food importation business in South Sudan; these are government bodies such as the Ministry of Trade and Industry, Ministry of Agriculture and the state chambers of commerce. The directorates provided all the details on policies concerning agriculture, the importation business and its economic impacts, while the chamber of commerce provided statistical data on the current situation of the business. This research work has addressed these groups of individuals using personal interviews on what has been done to curb food insecurity, import dependence and current agricultural efforts the government and non-government organizations have made to ensure economic stability of the country and how the policies are implemented to work effectively in preserving the country's natural resource, agricultural and human resource potential.

### **3.1.5 Document Review**

An extensive amount of documents were reviewed by the researcher on the food crises in South Sudan and the economy in general. Several documents from FAO, UNICEF, WFP and UNFPA were reviewed as well as literatures related to the food importation business in South Sudan. The study involved both the collection of primary data through interviews and surveys as well as secondary data through literature and document reviews. Government policies as well were reviewed and compared to other country's policies.

### **3.2 Survey**

The survey's aim was to give short qualitative views of the traders and consumers on the food importation business. This was done in order to characterize the stakeholders involved in the business in terms of gender, age, educational and income level and nationality. The survey was also done to assess the poverty/livelihood impacts of pricing in the food importation business. The questionnaire was developed through a consultative process, wherein stakeholders were invited to make meaningful input to the proposed questions designed to capture information. A structured questionnaire was used to collect the information from stakeholders in the data collection centers all over the city. The questionnaire captured information such as: Basic characteristics of the business.

There were two types of questionnaires administered:

### **3.2.1 Household survey questionnaire**

Sample households were surveyed in Juba. A systematic sampling was used involving every fourth house and changing directions while sampling. Households were interviewed both online (by Skype) and in person, and the questionnaires administered is shown in the appendices.

### **3.2.2 Traders survey questionnaire**

Twenty traders were surveyed and their responses recorded in the questionnaire. The questionnaire used is included in the appendices. Similarly to the household questionnaires, traders were selected from different markets in Juba City.

### **3.2.3 Sampling Strategy**

A sampling method was used to select sample members from a population. The researcher used both purposive sampling technique to select senior staff members of the concerned directorates in Juba to be used in the research and random sampling was used to obtain a good representative sample of the total population from all over Juba. In respect to the traders and policy experts, snowballing sampling was used as the respondents directed the researcher to more qualified personnel who would be in a better position to give the information necessary to fulfill the study aims. For the online survey, a voluntary sampling technique was used because it is the most feasible method.

### **3.2.4 Validity and reliability of research instruments**

#### **3.2.5 Validity**

The validity of an instrument is defined as the ability of an instrument to measure what was intended to measure. In this study, the validity of the instruments was established by a panel of experts through an assessment of selected items in the instruments that ensured that the instruments are measuring to the expectations. After identifying the vague and ambiguous questions, corrections were made and final instruments were prepared. Content validity index (C.V.I) will be measured as items rated 3 or 4 by both judges divided by the total number of items in the questionnaire.

### **3.3 Reliability**

Reliability refers to the ability of a measurement instrument to produce the same answer in the same circumstances, time after time. This means that if people answer the same question the same way on repeated occasions, then the instrument can be said to be reliable. Reliability (Internal consistency and stability) of the instruments were tested using coefficients. The researcher will test the inter-item consistency reliability to ensure that there is the consistency of respondents' answers to all items in the measure. A coefficient of reliability that gives unbiased estimate of data generalizability will be used to test reliability of the answered questionnaires.

#### **3.3.1 Data analysis method**

In assessing the case of Juba city, the researcher applied a case study design which is concerned with the nature of the food importation business. The researcher utilized mainly a qualitative approach, although some quantification was used with percentages. Quantitative data analysis was done with the help of Microsoft Office Excel 2010. Descriptive aspects of the findings were presented with the help of tables and graphs alongside other descriptive statistical indicators. Qualitative data was manually coded by the researcher. Qualitative data was analyzed alongside quantitative data in a concurrent triangulation approach of mixed methodologies.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.0 Brief Overview of the Study

The aim of the study was to carry out a qualitative analysis on the relevant stakeholders of the business from government operators in ministries and food retailers all the way to basic consumers and local farmers. This assessment was carried out in order to understand more about the food importation business in South Sudan. The paper also aims to discuss feasible policy approaches for the economic management and suggest areas of improvement to relevant stakeholders in order to mitigate the food insecurity within the country.

The study used a primary approach to data collection through one on one interviews with the farmers, consumers, non-governmental organizations and government agencies. A secondary approach to data collection was also used through comprehensive literature reviews, documentaries and reports from trusted sources such as FAO websites and reputed journals.

Although South Sudan is importing a significant amount of food items, it is worth noting that the food importation industry in South Sudan is relatively small scale and fragmented, and many of the imported food items are brought in by small scale traders and informal cross-border networks. Some of the larger importers include non-governmental organizations (NGOs) and private companies, but their exact number and market share are difficult to estimate. This paper gives an insight to the importation business without giving the exact numerical analysis of the business; such as the number of traders and trading companies involved. However, the research was carried out in order to qualitatively determine the food importation situation in the country and its effects on the consumers, local farmers and traders.

The following data were generated via a primary source from 40 questionnaires responded to by different actors in the value chain; ranging from the consumers, retailers and farmers. Key informant interviews were also conducted with different individuals in the Ministry of Agriculture, National Bureau of Standards, National Revenue Authority and Nongovernmental Organizations.

## 4.1. General Characteristics and Study Population

Two classes of data were captured during the survey; data that categorizes and describes the people and data that reveals perceptions, attitudes, opinions and beliefs of the people. Typical topics used to address the data include: knowledge, perceptions, attitude and demographics. This data was analyzed using Excel spreadsheets.

### 4.1.1 Food Retailer Data Analysis

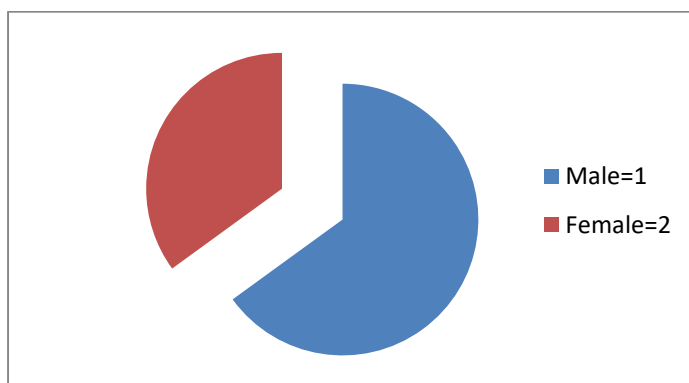
There are many food retailers in all major markets of Juba City as well as in small retail shops. The key actors in the food importation business are the retailers and wholesalers.

### 4.1.2 Data and Modeling Approach

The data analysis was carried out using Microsoft Excel where all the retailers were listed and each of their responses was written next to them. From the total of 20 retailers and wholesalers, the following are the data and responses that were received.

### 4.1.3 Classification of Retailers

Out of the 20 participants who took part in the retailers' survey, 13 were male and 7 were female as shown in the figure below:

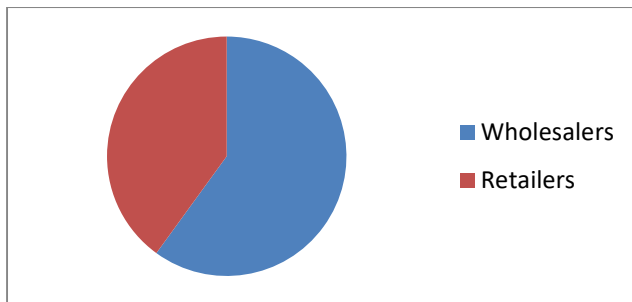


*Figure 1: Sex of Respondents*

From this study, we have observed that the food importation and retail business is a male dominated sector and the study tried to incorporate female traders to get a more diverse view. Most of the female traders were working in the market areas.

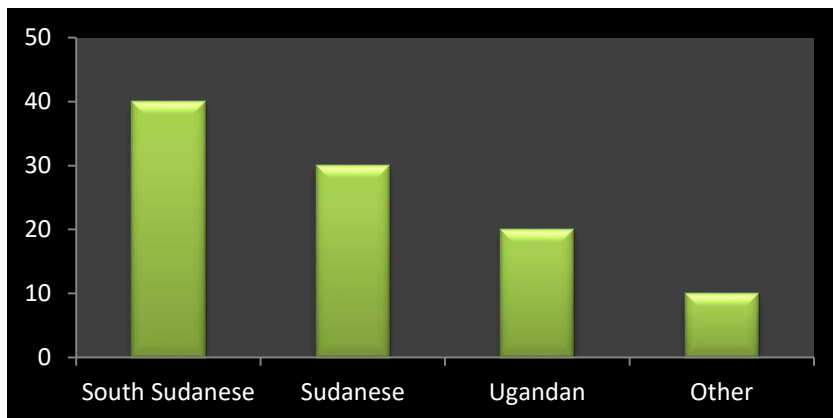
The food importation business was categorized into two groups: wholesalers and retailers. The wholesalers buy their products from food importing companies while the retailers buy from the wholesalers.

Wholesalers accounted for 60% of the correspondents and retailers accounted for 40% of the correspondents as shown below;



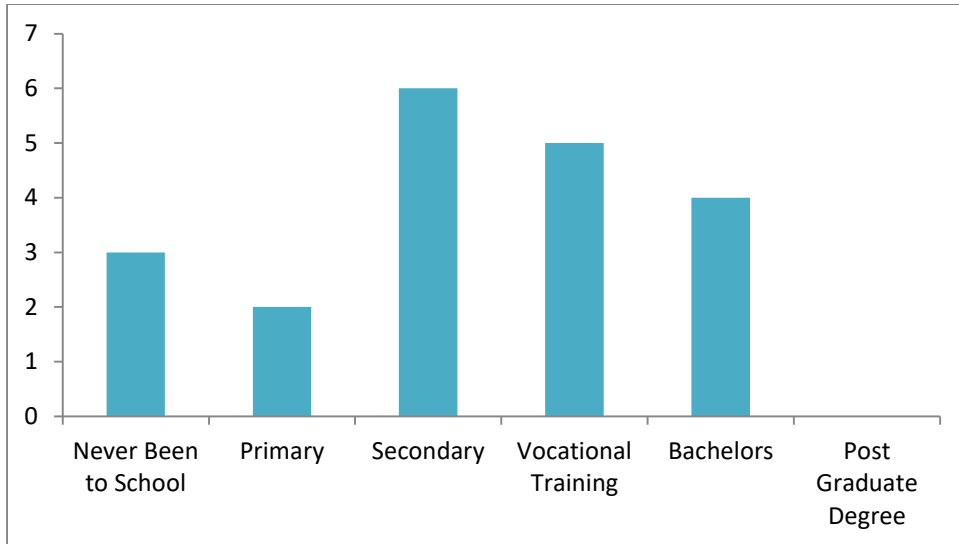
*Figure 2: Type of Business*

South Sudanese were the highest number of correspondents with 40% of the total correspondents followed by Sudanese with 30% and Ugandans with 20%. The rest were other nationalities like Ethiopians and Kenyans accounting for 10% of the correspondents. Majority of South Sudanese were selected because they were more willing to answer the questions and the research topic mostly involves South Sudanese in their country. Other nationalities were also selected to get a diverse view such as Sudanese who dominated the food importation business, Ugandans and Ethiopians.



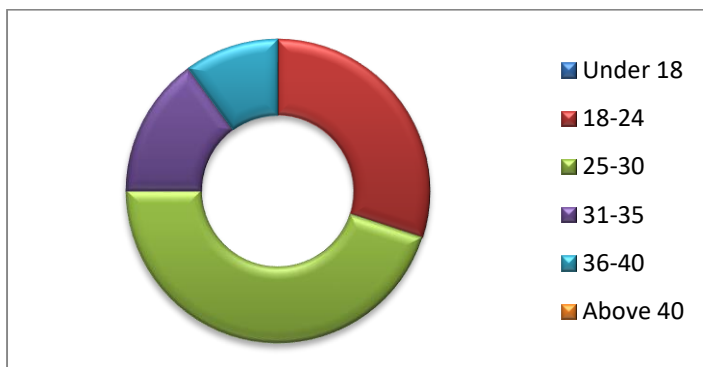
*Figure 3: Nationality of Correspondents*

According to the education level of the correspondents, 3 correspondents have never been to school, 2 reached primary level. 6 had completed their secondary education but did not proceed further, 5 did vocational training and 4 held a bachelor's degree. No correspondent had a postgraduate degree. We can see that the majority of the correspondents have only a secondary level of education followed by vocational training.



*Figure 4: Level of Education*

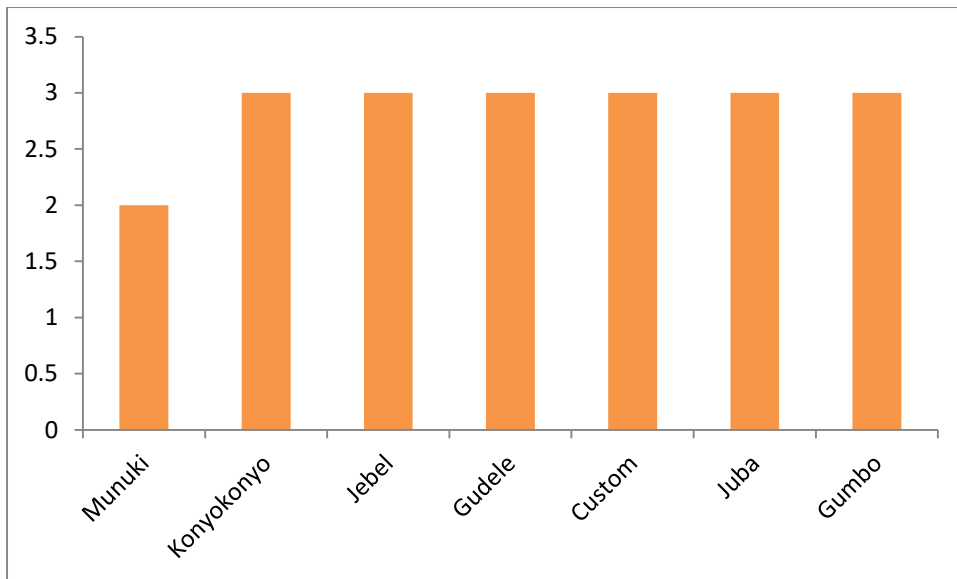
The low levels of education could be attributed to high poverty levels, lack of motivation to pursue higher education and a lack of opportunities as stated by one correspondent, “I did not go to school because there were no schools in my area as I was growing up” and another correspondent, “My parents could not afford to take me to school. We were many children at home and the priority was given to the male children.”



*Figure 5: Age of the Respondents*

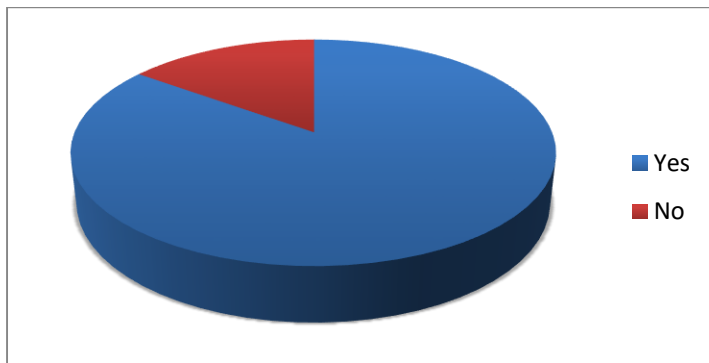
As seen from the chart above, no correspondents were observed to be less than 18 years of age; the majority of the respondents were between the ages of 25 and 30 years; followed by respondents between the ages 18 and 24; and between the ages 31 and 35. The least respondents were between 36 and 40 while no respondents were above 40 (Figure 5).





*Figure 6: Location of Respondents*

During the study, 2 respondents were from Munuki and 3 respondents from each of the locations namely; Konyokonyo, Jebel, Gudele, Gumbo, Custom and Juba Market. A fairly equal number of respondents from each location were chosen for the sampling (Figure 6).



*Figure 7: Main Source of Income?*

From the study, we observe that 85% of the respondents involved in the food importation business depended on it as their main source of income while 15% had other sources of income. This highlights the dependence on food imports for the majority of the respondents (Figure 7).

For the study, purposive sampling was used in choosing the different respondents. This technique is essential to find the people who have similar background knowledge and experience, and also to incorporate the population density and the geographic location as described by (Etikan, 2016). This is where a knowledge, attitude and practice (KAP) survey becomes necessary. According to (Vandamme, 2009), the KAP survey investigates human behavior related to a certain topic, and simultaneously identifies what people know

(knowledge), how they feel (attitude), and what they do (practice). Such a survey proposes that knowledge forms attitude, and both knowledge and attitude are the building blocks for practice.

#### 4.1.4 Qualitative Data Analysis

#### 4.1.5 Food Retailers Qualitative Data Analysis

##### 1. Are you the owner of the business?

80 % of the respondents were the owners of the business while the remaining 20% were working for someone else as shown in the figure below. Among the 20% of the correspondents working for someone else, 15% were working for a relative and the remaining 5% were working for a friend. None of the correspondents were working for an employer.

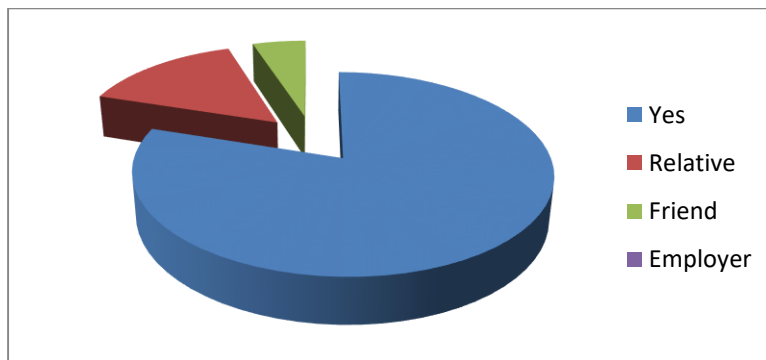


Figure 8: Owner of the business?

##### 2. Age of the Business

The food retailers were asked how long they have been in the food importation and retailing business. 5% of the businesses were less than a year old and most of the businesses fell under the category of 4 years (Figure 9).

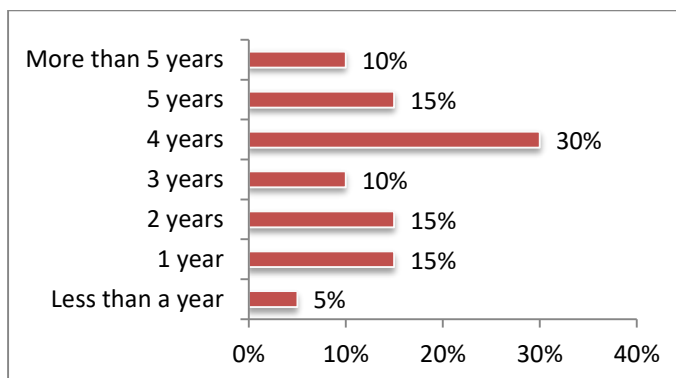


Figure 9: Age of the Business

### 3. Size and Earning Potential of the Business

The study showed that most, (35%) of the businesses had between 81 to 100 customers per day as shown in the chart below (Figure 10).

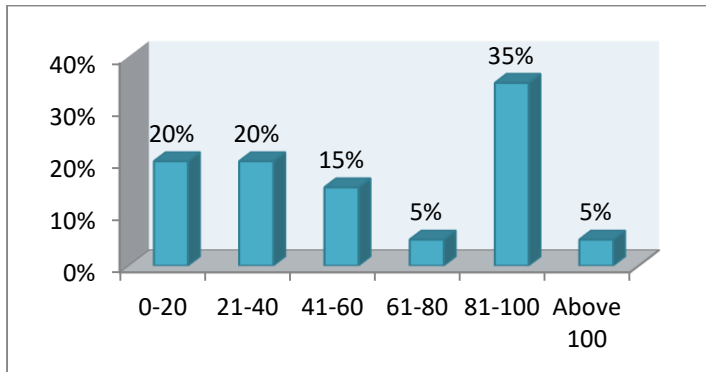


Figure 10: Customers per day

### 4. Number of Years in the Business

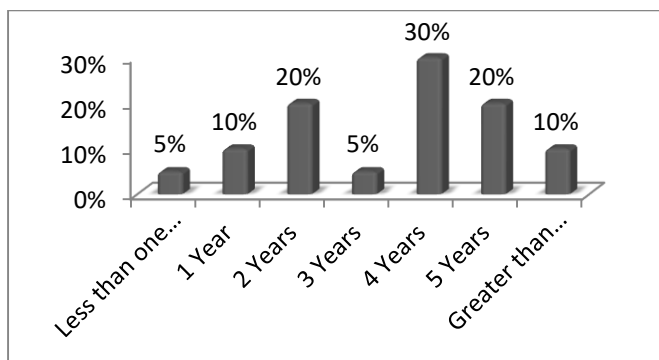


Figure 11: Number of Years in Business

The correspondents were asked about the number of years they spent in the business. This is different from the age of the business as seen in the previous figure because some correspondents agreed they worked for someone else and later on started their own food importation business with the capital. This question is very critical in the research because the correspondents can answer accurate questions based on their experience and knowledge in the field. Most of the correspondents had 4 years of experience in the field which was accurate enough to give good observations about the industry (Figure 11).

## 5. Reason for starting the business

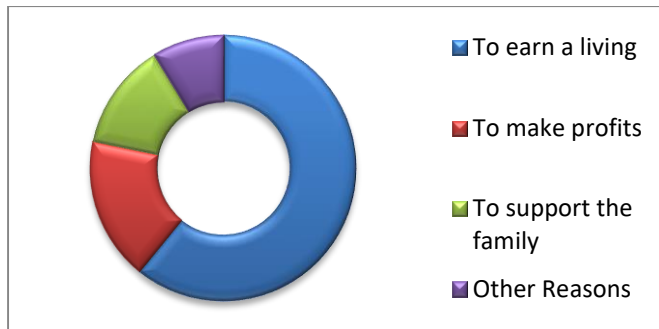


Figure 12: Reason for starting the business

When asked why they chose this type of business, the retailers' responses were listed down under specific themes that were written down using an inductive approach. The most popular theme was to earn a living, where 70% of the correspondents replied that earning a living was the sole reason they started the business. The next theme was to make profits, this is quite similar to earning a living since they all involve earning income but the difference when asked was the dependence on the business. The correspondents who answered under the theme of profits simply ventured into the business to make more money but it doesn't mean they entirely depend on the business for survival like the prior group of correspondents.

15% of the responses were under the theme of supporting their family. "There are no jobs in the market, so I turned to the food importation business in order to support my children and pay their school fees" said one correspondent. 10% of the responses fell under the theme "other". These correspondents ventured into the business for different reasons. One of the correspondents said he ventured into the food business because he wanted to raise funds for starting a different business while the other ventured into the business because he could not find a job.

## 6. Advantages and Challenges of the Business



Figure 13: Advantages of the Business

Majority of the correspondents, 65%, agreed that the business is profitable since most people depend on food imports in the country. They never lack customers even during inflation because food is a necessity. This puts them at a great advantage. Other respondents, 15%, said that the business is flexible and they can work according to their schedule. “There is a freedom of operation as opposed to getting jobs and having the possibility of being fired” said one trader. He works for himself and is proud to be his own boss. The rest of the correspondents, 20%, gave varying responses and were placed under the theme, “other”. Some of these correspondents said that they simply joined the business because they love it and feel that their marketing skills are suited for the business. Others said that they are able to interact with customers, which is good for the business while some did not answer the question (Figure 13).

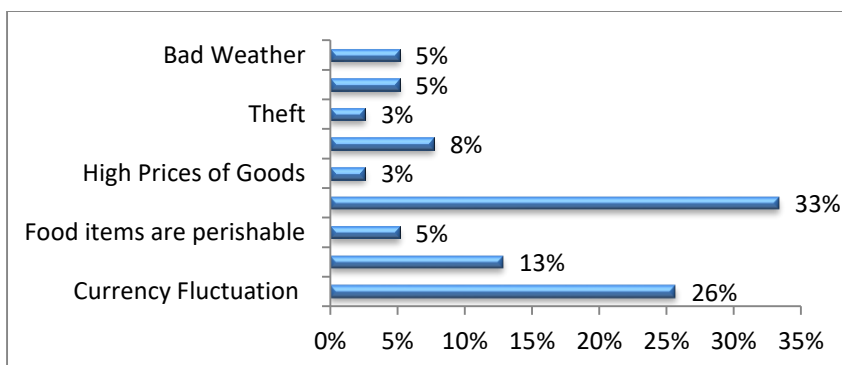


Figure 14: Challenges faced in the Business

The correspondents gave multiple responses when asked about the main challenges they faced in the business. The highest response as seen from the figure above was about taxes. Some of the correspondents complained that the taxation system was illegal and not transparent. Some have even added that they know some colleagues who left the business because of the high taxes imposed on the business. The second most common response was about the currency

fluctuation / economic instability of the country. The correspondents agreed that the devaluation of the currency and the economic collapse has affected their business negatively since they have to purchase the items from other countries. Less people can afford food items such as milk and other items which are not absolute hence the demand for them has fallen over the years. Other responses were on the poor roads and the fact that they are transporting perishable goods which need good roads. While other correspondents said the biggest challenge they faced were customers taking their goods on credit and not paying it back on time. This result agrees with the report made by UNDP. According to UNDP, the conflict has also increased the transportation costs of food, adding to the price for the end user, as roads are closed and rivers obstructed. Additionally, access restrictions, informal levies, and seizure/ theft of goods have all added to the price of goods (UNDP, 2017).

### 7. Legal License to carry out the Business and Insurance

The license is given by Juba City Council, and the duration of the license is one year after which the traders are requested to go for renewal. From the survey, and analyzing using SPSS software, it is reported that 80% of the correspondents do have a license for operating the business while 20% do not.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	16	80.0	80.0	80.0
Valid No	4	20.0	20.0	100.0
Total	20	100.0	100.0	

Table 1: License for operating the business

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	20	100.0	100.0	100.0

Table 2: Insurance

As seen from the table above, none of the food importation businesses are insured. All the correspondents stated that they do not have insurance. Some reasons are; insurance is expensive and they already have a lot of expenses to pay such as taxes. Another reason is that they see no need to insure their business,

## 8. How often the retailers and wholesalers purchase food items

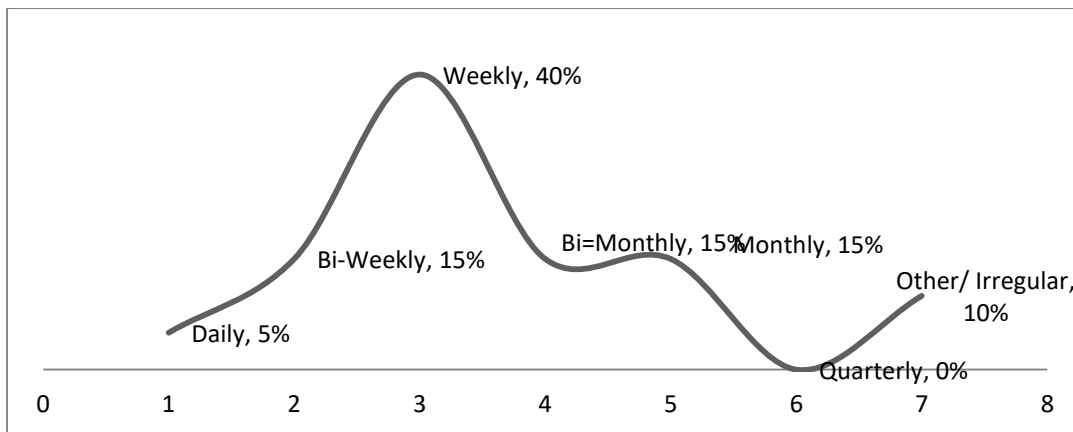


Figure 15: How often retailers purchase food items

Most of the retailers and wholesalers purchase their food items on a weekly basis as seen from the graph above (Figure 15). 15% of the retailers in the survey said they purchase their food items on a Bi-weekly, Monthly and Bi-monthly basis. Other retailers purchase their food on an irregular basis and only 5% of the retailers purchase their food items on a daily basis. This shows how the country is entirely dependent on the trucks coming from Uganda and Kenya carrying food items and other imports into the country. During the conflict, as one of the trader said in the interview, when the trucks from Uganda refused to bring the items to South Sudan for a period of one week due to the insecurity along the roads, their business was badly affected. Whenever there is a situation at the border, the country suffers a great deal in a span of a week or less.

## 9. Countries Retailers purchase food items from

Out of the total responses, 63% of the retailers and wholesalers stated that their food is imported from Uganda. 22% of the food imports are from Kenya and 16% of the food imports are from Sudan. Food imports from Kenya and Uganda all pass through the Nimule border when coming into South Sudan. This emphasizes the importance of the South Sudan- Uganda border and how much the country can be affected with a rise in insecurity along this corridor. This finding agrees with research made by the World Trade Organization, which states that South Sudan depends largely on import of goods, services and capital, mainly from Uganda, Kenya, other East African Community (EAC) states, Sudan, Ethiopia and, to a minimal extent, the Democratic Republic of Congo and the Central African Republic. The country imports practically all its needs, including food and fuel which vastly exceed exports (WTO, 2018).

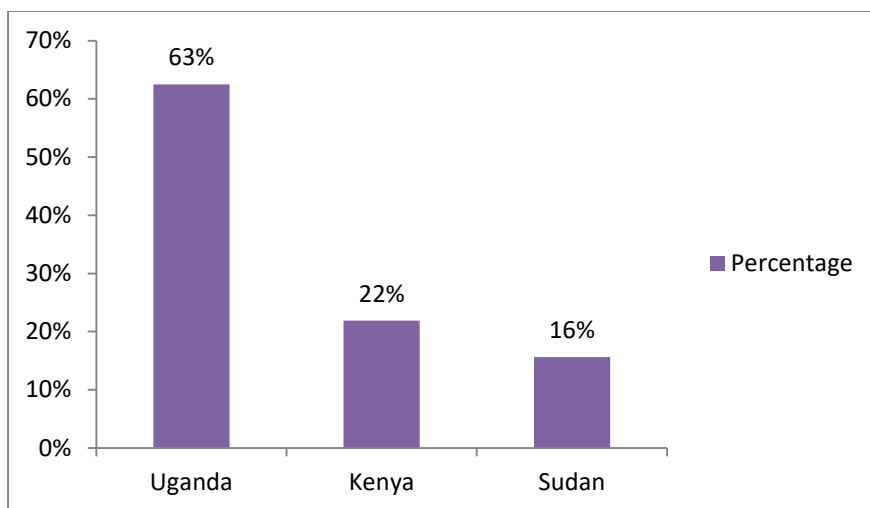


Figure 16: Countries where food is imported from

#### 10. How much food retailers and wholesalers spend in purchasing food items per month

The following data shows how much the retailers and wholesalers spend in purchasing food items per month. It gives us a rough picture of how much money the country is losing to its neighboring countries on a monthly basis. Since no data was given by the Ministry of Trade and Industry about the number of businesses operating in the country, an estimate was made based on the non-oil revenue collected by the NRA. The food importation industry takes about 30 percent of the total importation and businesses in South Sudan according to Trade Economics. One trader pays approximately 250,000 SSP annually in taxes. According to NRA, for the fiscal year of 2022, 170 Billion SSP was collected in business related taxes from non-oil revenue. 30 percent of this is from food importation businesses, making it around 51 Billion SSP from food importation businesses annually. Taking 51 Billion/250,000 per trader; gives us roughly 200,000 food retailing and wholesaling businesses countrywide.

An importer or food retailer spends roughly 3000 USD per month on purchasing food items from neighboring countries as seen on the table below.



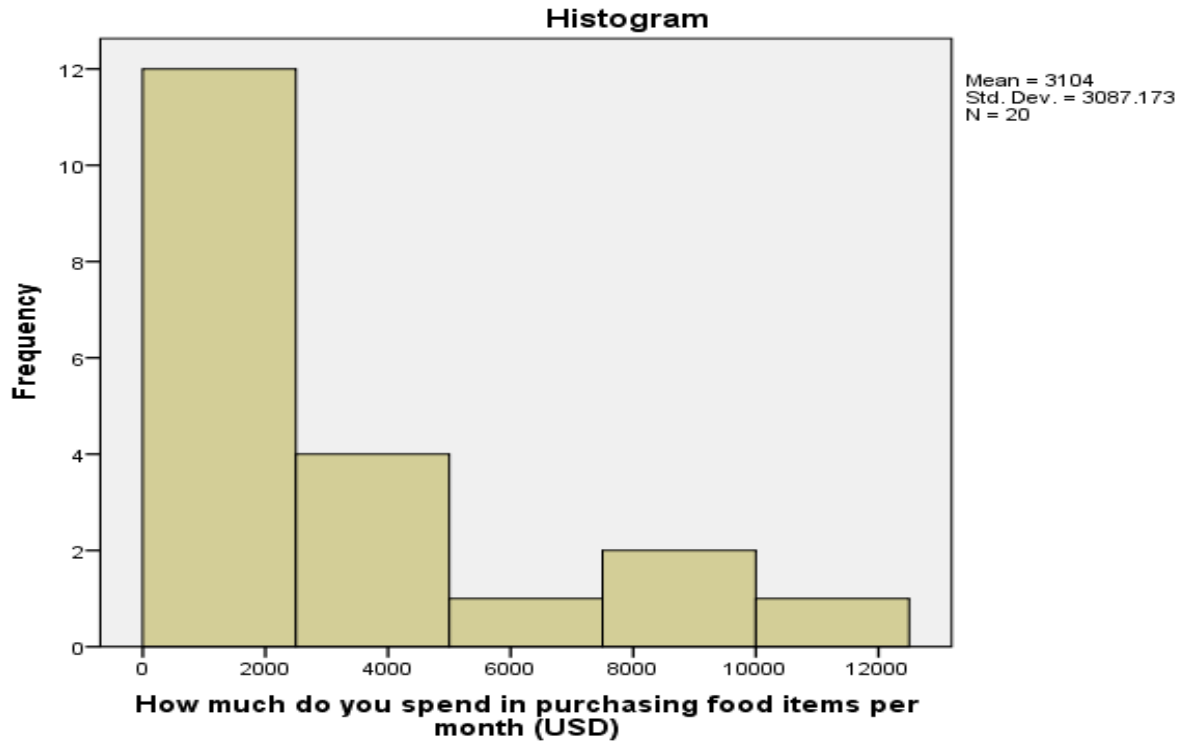


Figure 17: Histogram

**11. Average amount of sales per day and profits of the business**

From the graph below, it is seen that a high number of the food businesses make a sales of 50,000 SSP per day and the average amount of sales is 53,000 SSP per day.

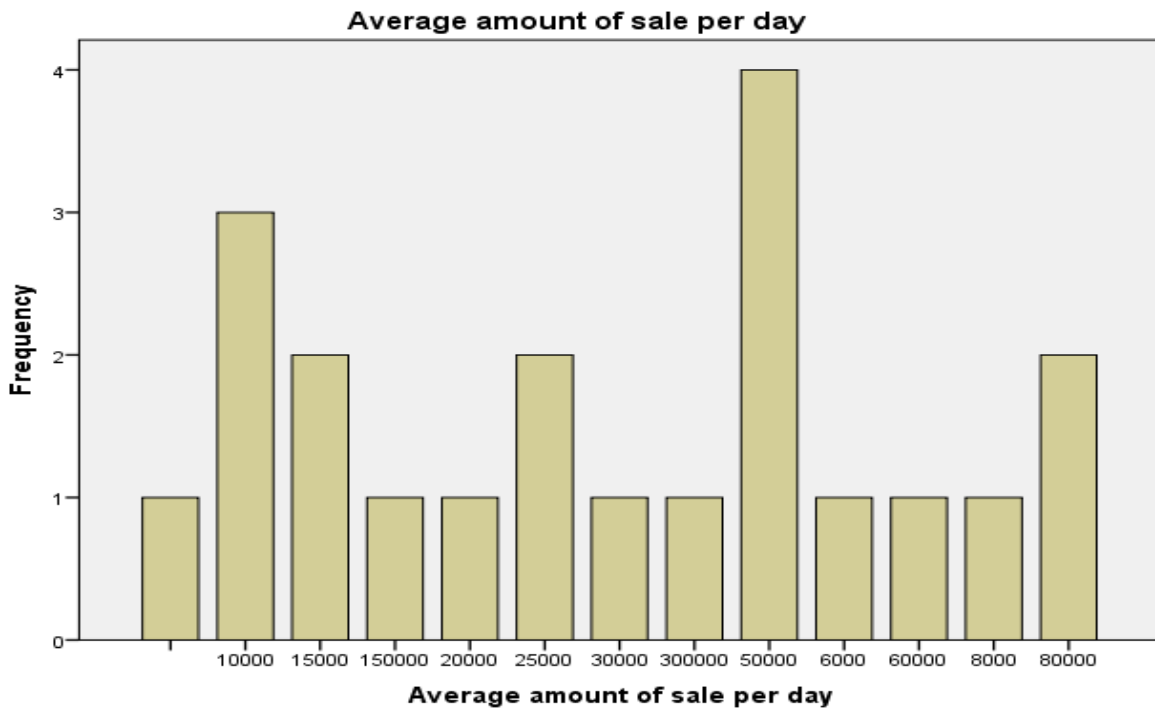


Figure 18: Average amount of sales per day

## Daily Profits of the Business

Descriptive Statistics								
	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Daily Profits of the Business in SSP	20	2000.00	416666.67	1063666.67	53183.3335	94704.43314	3.361	.512
Valid N (listwise)	20							

Table 1: Daily profits of the business

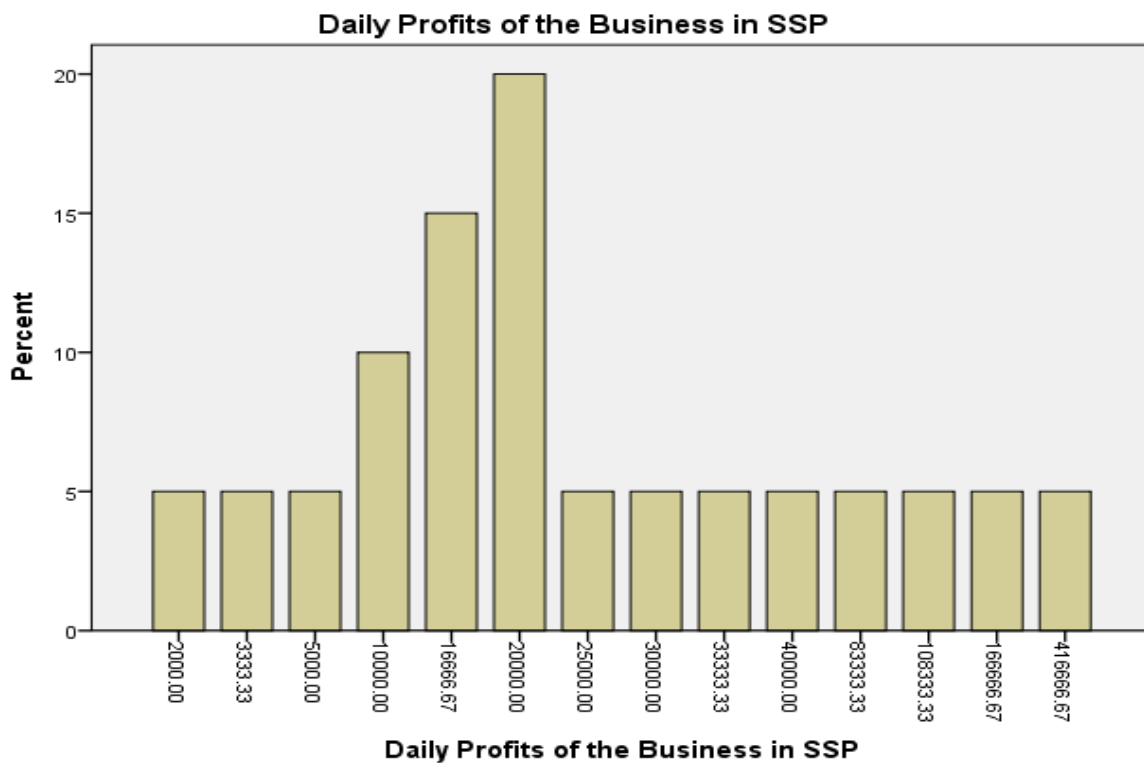


Figure 19: Daily business profits

### 12. Impact of inflation to the business

When asked how the inflation has affected their business, the respondents answered as follows; 90% of the respondents answered negatively while 10% of the respondents answered positively. It is therefore safe to say that the inflation and economic crisis has affected the food importation business negatively (Figure 20).

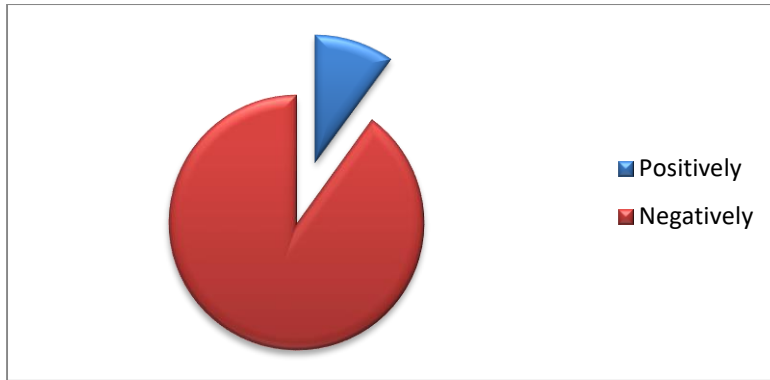


Figure 20: Impact of inflation on the business

When asked to further expound on their responses to the above question, the correspondents who agreed that the inflation has affected their business in a negative way stated that it is because it becomes more expensive to purchase food items from the neighboring countries and the customs tax also increases with the dollar rate. Other expenses such as rent and electricity as well go high and fewer customers buy non-essential food items such as milk powder, juice and meat due to their budget.

### 13. Food pricing determination

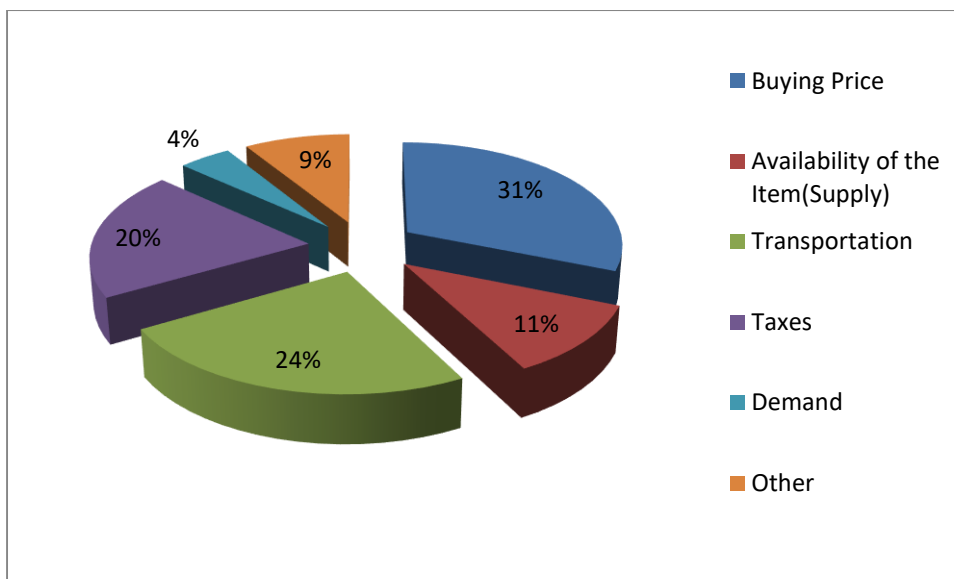


Figure 21: Food pricing determinants

Several factors affect the price of an item once it reaches the market. As seen from the figure above (Figure 21), food prices are largely affected by the buying price in the exporting countries. During the global spike in 2020, a rise in food prices was observed in Kenya and Uganda which directly affected South Sudan (Thomas, 2020). The devaluation of the pounds was also another major hit to food prices throughout the 4 year period as observed in (Figure

39). Transportation also determines the food prices. According to UNDP, the conflict has also increased the transportation costs of food, adding to the price for the end user, as roads are closed and rivers obstructed. Additionally, access restrictions, informal levies, and seizure/theft of goods have all added to the price of goods (UNDP, 2017).

Other factors such as taxes are also a huge determinant for food pricing determination. One of the traders was asked how he determines the prices of his food items and he said it all depends on the expenses he incurs. “When the City Council increases their taxes, I simply increase the prices of goods like everybody else. No one wants to operate on losses. We all want to make profits” he said.

#### 14. What retailers think the government should do to help them

The following were the retailers’ responses under the following themes when asked what they would like the government to do that will benefit the country and their importation business.

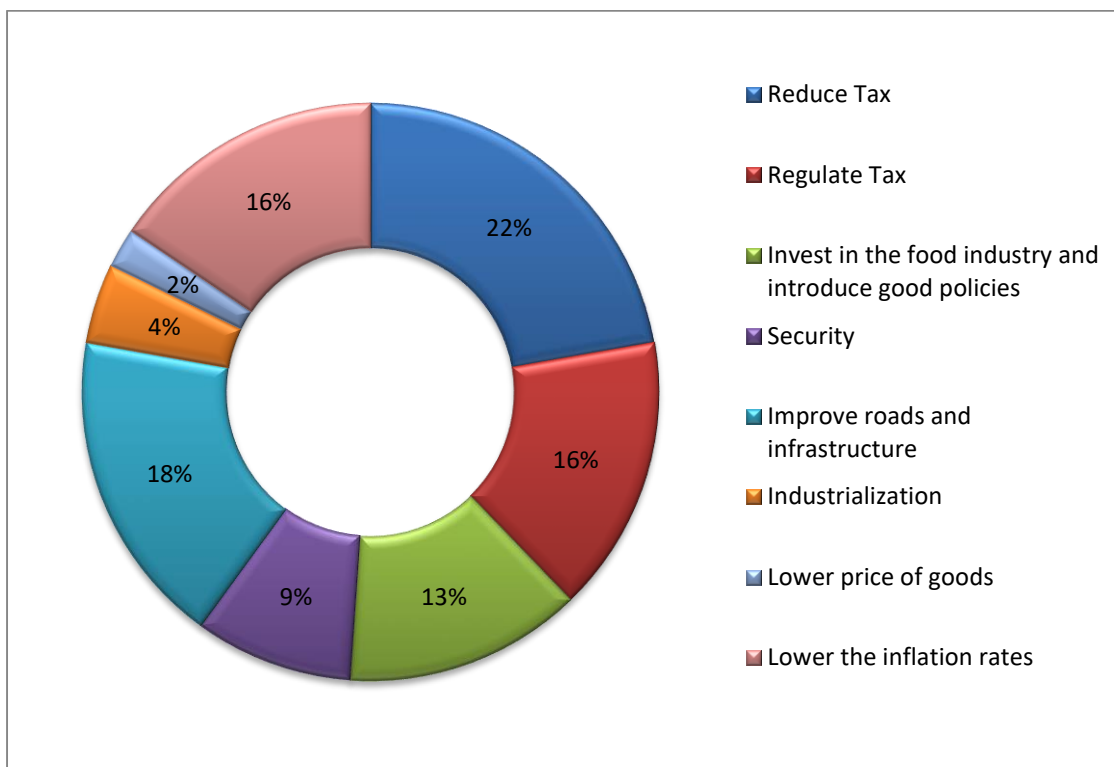


Figure 22: Retailers' response on government action

The highest number of retailers suggested that the taxes be reduced and regulated as seen from the figure above (Figure 22). In the previous section of this study, we have observed that an increase in taxes leads to an increase in food prices and all the taxes and financial burdens are levied on the buyer: This further exacerbates the insecurity issue as most households cannot comfortably afford to purchase food items. According to the food and agricultural policy in South Sudan, one of the policies is to lower the tax rates or subsidies on essential goods such as food and drugs. However, due to lack of policy implementation, taxes are still skyrocketing and insecurity is still rampant. Other response actions are to invest in the agricultural sector and increase food production within the country, improve roads and infrastructure, have good policies in place and improve security and industrialization. This will bring a win-win situation for everybody: food retailers will not have to worry about customs, currency exchange in order to purchase food from neighboring countries, the people will not have to worry about the rise in food prices, farmers will have a ready market for their produce and the government will have control over the economy and get much more returns in terms of taxes and subsidies.

## **4.2 Food Consumers Qualitative Data Analysis**

### **4.2.1 Data Analysis Methods**

Three classes of data were captured during the survey: data that categorizes and describes people, data that categorizes behavior of people and data that reveals perceptions, attitudes, opinions and beliefs. Typical topics used to address this data include: knowledge, perceptions, behavior, attitude and demographics. This data was analyzed using Excel spreadsheets. JASP, statistical software was also used during the study.

The data analysis was carried out using Microsoft Excel where all the consumers were listed and each of their responses was written next to them. From the total of 30 consumers, the following are the responses that were received.

### **4.2.2 Classification of Consumers**

The 30 respondents were grouped based on gender and segregated to 20 male and 10 female respondents (Figure 23). It was important to get information from both genders since they each has a detailed description of the food consumption rate in the house and at the economic level through the financial impact felt on the family.

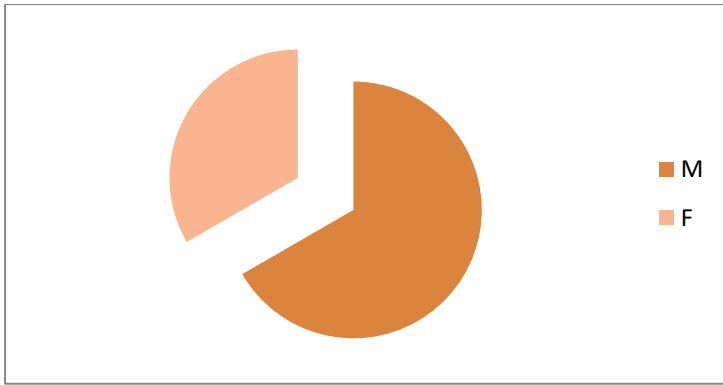


Figure 23: Sex of correspondents

No correspondents were observed to be less than 18 years of age; the majority of the respondents, 50%, were between the ages of 25 to 30 years old; 25% of the participants were above 40 years; 12.5% of the participants were between the ages of 18 to 24 and 35 to 40 (Figure 24).

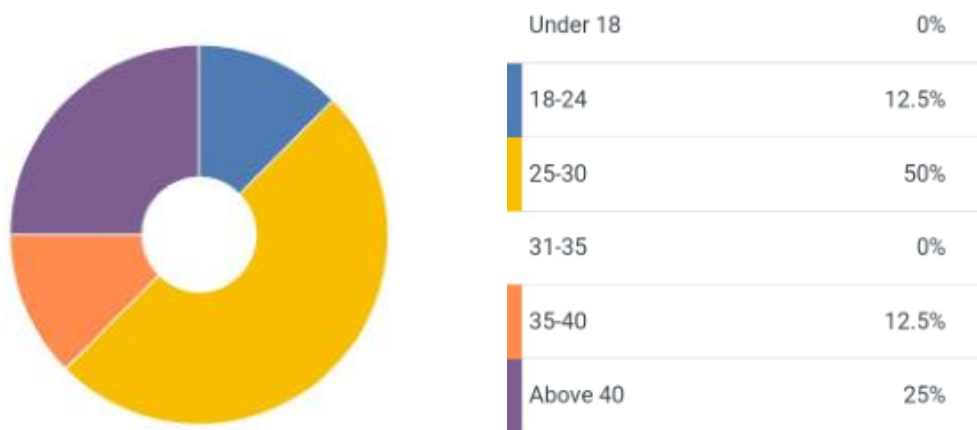


Figure 24: Age of correspondents

The study was mainly focusing on the South Sudanese households because the main focus of the study was to find out how the food importation business and the insecurity were affecting the people of South Sudan. Therefore, 100% of the correspondents were South Sudanese.

Out of the 30 households, 75% of the correspondents were married and 25% were single (Figure 25).

Marital Status

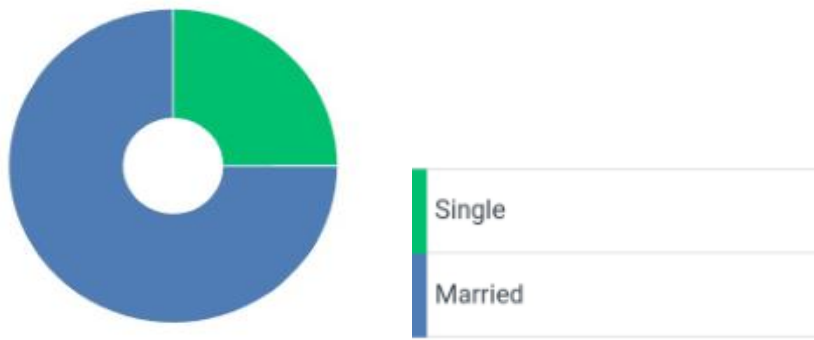


Figure 25: Marital status of correspondents

According to the survey, 50% of the correspondents had a bachelor’s degree. This is plausible because the survey focused on the heads of the family as the sample population. 25% of the correspondents had a master’s degree and the rest 25% of the population had a form of vocational training (Figure 26).

Level of Education

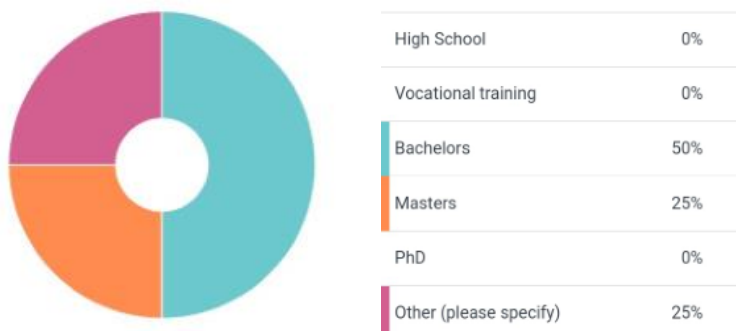


Figure 26: Correspondents' education level

When the correspondents were asked if they were the breadwinner for their households, 90% of the correspondents agreed they were the breadwinner of the household while 10% disagreed (Figure 27).

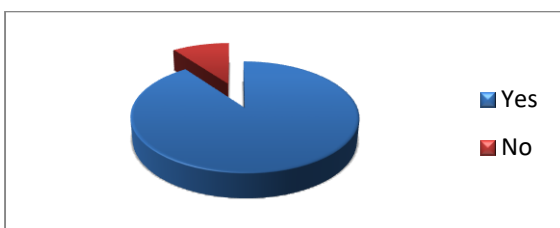
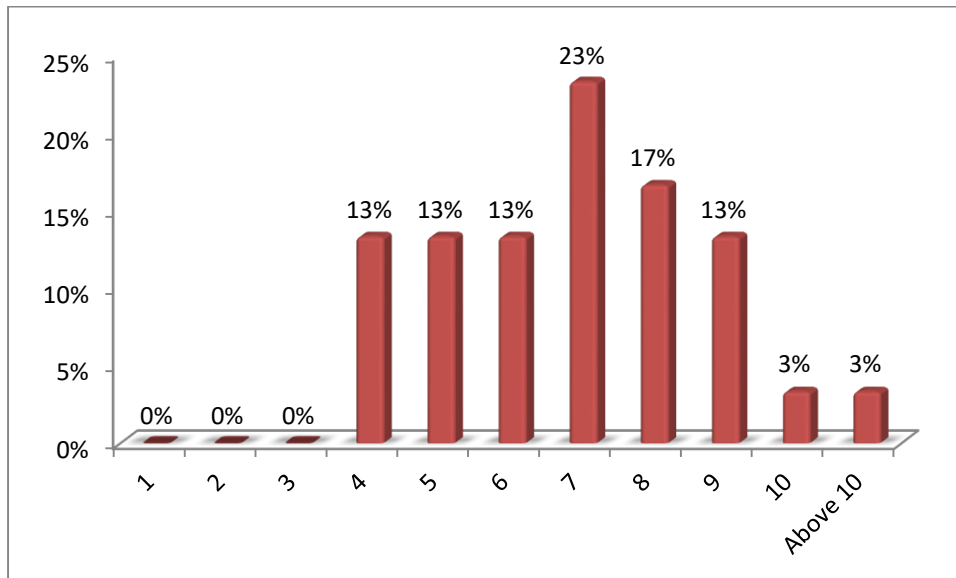


Figure 27: Breadwinner of the household

Out of the 30 correspondents selected for this study, none of the correspondents lived alone or had 2 or 3 members in their household. Most of the correspondents, 23%, had 7 members in their households, 17% had 8 members in their household, 13% had 4, 5, 6 and 9 members while 3% had 10 members and above 10 members (Figure 28).



*Figure 28: Size of the household*

Another critical factor in this survey is the economic status of the correspondents. This is important because the survey is mostly focused on how the food importation business and the economic crisis have affected the population. South Sudan is one of the poorest countries in the world, and its citizens face significant economic challenges. According to the World Bank data of 2017, the poverty headcount ratio at the national poverty line was estimated to be about 82% meaning more than 8 out of 10 people are living below the poverty line.

The average income in South Sudan is less than \$1 per day. The World Bank estimates that the Gross National Income per capita in South Sudan was only \$233 in 2019. However, it is important to note that income inequality is high in South Sudan with some individuals and households earning significantly more than others.

The study aims to get a balanced view from both sides of the earning households. As seen from the graph, half of the correspondents had an irregular income (Figure 29). This could mean that the amount of money they receive varies with each month. This increases their anxiety, especially for the correspondents with large households because they are not sure how they will constantly feed and take care of the needs of their members. None of the correspondents had an income of 300,000 SSP and above. Every correspondent who marked a regular income



was found below 300,000 SSP per month which translates to around \$400 per month. When you compare this to other countries, indeed it agrees with the World Bank analysis that South Sudan is one of the countries where most of the citizens earn significantly less than in other countries.

What is your income level in SSP per month?

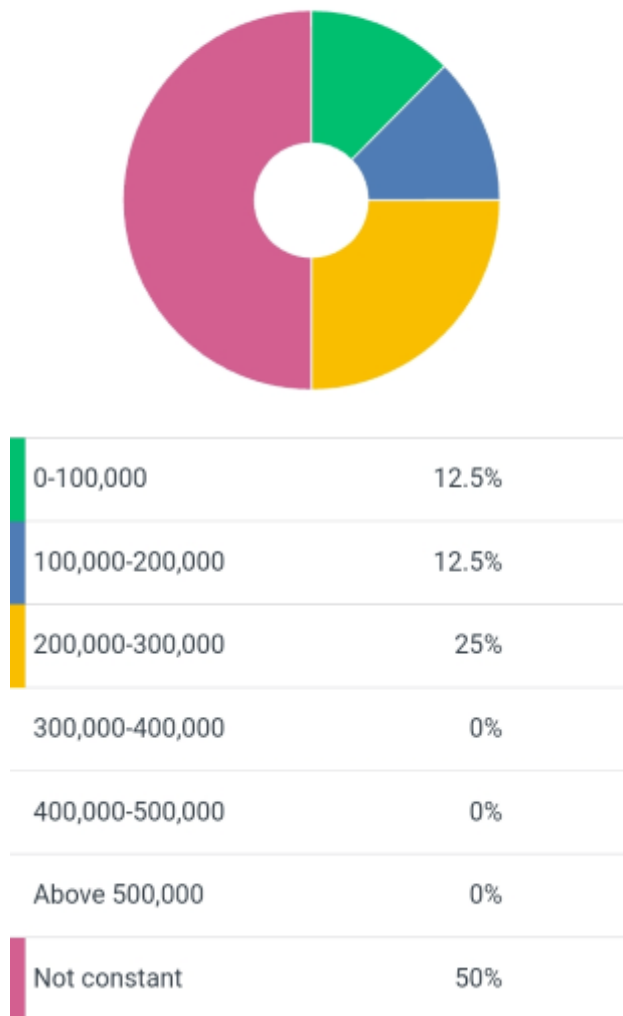
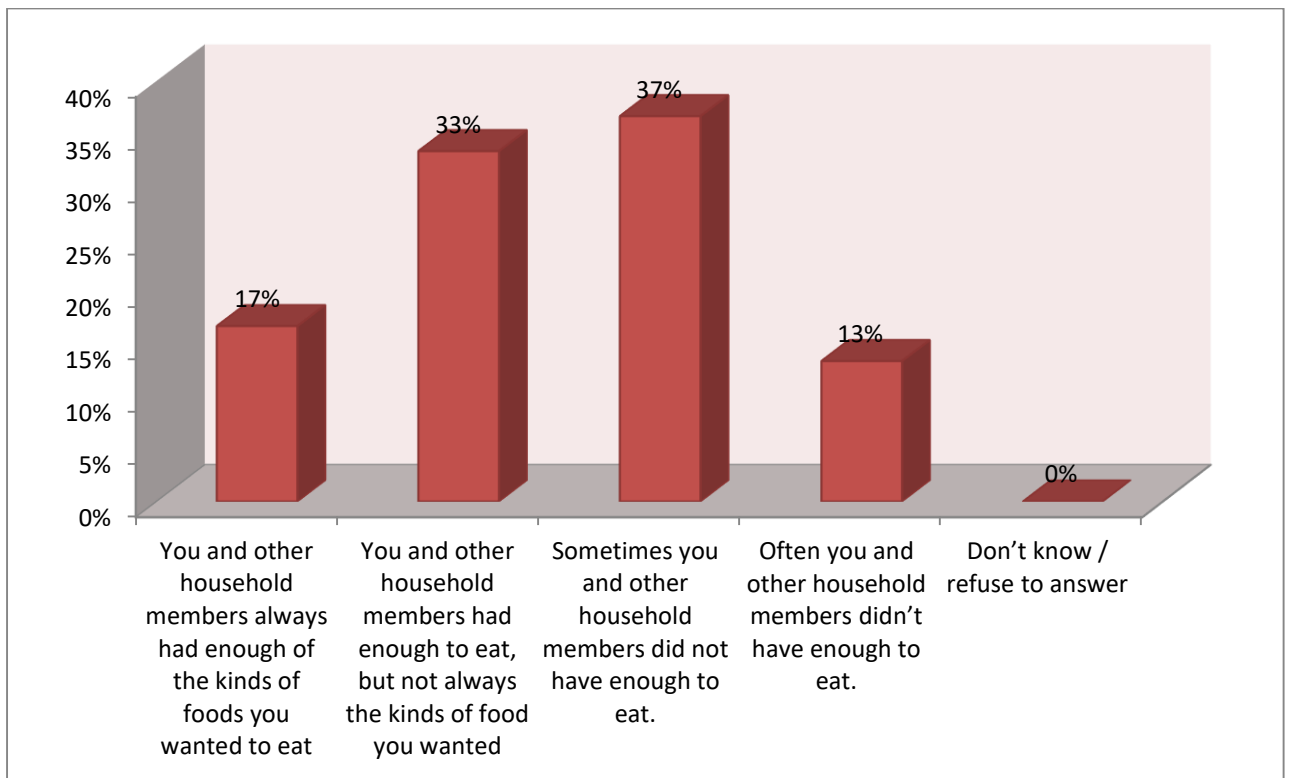


Figure 29: Correspondents' income level

#### 4.2.2 Types of foods eaten in households

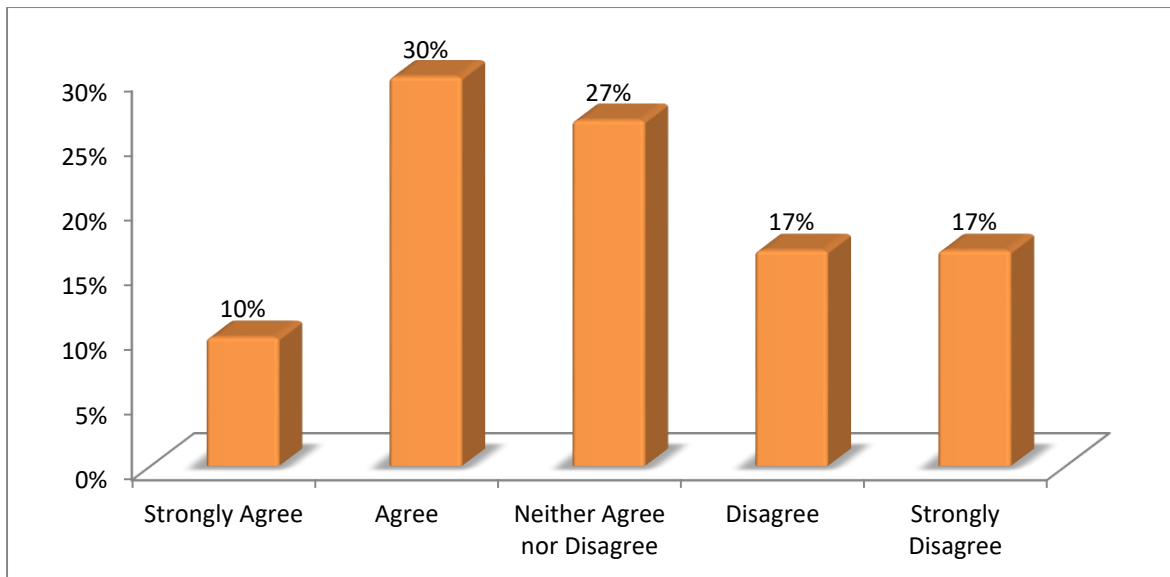
During the survey, the correspondents were asked if the members of their household had enough of the kinds of food they wanted to eat. This question was asked to identify whether consumers were comfortable enough to purchase the kinds of food they wanted and also the quantity of the foods they wanted. It is also a good measure of the quality of life they are living. The responses are seen in the following figure. The highest number of consumers, 37%, stated

that they sometimes don't have enough food to eat. When asked how they manage the situation, most of them said they resort to one main meal during the day and something light at night. 33% of the consumers stated they had enough food to eat but not always the kind of foods they wanted. They usually buy food according to their budget. 17% of the respondents admitted that they had enough food to eat and also the kinds of foods they wanted while 13% said they often did not have enough food to eat (Figure 30).



*Figure 30: Types of food eaten in household*

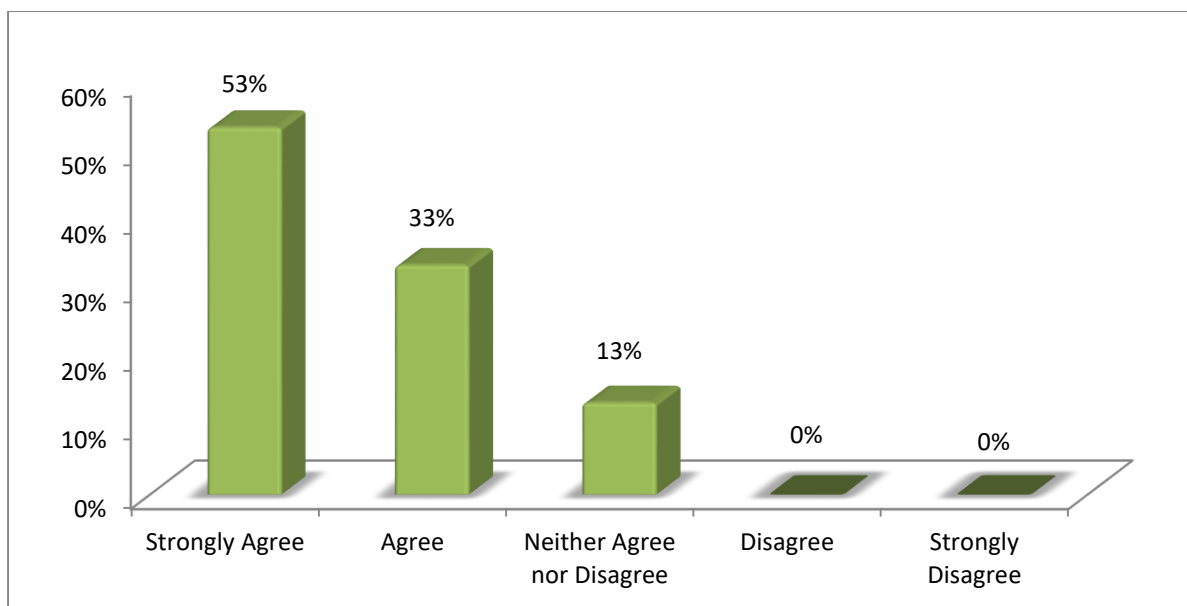
Following the responses the consumers gave, the next question mainly focused on the consumers' perception towards the food consumption situation in their household.



*Figure 31: Correspondents worry food will run out before they can buy more*

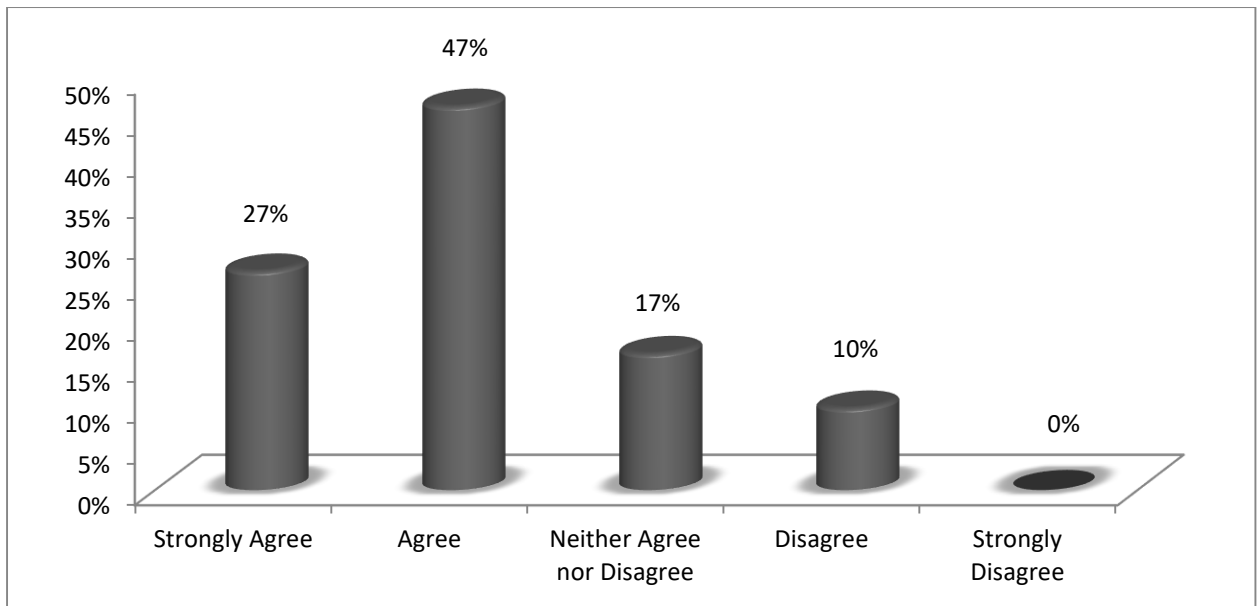
We can see from the chart that a large number of households do agree that they are worried food will run out before they have money to buy more food (Figure 31). Owing to the fact that the greater number of consumers have an income of less than \$400 per month and a significant number of them have an income which is not constant, the results depicted above are expected.

This response can be attached to the impact of the continuous rise in food prices and a fairly low income to cope with the rise in expenses. The consumers were asked if the rise in food prices has terribly affected their household and a vast majority strongly agreed and agreed to the statement respectively. A few of the correspondents neither agreed nor disagreed and none of the correspondents disagreed or strongly disagreed as seen in (Figure 32).



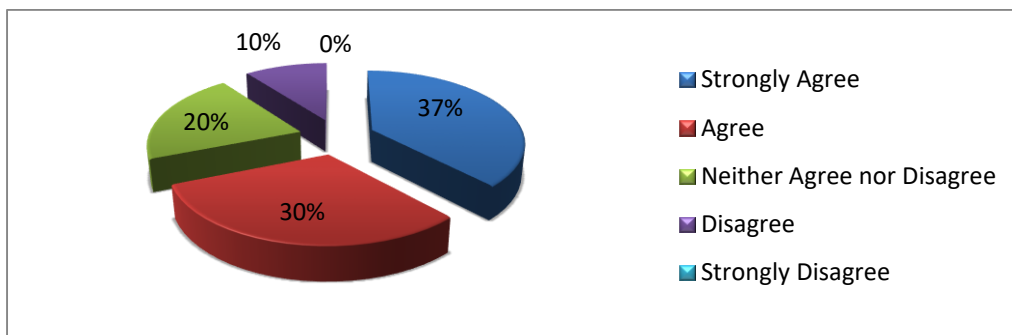
*Figure 32: Households affected by inflation*

The survey went on to identify if the correspondents have a balanced diet. This is different from the first question which leaned more towards having any meal they wanted as a form of luxury more than necessity. This question sought to understand whether the correspondents have a nutritious balanced diet and it hinges more on nutrition and health as a human right than it does on luxury and a high quality of life. The correspondents answered similarly to the previous questions where most of the correspondents were worried about food in the household running out before they could buy more and those that strongly agree that the food prices have affected their household terribly. 27% of the correspondents strongly agreed with the statement that they cannot afford to eat a balanced meal. When asked what they usually eat, they stated that they mostly eat legumes such as beans which are much cheaper than other options. “Even the vegetables have become so expensive. I cannot afford ‘dodo’ for a large family because a very small “kom” goes for 100 SSP. We need dodo of at least 1500 SSP in order to feed everybody in the house” stated one of the correspondents. “We cannot afford to eat meat and other vegetables such as cabbage. Fruits are out of the question.” said another correspondent. 17% of the correspondents neither agreed nor disagreed, 10% of the correspondents disagreed with the statement (Figure 33). One of the correspondents added, “We can afford a balanced meal because we are able to cut down on other unnecessary costs such as expensive clothes and other luxurious items. We are able to plan and budget accordingly so the budget of food is not affected.



*Figure 33: Correspondents cannot afford to eat a balanced meal*

The next section focused mainly on households with children. In this case, a child is considered to be someone under the age of 12 years. 12 years was considered because at that age, the nutritional needs of a child is different from that of an adult or a teenager. All the households had children under the age of 12 in exception of one household.

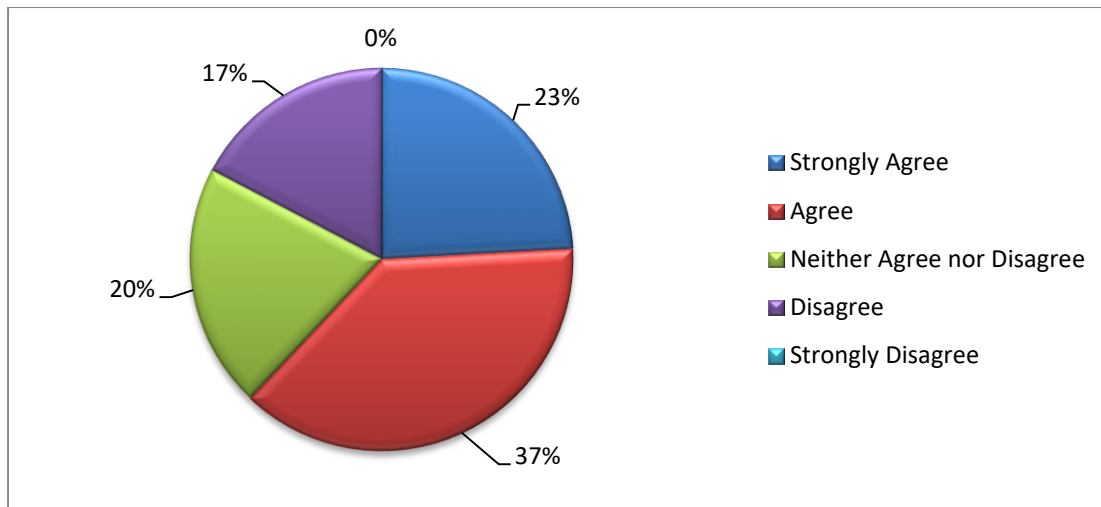


*Figure 34: Correspondents depend on low cost foods*

None of the correspondents strongly disagreed with the above statement. 10 percent of the correspondents disagreed and said they could afford nutritious meals for their children and 20 percent could neither agree nor disagree. These households could afford nutritious meals but not always. The vast majority, 37 percent, strongly agreed and 30 percent of the correspondents agreed that they could not afford nutritious foods (Figure 34).

In addition to the above survey question, the correspondents were asked if any of the children or adults fell sick or lost weight due to eating an unbalanced diet or not having enough to eat.

This question aimed to find out if the food situation had a direct impact on the health and well-being of the household members in the sample population.



*Figure 35: Household members lost weight or fell sick due to poor nutrition*

According to (Figure 35), 23% and 37% of the correspondents strongly agreed and agreed respectively. This represents a vast majority of the correspondents while 20% neither agreed nor disagreed. 17% of the correspondents disagreed and none of the correspondents strongly disagreed. This result correlates with the UNDP report. According to the UNDP 2009 Report on the Rising Food Prices and its implications on Human Security, a sharp rise in food prices can have significant impact on human security reaching far beyond the immediate effects of hunger and malnutrition. High food prices force vulnerable families to adopt coping strategies that not only have short-term negative effects, such as consuming fewer and less nutritious foods, but can also result in potentially longer-term reversals in poverty reduction and human development by cutting back on health care and education in order to maintain immediate staple food consumption. The sudden rise in global food prices over the recent years has significantly impacted the human security of millions of vulnerable people across the world. The driving force behind the dramatic rise in global food prices has been attributed to a complex combination of interrelated supply and demand factors (UNDP, Rising food prices and its implications on human security, 2009)

This knowledge can improve the effectiveness of policy interventions aimed at enhancing food security in conflict and insecure areas. It provides insights into the severity of the situation that people and households face and how they might address the future challenges set by the context. Therefore, this information can contribute to the early warning, assessment, targeting

and monitoring, and evaluation phases of the policymaking process (Maxwell, 2008). The analysis used the reduced FCSI (Food consumption coping strategy index) to capture relevant short-term coping strategies adopted when there was insufficient food in the household. These strategies can be classified into three categories: dietary change, increased short-term food availability, and rationing food.

The study followed (Maxwell, 2008) procedure for the computation of the FCSI. In other words, the frequency of each coping behavior was summed up and multiplied by a severity weight (Table 2). The weights ranged from 1 to 3, with 1 indicating the less severe coping strategy adopted by the household and 3 indicating the most severe mechanism. We considered a household with an FCSI < 28 as adopting no or low coping strategy, with an FCSI between 28 and 42 as medium coping and FCSI > 42 as high coping.

Category	Food Coping Strategy	Severity
Dietary change	Rely on less preferred and less expensive food	1
Increase short term household food availability	Borrow food from a friend or relative	2
Rationising strategies	Limit portion size at meal times	1
	Restrict consumption by adults for small children to eat	3
	Reduce the number of meals eaten in a day	1

*Table 2: Adopted from Maxwell and Caldwell*

From the study, the households were categorized and the computations of the coping strategies were tallied. It was observed that 50% of the households had no coping or low coping strategies, 37% had high coping and 13% had medium coping strategies (Figure 36).

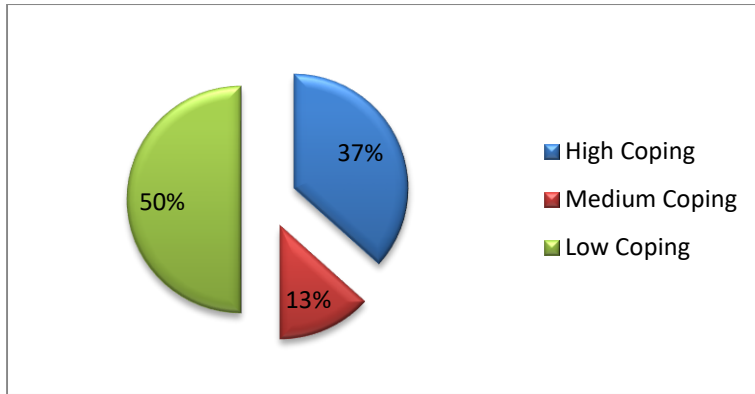


Figure 36: Coping Mechanisms

Reducing essential non-food expenses is another coping mechanism that deserves specific attention. The households in the investigated areas spent the majority of their income on food.

#### 4.2.3 Economic Situation and Inflation Rate in South Sudan

##### 4.2.4 South Sudan Food Inflation

Food inflation in South Sudan averaged 65.43 percent from 2008 until 2023, reaching an all-time high of 513.20 percent in December of 2016 and a record low of -32.60 percent in February of 2021.

The following two graphs show the drop in the value of the South Sudanese pounds against the dollar in;

1. A time period of 4 years from 2020 to 2023
2. Within a year from mid-2022 to May 2023

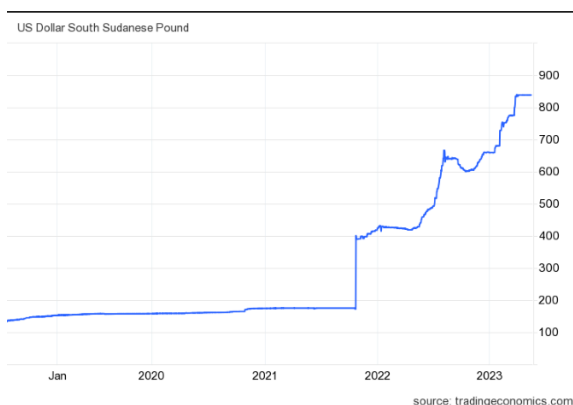


Figure 37: Inflation from 2020-2023





*Figure 38: Inflation in 2023*

According to the Trading Economics, South Sudan’s main imports are: foodstuffs, clothing and capital equipment. The country spent around 12944.30 million SSP in December 2021 and received around 5704 million SSP from exports. This shows that the country is a net importer with a balance of trade of -2633.5 million SSP. Imports in South Sudan increased to 12944.30 million SSP in 2021 from 11092.10 million SSP in 2020.

According to the Food and Agriculture Organization (FAO) of the United Nations, in 2019, South Sudan imported more than 900,000 metric tonnes of food, mainly from neighboring countries of Uganda, Kenya and Sudan. The most commonly imported food items include cereals, vegetables, fruits and meat products.

More recently, the investigated area is suffering from the cumulative effect of inter-communal violence, a series of climate shocks (drought-like conditions and flooding), and the dramatic impact on the food price increase produced by the lockdown measures introduced to prevent the COVID-19 pandemic (FAO, South Sudan Revised Humanitarian Response CoronaVirus Disease 2019 (COVID 19), 2020).

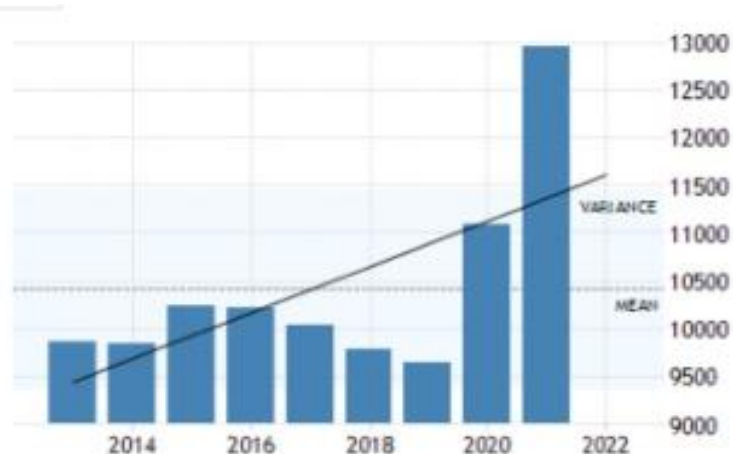


Figure 39: Food imports from 2014 to 2022

#### 4.2.5 Food Prices in 2022 as compared to 2018

Cost of living in South Sudan (these prices vary greatly due to the daily inflation rates but the data given is for the period of September-December 2022

Food Item	Quantity	Price in SSP (2018)	Price in SSP (2022)
Drinking water	1 liter	50	200
Milk	1 liter	250	800
Maize flour	1 kg	200	800
Cassava	1 bunch (4 large cassavas)	300	1000
Cabbage	1 large	300	1200
Cooking oil	5 liters	3000	9500
Ngete (local vegetable)	1 bag	200	600
Rice	1 kg	250	1000
Beans	1 kg	150	450
Lentils	1 kg	250	1000
Eggs	1 tray	900	3000
Beef	1 kg	1500	5000
Onions	1 bunch (4 onions)	100	500
Tomatoes	1 bunch ( 4 tomatoes)	100	500
Potatoes	1 bunch (4 potatoes)	200	600
Bananas	1 bunch (5 bananas)	200	1000
Oranges	1	100	500
Apples	1	150	400

Table 3: Comparison of food item prices

Graphically, the table above can be represented as below. We can observe that there has been a huge spike in the food prices in the last 5 years (Figure 40).

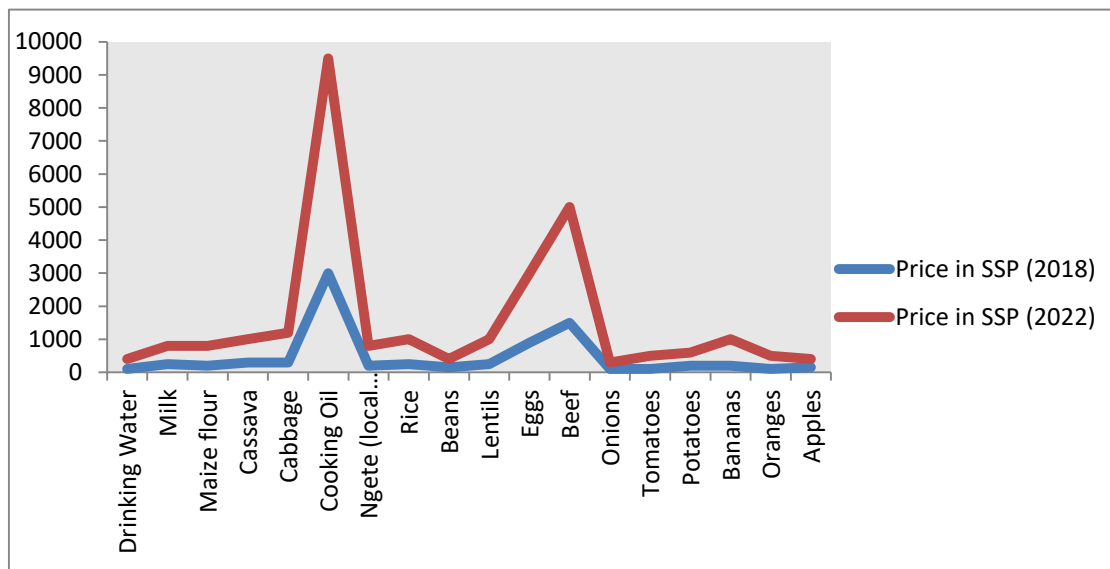


Figure 40: Comparison of food item prices

The following graph shows the inflation rate of the South Sudanese pounds against the dollar in the time period of 2019 when the pound was fairly stable at 30,000 SSP to 2023 where the dollar rate shot up to 84,000 SSP. According to FAO reports, East African regional food stocks were below average after the 2019 harvest: ‘Exportable cereal surpluses in the region were 18 percent below average, with Uganda’s production being 9 percent below average.’ During the pandemic, regional governments have indicated that they will allow commercial and humanitarian cargo to keep moving, despite current movement restrictions. However, grain prices in Juba rose by 20-36 per cent in the last two weeks of March, with maize rising faster than locally produced sorghum. Part of the reason for the rise in prices in March 2020 is decreased supply. Exports of Ugandan maize to South Sudan declined by 30-50 per cent in the last two weeks of March: Initial reports suggest that traders and consumers were responding to decreased availability by decreasing consumption. South Sudanese food producers and consumers are moving towards markets. This shift is one of several causes of the country’s deepening food insecurity (FAO, 2021).

When asked how livelihood was 10 years ago compared to the current situation, all the responses were negative. Some of the responses included; trying other sources of money to

increase income so as to cope up with the inflation, planning to cope by trying out farming and producing food by cultivating.

Nearly 800 million people went hungry on the planet in 2020 because they simply could not afford to feed themselves, said Francis Mwanza, a London-based spokesperson for the WFP. Unless we stop the conflicts, unless we stop the migration of people from their homelands into neighboring states, unless people have the means to either grow their own food or be able to afford to buy it, people will continue to be hungry. In nations ravaged by war and instability, drought and famine, food systems can all too easily be at risk because of oppression and abuse of power.

### 4.3 Health Concerns of the Food Imports

In recent years, there has been concern by the public and the government about the quality and safety standards of the foods imported into the country. Some products have been labeled as, “for export to South Sudan only” which can be quite dangerous for consumption when tested (MoH, 2022). This is just one of the many perils of depending on other countries to feed the populace. There was another report about Kenya having sugar which was unfit for consumption due to traces of mercury in it as confirmed by experts. The sugar was not discarded as should but exported to South Sudan (MoH, 2022).

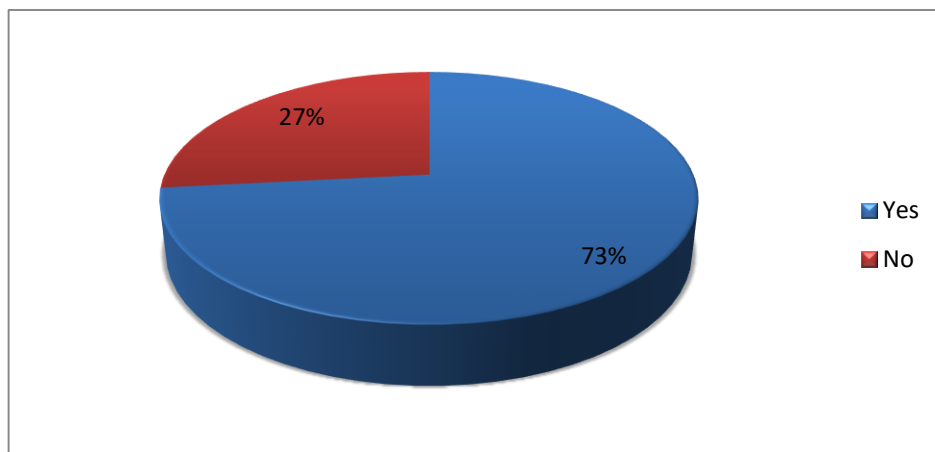


Figure 41: Worried about the quality and health standards of food imports

According to (Figure 41), 73% of correspondents were worried about the safety standards of the food imports. Some were afraid because of the recent news on cough syrup drugs that caused death to infants, others mentioned about the substandard sugar imported from Kenya

and others about expired goods brought to the country. 27% were not worried and according to one of the correspondents, they have been living on imports for their whole lives and nothing bad has happened.

### **Role of the South Sudan National Bureau of Standards**

Under the laws of South Sudan, the National Bureau of Standards Act: The purpose of the Act is to provide for a legal framework for the standardization of commodities and processes in South Sudan. As a country that depends most entirely on imports, South Sudan National Bureau of Standards developed a legal framework that will safeguard this process of food importation into the country. Some measures of compliance were put forward prior to food safety and other commodities being imported. The measures include:

- Requirements of safety and health
- Maintenance of measured standards
- Indication of country of origin of producing institution
- Possession of identity
- Consistence with religion, tradition and belief and finally
- Method of production followed.

Lab personnel are present to check and verify whether the food commodities comply with the above measures. Failure to comply with the food safety standards will lead to the rejection of the product. On the other hand, a product that complies with the standards will have a certificate of conformity issued. Such inspections are done every three months and from shop to shop. This is done in order to curb illegal foodstuffs that do not comply with the safety standards (South Sudan National Bureau of Standards, 2023).

## CHAPTER FIVE

### 5.0 POLICIES AND LEGISLATIVE FRAMEWORKS

The Government of South Sudan has developed a number of sectorial policies with significant food security bearings such as the Food and Agricultural Policy Framework and Strategic Plan, Animal Resources Sector Policy and Strategic Plan, Fisheries Policy, Trade and Industry policy and Health Nutrition Policy. This is in line with the Comprehensive Peace Agreement (CPA) which gave the Government full autonomy in developing policies that are specific to the country.

Appropriate policies addressing major food security issues are of paramount importance for the Government to tackle the prevailing food insecurity problems (Food security policy in South Sudan). Although these have yet to be formally developed, adaptation strategies and plans are part of South Sudan's development plans and include strategies related to agriculture and forestry, livestock, health, water and disaster risk management (Tadu, 2023). It is also worth noting that South Sudan's economy has been severely affected by decades of conflict, which has resulted in significant displacement, loss of life, and destruction of infrastructure. This has further exacerbated poverty and limited economic opportunities for many citizens.

The main challenge in policy and regulations is not the lack of instruments, but implementation failure. There is very little or no political will when it comes to having long term sustainable plans for agriculture and production. However, a major reason, according to the ministry of Agriculture, the lack of implementation of policies is due to the scarcity of funds and the lack of the will by the government authorities. The government operates on a small budget that cannot effectively cover all government areas of responsibility. This lack of capacity to enforce strong agricultural regulations is a major factor for the dependence on food importation (Tadu, 2023).

One of the aims of the research was to help the government come up with solutions in order to curb the insecurity and heavy dependence on food imports for sustaining the country.

## **5.1 Agriculture and Food Policies**

### **The Food and Agricultural Framework**

The Food and Agricultural Policy Framework (FAPF) indicates a number of programmes and activities directly related to food security. The availability, access and stability dimensions are better addressed than the utilization dimension. It is reasonably safe to say that this policy has addressed the issue of food availability mainly through promoting improved agricultural practices. However, it lacks quantitative and qualitative production targets during the lifetime of the framework.

When coming up with strong and effective agricultural policies, the need for security is paramount. South Sudan has a great potential and 80% of the citizens as recorded by WFP, are farmers. Yet due to insecurity many of them have been forced to live in displacement camps and the city. “The main challenge I face is insecurity. If you go to the garden, they may kill you. There is no way I can go and farm”, said one of the farmers in Juba during an interview. “Insecurity forced us to evacuate into the towns. We also suffered food scarcity because of the flooding. At home we used to do many things in order to survive. We used to fish and hunt but we cannot do that in the city”. This agrees with the research done by (Thomas, 2020) that stated, if imported food becomes unaffordable or unavailable as a result of the global COVID-19 pandemic, South Sudan’s social crisis will deepen. Hungry people without access to land or other productive resources may be forced to migrate in search of food or work or aid. People, whose lives are immersed in informal urban economies, and landless rural workers, may need to reorganize their livelihoods dramatically to cope with food and health price inflation. Those with access to land may be tempted to disengage from food markets and focus on production for household consumption. If the availability of imported food decreases significantly, domestic food producers will need to increase supply to the food markets on which so many people depend. But this is not the only challenge that domestic food producers face. More understanding of the dilemmas and impossibilities faced by food producers and food consumers is an essential part of the response to this new crisis (Thomas, 2020).

### **Animal Resources Policy Framework (ARPF)**

The Animal Resource Policy Framework (ARPF) systematically identifies the constraints of the sector, policy strategic objectives and policy measures. Inter-ministerial institutional arrangements for implementing strategic objectives proposed in the strategic plan are indicated.

The main gaps in the animal resource strategic plan are the lack of time frame for the implementation of most policy objectives and the lack of budgetary allocation and funding arrangements for the various policy objectives and interventions.

### **Fishery Policy Framework**

The Fishery Policy Framework (FPF) has documented the sector's potential for food security and poverty alleviation. It also identifies key constraints, and proposes relevant objectives, programmes and activities to realize its vision, goals and objectives. In general, the programme areas covered under the framework contribute to food security including through increased fish production, income generation from fish marketing, infrastructure development, research and training, and aquaculture development, among others.

#### **5.1.1 The Transport Sector Policy**

The Transport Policy highlights that the prioritization of road investments should be based on the level of economic and social benefits expected from those investments. The policy indicates that project prioritization should be based on the social criteria whose objectives are geared among others to increase mobility, peace building, security and facilitating administration, maximization of access to social services; creation of employment and increased food security through increased production. The contribution that the road sector could have in linking surplus areas to market centers for ensuring food supplies needs to be well articulated as a major policy objective.

The policy framework and the strategic plan lack institutional coordination with major food security stakeholders such as the Ministry of Agriculture and Forestry, Ministry of Animal Resources and fisheries and the Ministry of Finance: These need to be considered when the policy is revised.

#### **5.1.2 Import and Export Policies**

A number of good and innovative ideas, statements, and interventions which can potentially contribute to food security are described in the Trade and Industry policy. In order to be complete, the document needs a systematic realignment of those descriptions and an appropriate articulation of policy objectives contributing to food security. The intention of the Ministry of Trade and Industry is to reduce dependence on food imports and for South Sudan to become a net exporting country. If enforced through legislation, the policies could greatly



help in improving access to food and stabilizing prices. However, a policy statement on the position of the Ministry in relation to food aid imports should be included in the next policy development process. The trade and industry policy also proposes the promotion of marketing agricultural products through land conversion tax. It also indicated that inter and intra state trade be strengthened to ensure that surplus food crops are sold to deficit areas while food deficit areas may sell other surplus resources such as cattle to other areas. It further states that the Ministry will encourage the production of subsistence crops for domestic consumption and work with the Food Security Council and other stakeholders to introduce and accelerate mechanized agriculture in an effort to boost agricultural productivity to export crops.

### **5.1.3 The Role of the National Ministry of Agriculture**

The Ministry of Agriculture has objectives and a mandate to develop policies for Agricultural development. This can be achieved through:

1. Supporting farmers
2. Develop technologies that are sustainable and reduce the nation's dependence on food imports.

#### **Challenges faced by the Ministry**

Just like any other ministry, the Ministry of Agriculture faces tremendous challenges when it comes to implementation of their mandate. According to the constitution, 10 percent of the annual budget is supposed to go to the Ministry of Agriculture. In other countries, a much greater budget is allocated for the Ministry of Agriculture. However, in South Sudan, 0.6 percent of the annual budget is what the ministry receives which is not sufficient to help the ministry carry out its operations. Lack of human capacity and corruption are the main factors that lead to a huge drawback for the ministry. No effective implementation of the budget, due to insecurity and poor roads.

“There is a great need for the government to create a larger directorate of food security” said the Director General for Research in the Ministry of Agriculture Dr. George Tadu, whose vision is for South Sudan to become a net exporting country. He suggested that the directorate should focus on buying food from local farmers and imports, and to store the food in reserves. The food should be given freely or sold at an affordable price to the affected population. 2% of the annual budget is needed to carry out this (Tadu, 2023).

#### **5.1.4 Areas of Policy Improvement**

Major gaps have been identified in most of the policy documents:

The lack of a monitoring and evaluation framework including inadequate benchmarks and associated indicators is a major gap that limits effective monitoring and policy implementation. Most of the sectorial policies do not have a framework for periodical reviewing of policies such as mid-term evaluation of the implementation process, thus making it difficult to trace the measures identified to achieve the policy objectives.

Another serious issue is the lack of proper institutional arrangements for policy/strategy implementation. This is particularly critical with respect to the coordination of relevant stakeholders including the states.

Another issue facing almost all the ministries is the lack of budget implementation. Very often, budgetary considerations regarding policy implementation are not included in the policy documents.

#### **5.1.5 A Policy Response to the Food Import Dependence**

In order to address the gaps indicated above, the governments in collaboration with independent partners need to take an appropriate short and long term action which mainly focuses on the following points:

- ✓ Define and implement a policy benchmarking approach that aims to achieve the best policy performance for food security based on a vision and adaptation of best practices coming either from in-country experience or abroad.
- ✓ Develop a comprehensive food security strategy which will provide direction and clear guidance for developing and updating relevant sector policies and strategies for the future. It should also consider streamlining food security objectives and measures in all relevant sector policies and national poverty reduction strategy. In all cases, the government needs to take leadership and overall guidance in food security strategy development and streamlining.
- ✓ Appropriate units or task forces responsible for policy issues need to be established in ministries.
- ✓ In order to enhance the capacities of the ministries, there is need for capacity building support that targets the human resource capacity development through training,

- ✓ Monitoring and evaluation of the framework should be incorporated in the sector policies and overall food security strategy.

## CHAPTER SIX

### CONCLUSION AND RECOMMENDATIONS

#### 6.0 Conclusion

South Sudan is one of the structurally food deficit countries in Africa. Food insecurity is characterized mainly by recurrent drought, price fluctuations attributed to heavy dependence on imported food commodities from neighboring countries, civil insecurity and lack of infrastructure. Moreover, limited capacity for rural service delivery, shortage of productivity enhancing inputs, and lack of adaptable technology are structural problems that affect food security in South Sudan despite its high agricultural potential. In spite of the current spread of food insecurity problems, South Sudan is heavily reliant on food imports to feed its population due to the lack of domestic food production and infrastructure. In 2019, South Sudan spent approximately \$1.8 billion on food imports, making it one of the largest importers of food in Africa. Unfortunately, food insecurity remains a significant challenge in South Sudan, with an estimated 6.5 million people, or over half of the population experiencing severe food insecurity in 2021. The country has been facing a protracted humanitarian crisis characterized by conflict, displacement and economic instability which has severely affected food insecurity. The high cost of food imports and the depreciation of the South Sudanese pound have made food unaffordable for many people, especially those living in rural areas or displaced by conflict. According to the Food and Agricultural Organization (FAO), the cost of a basic food basket in South Sudan increased by 10% in 2020, further exacerbating the food insecurity situation.

In summary, South Sudan is spending a significant amount of money on food imports, but many of its citizens are still struggling to afford food. The ongoing humanitarian crisis and economic instability are major factors contributing to the high levels of food insecurity in the country.

## **6.1 Recommendation**

From the survey and key informant interviews, several recommendations and pathways can be extracted. South Sudan has an immense potential for sustainable economic development and improved food security with its vast natural resources and favorable agro-ecology. We have all the favorable climates such as the temperate climate, greenbelt climate (WES and Yei/Equatoria). The future is bright but we need to tackle the issue of security and then mindset change. This will bring revenue to the government and taxes will improve since they will not only depend on small business owners, there will also be less corruption and insecurity.

### **6.1.1 Stimulating Innovation to curb food insecurity and dependence on imports**

Innovation is doing something productive with minimum inputs. According to United Nations Fund for Population Activities (UNFPA) statistics, youth make up the largest population group in the country. The youth should therefore be included in any innovation or sustainability project because they are the most active and productive age group. The youth are the link between the current and future thus their vigor and ideas should be considered and utilized.

Another way to stimulate innovation is by linking agriculture to social life. In South Sudan, many connect agriculture to a rural mindset, anyone who practices agriculture is seen as rural, backward or poor. This wrong mindset needs to be changed, and training and commercialization of agriculture is needed in order to make it attractive to the general population.

Agriculture should also be linked to tourism to encourage more farmers in it. We could have an innovative productive center. We should move away from handouts because relief makes people lazy and we need to set a good example for the next generation. Farmers need to be encouraged to produce, create markets and improve networks.

Sometimes, farmers face the challenge of not having any market for their produce once they reach the city and markets. This is due to the fact that the general population prefers imports to what is locally grown in the country. When interviewing one trader, she preferred to sell tomatoes that are brought from Uganda to those grown locally in Aru Junction. Her reason was that the tomatoes from Uganda can last for more than 2 weeks under good conditions as opposed to those locally grown because the ones from Aru Junction do not have preservatives and thus perish within 3 to 5 days. This is where providing better quality seeds come in. Farmers need to be supported and a radical campaign to educate people on the cost benefit analysis to destroy the mindset of preferring imports from local production needs to be

emphasized. FAO, WFP and other developing partners should support local seeds companies' technically and financially to produce more certified seeds which are of South Sudan origin to reduce cases of non-viable seeds being imported and distributed to farmers.

### **6.1.2 Formation of farmer support groups**

Most of the rural population in the country practices agriculture. However, these farmers face many challenges, one of which is the poor road network and insecurity. Speaking to one of the farmers who lives in Torit and has been practicing Agriculture for more than 20 years, the main challenge he faces is the bad roads and insecurity along the road. Local farmers can get discouraged because their fresh produce cannot get to the market on time. There are no processing facilities so the food gets rotten. Labor is also expensive and is difficult to get a return for the investment.

One way we can solve this challenge is by encouraging farmers through education, financial and practical support through the formation of farmers' cooperatives, agricultural associations, women and youth groups. Farmers can be supported by being given high quality breeders of seeds. According to the Director of Research, Dr. George Tadu, there are specific breeds of agricultural produce that stay fresh longer and do not rot due to adverse conditions. Such agricultural produce can be beneficial for farmers whose rural areas are very far from the cities and market areas. Financial and physical support together with the technical support so that farmers know the "how to" aspects of farming is also vital. Farmers can be supported by providing them with tractors and more advanced tools to help in cultivating. They can also be supported by being given methods for irrigation to help them adopt a climate smart agricultural system. The challenge of not being close to the market can be solved by having a link between the farmers and the market known as middle men/by informing consumers when the locally grown foods will be available.

### **FARM Stew South Sudan – A Case Study**

One key informant interview in this research was done with the Executive director of FARM STEW South Sudan FS-SS, a non-profit making organization that was founded in South Sudan in November 2018. FS-SS is a Christian organization that aims to promote the health and wellbeing of rural and small families. FS-SS also aims to respond to the ever-increasing social, economic, health, and illiteracy challenges facing many South Sudanese. FARM STEW is an acronym that represents eight ingredients of a recipe for abundant life: F (Farming), A (Attitude), R (Rest), M (Meals), S (Sanitation), T (Temperance), E (Enterprise) and W (Water).

This organization had great insights towards fulfilling the paper's objectives. They focus on Food Security & Livelihoods, WASH, Education, Health and Nutrition, as these are the most development aspects that South Sudan needs to attain sustainable development. Their mission is to improve the health and well-being of poor families and vulnerable people around the world.

The organization educates the poorest and most hungry families on how to improve lives through fresh, home grown food, clean water, and strong community units. It equips families to address the root causes of hunger and disease. It is currently operating in Western Equatoria: Maridi and Yambio, Central Equatoria: Juba and Yei, Eastern Equatoria: Torit, Magwi, Ikwotos, Nimule, Western Bahr El ghazāl: Wau, Jur River. Warap: Tonj South.

Some of the solutions the organization is coming up with to solve the food insecurity issue is;

- 1. Establish Home Gardens:** Establish kitchen gardens and conservation agriculture by training and equipping subsistence farm families seeking to "end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food. The organization embarked on provision of seeds (crop & vegetables) and training to vulnerable households on kitchen gardening with agribusiness skills as supplementary to create resilience and sustainability. With funding from the SWISS Embassy, FS-SS implemented a project benefiting 1400 households in Magwi County through support on kitchen gardening. FS-SS distributed Vegetables seeds (sukuma wiki, tomatoes, onion, watermelon, cabbage, carrot, etc) and provided training on improved agronomics practices, IPM and post-harvest management. Vegetable gardening training on Nursery bed preparation and seedlings transplantation were conducted for the farmers that provided a source of income to the targeted household as there was high demand for the vegetables.
- 2. Increase Food Availability:** Increase simple, domestic processing of locally available and affordable plant-based foods to maximize nutrition value, particularly soybeans, maize, fruits, and vegetables.
- 3. Develop Small Business:** Develop entrepreneurial skills for income-generating activities (IGA) with agricultural products.
- 4. Improve Sanitation:** Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

FARM Stew uses integrated approaches in supporting households in kitchen gardening such as:

- Volunteers ToT training on good agronomics practices and deployment within the targeted areas.
- Setting of demo plots where field days and practical training are attended by the targeted household/members.
- Formation and training of farmers' groups, cooperatives and associations that help in easy transfer of knowledge to their household level.
- Formation and training of VSLA groups that help in saving income earned from the sale of vegetables.
- Entrepreneurship and business skill training that help the household in running and management of kitchen gardening business.
- Vegetable Utilisation & Nutrition training (cooking classes, value addition, preservation, and marketing) that help in proper preparation and utilization of nutrition dense meals.

With funding from GIZ in 2021, FS-SS has implemented resilient building projects in Juba County (Rajaf and Luri); with aims to minimize the impact of coronavirus (COVID-19) on food security and livelihood and promote behaviour change and sustainable agricultural livelihoods. The project contributed to addressing challenges of food security and livelihood created by the pandemic by creating awareness of coronavirus, facilitating the reintegration of returnees, improving access to water and strengthening smallholder agricultural production and capacities specifically in kitchen gardening.

With funding from the International Trade Center (ITC), FS-SS is currently implementing entrepreneurship and business management skills training in Juba County. This training is aimed at increasing business and management know-how on the agribusiness value chain and job creation among the participating youth--direct jobs, as well as the creation of indirect jobs due to vertical and horizontal value chain linkage. The project activities included; community awareness, mobilization, TOT training on entrepreneurship and business management skills, identification, selection, and registration of potential youth agripreneurs, training, mentorship and coaching, experience sharing and inspirational talks. However, just like many other organizations in South Sudan, FARM STEW faces financial constraints in widening their vision to reach more households and more counties in the country.



### **6.1.3 Security and policy reforms to curb the food insecurity issues**

In order for a country to be classified as food secure, the food has to be accessible, available and of good quality. However, South Sudan is characterized by poor roads where farmers cannot access the market in the city, the rise in food prices makes it inaccessible to a great number of the population and according to the Ministry of Agriculture and the Ministry of Humanitarian Affairs, the internally displaced persons are at a higher risk of being food insecure. National government should improve the security situation among the villages to allow farmers to concentrate on their farm land to produce food. There is also a need to improve physical infrastructure such as roads to allow farmers in the village setting to access markets in the town. The government should also provide agriculture loans to farmers to help to improve their business since we have observed that most farmers lack financial support. Finally, the national Ministry of Agriculture and Food Security should enforce policy and laws that regulate the business of seeds in the country to help farmers have access to viable and quality seeds.

### **6.1.4 Limitation of the Project and Further Studies**

There were challenges incurred during the survey where respondents may not have been very honest with all their answers. Other challenges were incurred during interviews with key informants who did not have sufficient data and relevant documents that may have helped answer the research questions effectively.

There is therefore a need for further empirical research to answer the research questions more effectively on quantifying the food importation business detail from right from the customs border through tallying and identifying the main stakeholders in the business, the importers. Further research should be done on the relationship between food importation and food insecurity as well as the associated risks of depending on food aid and how it relates to keeping a country food insecure. More research also needs to be done to learn the government's margins in the business and how much of that is going back to achieving long term sustainable goals of food security and economic development in order to reduce dependence on imports.

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## LIST OF APPENDICES

### APPENDIX A: Interview with Ministry of Agriculture

1. Briefly describe the roles the Ministry plays in ensuring sustainable economic development in South Sudan.
2. Today in South Sudan, millions of people are facing hunger brought by food insecurity which resulted from the ongoing conflicts. What is the government doing to achieve food security and stability for its hungry populations?
3. What is the contribution of Agriculture in employing South Sudanese? What is the job outlook for college students majoring in the Agricultural field of study/ food science?
4. What are the major challenges facing the Directorate?
5. Drawing from your experience, what more do you think could be done to stimulate innovation, keeping in mind partnerships with the government, development partners such as WFP and FAO and the civil society?
6. What is your vision for South Sudan at large in terms of agriculture and food security?
7. Given the recent move by the WFP to halt food provision to South Sudan, how ready is the government in tackling the inevitable food crisis? What homegrown solutions is the Ministry/Government coming up with other than depending on food aid to help solve the food insecurity? How can we reduce on dependence on food imports?
8. What are the policies put in place to combat food insecurity and how is the government planning to contribute to increasing food security resilience?
9. Tell me more about the Agricultural trade balance from 2011-2022.
10. As a nation that produces little, South Sudan must accept prices set by the producers/importers. This means that any shift in global food supply will affect the country immensely including a spike in food prices. What can the government do to tackle rising consumer food prices?
11. How is the government protecting the interests of its poor and vulnerable farmers?
12. What types of crops are generally being grown in South Sudan?

## **APPENDIX B: Interview with National Revenue Authority**

### **Questions**

1. What is your vision for South Sudan at large in terms of agriculture and food security?
2. What is the current situation of imports and the food importation business in South Sudan?
3. What are the policies put in place to combat food price inflation and how is the government planning to use the revenue to contribute to increasing food security and resilience for the betterment of the country's economy?
4. From your experience working with the revenue authority, what percentage of the importing companies has licenses and how much is a license?
5. Do you have any statistical data on the food importing companies or individuals operating in South Sudan? If so, which companies are directly involved with importing foodstuffs into the country? Could you quantify the food importation business in detail: The stakeholders in each of the processes from the companies importing food from other countries to transporters and wholesalers? Product volumes and their market shares, amounts of revenue accruing at different stages of the value chain; this is to better understand the overall economic significance and provisionally identify intervention priorities and opportunities.
7. How much is the government receiving through taxes/ government margins in the business?
8. What are the issues of emigration and customs at the border?

## **APPENDIX C: Interview with the National Bureau of Standards**

### **Questions**

1. under the laws of South Sudan, the National bureau of standards act: The purpose of this Act is to provide for a legal framework for the standardization of commodities and processes in South Sudan. What food safety standards have been put in place?
2. How are the policies set up being implemented; providing that South Sudan import bulk amounts of foodstuffs on a daily basis? How do you ensure the food imported daily is safe for consumers?

3. What is the general structure of food importing companies to South Sudan? Do you have any statistical data on the food importing companies or individuals operating in South Sudan? If so, which companies are directly involved with importing foodstuffs into the country? Could you quantify the food importation business in detail: The stakeholders in each of the processes from the companies importing food from other countries to transporters and wholesalers? Product volumes and their market shares, amounts of revenue accruing at different stages of the value chain; this is to better understand the overall economic significance and provisionally identify intervention priorities and opportunities.

4. From your experience working with SSNBS, what percentage of the importing companies has licenses and goes through the right channels to ensure food is fit for consumption?

5. Does SSNBS also assess the foods produced locally?

#### **APPENDIX D: Interview with farmers**

##### **Questions**

1. Tell me more about yourself and your work.

2. What has your experience been like since the country's independence?

3. What are some of the biggest challenges you face as an individual?

4. Drawing from your experience, what more do you think could be done to stimulate innovation keeping in mind partnerships with the government, development partners (FAO, WFP etc.) and other local farmers?

5. What advice do you have for the Government in tackling food insecurity?

## **APPENDIX E: Interview with FARM STEW South Sudan**

### **Questions**

1. Tell me more about your organization/enterprises
2. What has your experience been like since the establishment of the organization?
3. Who are the main investors of the organization?
4. The second SDG: Zero Hunger is far from being achieved especially in hunger stricken South Sudan. Millions of people face hunger on a daily basis. How are you aiming to solve the food insecurity issue through the organization?
5. How far has the organization gone into solving the issue/what is your current progress in enhancing resilience by reducing dependencies on food import.
6. What are some of the biggest challenges you face as an organization?
7. Drawing from your experience, what more do you think could be done to stimulate innovation keeping in mind partnerships with the government, development partners (FAO, WFPs etc) and local farmers?
8. What advices do you have for the government in tackling food insecurity?



# FOOD IMPORTATION BUSINESS



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