European International University

MBA in Marketing Management

Action Research Paper

Factors influencing Food price products at Juba, South Sudan market: Implication and Recommendation for Government intervention

Forename: Koma Charles

Surname: Wiri

Student ID number: EIU2027410

Word Count : 7966 Words

COVER PAGE AND DECLARATION

	Master of Business Administration (M.B.A.)
Specialisation :	Marketing Management
Module Code & Module Title :	MGT590 Action Research Paper
Students' Full Name :	Koma Charles Wiri
Word Count :	7966
Date of Submission :	12- October - 2024

I confirm that this assignment is my own work, is not copied from any other person's work (published/unpublished) and has not been previously submitted for assessment elsewhere.

E-SIGNATURE: ____Koma Charles Wiri_____

DATE: _____12-October - 2024_____

EIU Paris City Campus
Address: 59 Rue Lamarck, 75018 Paris, France | **Tel:** +33 144 857 317 | **Mobile/WhatsApp:** +33607591197 | **Email:** paris@eiu.ac

EIU Corporate Strategy & Operations Headquarter
Address: 12th Fl. Amarin Tower, 496-502 Ploenchit Rd., Bangkok 10330, Thailand | **Tel:** +66(2)256923 & +66(2)2569908 |
Mobile/WhatsApp: +33607591197 | **Email:** info@eiu.ac

Table of Contents

Cover Page and Declaration 1

Table of Contents 2

Dedication 4

Acknowledgment 5

Abstract 6

1. Rational for Research 7

2. Research Questions and Objectives 8

3. Literature review 10

3.1 Factors inflating food prices globally and the effect. 10
3.2 Factors inflating food price in the region and South Sudan 12
3.3 Food security and Prices theory 16
3.4 Market price control in South Sudan 17
4. Methodology 21

4.1 Research Design and Participants 21
4.2. Intervention and Data Collection Tool 22
4.3 Data Collection Procedure 23
5. Data Analysis and Research Findings 24

5.1 Interview and Observation Evaluation 24
5.1.1 Questionnaires Participants 24
5.1.2 Household Focus Group Discussion Participants 25
5.1.3 Age group 25
5.1.4 Gender 26
5.1.5 Marital Status 26
5.1.6 Education background 27
5.1.7 Occupational background 27

5.1.8 Juba resident sources of income 28
5.1.9 Potential employment opportunities for Juba residents..... 28
5.1.10 Main staple food Juba residents depends on. 29
5.1.11 Main food items in Juba market are imported from. 30
5.1.12 Food traders in Juba market are mainly. 30
5.1.13 Factors inflating food price in Juba market. 31
5.1.14 Food price inflation has affected the behaviour of households in Juba. 31
5.1.15 Change of shopping behaviour of household due to food price inflation. 32
5.1.16 Categories of Juba residents affected by food price inflation. 32
5.2 Content Analysis and Findings..... 33
5.2.1 Economic status, food demand and supply..... 33
5.2.2 Factors inflating food price in Juba Market 34
5.2.3 Effect of food price inflation on Juba residents 34
6. Conclusion, Implication and Recommendation..... 35

References 37

Appendices 39

Appendix 1: Glossary of terms and abbreviations 39
Appendix 2: Literature Review Table 40
Appendix 3: Data collection and Evaluation Procedure..... 41

Dedication

I dedicate my research work to God who has been the sources of my wisdom, knowledge, strength and ability .Special appreciation also goes to my family and friends who have inspired and motivated me through advice while pursuing this study.

Acknowledgment

I would like to express my special thanks to the entire administration of European International University for producing this program and mode of studies that fitted well with my context and schedules. All the lecturers of this program for their well vast knowledge, experience, and focus presentation of the topics.

My special appreciation also goes to Ms. Kanokkan S., Kanlaya Tipkamonman, Tina Yang and Christian Manaoat who supported right from process of admission and when stuck with assignment, they were ever ready for my aide. Most importantly, Dr. Katina who gave prudent advice and guidance during my research work, all these contributions are remarkable.

Abstract

Keywords: factors inflating food price, marketing structure, supplying market

Food price inflation has become a global issue. The study here is investigating the factors influencing the price of products at Juba market, South Sudan, and the questions to be answered are 1) What are the factors inflating food price in Juba market?2) What are the effects of high food prices to the households in Juba? 3) How local food production has contributed to high food prices in Juba market? 4) What can be done to stabilize high food price at Juba market? The aim of the study is to identify the factor inflating the price at the local market in Juba and recommend some measures to be taken. Qualitative method has been used to collect data where questionnaire sent participants, focus group discussion conducted to households and other information collected through researcher's observation.

The study has been conducted to 13 participants through questionnaire and 6 household focus groups whose age ranged from 18-58 years. The participants were from social /humanitarian workers, food traders who are both retailers ,wholesalers and students The participants were knowledgeable about the context and provided and in-depth information that wee valuable to the study .The information provided indicates that Juba residents have sources of income and potential employment opportunities with various institution but still were affected by inflating food price . The main staple food residents in Juba residents depends on were exported from Uganda and Sudan because local food production has been affected by several factors and food demand is high and this has affected the shopping behaviours of residents in Juba at various levels.

The analysis concludes with some recommendations for government intervention through agricultural sector to invest in storage infrastructure, policy , provision of farm inputs , support initiative taken by farmers .The future research to be done on how households are copying up despite of food price inflation and contribution of local producer to improve food security .

1. Rational for Research

South Sudan economy depends on agriculture which consists of livestock rearing, subsistence farming, collection of wild food and fishing. The main staple food crops that are dominate are sorghum, maize, millet, cassava, beans, lentils, varied vegetables etc.

When South Sudan gained independent in 2011, economy was somehow stable, and it's market structures were to be improved including regional marketing and other oversee trading. During this period, the main market in South Sudan lies within Nimule, Juba, Torit, Rumbek, Wau and Aweil.

In each of the South Sudan's ten states, local food production was carried out by the local farmers which was enough for their own consumption and cost of living was not high and many common people were able to purchase products in the market that were supplied by traders across the region i.e., Sudan, Ethiopia, Eritrea, Uganda Somalia, Kenya, and some from within South Sudan. The main markets process and other deep market prices differs depending on routes of the supplying market.

When conflict broke out in 2013 and 2016, marketing structure affected including supplies across the regions. Traders are unable to supply food product as it used to be citing the challenges of conflicts, numerous official and unofficial taxes along the route of the movement, poor infrastructures, inflation where local current become weak, dollar is the lead in transaction both internally and at regional level, unable to access market because people were displaced to inaccessible areas within South Sudan and others into refugee camps at the neighbouring countries. Due to this effect, some traders left business, but some kept on supplying market in South Sudan with maize beans, lentils, onions, sorghum, and other essential food items but at higher prices. Local production become low compared to the demand of the local population and this is an indicator of food insecurity in the country. Food prices became remarkably high, and many households could not afford it. As a result, importing of primary food from Kenya,

Uganda and Sudan became an option to meet the demand.[1] Despite of all the imported main food crops from the neighbouring countries, South Sudan is still being faced with continuous food crisis and skyrocketing of prices. There were several factors that has contributed to this and among others includes, sharp depreciation of national currency due to reduction of oil export.[2] Other factors were due to limited manufacturing sectors, armed conflict, drought, and flooding, hard current verses local currency exchange.

Therefore, this study is done with the purpose of identifying the factors that has influenced the prices of food items in Juba market and to propose appropriate recommendation.

2. Research Questions and Objectives

It is important to understand that inflating food prices has become a global issue and the households or population in Juba is part of the global village. Therefore, this study is trying to assess and evaluate the effect of inflating food prices and the impact on households through the following research questions.

- What are the factors influencing high food price in Juba market?
- What are the effects of high food prices to the households in Juba?
- How local food production has contributed to high food prices in Juba market?
- What can be done to stabilize high food price at Juba market?

The research questions have provided this study with the focus of investigation, and this has been widening by research objectives as indicated:

- To identify the causes of high food price in Juba market.
- To identify the effect of high food price in Juba market.
- To assess the problem associated with the local food production in South Sudan
- To and recommend for appropriate food security strategy.

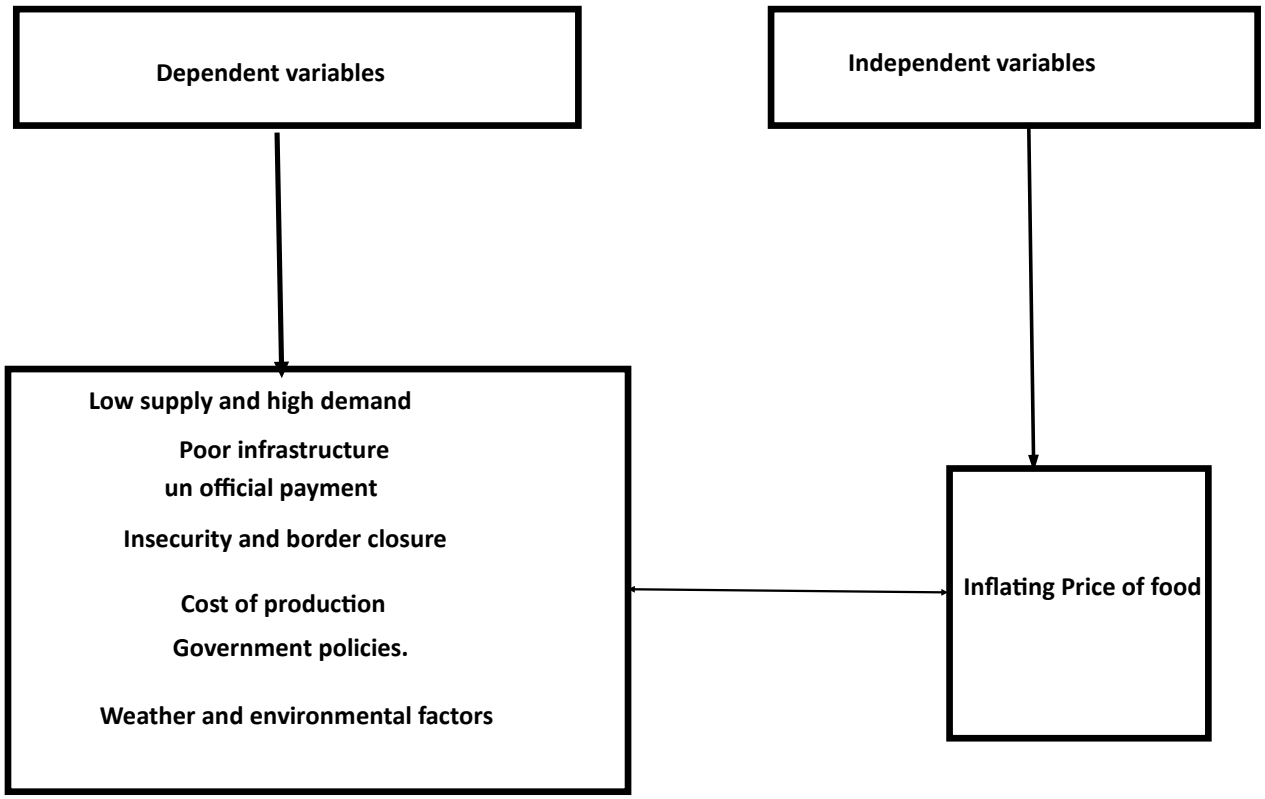
[1] https://www.google.com
[2] https://www.fao.org

Research Hypotheses

Prices in the market will continue to rise due to low supply and high demand of local products including other factors.

Research Variable

Figure 1: Dependent and independent variables



(Sources: Researcher)

3. Literature review

The literature here has assessed many related studies to determine the inflating food prices and its effect on the local population in Juba, South Sudan.

3.1 Factors inflating food prices globally and the effect.

Rising food prices is a serious matter and it has been noted as global crises. Food supply globally is not proposal to the demand. Recent factors that have further tightened world markets includes global demand for biofuels feedstocks and adverse weather conditions in some major grain and oilseed producing areas. Other factors that have added to global food commodity price inflation include the declining value of the United States dollar, rising energy prices, increasing agricultural costs of production, growing foreign exchange holdings by major food importing countries, and polices adopted recently by some exporting and importing countries to mitigate their own food price inflation (Trostle, R ,2008).

Trostle, further urged that annual growth rate production of grains or growth areas harvested has declined. Government and Private institution reduce their focus on agricultural research. Private institution focuses mostly on innovations that the private companies could sell to producers, and this is cost reducing but not enhancing technological development. While government has not focused on innovation that increases yield and productivity where farmers are unable to provide varieties of new seeds.

As seen from above, not only government or private institution do focus less on agriculture but also investors as stated further by Tostle, hedge funds, index funds, and sovereign wealth funds were more interested in agricultural commodity markets but less interested in agricultural commodities. They were using the commodities to diversify their financial portfolios or had only financial interest in the markets and did not intend to take delivery of the agricultural commodities.

According to report conducted by USGAO (March 2023) that one of the causes of high food price could be due to retail food price changes depending on locality or the country where the food is purchased. The variation could also be due to retailers passing on local cost increases in transportation and retail overhead expenses like labour and rent to consumers. Based on findings of UKODI (April 2008) that rising food prices globally is due to rising oil price, increase cost of fertilizers, machine operation, transportation costs, drought hit production field, cost of production, speculation in commodity price by investors and falling value of dollar. These factors have impacted the poor, farming, and low-income countries through:

High food prices affect the poor directly, as producer and consumers and indirectly through the impact on their economies. The greatest concern is the impact on their food consumption. While most of the world's poor live in rural areas, not all are farmers, and even some farmers buy staples. The poor spend large fractions of their budgets on food, so rising prices make them more likely to reduce their food consumption. Inflated costs that push up import parity prices also hold down export parity prices. They also pointed out that farmers may lack the credit and inputs needed to respond in the short term.

Food aid is programmed by budget, not volume, therefore, the raising prices depress supply. There is varying effect with farming household benefiting, and others losing out. Overall, the economy suffers and reduced consumer spending on other goods and services puts a brake on economic growth.

Ulimwengu and Ramadan (2009) in their study about how does food price affect Ugandan household, found out that the poor households who already spend much of their income on food are eating less, buy less nutritive food and reducing other relevant expenses as a response to high food price.

Ayenew and Yibeltal (2023) conducted studies on challenges of Agricultural Marketing in East Africa Developing countries, pointed out that the Policy option that prompts export-driven

production and food sustainability should be adopted. There should be measures that save food producers from collapsing and focus to increase agricultural productivity. The findings of study shows that the challenge of agricultural marketing among other includes Price fluctuation, market monopoly, and problem of liberalization for agricultural marketing in the country. There is poor accessibility to the market, unstable prices, drought, in adequate financial services, and poor infrastructure are the factors that affect agricultural marketing in East Africa Countries.

Uganda is the main supply of basic food items to South Sudan, when it is facing some challenges in agricultural due to above mentioned factor, then South Sudan is impacted with prices for food items shoots up.

Tongun and Wan (2018) did study on factors influencing the consumption and Purchasing of Local Maize in South Sudan, their study mentioned that maize is one of the important foods for most South Sudanese. Local maize is more beneficial and healthier with less chemical compared to imported ones. However, local maize is expensive, not easily found and their store or grocery are no found in Juba or other marketplaces compared to imported maize. Demand for local maize is high but it has exceeded the domestic supply. The gap here can only be filled by the imported maize. Therefore, it has been observed that demand for food in South Sudan is higher and the domestic supply cannot meet this need unless through imported food supply.

3.2 Factors inflating food price in the region and South Sudan

South Sudan is boarding Uganda, Kenya, Ethiopia, Libya, Chand Democratic Republic of Congo, and Chad. In all these, at least there are some ongoing trades at the border. However, regionally, South Sudan is mostly linked to East Africa where most of her food supply come from. In the study conducted by African Development Bank Group on Competitiveness and Cross Border Trade with neighbouring contraries shows that the source of food supply for major urban markets in South Sudan was Sudan and Uganda as this dominated the trade between the

two countries. However, the challenge being face is the poor infrastructure in South Sudan which is slowing down the sustainable development.

South Sudan is a land lock country, and it has become part of East Africa, countries that includes Kenya, Uganda, Tanzania, Rwanda, and Burundi. According to Mosel & Hendeson (2015) that South Sudan mostly depend on oil revenue that represent 99% of export and 95% government revenue that accounts for about 50% GDP. However, most of non-oil revenue are not exploited. Most of the goods including food items are imported from other countries.

The immediate countries that import food items into South Sudan mostly are Sudan, Uganda, Kenya, Ethiopia, and others to lesser extent.

Studies conducted on Market in Crises by Mosel and Henderson (2015) shows that sorghum is the main staple crops cultivated by 68% of the households, maize grown by 44%, ground nuts by 33% a, 13 % households and three-quarter of household's own livestock. The food produced is not proportionally to the population and 70% of households spend most of their income on food that are bought from markets. It has been observed that there are traders who procure or sell local food products in markets in Juba and elsewhere and these are assumed to be local traders who depend on food items that are produced locally in South Sudan from Western Equatoria, Eastern Equatoria and Central Equatorial. However, less is expected from other seven States and two administrative areas.

Mosel and Henderson further pointed out that South Sudan import most of the main staple food from East Africa that accounts to 57%. This is from Uganda, some few from Sudan, very few from Kenya and Ethiopia. The estimates for the maize imported from Uganda is said to be 54% and good percentage of sorghum too.

Most traders in Juba and other Parts of South Sudan import their food from Uganda and this has been estimated between 85%-90%. These traders compose of wholesaler's retailers, and

small sellers. The main reason of the traders making decision to import foods from Uganda is due to better exchange rate, availability access to foreign currency (ibid).

It has been estimated that the South Sudanese markets are dominated by foreigners that are from Sudan, Somali, Eritrean, Ethiopians, Ugandans and others that constitute about 85% while South Sudanese traders have about 15%. Based on the same study that local shareholders are rarely a businessperson or provide capital, but simply offers entry point into the local market and establish useful connection (ibid).

It has been observed that South Sudan market depends on imported goods, and this has inflated the prices of goods and services. This ever-inflating price has been attributed to factors such as

Transport cost from Kampala or other part of Uganda to markets in South Sudan is expensive. Rental price is high, and the traders bring cereal or food items tern to raise the price of items to recover their money. Study conducted by NBS in 2011 discovered that there are numerous checkpoints between main market routes where traders will have to pay some amount of money at each checkpoint and many of these payments are unofficial and traders will have to increase the prices of food to recover their money.

Food items are bought cheaply in Uganda, but traders operating Kampala (Uganda) and South Sudan must exchange South Sudanese pounds into dollar for transaction. Many times, this exchange rate is unofficial and with fluctuation of exchange rate, the traders will ensure this does not have negative impact on his business.

Conflict and Insecurity -when conflict broke out in 2013, some markets were impacted, especially in Bentiu, Malakal and Bor. This means that some Sudanese traders who supply South Sudan market with sorghum and other food items either lost their business during conflict or it was risky for them to supply food items using these routes. Accordingly, Chamber of Commerce reported 40% decreased in registration of new companies since conflict started. In

2016 conflict, within Juba, food items including other items were looted and many of these were from foreigner traders. These resulted into many foreign traders leaving business in South Sudan and this situation impacted market and prices shoot up.

Ayober (2021) stated that the main cause of inflation is depending on oil revenue and neglecting non -oil revenue, entire depending on imports of goods and services, corruption and mismanagement economics of resource, no economic production or poor export, high. High taxes rates, huge amount of liquid money in circulation, poor physical policy, insecurity, and war which causing political instability in the country and devaluation of country currency. Inflation also increases cost of living because price increase, the fixed income will come poor to meet the cost at the market reducing purchasing power and pending more and it discourages saving, since the purchasing power of deposits erodes over.

Dukhan and Celestine (2023) carried study about analysing the main driver and Control of inflation in South Sudan where they pointed out that unofficial exchange rate contributed to inflation and depreciation of local currency, free market has no control, few households are food efficient, and many depends on market. In their recommendation, they state that government of South Sudan should collaborate with the international partners to address the food insecurity problem and poverty impacted by soaring prices and carry deprecation. Further, the government should reduce security and risk and informal roadblocks along internal trade routes that adds to transport costs, transport industry should be made competitive to regulate domination and ensure imports are not obstructed by unnecessary procedure, work to resolve border closure with Sudan that supply main food into South Sudan markets and invest in road infrastructure through the country.

The study further recommends that to reduce high food price, there need to diversification of economy and depend Less on oil revenue so that fund is allocated for importation and

agriculture which would improve supply, contribute to food price reduction, and increase food security.

3.3 Food security and Prices theory

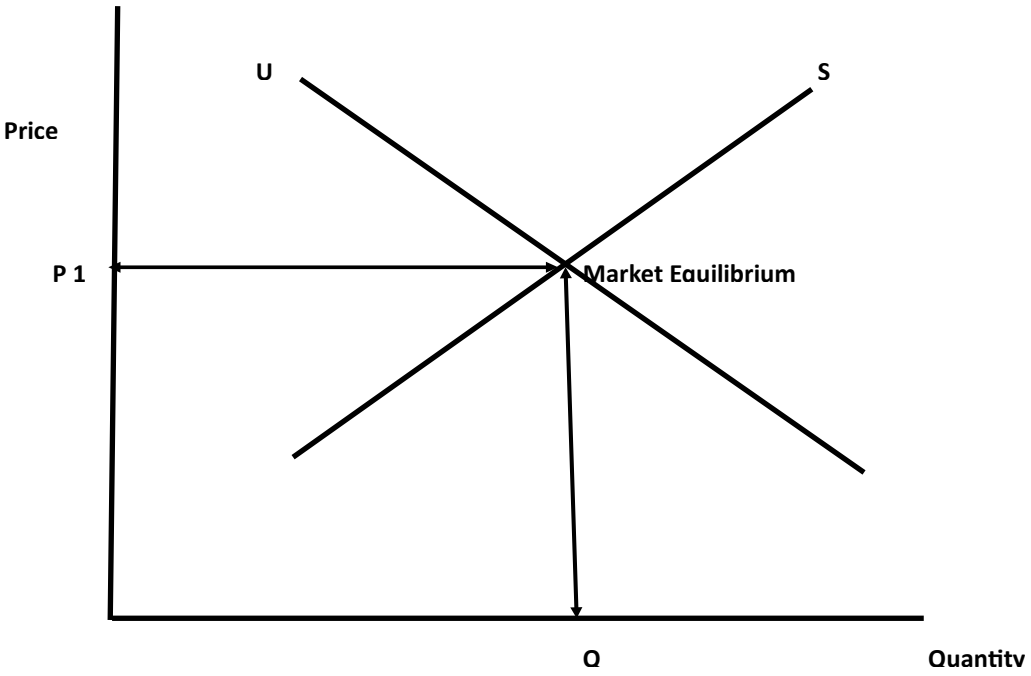
Food security and price can be well understood when several theories such as economic theories are used to explain it. This involves a range of factors such as economic growth, climate change, supply and demand, trade policies, geopolitical tensions, and technological progress. Therefore, economic theories would help to explain and enable understanding of the factors that influence food security and prices.

- Market equilibrium theory is when food process will tend towards a market-clearing level and food supplied will be equal to the quantity of food demanded.
- Agricultural productivity theory focuses on the relationship between food production and economic growth. It states that increasing agricultural productivity will lead to increase food supply and lower prices.
- Food price volatility theory examines the factors that contribute to fluctuation in food prices such as changes in production levels, demand patterns, trade polices a, and geopolitical tensions.
- Agriculture trade theory focuses on the role of trade in food security and prices. It suggests that international trade can help to increase food supply, reduce prices, and improve food security.
- Climate change theory examines the impact of climate change on food security and prices. According to this theory, that climate change can have significant effects on food production, leading to changes in supply and prices.

3.4 Market price control in South Sudan

Looking at Market equilibrium it happens when the quantity demanded is equal to the quantity suppled at a given price. This can also be a state where the demand for good or services matches the supply, resulting in an optimal price for both buyers and sellers.[3]

Figure 2: Market Equilibrium



(Sources: Researcher)

There are factors that affect market equilibrium and price elasticity that includes.

When product is available, consumers switch to substitute, and this reduce the demand for the original product. This affects the market equilibrium and the original product's price.

Likely if income of consumers increases, they might spend more on goods and services which will increase the demand for products. However, when income of consumers decreases, they

[3] https://fastercapital.com

will reduce their spending, and this leads to decrease in demand. Therefore, prices increase or decreases depending on the direction of demand.

In short term, demand may be inelastic, which means consumers may not be able to adjust to changes in price but in long term, demand might become elastic, and consumers might have time to adjust to changes in price.

When production costs of product increase, the supply might decreases leading to an increase in price but when the production costs decrease, the supply might increase, leading to decrease in price .Therefore, when production costs increases, producers may be forced to raise prices to maintain profitability and this increase in price might lead to decrease in demand as consumers will opt to cheaper alternative or reduce their consumption. This fluctuation depending on the costs of production affects market equilibrium and prices.

Market equilibrium and prices are affected by government regulations in sense when the government imposes taxes on a product, the price increases and this leads to a decrease in demand but when government reduces taxes on a product, the price might decrease, and this leads to increase in demand.

Change in consumer's preference affects market equilibrium too. When a consumer changes their preference, demand for goods and services increases or decreases. For instance, becomes more health conscious, the demand for organic food and health supplements may increase, this might cause swift in demand curve and market may move away from equilibrium and prices may adjust to reflect the new demand.

Increase in population size, leads to increase demand for goods and services that results into market equilibrium swift but decrease in population size, leads to surplus supply and a decrease in equilibrium price.

Introducing innovative technology can lead to increased food production efficiency and lower costs, but also inefficiency of the technology use will impact production negatively and this will impact supply and demand in either way.

The external factors referred to includes natural disasters, wars, and political instability. When a natural disaster destroys farmland, the supply of food will decrease and if war also breaks in country, supply will also decrease.

African Development Bank Group conducted study on Competitiveness and Cross Border Trade with neighbouring contraries and it shows that the source of food supply for major urban markets in South Sudan was Sudan and Uganda as this dominated the trade between the two countries. However, the challenge being face is the poor infrastructure in South Sudan which is slowing down the sustainable development.

Impact of checkpoints on markets in South Sudan, Schouten, Mattysen and Muller (2021), emphasis on the numerous checkpoints is one of the areas that has made food price to go higher. According to their findings that checkpoints for river has been estimated at 21% and for road transport at 71%. Some of these checkpoints are official but other are not. Also based on their studies that 84% payment at these checkpoints are receipted and 16% receipted. This is one of the key factors in the high transport price and in terns it impacts the prices of imported food items including domestic products.

Free Market Economy has been noted as one of the root causes of the soaring prices in South Sudan. According to this market system it is not easy to control price of goods and services in the market, but supply and demand detect the price with little or no government control. It is centred on voluntary exchange which involved two parties where they freely trade goods and services.[4]According to studies conducted regarding market economy and the remarks

[4] https://www.investopedia.com

made is that South Sudan almost has no economy, and it has adopted a free-market style economy, but so far, it has no infrastructure, no capital to invest and it is the poorest nation in the world. Its functioning economy is a traditional economy that rely on barter and the exchange of goods for services.[5]

Some of the studies conducted and the findings pointed out that some of the factors that have impacted the market and inflating food prices in South Sudan are but not limited to:

- Cost of hiring vehicles
- Poor infrastructure
- Low local food production.
- Cost of work permit for foreigner traders and unnecessary taxes
- unofficial checkpoints and receipted payment
- unofficial exchange rate of dollar into local currency (South Sudanese Pound)
- Effect of insecurity or conflict on food trade.
- South Sudan adopted free economy market system, where not easy to control the market.

All above impacted the market in South Sudan particularly in Juba and caused the food prices to go high. Demand for food has dropped, some families go without basic food, others have reduced number of meals and hence quickly to health issues because they might lack other nutrients in the body.

[5] https://www.goole.com

4. Methodology

4.1 Research Design and Participants

The researcher adopts experimental approach to involve one or more independent variable used to manipulate and apply to one or more dependent variable to measure the effect. The study used the effect of the independent variable on dependent variable to enhance the conclusion of relationship between the variables. The study adopted, the pre-experimental research design to involve various dependent variables, the effect of the application of independent variable would cause changes.

The research used qualitative method because the data collected and analysed cannot be quantified and the techniques to be used is interviews or focus group discussion, observations, and document analysis.

Population

The research study targeted food traders in Juba both those importing or producing food locally and selling them at the local market in Juba including households. The targeted market in Juba were 6 major markets in Juba where food items are sold at wholesale or retailed prices. These markets are in strategic residential areas of the town, with more than 10 smaller markets, shops and stores close to residential areas. In this market the food traders are importing and selling food as wholesalers or retailers. There are also local producer and household who are involved as food trader at the retailing level.

Figure 1: Targeted population

Juba Markets	Participants of Questionnaire	Participants of Households
Gumbo (Owino)	10	4
Konykonyo	4	2
Jebel	4	2
Munuki	4	2
Gudele 1	4	2
Gudele 2	4	2
Small markets, shops & stores	4	2
	34	16

Sample

The research focus on convenience sampling to enable easy access to respondents and data collection was not expensive. Voluntarily responding sampling was also used because some respondents voluntarily participated in filling the questioner or join focus group discussion especially at household level or group of small retailers who sells both local and imported food items.

Purposive sampling has been used with the aim of knowing the opinion and information from the respondents during focus group discussion and during observation.

Sampling size figure 2

Respondents	**Frequency**	**Percentage**
Food traders' importers/wholesalers	6	20%
Food traders' importers/retailers	6	20%
Food traders' local suppliers	3	10%
Food traders' local retailers	3	10%
Households	12	40%
Total	**30**	**100%**

4.2. Intervention and Data Collection Tool

The secondary data collected from various sources are available in websites, Journal, and books. These sources were gathered online, and they focus on identifying the most food items

South Sudanese depends on, why food imported from neighbouring countries and causes of food price inflation in South Sudan and the effect on households.

An in-depth primary data was collected during face-to-face interaction with the participants through questionnaire that were sent to specific targeted participants and the questionnaire were physically distributed but based on the participant's consent.

Focus group discussion, data were collected from participants who were from household as they are the consumers or food purchasers who usually go to market in Juba. These group were selected according to the area where the main markets are situated. The research has specific guided questions to gather the view of the groups and the number were limited for easy management.

The study also use observation, especially visiting both the main and small markets including those who sell food items at roadside, household level or residential areas in Juba to observe the purchases at the food store, or other places where food items were sold to observed purchase behaviour, frequency, types, quality, or quantity of food items.

4.3 Data Collection Procedure

The research methods and it shows the research used qualitative methods and it shows the factors implanting food price in Juba market and how it has impacted the households in Juba. The process of the data collected and procedure for evaluating the specific study has been discussed as below and clarified in the appendix 3.

Validation of data collected is important for analysing research objectives. Data collected focused on factors inflating food price in Juba market and how it impacted the households in Juba. This has also been supported by interview conducted to food traders through questioners and household focus group discussion conducted in Juba.

The data collected from secondary sources revealed the economic potential of the country but still face with food insecurity. Other studies evaluated how other countries supplying food to meet local demand but still food price inflation continues to rise and the other factors inflating. Nevertheless, this paper evaluates factors inflating food price in Juba market and the effect. The research uses the multimethod research approach to collect data.

Diverse sources of data collected were cited with no plagiarism and the research pointed out the study objectives and analyse the factors influencing the price of the main food in Juba market and pointed out how low supply has contributed to this factor inflating the food price internally. The data were collected from reliable sources, the study evaluate the data collected with both content analysis and directed content analysis approaches. The primary data were also collected and analyse through table where the findings indicated the study been investigated and the results wren interpreted based on the research objectives.

5. Data Analysis and Research Findings

This section evaluates data collected from participants through questionnaire, focus group discussion and observation. The analysis used to answer the research questions and suggest a future result.

5.1 Interview and Observation Evaluation

The study examines the data collected from participants were used to support the factors inflating food price in South Sudan and their effect on households in Juba. The data were collected from food traders, social workers, students, and households in Juba and analysed as below.

5.1.1 Questionnaires Participants

From table 5.1.1 below the questionnaires meant for 20 participants for Food Traders and household participants. Those who filled the questionnaire and returned to researcher were 13

and this represents 65 % while 7 did not fill the questionnaire citing that they were taken by other schedules and decline with best reasons known to them represent 35 %.

Table 5.1.1: Questionnaires Participants

Participants	Frequency	Percentage
Participated	13	65 %
Not participated	7	35 %
Total	20	100 %

5.1.2 Household Focus Group Discussion Participants

As seen from the table 5.1.2, household focus group discussion was planned for 10 households, but it was done successfully in 6 households representing 60 %. In 4 households representing 40% were not conducted due to time factors.

Table 5.1.2: Household Focus Group Discussion

Participants	Frequency	Percentage
Participated (households)	6	60 %
Not participated (households)	4	40 %
Total	10	100 %

Therefore, both table 5.1.1 and 5.1.2 shows the targeted participants by the study. Thought 35 % - 40 % did not participate but the participation of 60 % to 65 % participants have provided some valuable information for the study.

5.1.3 Age group

In table 5.1.3 shown below, the age group of participants rearrange from 18-58 above. Majority participants were from age group 38-47 years (35.71 %), follow by 28- 37 years (32.14 %), 18-27 years (17.85 %) ,48-57 years (10.71 %) and 58 – above years (3.57 %). This means, majority participants are at their productive age, responsible and mature individuals who have diverse needs, preference, and habits on how they spend their money.

Table 5.1.3: Age group

Age group	Frequency	Percentage
18-27	5	17.85 %
28-37	9	32.14 %
38-47	10	35.71 %
48-57	3	10.71 %
58 above	1	3.57 %
Total	28	100 %

5.1.4 Gender

In table 5.1.4 majority of the participants were female (57.14 %) while male (42.86 %) It has been perceived that gender plays an important role in shaping customer's purchasing intention but context here, men are the bread winner in the family and women plan how the available resources can be used to meet the basic needs in the family.

Table 5.1.4: Gender

Participants	Frequency	Percentage
Male	12	42.86 %
Female	16	57.14 %
Total	28	100 %

5.1.5 Marital Status

Below table 5.1.5 shows majority of participants were married 22 (78.57 %) but 6 singles (21.43 %). It is certain that as members of households in Juba, no one could explain to them the inflating food price in the market, but their experience explains it to them.

Table 5.1.5: Marital Status

Participants	Frequency	Percentage
Married	22	78.57 %
single	6	21.43 %
Total	28	100 %

5.1.6 Education background

In the table below 5.1.6, the education level of the participants ranges from those who did not attend formal education to master's degree. Majority of the participants attended primary – high level (35.71 %), followed by college certificate or Diploma (25 %), Degree (21.42 %), and not attained any level 10.71 % and Master (7.14 %).

It is believed that education change the values, interest and the buying habits and these participants with various level of education would get dipper insight of how the inflating price affect the buying behaviour and are able to propose the coping mechanism. However, for those who did not attain formal level, have already learned from their experience.

Table 5.1.6: Education background

Response	Frequency	Percentage
Not attained formal education	3	10.71 %
Primary or high level	10	35.71 %
College certificate or Diploma	7	25 %
Degree	6	21.42 %
Master	2	7.14 %
Others	0	0
Total	28	100 %

5.1.7 Occupational background

The table 5.1.7 shows that food traders who were the majority with 39.29 %, social workers with 32.14 %, students represent 21.4 % and casual worker with 7.14 %. These participants with various occupation background gives wider understanding about factors inflating food price at the market and how it impacts the cost of living.

Table 5.1.7: Occupational Backgrounds

Response	Frequency	Percentage
Social worker	9	32.14 %
Food trader wholesale/ retailer	11	39.29 %
students	6	21.42 %
Causal worker	2	7.14 %
	28	100 %

5.1.8 Juba resident sources of income

In the table below 28.57 % indicate Juba residents' sources of income is from wholesaler / retailer business, 21.43 % from company /NGOs, 17.85 % from causal work, 14.28 % from salary from government, 10.71 % from remittent and 7.14 % from others. This means that most residents in Juba can understand and think on what affect their operations, physically or mentally health. From their income, they can make decision on how to spend their money and what to buy and when.

Table 5.1.8: Juba Resident Sources of Income

Response	Frequency	Percentage
Remittent	3	10.71 %
Wholesaler/retailer business	8	28.57 %
Company / NGOs	6	21.43 %
Salary from government	4	14.28 %
Causal workers	5	17.85 %
others	2	7.14 %
	28	100 %

5.1.9 Potential employment opportunities for Juba residents.

In table 5.1.9, Participants mentioned that 39.29 % residents in Juba were self-employed/business, 35.71 % were government employees, and 25 % were employed by NGOs/companies. Therefore, there is employment opportunity but with varied salary and demand, and how inflating food price affect them.

Table 5.1.9: Potential employment opportunities for Juba residents

Response	Frequency	Percentage
Self-employed	11	39.29 %
NGOs / companies	7	25 %
Government	10	35.71 %
Unemployment	0	0
	28	100 %

5.1.10 Main staple food Juba residents depends on.

In table 5.1.10 participants stated that main food Juba residents depends on sorghum were 19.39 %, maize were 14.29 %, vegetables were 12.24 %, cassava were 11.22 %, beans were 10.20 %, lentils were 9.18 %, groundnuts were 9.18 %, matoke/banana were 4.08 % and rice were 3.06 %. This means most residents in Juba depends on these food items to meet their basic needs and it also shows their economic status. Lack of these main food items and an inflation in price affects the population and causes food insecurity in Juba which leads to starvation or malnutrition.

Table 5.1.10: Main staple food Juba Resident depends on

Response	Frequency	Percentage
Matoke / banana	4	4.08 %
Sorghum	19	19.39 %
Wheat	0	0
Rice	3	3.06 %
Potatoes	7	7.14 %
Beans	10	10.20 %
Lentils	9	9.18 %
Cassava	11	11.22 %
Maize	14	14.29 %
Vegetables	12	12.24 %
Groundnuts	9	9.18 %
	98	100 %

5.1.11 Main food items in Juba market are imported from.

As seen from the table 5.1.11, most participants mentioned that 54.76 % of main food items were imported from Uganda, 35.71 % were from Sudan, 7.14 % from Congo DRC and 2.38 % from Ethiopia but none of the participants mentioned Tanzania and Rwanda. The traders were supplying these food items because they had access to the main markets and security wise, the area is somehow stable compared to other areas.

Table 5.1.11: Main food items in Juba market are imported from.

Response	Frequency	Percentage
Ethiopia	1	2.38 %
Rwanda	0	0
Tanzania	0	0
Sudan	15	35.71 %
Uganda	23	54.76 %
Congo DRC	3	7.14 %
	42	100 %

5.1.12 Food traders in Juba market are mainly.

In table 5.1.12, majority of the food traders in Juba market are traders importing food and are also retailer were 34 %, traders importing food and are wholesaler were 22 %, local retailer were 18 %, local producers were 14 % and households were 12 %. This means that most food traders were retailers who also involved in importing food, followed by wholesalers and other traders could be the local retailers and households.

Table 5.1.12: Food traders in Juba market are mainly

Response	Frequency	Percentage
Traders importing food and wholesalers	11	22 %
Traders importing food and retailer	17	34 %
Local producers	7	14 %
Local retailers	9	18 %
Households	6	12 %
Others	0	0
Total	50	100 %

5.1.13 Factors inflating food price in Juba market.

In table 5.1.13 the responses to the factors inflating food price in Juba market indicates that unlawful check points and payment were 25.49 %, government policy were 19.61 %, currency inflation were 17.65 %, local demand is high were 13.73 %, transport were 11.76 %, poor were 9.80 %, supply chain were 9.80 % and effect of weather were 5.88 %.

Other factors that added to the food price inflation are laziness of the residents and they are relying only on food in the market, unwillingness to invest in other economy, too much dependency on imported ford and aids and free market economy system in the country.

This means there were several factors that has caused the food price inflation and these need to be addressed. It has been observed that if insecurity issues could be addressed more constructively, then other factors could be addressed easily.

Table 5.1.13: Factors inflating food price in Juba market.

Response	Frequency	Percentage
Supply chain	5	9.80 %
Government policy	10	19.61 %
Local demands are high	7	13.73 %
Transport	6	11.76 %
Unlawful check points and payment	13	25.49 %
Poor infrastructure	5	9.80 %
Currency inflation	9	17.65 %
Effect of weather	3	5.88 %
	51	100 %

5.1.14 Food price inflation has affected the behaviour of households in Juba.

In table 5.1.14 participants who confirmed that inflating food price has affected the household behaviour were 92.86 % and 7.14 % however were not sure and they did not respond. This means that the household who are customers or consumers being affected have reacted to these changes and are copping u differently.

Table 5.1.14: Food price inflation has affected the behaviour of households in Juba.

Response	Frequency	Percentage
Yes	26	92.86 %
No	0	0
Not sure	2	7.14 %
	28	100 %

5.1.15 Change of shopping behaviour of household due to food price inflation.

In table 5.1.15 the participants, 41.67 % stated that the shopping frequency of households has reduced, 37.5 % they buy cheaper alternatives, 14.58 % have not made any change and 6.25 % have stopped buying.

Effect of the high price has forced an individual or at household level to make decision to readjust on how to buy food items based on what they are able to afford. Reduced frequency of purchasing food item, going for cheaper alternatives, or stopping to purchase food leads to negative impacts in relation to health because.

Table 5.1.15: Change of shopping behaviour of households due to food price inflation.

Response	Frequency	Percentage
They buy cheaper alternatives	18	37.5 %
They have reduced shopping frequency	20	41.67 %
They have not made any change	7	14.58 %
They have stopped buying	3	6.25 %
	48	100 %

5.1.16 Categories of Juba residents affected by food price inflation.

In terms of the most affected by inflating food price, table 5.1.16 indicates that 38.24 % affected were the unemployed, 26.47 % were government employees, 20.59 % were self-employees and 14.70 % were NGOs/company employees .This means that the effect is much felt by unemployed, government civil servants, low income earners and casual worker but less

felt by self-employed and NGOs/companies employees due to frequency of payment and salary or wage difference.

Table 5.1.16: **Categories of Juba residents affected by food price inflation.**

Response	Frequency	Percentage
Self-employees	7	20.59 %
Unemployed	13	38.24 %
Government employees	9	26.47 %
NGOs/company employees	5	14.70 %
	34	100 %

5.2 Content Analysis and Findings

Based on the analysis of research articles and the study done through questionnaire and focus group discussing indicated the participation of both male and female who were of productive age, higher female participation because they understand food expenses more than the male partners. More married participants because food price inflation is felt more at household level and how it impacts their lives. The participants were of varied educational and occupational background who provided insight or wider understanding about the factors inflating food price at the market and how it impacts the cost of living. Therefore, the following ae the findings from content analysis and research finding:

5.2.1 Economic status, food demand and supply

The sources of income for Juba residents were from business that is mostly.

Wholesale/retail, some get sources of their income from companies or NGOs, salary from the government, remittent and other sources. This gives indication that the resident has capacity to understand and think what affect their operation, physically and mental health whereby they can make decision on how and when to spend their money.

The study shows that most of the residents in Juba were self-employed, government employees, NGO employees. This shows that there is employment or potential opportunities.

5.2.2 Factors inflating food price in Juba Market

The main staple food that residents depends on is sorghum, maize, vegetables, cassava, beans, lentils, groundnuts, but depend less on matoke / bananas and rice. These foods are not produced internally but are imported from Uganda and Sudan mainly but less extend from DRC and Ethiopia. The traders can supply these food items is because they have access to the main markets and with improved security situation. The traders importing food are retailers, wholesalers, but few local retailers who are also household.

The study also pointed out the factors contributing to food inflation are unlawful check points and payment, government policy, currency inflation, local demand is higher, transport, poor infrastructure, supply chain and effect of weather. Other factors contributing are unwillingness to invest in other economy, insecurity, too much dependency on aids, laziness of residents and relying on the food in the market. These several factors have inflated food price shapely, and it need to be addressed.

5.2.3 Effect of food price inflation on Juba residents

The inflating food price has impacted the households' behaviours where they have reacted and have different copying behaviours. Individuals or households have made decision to readjust on how to buy, what to buy and when based on what they are able to afford. Their reacting behaviour of reduced frequency of purchasing food items, going for cheaper alternative s or stop to purchase could lead to negative impact in relation to their health because what they might buy could have less nutrients and lead to health concern / malnutrition.

Food price inflation in the market is much felt by unemployed, government civil servants, low-income earners, and casual workers but the level of the effect is not the same with self -employed and NGOs/companies employees due to frequency of payment and salary or wage difference. The effect has resulted to increase in crimes, number of street children has grown, school dropout, breakage in families /infidelities, prostitution, rampart and unplanned

marriage and thefts since their monthly earnings could only afford to purchase a meal for a day or less and thus this leads to high food insecurity and malnutrition.

Salaries in South Sudan are influence by several factors and effect varies from diverse groups and industries. Some of the highlighted factors among others includes economic stability, occupational sector, education and skills, experience foreign aids and investment, government policy, supply and demand, inflations, geographical location, gender, and international market price.[6]

6. Conclusion, Implication and Recommendation

The research focus on factors inflating food price in Juba market and the impact on the residents. The study evaluated the economic status of the residents and relate to how local supply and demand unable to meet their basic needs and importing basic food items from neighbouring countries was seen as a remedy to control the inflating food price in the Juba market. This was examined by data collected from various resources on the related studies and primary sources through questionnaire and focus group discussion.

Despite of economic status and employment opportunities, the food price inflation continuous to rise and this has impacted all the economic level status though it varies from one to another that has resulted to inflated cost of living and by residents unable to participate in other activities and this has also impacted economy of the country. After understanding the factor inflating food price and the impact or and the related implication, the study recommended that there is need for government intervention through agricultural sector especially:

- Invest directly in storage infrastructure such as national strategic reserve where food is produced or purchased and stocked for the purpose of future domestic demand. To have agricultural policy where farmers are provided with loans at reduced interest rate, provided

[6] Average salary in South Sudan, https://www.timecamp.com

farm inputs and support their schemes. The government should invest in agriculture where local farmers are capacitated with skills and provided with farm inputs to enable them to produce enough food for local consumptions and exports. This would encourage locally grown food and enhance food security. Thus, with higher or improved level of production locally food price is likely to drop.

- Partnership between local farmers and private organizations dealing with agriculture or government to support initiatives taken by farmers.

- Government and partners to engage communities in addressing inter - communal conflicts, threats, and commitment of warring parties to political will and this will allow security to prevail and enable farmers to work on their farms and produce enough food to meet the demand of the local population and hence reduction in food price in the market.

The research has a certain limitation, it focuses much on factors inflating food price and effect, but future study can be conducted on how the impacted households because of food inflation are copying up.

Another study can be done also on local producer and retailers evaluating how they contribute to improve food security.

References

Ayeker, L. Bukeje. Impact of Inflation on South Sudan Economy: Case Study of Juba Main Market. Vol 7, issue 10, 2021.

Mosel, I., and Henderson E. (2015). Markets in Crises: Spit Sidam Case Study: Humanitarian Policy. Group, Overseas Development Institute 203 Blackfriars Road London SEI8NJ. United Kingdom.

Schouten, P., Mattysen, K., & Muller, T. (2021). Checkpoint economy: The Political economy of Checkpoints in South Sudan, ten years after independence. Antwerp/Copenhagen: Ipis/DIIS.

South Sudan: A Study on Competitiveness and Cross Border Trade with Neighbouring Countries. African Development Bank Group.

Tongun, N. & Wang G. Factors Influencing the Consumption and Purchase of Local Maize in South Sudan. Business and Economics Journal. Vol 9, No 4, 2028.

Trostle, R. (2008). Global Agricultural Supply and Demand: Factors Contributing to the Recent Increase in Food Commodity Price, A report from the Economic Research Service, United States Department of Agriculture.

Ulimwengu John, M. and Ramadan, R. (2009). How Does Food Price Affect Uganda Households? An Augmented Multimarket Approach. International Food Policy Research.

UK, Overseas Development Institute, UKODI- Rising Food Prices: A global Crisis, Briefing Paper 37 (April 2008).

US, Government Accountability Office, USGAO- Food Prices: Information on Trends, Factors, and Federal Roles (March 2023).

Yibeltal Yismaw Ayenew. Challenges of Agricultural Marketing in East Africa Developing Countries. Journal of World Economic Research. Vol 12, No 12, 2023, pp47-58.

Average Salary in South Sudan – retrieved on 20.05.2024 from https://www.timecamp.com

Free Market- retrieved on 20.03.2024 from https://www.investopedia.com & https://www.google.com

Law of Supply and Demand – retrieved on 20.04.2024 and 04.05.2024 from https://bccs.bristol.sch.uk and https://learn.owrywise.com

Appendices

Appendix 1: Glossary of terms and abbreviations

This list provides definitions that are important and for the easy understanding of the content of this paper. The list also explains some abbreviations.

	The term	Definitions
1	Juba market	Exchange of good and service taking place between buyers and seller in Juba city
2	Inflating price	Continuous increasing of price
3	Staple food	Basic or common food household depends on
4	Juba residents	Any person staying in Juba regardless of being South Sudanese nationals or foreigners
5	National strategic reserve	Stock of commodities held back by the government from the normal usage with the aim of future usage or continuity
6	Oil revenue	Sources of income from oil
7	Non – oil revenue	Sources of income got from agricultural products, taxes etc.
8	South Sudanese markets	goods and service demanded by South Sudan and supplied by neighbouring countries or oversees
9	Local shareholders	South Sudanese who are involved indirectly or facilitate business operations
10	Food supply and demand	Ability of seller or trader to provide and the need for goods or services
11	Market equilibrium	Supply of goods or service is equal to demand in the market
12	Price elasticity	Relationship between a change in the quantity demanded or supplied and change in price
13	Perfect elasticity	State where demand for product totally depend on the price of product.
14	Perfect inelastic	A slight increase or decrease in the price of product does not have effect on quantity demanded or supplied
14	Unit elasticity	Change of supply and demand of product propositionally to price
15	Free market economy	System where government has no or less control on price in the market, but price is decided by demand and supply
16	USGAO	United States Government Accountability Office
17	UKODI	United Kingdom Overseas Development Institute
18	NBS	National Bureau of Statistics

Appendix 2: Literature Review Table

Name	Date	Variables	Objective	Findings
Tongun & Wan	2018	Factors influencing consumption and purchase of local maize production	Demand exceeds supply in South Sudan	Local produced maize is healthier, but it is expensive, not easily found compared to imported ones
Mosel & Henderson	2015	Food Crises in the market	Food insecurity	Sorghum, maize, groundnuts are the main staple food produced by households but not proportional to population. However, most household depend on food bought in the market
Dukhan & Celestine	2023	Drives and control of inflation	Analysing the main drives and control of inflation in South Sudan	The unofficial exchange rate, depreciation of local currency, free market economy, few households are food efficient
Trostle, R.	2008	Global food price inflation	Factors inflating food price in the global market	Food supply not proportional globally, and several factors contributed to food price inflation that includes, rising energy price, location, agriculture, cost of production, declining value of United States dollar, policies adopted by some importing and exporting countries
Ayenew, Y., Y.	2023	Challenges of agricultural marketing	Adoption of the policy option that promotes export driven production and food stability	Price fluctuation, market monopoly, problem of liberalization for agriculture marketing, poor accessibility to market, drought, inadequate financial services, poor infrastructure affects agriculture marketing in East Africa
Ulimwengu, J. & Ramadan, R.	2009	Impact of food price inflation	Impact of food price inflation on household with varied economic status	Poor households spend much of their income on food are eating less, buy less nutritive food and reducing expenses as a response to high food price inflation.

Appendix 3: Data collection and Evaluation Procedure

