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**FACTORS AFFECTING THE PERFORMANCE OF SESAME
EXPORT: THE CASE OF DANGUR WOREDA, METEKEL
ZONE, BENISHANGUL GUMUZ REGIONAL STATE**

**ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MANAGEMENT**

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DECLARATION

I hereby declare that this work entitled “**Factors Affecting the Performance of Sesame Export: The Case of Dangur Woreda, Metekel Zone, Benshangul Gumuz Regional State**” is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

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This Research project has been submitted for examination with my approval as a College advisor.

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This is to certify that the research project prepared by Tsehaye Taye entitled: “**Factors Affecting the Performance of Sesame Export: The Case of Dangur Woreda, Metekel Zone, Benshangul Gumuz Regional State**” and submitted in partial fulfillment of the requirements for the Master of Business Administration in Management complies with the regulations of the College and meets the accepted standards with respect to originality and quality.

Approval of the project by Examiners

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ACRONYMS AND ABBREVIATIONS

ECA	Ethiopia Commodity Exchange
FAO	Food and Agriculture Organization
MOARD	Ministry of Agriculture Research and Development
UNCTAD	United Nations Conference on Trade and Development
LPI	Logistics Performance Index
WEF	World Economic Forum
SPSS	Statistical Package for Social Sciences

ABSTRACT

The main objective of this study was to identify factors affecting the performance of sesame export: The case of Dangur woreda, Metekel zone, Benishangul Gumuz Regional State. The research approach of this study is a mixed approach of descriptive and explanatory approach to analyze Liker scale type data. The researcher has selected five variables and the data was collected through structured questionnaires on liker scale measurement technique and some open-ended interview questions from a population of sesame seed exporters, producers and agricultural sector supporter basically agricultural transformation agency of the regional government. Linear regression models, Descriptive statistics and inferential analysis were employed to examine the effects of the selected variables on the performance of sesame seeds export performance in the study area. All necessary tests such as normality, homoscedasticity, linearity and null hypothesis tests were taken place. The findings implied that out of the selected five variables four variables like foreign price level, quality of the product, production/productivity and infrastructure were found to have significant effect on Sesame export performance in the study area where infrastructure is the most influential variable. Hence, it is recommended that developing all season rural feeder road and other important infrastructure service, introduction of modern agricultural technologies for product storage (silos) and constructing modern warehouses so that the quality of the sesame export can be maintained, support the producers in supplying modern agricultural technologies such as tractors, planters, sprayers and harvester machines to boost production/productivity and working on the stability of the foreign exchange rate.

Key words: *Export, factors affecting, export performance, sesame seeds, Dangur, Benishangul Gumuz.*

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the study

Export of goods is of utmost importance for the economic growth of a nation. It is commonly acknowledged that developing countries should adopt an approach that focuses on exporting as the transition towards becoming an emerging economy. The East Asian tigers have experienced remarkable and enduring export growth, as have emerging nations such as Chile, Tunisia, Botswana, and Mauritius (World Bank, 2012). Even fast-growing countries such as Brazil and China have relied on world markets (World Bank, 2012). In reality, the act of exporting permits businesses in underprivileged nations to expand their customer base and gain advantages from scaling economies. In addition, by means of exports, a nation can produce foreign currency revenue, elevate efficiency, and enhance employment opportunities, which ultimately stimulate economic development. Studies have shown that countries with higher levels of exports tend to have higher levels of economic growth and lower levels of poverty. Therefore, promoting exports is often seen as a key strategy for achieving economic development and reducing poverty, Agosin (2007) finds that export diversification has a stronger effect on per capita income growth.

In developing countries, the debate on the determinants of agricultural export after trade liberalization remains a contentious issue in the field of economics. These determinants can be broadly classified into two categories, internal and external. While some studies have identified internal determinants as significant in certain countries, others have found external factors to be more important in determining agricultural exports. Currently, there are two schools of thought that seek to explain the decline in agricultural exports in many developing countries. The first school of thought attributes this decline to external factors such as deteriorating terms of trade, elasticity of demand for exported commodities, and the world income of trade partners. These factors are considered to be external determinants of agricultural export in developing countries. Conversely, the second school of thought focuses on internal factors that have hindered the growth of agricultural exports in developing countries. These factors include poor domestic trade policies, inadequate infrastructure, lack of agricultural export credit, and taxation on agricultural exports (Gbetnkom and Sunday, 2002).

Sesame is one of the most historic oilseed vegetation cultivated for its safe to eat oil and makes use of in food. Sesame seeds are very nutritious and confer fitness benefits. Globally the consumption of sesame seeds amounted to USD 6,559.0 million in 2018 and is projected to reach USD 7,244.9 million by 2024, with a 1.7% compound annual growth rate (Mordor Intelligence Home Page 2020-2025). The steady increase in global sesame consumption can be attributed to evolving consumer habits and heightened health consciousness. Sub-Saharan African (SSA) nations depend heavily on the export of primary agricultural commodities, which they produce at a lower cost due to their abundant labour and tropical climate. This trade accounts for a significant portion of these countries' GDP. In Ethiopia, agriculture contributed 22.9% to GDP growth, with crop production accounting for 65%, followed by animal farming and hunting at 25.9%, and forestry at 8.8%. In addition to this, the merchandise trade deficit is narrowed from USD 12.4 billion to USD 10.9 billion, owing to increased revenue from goods exported project research and a decline in import bills. As a result, the merchandise trade deficit as a percentage of GDP was 10.1% (NBE, 2019/20).

Ethiopia boasts a diverse range of weather patterns that are conducive to cultivating various crops. Throughout history, Ethiopia has gained recognition for its production of oilseeds, which are a principal source of export revenue for the nation, second only to coffee. Nonetheless, the export processes for agricultural products, particularly oilseeds, are arduous and prolonged, hindering the country's competitiveness in the worldwide market. The capacity to provide goods for international trade can enhance a country's competitiveness. This reality has caused countries to prioritize upgrading trade facilitation measures (Mengistu, 2018).

The oilseed sector in Ethiopia is rapidly expanding to meet the demands of both local and foreign markets, and it plays an essential role in the country's economy by generating income and foreign exchange earnings. Ethiopia is known for producing the highest amount of sesame, which is the primary oil crop, and the second most exported commodity that contributes to the country's overall export earnings. Ethiopia is among the top African countries that grow and export sesame to the global market. Sesame is cultivated in various regions of Ethiopia, including Dangure Woreda in the Metekel Zone of the Benishangul Gumuz regional state. It is the second most significant agricultural product after coffee in terms of foreign exchange. However, the traditional production systems used in most areas lead to low production and productivity of the crop (Abadi, 2018).

Although sesame is a crucial commodity for Ethiopia's export sector, there are various factors that cause fluctuations in the volume and value of sesame exports. These include inadequate market infrastructure and low productivity levels. Insufficient road networks, market information, and credit facilities are among the major obstacles that need to be overcome to enhance the quality and quantity of sesame production and marketing. Moreover, fluctuations in currency, price drops, economic crises, conflicts or unrest, weather patterns, pests, and insecticides all have an impact on sesame productivity and export performance. Achieving a balance between supply and demand is also essential.

1.2 Statement of the Problem

Global and domestic economy rely heavily on international trade, which acts as the lifeblood of economic activity. In particular, maintaining a healthy balance of payments through exports is crucial for countries to finance their imports without incurring deficits. According to Belayneh & Wondaferahu (2012), exports are a critical driver of economic growth. In developing nations, unprocessed agricultural goods are the most sought-after commodities for export. According to Negash (2015), oilseeds are among the most crucial cash crops in Ethiopia, serving as a source of income for small households and as an export to the global market. Sesame product is the abundant oilseed in Ethiopia and are an essential cash crop that is mainly exported as raw oil seed to China.

Ethiopia is among the top five producers of sesame seed, linseed, and nuge or Niger seed (Tesfaye, 2007). Despite its current importance, stakeholders believe that the oilseed production in Ethiopia has not yet reached its potential. Gelalcha (2009) confirmed that there is a significant potential for sesame for further growth in terms of both quantity and quality through improved production techniques and productivity factors. In line with this, there is a rising trend in the export of oilseed from Ethiopia to the rest of the world (Mershay, 2019).

Despite the significant importance of sesame both as an export product and a source of income for farmers in some regions of Ethiopia, its low export performance remain major issues. Several studies have identified a range of factors contributing to this problem (HAISH, 2017).. Gelalcha (2009) notes that traditional farming practices, poor-quality seeds, and inadequate fertilizer use are among the key challenges facing the existing production system. Many studies indicate that there are several reasons for the low performance of sesame exports. In summary, identifying and

examining the challenges that significantly affect Ethiopia's sesame export and its performance should facilitate the design of policies to improve the performance and ultimately overall economic growth. Therefore, the objective of this project study is to examine the challenges behind the poor export performance and productivity of sesame and how much these challenges affect the country's export performance in Ethiopia (Mershay, 2019). Several research studies have been conducted in different areas of Ethiopia. However, no study has been conducted in Benishangul Gumuz regional state, Metekel zone Dangur woreda. In addition, there are more peculiar problems in the study area with regards to the problem of rural feeder road/ infrastructural problems where it is mandatory to cross many streams to reach the farm areas. As a result, it is difficult to reach the farm areas starting from the month of July-November due to the overflow of big streams. Thus, these factors are the identified gaps of the previous researches of the study area. Therefore, the researcher is motivated to study the primary factors affecting the export performance of sesame in Benishangul Gumuz regional state, Metekel zone Dangur woreda by incorporating the infrastructural problem factors. The research will attempt to respond to the following research questions.

1.3 Research Questions

1. What are the determinant factors of sesame export performance in the study area?
2. What are the relationships between sesame export performance and its determinants?
3. Which independent factor is the most influential on sesame export performance in Benishangul Gumuz regional state, Metekel zone Dangur woreda?

1.4 Objectives of the study

1.4.1 General Objective of the study

The general objective of this paper is to analyze the determinants of sesame export performance in Ethiopia.

1.4.2 Specific Objectives of the study

- To identify and assess the determinant factors of sesame export performance in the study area.
- To examine the relationship between sesame export performance and its determinants

- To analyze the most influential factors that are affecting sesame export performance in the study area.

1.5 Research Hypothesis

H₁: Marketing information is an influential factor to export performance of sesame in the study area.

H₂: Foreign price level is an influential factor to export performance of sesame in the study area.

H₃: There is a positive relationship between product quality and sesame export performance in the study area.

H₄: Production/productivity is related to the export performance of sesame product in the study area.

H₅: Infrastructural/rural feeder road is significantly related to the export performance of sesame in the study area.

1.6 Significance of the study

Primarily, it facilitates the provision of up-to-date data regarding the primary determinants that impact the export performance of sesame seeds. This data can be utilized as a reference point for future research initiatives in this field. Exporters can also leverage this information to make informed decisions that enhance their capacity, competitiveness, and overall performance. Moreover, relevant stakeholders such as the government can take appropriate measures to promote export growth in the country based on this information. The research holds significance in expanding the understanding of the current sesame export trade activities, accomplishments, and challenges in Ethiopia

1.7 Scope of the study

Among the various exportable oilseeds, this study focuses only on sesame exporters that are working in Benishangul Gumuz regional. It is limited to the current periods since it is difficult for the exporters to recall factors that affect performance of sesame export long years ago. The purpose of this investigation is to analyze exclusively the determinants of sesame productivity and export performance, aiming to identify a few constraints and opportunities for achieving the country's

developmental goals. The study does not encompass other factors that affect export and productivity performances or other agricultural products that can be exported. The research was confined to examining export performance determinants in a single woreda of Benishangul Gumuz regional state in Ethiopia.

1.8 Limitations of the Study

The factors that determine export performance are extremely important and essential for progress and advancement. Numerous measures can be employed to identify the determinants of sesame export performance. Nonetheless, due to limited time and budgetary constraints, this research paper has been restricted in scope. Additionally, the study has been limited to a single district, which has placed a significant burden on the researcher in terms of data organization.

CHAPTER TWO

2. LITRATURE REVIEW

2.1 . Theoretical Literature Review

This section of the research pertains to examining the present associated literature concerning the overall export performance of Ethiopia and specifically, the sesame product. The initial segment pertains to the theoretical groundwork of significant trade theories and exports. The subsequent part will concentrate on the conceptual and practical studies on the factors that impact the export performance of the sesame product. Various scholars have identified the determinants of export performance variables at different times, based on the approaches they employed, taking into account the perspectives of different countries.

2.1.1 International Trade theories

The notion of international trade originated from the economic principles of mercantilism in the 18th century. This doctrine asserted that a country could amass wealth and power by exporting more goods than it imported, leading to an export surplus that could be used to acquire valuable commodities such as gold and silver. As per Aplleyard and Field (2014) cited in Tewodros (2016) and Haish (2017), it was believed that governments had to utilize their authority to regulate imports and encourage exports to surpass imports. Subsequently, Adam Smith introduced the concept of the absolute advantage model in his classical theory of international trade. This model posited that a nation's wealth was determined by its stock of natural resources rather than precious metals. Smith also argued that changing the mercantilist policies could explain the prosperity of nations. Furthermore, he introduced the theory of absolute advantage, which suggested that trade could benefit one nation at the expense of another, as cited by Mannur (1996) in Haish (2017).

Exports refer to the products and services generated within a country and bought by inhabitants of another nation. The type of product or service and the mode of transportation are irrelevant. Whether it is transported through shipping, email, or personal luggage, as long as it is produced domestically and sold to a foreign buyer, it is considered an export. International trade comprises exports as a crucial component. The concept of exports has progressed from David Ricardo's comparative advantage in 1817 to the latest trade theories. According to the theory of comparative

advantage, trade between two nations is still feasible even if one nation has an absolute disadvantage in the production of both commodities. If the nation with an absolute disadvantage specializes in the commodity in which its absolute disadvantage is the smallest, there is still a basis for trade. This commodity is the country's comparative advantage, and the nation will focus on producing and exporting that commodity, particularly in the agricultural sector (Salvatore, 2009).

The Heckscher-Ohlin hypothesis, which gained popularity in 1933, focuses on the dissimilarities in resource endowments among nations as the foundation for trade. Since nations possess varying natural resource endowments in terms of both type and quantity, the theory highlights a nation's Agricultural exports of a commodity that utilizes cheap and abundant inputs and imports the commodity that requires the intensive use of a nation's limited and costly inputs. Thus, based on the Heckscher-Ohlin theory, if a nation is abundant in labor, it should concentrate on exporting the commodity that requires labour-intensive production. Similarly, if a nation is considered capital-rich, it should specialize in Agricultural exports that use capital-intensive techniques (Salvatore, 2013).

According to Haish (2017) noted that the Ricardian concept of comparative advantage emerged subsequent to Adam Smith's theory of absolute advantage. The theory of comparative advantage asserts that countries that produce goods based on their comparative advantage will reap greater benefits from international trade, provided that the cost of producing a good is lower than the cost of production in another country. This can be attributed to the country's labor efficiency or superior labor productivity when compared to its trading partner. David Ricardo's comparative cost advantage of production, as explained by Charles (1998), proposes specialization in the production and export of goods with a comparative cost advantage, while importing products with comparative disadvantage. However, despite the improvements made by the theory of comparative advantage over absolute advantage, it has been criticized for its assumption of maximizing production and consumption, which neglects the interests of workers and consumers. Additionally, comparative advantage is based only on the maximization of production and consumption, and has not upgraded the two-country, two-commodity assumption of absolute advantage. The theory has also failed to consider labor transportation barriers, as well as the potential impact of learning curves.

International trade has been recognized as a determinant of economic growth since the time of classical economists Adam Smith and David Ricardo, and this concept has been maintained until today. Export-led economic theory has been encouraged by globalization to improve economic growth and performance. Economic literature supports the argument that development requires economic growth to alleviate poverty, and greater access to world markets is seen as a necessary condition for faster growth (HAISH, 2017). Exports are vital to a nation's economic growth and trade balance when based on comparative advantage in resource endowments. Expanding exports is an important part of the economic growth process. Export promotion has been a commercial policy issue that has received a lot of attention both nationally and internationally (Orindi, 2011).

Many countries worldwide are focusing on promoting their exports, mainly due to the decline in local markets. In developing countries like Ethiopia, the export sector is crucial as it is a source of growth that can be attributed to the foreign exchange earned, which would be impossible without exports (SAMUEL, 2015). Ethiopia's export sector is dominated by a few primary commodities, including agricultural products such as coffee, oilseeds, gold, chat, flowers, pulses, live animals, and hides and skins (Nega, 2013).

2.1.2. Export Performance

The dictionary meaning of Export performance is the relative success or failure of the efforts of a firm or nation to sell domestically-produced goods and services in other nations. Export performance can be described in objective terms such as sales, profits, or marketing measures or by subjective measures such as distributor or customer satisfaction.

Accordingly, sesame export is the international marketing related to decisions and activities of internationally active firms engagement in the international market and its achievement in terms of sales, profits, or marketing measures or by subjective measures such as distributor or customer satisfaction. Hence, selected factors that affect the performance of sesame export is considered by the researcher.

2.1.3. Factors Affecting Sesame Export Performance

Many countries worldwide are focusing on promoting their exports, mainly due to the decline in local markets. In developing countries like Ethiopia, the export sector is crucial as it is a source of

growth that can be attributed to the foreign exchange earned, which would be impossible without exports (Samuel, 2015). Ethiopia's export sector is dominated by a few primary commodities, including agricultural products such as coffee, oilseeds, gold, chat, flowers, pulses, live animals, and hides and skins (Nega, 2013).

According to a empirical output of the panel gravity model application study on determinants of sesame export in Ethiopia by Murad Mohammad Baker and Beyan Ahmed Yuya in 2019, the Ethiopia's sesame exports performance to the importing countries mainly depends on real grossdomestic product of importing countries, weighted distance between Ethiopia and its importing countries and real exchange rate were statistically significant.

According to Birtukan Simaw's 2022 study conducted on factors affecting the performance of sesame export shows; Bureaucracy, pricing, product quality, policy and infrastructure were found to have significant impact on Sesame export performance. These variables are also found to be positively related to the regressed variable except bureaucracy, which is negatively related to the predicted variable. Moreover, predictors like market information and technology make less contribution to predict the dependent variable, and are less significant to determine the dependent variable.

According to Meseret Abebe's study on Factors Affecting Export Performance of Sesame Seeds has identified that exchange rate, inflation, production volume, trade openness and interest rate has a positive and significant influence on sesame export performance.

2.1.4. Low production and productivity

The primary elements that impact the export of sesame in Ethiopia are reduced production and efficiency caused by various natural and societal factors. According to Abadi (2018), drought, pests, illnesses, inadequate production technology and resources, weeds, poor infrastructure, and social insecurity are the primary factors that affect sesame production and productivity.

2.1.5. Product Quality

As per the findings of Mengistu in 2018, the Ethiopian Quality and Standards Authority was responsible for grading sesame quality until the recent integration of sesame into the Ethiopia Commodity Exchange (ECX) system. In order to meet the international standards, sesame seed types meant for export must satisfy both the authority's standards and the minimum global

standards. Ethiopian sesame is categorized and graded as Humera/Gondar, Wellega, and red sesame, each containing mixed types, with an oil content ranging between 43-56%. The first, second, and third grades must meet the minimum international standards of 52%, 48%, and 45% oil content, respectively. Conversely, the accepted moisture content for all grades is between 6-8%, according to Winands and Biersteker (2007). Before sesame production in Ethiopia can reach the export processing and storage levels, it must undergo a long chain of processes, as explained in MoARD (2006/07). Sesame exporters face impurity issues such as dirt, branches, stones, etc., with the percentage of foreign substances estimated to be between 7-9%, while the agreed-upon international standards for first, second, and third grade sesame are 2%, 4%, and 6%, respectively. The cost of labor and machinery required to clean low-quality sesame for exportation is high, thus reducing competitiveness in the global market.

2.1.6. Infrastructure/ rural feeder roads

Mengistu (2018) investigated an essential aspect of any logistics program is transportation management and economics, which involves the logistics and expenses involved in moving goods and supplies from one location to another. A competitive advantage in logistics depends on the ability to maintain production schedules and deliver products efficiently to global markets. Transportation is the final stage of reaching international markets and requires careful management to minimize costs and achieve optimal performance. Infrastructure, particularly rural feeder roads, plays a crucial role in affecting a country's export supply capacity, according to UNCTAD, 2005. However, poor transport infrastructure in most African countries, as noted by UNCTAD, 2005; Mbekeani, 2007; Bacchetta, 2007, is a significant obstacle to trade, competitiveness, and sustainable development. It also isolates countries, hindering their participation in global production networks (Limão and Venables, 2000) cited in Mengistu, 2018. Due to inadequate internal transport infrastructure, transport costs in Africa are high, making exports expensive and uncompetitive (Radelet and Sachs, 1998; Mathee, Grater, and Krugell, 2007) cited in Mengistu, 2018, and reducing foreign earnings from exports (UNCTAD, 2003; Mathee, Grater, and Krugell, 2007). According to the analysis by Limão and Venables, 2001, African trade flow is low due to poor infrastructure.

As per the World Bank Report, 2013, cited in Mengistu (2018), Ethiopia's overall logistics performance is low compared to relevant peers. The Logistics Performance Index (LPI) measures

a country's trade logistics status and facilitates comparisons with other countries. Ethiopia ranks at the lower end of the surveyed countries (141 out of 155 countries in 2012). It lags behind not only the average for sub-Saharan Africa in all six key dimensions of logistics performance measured but also compared to neighboring Kenya and Tanzania. The logistics system in Ethiopia is not improving over time, according to the Logistics Performance Index, which shows a relative deterioration in Ethiopia's ranking between 2007 and 2012. According to Mengistu (2018) the situation is even more concerning since Djibouti is the only gateway for Ethiopia to the world in terms of land transportation.

2.1.7. Foreign Price Level

According to Birtukan Simaw (2022) on her study of factors affecting the performance of sesame seeds export has identified that international price level is significant factor to determine the performance of sesame seeds export. The finding shows that having stable foreign currency, reducing intermediary on the supply chain, and making the ECX price volatile with international market will help to enhance sesame seeds export performance and be competitive on the international market.

2.1.8. Marketing Information

Marketing information system includes all the facts and information which is used in making marketing decisions and which will affect the marketing operation of the enterprise. The need for information is vital for a business particularly for export business because business units operates in unpredictable and complex environment. Moreover, marketing information is vital to know about the customer, the competitors and the prevailing environmental situation as well. Haish (2017) has mentioned in his study of factors affecting sesame export performance in Ethiopia, that most of the producers and exporters are family farmer that have lack of market information to produce marketable products and supply to the market. As result they are vulnerable to the low price and tricks of local collectors. Haish concluded that marketing information revealed that marketing information is less significance to influence the dependent variable and it is related positively to the dependent variable.

Sorsa (2009), magnifies that the main challenges of export of sesame and other products are lack of international market linkage, poor quality, exporting non processed, lack of promotion and branding Tewodros (2012) also intensified that there is lack of marketing communication problems for export. In line with this idea, some of the products are exported to the final destination because of lack of communication, lack of purification problems and merely raw seeds.

2.2 Empirical Literature Review

Kingu (2014) conducted a research study on the factors influencing the export of agricultural products, specifically cotton lint, in Tanzania. The study utilized secondary data from various sources, including the Food and Agricultural Organization (FAO) STAT database, Ivan Kushnir's Research Center, and the World Economic Indicators database spanning from 1970 to 2010. The study employed cointegration and error correction models to analyze the determinants of cotton lint export earnings in Tanzania. The findings of the research indicate that cotton lint export earnings are predominantly influenced by internal factors such as real exchange rate and agricultural productivity. The results also indicate that the estimated coefficients of real exchange rate and agricultural earnings are statistically significant, which means that these factors have a positive impact on cotton lint export earnings in Tanzania. Non-parametric tests also demonstrate that the trade liberalization strategy is a significant determinant of cotton lint export earnings in Tanzania.

Negasa (2016) investigated a research on the assessment of the Sesame Value Chain in Ethiopia. Sesame is a considerable source of income, particularly as an exported crop. The sesame value chain in Ethiopia is lengthy, involving various participants, including producers, local traders, brokers, oil millers, exporters, retailers, and local consumers. Small-scale farmers in the sesame seed value chain rely on intermediaries due to the small quantities they produce and the lack of an efficient market information system. Pricing is not determined by the forces of supply and demand and does not reflect current international market prices. The primary regions for sesame production in Ethiopia are Tigray, Amhara, Oromia, and Benishangul Gumuz, which account for over 90% of the total sesame output. In the 2007/08 season, Amhara, Tigray, and Oromia contributed 48.5%, 28.5%, and 15%, respectively, to the overall production.

Eyayu (2014) theoretically explain and empirically evaluate the factors that impact agricultural exports of SSA countries from both the demand and supply sides. The study specifically aimed to analyze the relative significance of these two major factors in determining the agricultural export performance of the countries. To answer this question, a panel data set was used with fixed effects estimation technique covering 47 SSA countries from 2000-2008. The results of the estimation showed that on the supply side, factors such as real GDP, real GDP (lagged) of the exporting country, and lagged agricultural input use had a positive and significant effect on the agricultural export of the SSA countries. The study also revealed that on the demand side, the per capita GDP of the US, which is the major trading partner of SSA countries, had a positive and significant effect. Additionally, the US import tariff imposed on agricultural products from SSA countries had a negative and significant effect. Therefore, the overall outcome confirms that both supply side and demand side factors are equally crucial in determining the agricultural export performance of SSA countries.

To examine factors that determine Ethiopia's export performance, Anagaw and Demissie (2012) used econometric models such as the Johansen cointegration and error correction approaches for the period 1970–2011. The results of the study showed that the growth of Ethiopian exports in the short term could only be explained by the openness of the current year. However, in the longer term, factors such as openness and personal credit as a percentage of gross domestic product (an indicator of financial development) had a significant impact on Ethiopia's exports. Ethiopia's real gross domestic product and infrastructure development have been found to have a significant and positive impact on agricultural export volume. On the demand side, the trading partner's real gross domestic product and the real effective exchange rate were found to have a positive impact on Ethiopia's agricultural exports. Ethiopia's exports were more elastic compared to real GDP (1.7), while inelastic compared to the rest of the other variables.

Mengistu (2019) conducted a study on the determinants of oil seeds and pulse export performance in Ethiopia using Statistical Package for Social Sciences (SPSS) 20. The study revealed that higher foreign price level, increased production/productivity, improved product quality, and stable real effect exchange rate positively and significantly influenced oil seeds export performance in Ethiopia. In another study, Noah (2018) explored the determinants of agricultural export trade in Ethiopia specifically focusing on sesame export from 1994 to 2016, using Ordinary Least Squares

estimation technique. The study found that, except for terms of trade, real exchange rate, domestic price, and lagged volume of export, all other factors such as intercept terms, production, export price, and domestic consumption significantly affected the value of sesame export.

Haish (2017) investigated the influencing factors of sesame export performance in Ethiopia using descriptive and inferential analysis to analyze Likert scale type data. The study concluded that promotion, technology, cost of export, policy incentives, price in the international market, marketing strategies, and quality were the most significant determinants of sesame export performance in Ethiopia. Kindie (2007) conducted a study on the sesame market chain in Metema woreda, North Gondar Zone, Amhara national regional state. The research revealed that the sesame market faces various obstacles, including a scarcity of contemporary resources, insufficient funds, inadequate and untimely market data, and substandard packaging materials. Additionally, the majority of traders confront significant difficulties due to protracted export procedures and corrupt practices by certain institutions.

Fikru et al., (2017) conducted a study to analyze the sesame marketing chain in the case of Gimbi districts in Ethiopia. Data was collected from both primary and secondary sources. The primary data for this study were collected from 127 farmers, 17 traders and 22 consumers using appropriate statistical techniques. The study result showed that sesame producers face a lack of improved seed variety and a high number of diseases and pests. On the marketing side, limited market access, low product prices, lack of storage, lack of transportation and low product quality are the main problems. The results of the multinomial logit model showed that the probability of choosing the collection point compared to the wholesale point was significantly influenced by land, market price of sesame, membership in a cooperative, access to credit, and ownership of transportation facilities. Similarly, the likelihood of choosing a cooperative distribution outlet was influenced by the area and quantity of sesame produced compared to the wholesale outlet. Therefore, a policy aimed at increasing farmers' access to modern inputs, developing and improving infrastructure, taking into account gender consideration, improving the development of cooperatives and improving the advisory system is recommended in order to promote development to accelerate the chains.

As per the research conducted by Imad Eldin Elfadil Abdel Karim Yousif (2015) in the Agricultural Economics Working Paper Series, Khartoum University, the primary factors

influencing sesame export in Sudan were analyzed using the vector error correction model. The study revealed that low yield, area variability, and unstable fluctuating exchange rate were the key factors affecting sesame export earnings in the long term, while area variability had a short-term impact. As per the findings of the Agricultural Value Chain analysis in Mozambique (2016), the primary obstacles to realizing end-market opportunities in the sesame value chain were insufficient sesame production volume, low sesame yield/productivity, substandard quality of sesame output, and weak connections between buyers and producers. Kafando Wendata Achille et al (2020) established that Burkina Faso's exports of sesame seeds were influenced by both internal factors such as producer price, production, nominal exchange rate, and external factors such as global demand and price for sesame in the short and long term.

According to an examination of the production and export patterns of sesame seeds in Uganda (2021), the analysis of correlation revealed that there was a noteworthy and affirmative correlation between the quantity and value of exports and the yield of sesame seeds, implying that the surge in exports was due to the high yield of sesame seeds in Uganda. Additionally, the area that was harvested showed a significant positive correlation with the production of sesame seeds, indicating that any increase or decrease in the area harvested resulted in a similar trend in the production of sesame seeds. The production of sesame seeds exhibited a significant positive correlation with the export quantity, but not with the export value, suggesting that the production was fueled by the global demand for sesame seeds, which allowed Uganda to generate foreign income. Furthermore, the production of sesame seeds showed a significant positive correlation with both the attainable yield of Uganda and the world, implying that the production was influenced by the achievable yield.

2.3. Critical Analysis/Literature Gap

Despite using different approaches, some of the empirical studies reviewed have similar results while others contradict each other, as observed. In the realm of logistics, transportation management and economics are vital components of any program, involving the logistics and associated costs of moving supplies and products from one location to another. An organization's competitive advantage in logistics depends on its ability to maintain production schedules and efficiently deliver products to international markets. Effective transportation management is crucial in minimizing transportation costs and achieving better performance in reaching the

international market. One of the most significant factors affecting export supply capacity is the domestic transport infrastructure, particularly rural feeder roads, which play a crucial role in the early stages of export sector development. However, most African countries have poor transport infrastructure, which hinders trade, competitiveness, sustainable development, and participation in global production networks, causing their exports to be expensive and uncompetitive. This situation reduces foreign earnings from exports, as noted by various studies. Poor infrastructure also results in low trade volume, as evidenced by African trade flow analysis.

As stated in Mengistu's 2018 report, the World Bank Report of 2013 suggests that Ethiopia's logistics performance is lacking compared to its peers. The World Bank Logistics Performance Index (LPI) cited in Mengistu's report indicates that Ethiopia ranks poorly among surveyed countries (141 out of 155 in 2012), falling below the sub-Saharan African average in all six dimensions of logistics performance measured, and also lagging behind neighboring Kenya and Tanzania. In general, Ethiopia's logistics system is not improving, and its ranking has actually worsened between 2007 and 2012. This is a concerning situation, especially considering that Djibouti is the only land transportation gateway to the world for Ethiopia. According to the 2012/13 World Economic Forum (WEF) World Competitiveness Report on infrastructure development in Ethiopia, the country ranks 119 out of 144 countries, far behind Vietnam and China (ranked 95 and 48, respectively), but relatively better than Tanzania and Uganda (ranked 132 and 133, respectively) (World Bank, 2013).

The logistics system in Ethiopia is known for its inadequate management and lack of coordination in transporting goods. The development of logistics infrastructure is also at a low level, and the fleets of freight vehicles are insufficient in number and quality. This results in damage and deterioration of goods during handling, transportation, and storage. Furthermore, the lack of sea ports creates poor connections between producers (farmers) and consumers (markets), which negatively affects the competitiveness of Ethiopian goods on the global market and compromises the livelihoods of the people and economy of the country. Additionally, the distribution and collection of goods are generally inefficient due to poor road infrastructure (Debela, 2013). However, Mengistu (2018) discovered that infrastructure and rural feeder roads have no impact on the performance of sesame exports in his analysis. Therefore, he concluded that further

investigation is necessary to determine the effect of infrastructure and rural feeder roads on the performance of sesame exports since his study found a negative association.

Hence, the researcher will employ primary data from the study area that disprove this finding since the absence of rural feeder roads over many streams around the study area has a big influence on the competitiveness of the producers to produce sesame as a leading crop which in effect reduces the volume of the product from the study area.

2.4 Conceptual framework

The below figure illustrates how five independent variables merge to accomplish movement towards sesame export performance.

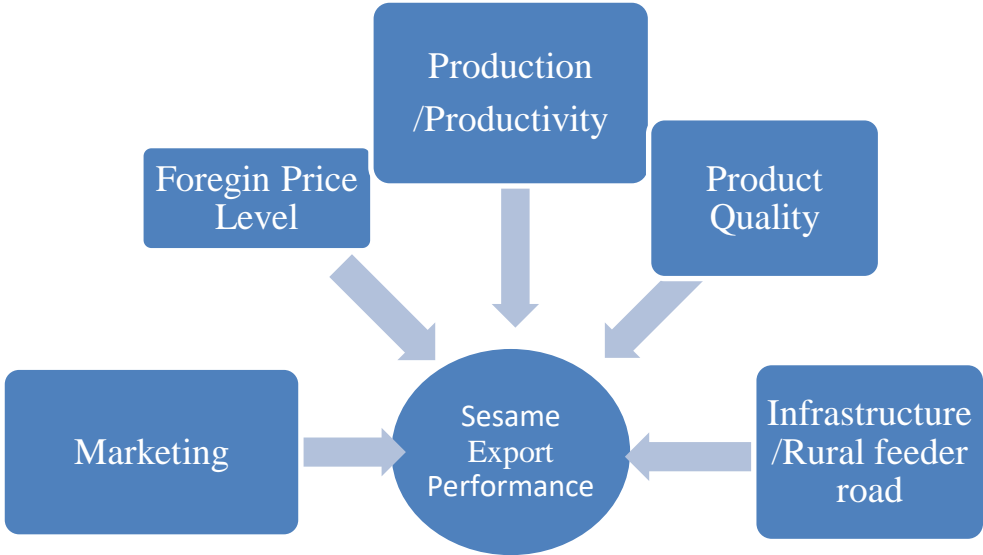


Figure.2.1: Conceptual framework

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. Description of the Study Area

3.1.1. Background

Dangur is a woreda located in the Benishangul-Gumuz Region of Ethiopia, situated at 11° 30' 0" N latitude and 35° 50' 0" E longitude, covering an estimated area of 8,387.19 square kilometers. The district is named after the Dangur mountain range, which stretches to the southwest from the mountains on the western side of Lake Tana. The administrative hub of this district is Manbuk, and it is approximately 650km away from Addis Ababa. The weather in the region is unimodal and is characterized by heavy rainfall during the wet season (May-October) and negligible or no rainfall during the dry season (November-April). As per the Atlas of Ethiopia (1975), the geology of the area is marked by tertiary trappings lava. Soil types in the region are lava plateau red to reddish-brown (luvisols), grey (gleyic luvisols), and black clay (vertisoil), as per preliminary assessments. In the study area, Vertisols or black clay soils are predominant, particularly in areas where the topography is flat to gradually gently undulating. The soil in the district is fertile, and it is this fact that farmers and investors do not use fertilizers on their farms. The most significant marketable commodities in the area are sesame, cotton, and sorghum, accounting for over 90% of the cultivated land in the district.

3.1.2. Access to Road and Transport

Despite the presence of challenging rural feeder roads to the woreda, access to many sesame farm areas is hindered during all weather seasons due to various streams and large rivers crossing the route to these areas. As a result, transportation of inputs and products from the study area only occurs during the dry months of the year (November-May) via the connecting route to the farms. The condition and distance of the roads have a significant impact on determining transport tariffs. Consequently, when poor and seasonal transport conditions arise, it becomes impossible to reach the farms to solve any arising issues. At times, transport costs may rise above the normal rate due to high competition among traders in meeting export commitments on time.

3.2. Research Approach

There are three basic types of research approaches; quantitative, qualitative and mixed approach. The quantitative research approach is based on the philosophy of the post-positivist worldview. It is also reductionist in that the intention is to reduce the ideas to a small, discrete set of ideas to be tested, such as the variables that form hypotheses and research questions. In addition, the quantitative approach uses statistical methods to describe behavioral patterns and to generalize results from samples to the population of interest, and employs investigative strategies such as experiments and surveys (Creswell 2003). Therefore, the study is used mixed research approach.

3.3. Research Design

The research design utilized for investigation and interpretation of research work is both descriptive and explanatory. This design allows researchers to examine current practices, conditions, processes, trends, causes, and effects under study (Singu, 1985). In the same vein, according to Creswell (1994), a descriptive survey inquiry is useful for collecting data at a specific point with the aim of describing the overall nature of existing conditions and generalizing from a sample to a population. Explanatory research is a research method that explores the reasons for something occurring when limited information is available. It can aid in increasing understanding of a given topic, determining how or why a particular phenomenon is occurring, and predicting future events. Explanatory research can also be described as a "cause and effect" model that investigates patterns and trends in existing data that have not been previously explored. The study used explanatory and descriptive research design.

3.4. Target Population and Sampling

3.4.1. Target Population

The study targets individuals involved in sesame production, including producers, farm managers, employees, middle traders, and exporters in the study area and its surroundings. Additionally, government officials from both the regional and federal levels, as well as investment financiers, particularly the Development Bank of Ethiopia, are included in the sampling frame. The total number of individuals in the target population is 328.

3.4.2. Sample size determination

The size of the sample pertains to the percentage of individuals who are selected to take part in the study Thornhil & Saunders (2000). Yamane's (1967) statistical formula for determining sample size is utilized in generating the suitable sample size;

$$n = \frac{N}{1+N(e^2)}$$

Where; N= population size e= Tolerance at desired level of confidence, take 0.05 at 95% confidence level n= sample size.

How the formula is used is shown below

$$n = \frac{328}{1+328(0.05^2)} = 180.21$$

The level of certainty or accuracy in the data, represented by the symbol e, is set at 95% for this research. As a result, the sample size consisted of 180 participants as it was not feasible for the researcher to cover the entire population due to limitations in the study area, budget, and time. Therefore, the researcher employed sampling methods instead of conducting a census.

3.4.3. Sampling Method

The purposive sampling method was utilized to deliberately choose the samples from the study area. This is also regarded as a crucial approach for selecting a sample from a given population, as it is intentionally done. The rationale behind the purposive method is to select only the relevant samples, rather than those who lack sufficient knowledge about the subject matter. Consequently, the samples chosen are significant in representing the population, which enables the drawing of conclusions from the study's outcomes. Given the respondents' comprehension of the subject matter, it is reasonable to make inferences from the sample's results to the population as a whole.

3.5. Method of Data collections procedures

The investigation utilized a primary data origin, utilizing structured and open-ended questionnaires for collecting primary data. Prior to actual data collection, the questionnaire was pre-tested and refined based on the findings. While questionnaires have their own drawbacks and benefits, their advantages include low cost, lack of bias, sufficient time for thoughtful responses, convenient access to respondents, and the ability to use a large sample size. Additionally, other sources such

as reports and working papers from governmental, non-governmental, and international organizations, research publications (such as journal articles, dissertations, and theses), as well as internet and electronic databases may be used as empirical evidence for the subject matter. Therefore, it is reasonable to make generalizations from the results of the sample to the population.

3.5.1 Questionnaire

According to Walonick (1993), the Questionnaire is one of the most popular methods of collecting data conduction in scholarly research. It provides convenient way of gathering information from a total target population. As a result, questionnaire was used to gather information through quantitative and qualitative data. A questionnaire is a formalized set of questions for obtaining information from respondents that translate the researcher's information needs into a set of specific questions that respondents are willing and able to answer. A five point Likert Scale questionnaire was used to measure the variables of the study. The researcher was prepared closed-ended questionnaires, was prepared by considering the selected independent variable of employee engagement.

3.5.2 Interview

Interview is carried out as instrument of data collection to gather data on the topic of the study. Creswell (2009) Suggested that interview would be used to elicit views and opinions from the participants in detail. Interview is carried out as instrument of data collection to gather data on the topic of the study. Creswell (2009) Suggested that interview would be used to elicit views and opinions from the participants in detail. Therefore, 5 officials were selected purposively for an interview.

3.6 Variables and Measurement

A survey is a type of tool for measuring information that includes a formal set of questions for gathering data from participants (Malhotra, 2000). To obtain descriptive and explanatory primary data, a researcher must create a survey that translates the necessary information into specific questions that will encourage participants to complete the survey and minimize response errors (Lietz, 2010). The survey will be designed to gather information about the perspectives of producers, farm managers and employees, middle traders, and exporters on the export market environment, export and production/productivity, export and product quality factors, foreign price

levels affecting exports, and the impact of infrastructure/rural feeder roads on export performance. The widely used Likert rating scale was utilized for this study. A Likert scale requires participants to indicate their level of agreement or disagreement with a range of statements related to the research inquiry (Lietz, 2010). The Likert scale has numerous advantages. It is easy to construct and administer, as participants easily comprehend how to use it, making it suitable for surveys (Mengistu, 2018). The primary disadvantage of the Likert scale is that it may take longer to complete than other itemized rating scales since participants must read each statement (Hair et al., 2000). To increase the variability in the data and enhance the validity of the findings, a five-point scale was employed to capture participants' assessments over a broader range for statistical analysis (Bagozzi et al., 1999).

3.7 Methods of Data Analysis

After collecting data from primary sources it was appropriately checked. In addition to that in-house editing was used by the researcher to detect errors committed by respondents during completing the questionnaires. Then the edited data was coded and manually entered into the computer. In the study, quantitative method of data analysis techniques was employed. Analysis of data in this research was conducted by using statistical tools like frequency, mean, standard deviation, correlation and multiple regressions. A descriptive analysis was also used for demographic factors such as gender, age, marital status, educational level, and for how long has been the employees served in the area.

In the study hypotheses was analysed using methods of statistical inference. Pearson Correlation analysis was conducted to test the existence of significant relationship between the selected sesame export performance factor variables. Then, the multiple regression analyses were also conducted to determine by how much percent the independent variable i.e. Selected sesame export performance determinant factor variable explain the dependent variable which is Sesame export performance. Tables were employed to present the data and statistical package for social science (SPSS) used to support the analysis.

3.7.1 Descriptive Statistics

The final report of the relevant demographic variables was produced through central tendency measurements (frequency and frequency distribution, valid & cumulative percentage, and comparison of mean). Also, tabular explanations are used to present the result with the help of SPSS.

3.7.2 Inferential Statistical Analysis

In inferential statistical analysis, correlation and multiple linear regression methods was utilized using statistical package for social sciences (SPSS) software. The use of these statistical tools and methods of presentation are described below.

3.7.3 Correlation

Correlation (r) is used to describe the strength and direction of the relationship between two variables. Since all variables are measured as an interval level, Pearson product-moment correlation was used. Correlation “ r ” output always lies between -1.0 and +1.0 and if “ r ” is positive, there exists a positive relationship between the variables. If it's negative, the relationship between the variables is negative. While computing a correlation, the significance level shall be set at 95% with an alpha value of 0.05 or a chance of occurrence of odd correlation is 5 out of 100 observations.

3.8 Reliability

Essentially, reliability refers to the degree to which an instrument can accurately measure what it was designed to measure. To assess reliability, the most appropriate test is inter-item consistency reliability, which is commonly known as the Cronbach's coefficient alpha. According to Joseph and Rosemary (2003), the Cronbach's alpha reliability coefficient (α) typically falls between 0 and 1. The authors suggest that if the Cronbach's alpha coefficient is closer to 1.0, there is greater internal consistency among the items. In this particular research, explanatory variables included marketing factors, price factors, product quality factors, infrastructural factors, and output factors. Additionally, the dependent variable was performance. The study yielded an average Cronbach's alpha value of ($\alpha = 0.890$) for the sum of the variables, which falls within the "very good" range of reliability.

Table 3.1.: Reliability Test of Variable’s Using Cronbach’s Alpha

No	Reliability Statistics				(α) reliability ranges
	Variable Name	Cronbach's Alpha Value	Cronbach's Alpha based on standardized items	No of items	
1	Marketing Factors	0.862	0.864	4	Very Good
2	Price factors	0.697	0.720	3	Very Good
3	Product quality factors	0.591	0.611	5	Good
4	Infrastructural factors	0.755	0.757	5	Very Good
5	Output factors	0.824	0.824	3	Very Good
6	Performance	0.873	0.883	5	Very Good
	Overall	0.890	0.873	25	Very Good

Source: Own computation using SPSS of the survey, 2023

3.9 Validity

To guarantee the excellence of the investigation blueprint, the study's content and construct validity was checked. The scholar conducting the research utilized trustworthy and valid Likert scale statements from previous experts to assess job performance and reward practices. The research advisor verified the face and content validity by examining the relevance of the queries and the measurement scales. The variables were evaluated through a Likert scale with five points.

3.10 Ethical consideration

All sources utilized in this study are well acknowledged and cited and all the issues are addressed based on the academics point of view of the Addis Ababa University.

CHAPTER FOUR

4 RESULT, DISCUSSION AND INTERPRETAION

4.1. Demographic Profile of Respondents

This section will give an over view of the demographic profiles of respondents and all stake holders involved in the production, export and concerned regional, zonal and woreda agricultural offices heads and experts. Analysis was done regarding gender, age, educational level and work experiences of respondents.

A total of 180 sample size is determined from the above population of the study. From the total population 20 respondents did not respond 9 respondents response is rejected due to its incomplete information and 151 respondents response is accepted as a total sample size.

Table 4.1: General Background Information of Respondents

	Item	Frequency	Percent	Cumulative Percent
Sex	Male	139	92.1	92.1
	Female	12	7.9	7.9
	Total	151	100.0	100
Age	26-35 years	42	27.8	27.8
	36-45 years	94	62.3	90.1
	46-55 years	15	9.9	100.0
	Total	151	100.0	
Education	Diploma	28	18.5	18.5
	First Degree	123	81.5	100.0
	Total	151	100.0	
Work Experience	2-5 years	6	4.0	4.0
	6-10 years	145	96.0	96
	Total	151	100.0	100

Source: Own Survey, 2023

According to the data presented in Table 4.1, the study was conducted with a sample size of 151 respondents. The response rate for the questionnaire was over 80%. The gender distribution of the sample included 12 female and 139 male participants, accounting for 7.9% and 92.1% of the respondents, respectively. This indicates that the majority of participants were male, which is consistent with the gender distribution of the business population in the area. In terms of age, 42 respondents (27.8%) were under 35 years old, 94 (62.3%) were under 45 years old, and 15 (9.9%) were under 55 years old.

4.2 Factors Affecting Sesame Export Performance

4.2.1 Assessment on Marketing Factors

Assessment on marketing factors were checked using four indicators namely information about export procedure, International trade procedural, payment to the sellers for exported and demand in the international market. Respondents were asked to evaluate the impacts of the above mentioned variables.

Table 4.2. Marketing Factors

Items	Mean	Std. Dev.
There is no lack of information about export procedure of sesame in the study area	4.07	1.184
There is no International trade procedural complexity to sesame export	3.94	1.185
There is delay of payment to the sellers for exported sesame in the study area	4.07	1.209
There is sufficient sesame demand in the international market in the study area	4.11	1.190
Over all Mean	4.05	1.00

Source: Own survey 2023

The study finding shows that marketing factor is found to be an influential factor affecting the performance of sesame export of the study area. As it is shown on the above table, the aggregate standard deviation score is with a higher level of deviation **1.00** and the aggregate mean score for

marketing factor is found to be **4.05**. Thus, overall standard deviation score shows a relatively higher deviation among the responses of respondents compared to other variables showing lower influence of the marketing factor on the performance of sesame export. Meanwhile, the overall mean score of marketing factor influence on sesame export performance shows a relatively higher level of agreement among the respondents response.

4.2.2 Assessment on Foreign Price Factors

The price assessments were done on three indicators such as price situation in the global market, export procedure and Negotiation power of exporters and Contract discipline and honor of contractual agreement. The results of the indicators are presented in table 4.3.

Table 4.3: Foreign Price Factors

Items	Mean	Std. Dev.
There is a little price volatility of sesame in the global market	3.88	0.765
Exporters in the study area know very little about the export procedure and have lower Negotiation power.	4.21	0.696
There is a good Contract discipline and honor of contractual agreement between sellers and buyers in sesame export practice in the study area	4.00	1.007
Over all Mean	4.03	0.66

Source: Own Survey, 2023

As shown in the above table 4.3, the study finding shows that foreign price factor is found to be an influential factor affecting the performance of sesame performance of the study area. Accordingly, the aggregate standard deviation score is with a lower level of deviation of 0.66 and the aggregate mean score for foreign price factor is found to be 4.03. Thus, overall standard deviation score shows a relatively lower deviation among the responses of respondents compared to marketing variable showing higher influence of the foreign price factor on the performance of sesame export. The overall mean score of foreign price factor influence on sesame export performance shows a higher level of agreement among the respondents response that signifies the influence of the foreign price. Thus, this factor is an influential factor in both measurements.

4.2.3 Assessment on Production/Productivity Factors

The output assessments were done on four indicators such as introduction of better variety of seed, utilization of cultivated land potential, access to improved input and access to improved technology. The results of the indicators are presented in table 4.4

Table 4.4: Production/Productivity Factors

Items	Mean	Std. Deviation
There is no sufficient efforts made so far for introduction of better variety of sesame seed	4.01	0.808
There exist no maximum utilization of sesame cultivated land potential to increase output	4.07	0.814
Producers have no capacity to buy improved technology to produce sesame in big volume in the study area	3.41	1.162
Producers have no access to sufficient information/awareness about improved technology for producing sesame around study area	3.94	0.933
There is no supply of technology in multiple choices for sesame producers in the study area	4.07	0.690
Over all Mean	3.90	0.55

Source: Own Survey, 2023

As shown in the above table 4.4, the study finding shows that Production/Productivity factor is found to be one of the major influential factor affecting the performance of sesame export of the study area. As a result, the aggregate standard deviation score is with a lower level of deviation of **0.55** and the aggregate mean score for foreign price factor is found to be **3.90**. Thus, overall standard deviation score shows a relatively lower deviation among the responses of respondents showing higher influence of the Production/Productivity factor on the performance of sesame export. The overall mean score of Production/Productivity factor influence on sesame export performance shows a higher level of agreement among the respondents response that signifies the influence of this factor. Thus, Production/Productivity factor is an influential factor in both measurements.

4.2.4 Assessment on Product Quality

The output assessments were done on four indicators such as quality controlling mechanisms at various levels, post-harvest storage technologies and availability of modern threshing machine. The results of the indicators are presented in table 4.5.

Table 4.5: Product Quality Factors

Items	Mean	Std. Dev.
There is no strong regular quality controlling mechanisms at various levels in the value chain in the study area	4.32	0.628
Investors/Farmers have no post-harvest storage technologies to keep the quality of the product in the study area	4.03	0.761
There is no modern sesame threshing machine to keep the quality of harvested sesame seed in the study area.	4.25	0.802
Over all Mean	4.20	0.63

Source: Own Survey, 2023

As per the table above table 4.5, the study finding shows that product quality factor is found to be one of the major influential factor affecting the performance of sesame export of the study area. As a result, the aggregate standard deviation score is with a lower level of deviation of **0.63** and the aggregate mean score for product quality factor is found to be **4.20**. Thus, overall standard deviation score shows a relatively lower deviation among the responses of respondents showing higher influence of the product quality factor on the performance of sesame export. The overall mean score of product quality factor influence on sesame export performance shows a higher level of agreement among the respondents response that signifies the influence of this factor is positive. Thus, product quality factor is an influential factor on the performance of sesame export in both measurements.

4.2.5 Assessment on Infrastructural/rural feeder road factors

The Infrastructural assessments were done on five indicators such as rural feeder road accessibility, road network and modern market centers accessibility, telephone access network, accessibility to health centers and hospitals and electric power service accessibility. The results of the indicators are presented in table 4.5.

Table 4.6: Infrastructural/rural feeder road factors

Items	Mean	Std. Deviation
Rural feeder road is not accessible to the study area	4.17	0.522
Road network and modern market centers are not moderately accessible in the study area	4.36	0.811
There is no telephone access network in the study area	4.25	0.685
The study area is very far from health centers and hospitals	4.19	0.534
There is no electric power service around the study area	4.36	0.753
Over all Mean	4.26	0.47

Source: Own Survey, 2023

As shown in the above table 4.6, the study finding shows that Infrastructural/rural feeder road factor is found to be one of the major influential factor affecting the performance of sesame export of the study area. As a result, the aggregate standard deviation score is with a lower level of deviation of **0.47** and the aggregate mean score for Infrastructural/rural feeder road factor is found to be **4.26**. Thus, overall standard deviation score shows a relatively lowest deviation among the responses of respondents showing highest influence of the Infrastructural/rural feeder road factor on the performance of sesame export. The overall mean score of Infrastructural/rural feeder road factor influence on sesame export performance shows a highest level of agreement among the respondents response that signifies the influence of this factor is the positive. Thus, Infrastructural/rural feeder road factor is the most influential factor affecting the performance of sesame export in both measurements compared to other variables considered in this study.

4.3 Descriptive Statistics

The responses of the respondents for the variables were measured on a five point Likert scale: 1= strongly disagree, 2= disagree, 3 = neutral, 4= agree and 5= strongly agree.

Table 4.7: Descriptive Statistics of oilseeds export performance determinants

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Marketing	151	1.00	5.00	4.0464	1.00225
Price F	151	2.33	5.00	4.0287	.65765
Product Q	151	3.00	5.00	4.2031	.63125
Infrastructural	151	3.20	5.00	4.2649	.47696
Performance	151	2.60	5.00	4.0503	.65083
Output F	151	2.00	5.00	3.8993	.55178

Source: Own Survey, 2023

The standard deviation was used to display the descriptive outcome of the reaction of Ethiopian sesame exporters to the factors of marketing, price, product quality, production/productivity, and infrastructure/rural feeder road, as presented in Table 4.7.

4.4 Correlation analysis

It is a statistical measure that shows the strength of association between different variables within a study and relative movement of variables as well. The value of correlation coefficient need to be within -1 to +1. The below given table shows correlation coefficients of this research. The Pearson's correlation coefficient analysis helped the researcher to better understand whether there was a positive relationship, negative relationship, or no correlation between dependent variable and independent variables. Thus, the strength and direction of relationship between variables was able to be analysed by the researcher using Pearson correlation coefficient analysis. In addition, the researcher used it to measure whether there was a significant relationship between independent variables and dependent variable.

Table 4.8: Correlation matrix of dependent and independent variables

Correlations							
		Performan ce	Mark eting	PriceF	produc tQ	Infrastruct ural	Output tf
Perfor mance	R	1					
	Sig.						
Marketi ng	R	.202*	1				
	Sig.	.013		.			
PriceF	R	.540**	.083	1			
	Sig.	.000	.310				
Product	R	.437**	.032	.514**	1		
	Sig.	.000	.693	.000			
Infrastr uctural	r	.626**	.049	.405**	.282**	1	.
	Sig.	.000	.552	.000	.000		
Outputf	r	.637**	.281**	.367**	.176*	.385**	1
	Sig.	.000	.000	.000	.030	.000	
*. Correlation is significant at the 0.05 level (2-tailed).							
**. Correlation is significant at the 0.01 level (2-tailed).							

Source: Own Survey, 2023

The first tested relationship was among variables provided on output factor and sesame export performance. The p-value is less than 0.01, which shows that correlation between the said two variables is statistically significant. On the basis of 151 responses from, among the five selected variables in this study the strongest relationship output factor is with sesame export performance because the value is 0.637. This is a direct or positive relationship that means if tax audit effectiveness will be improved by 100% there will be 63.7 % increase in output factor. As per the data collected from 151 responses from the employee, among the five selected variables in this study the second strongest relationship infrastructural factor is with sesame export performance issue because the value is 0.626. This is a direct or positive relationship that means if responsibility will be improved by 100% there will be 62.6% increase in infrastructure. As per the collected five selected variables in this study the third strongest relationship of price factor is with sesame export performance the value is 0.540. This is a direct or positive relationship that means if price factor will be improved by 100% there will be 54% increase sesame export performance.

4.5 Regression Analysis

Regression analysis is a statistical measurement used to estimate the relationships among the dependent and independent variables. It enables to determine the strength of the relationship between variables and the predictive power of the independent variables on the dependent variable. In short, regression helps a researcher understand to what extent the change of the value of the dependent variable causes the change in the value of the independent variables, while other independent variables are held unchanged. Regression analysis is a way of statistically sorting out the variables that have indeed an impact. While there are many types of regression analysis, at their core they all examine the influence of one or more independent variables on a dependent variable.

4.5.1 Diagnostic Tests of Assumptions of Classical Linear Regression Model (CLRM)

The Classical linear regression model such as homoscedasticity, autocorrelation, Multicollinearity, and normality were conducted and are discussed below.

4.5.1.1 Normality test

Multiple regressions require the residuals to be normally distributed. Skewness and kurtosis are statistical tools that can enable to check if the data is normally distributed or not. To verify that the error term in the model is zero mean and has consistent variance, researchers employ the Normality test. This test assumes that the populations from which the samples are taken are normally distributed, which can be confirmed by examining a histogram or a Q-Q-Plot. In addition, a normal probability plot can be used to confirm Normality. Based on the figure above, it can be inferred that the conclusions drawn from the model are precise and dependable.

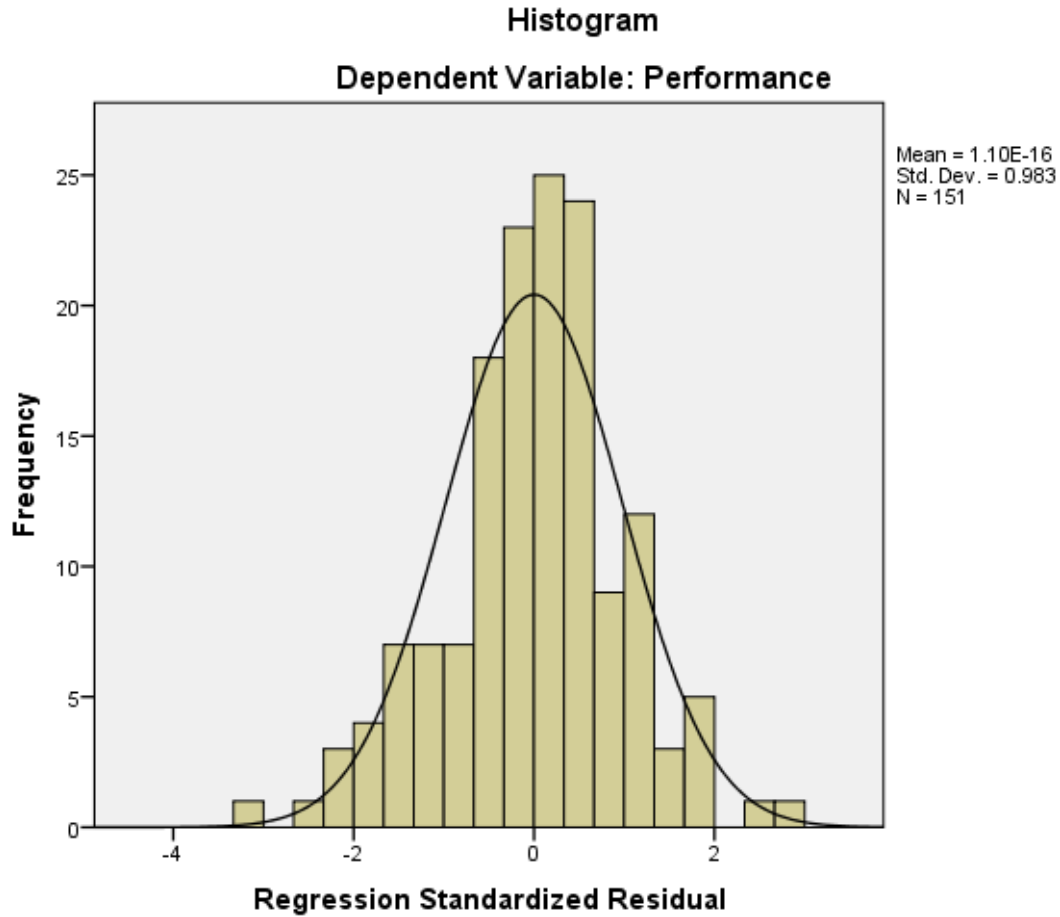


Fig 4.1 Normality Test

4.5.1.2. Homoscedasticity Test

The concept of homoscedasticity is crucial to the linear regression model. It pertains to a scenario where the error term (i.e., random disturbance in the correlation between the independent and dependent variables) remains consistent across all independent variable values without any discernible patterns. One can verify the assumptions by examining a scatter plot diagram. This plot showcases the predicted model values compared to the residuals obtained. Therefore, as demonstrated in the figure below, the scatter plots have not established any patterns.

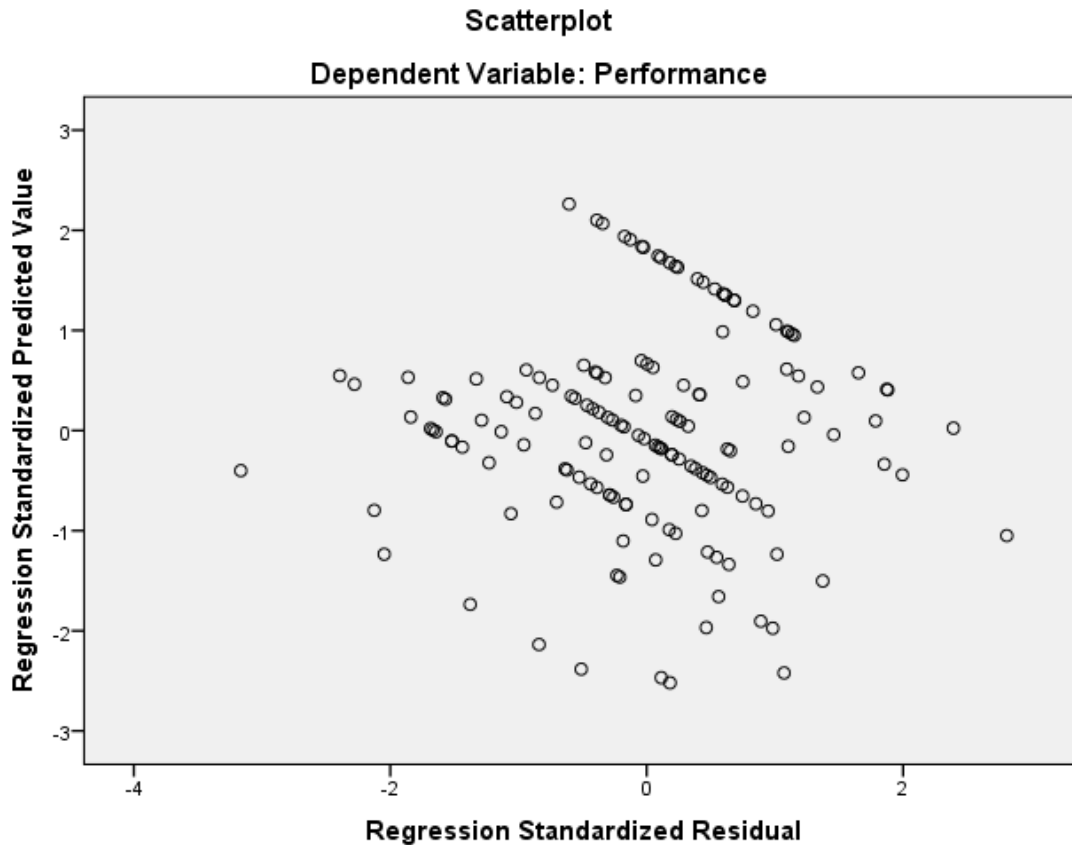


Fig 4.2 Homoscedasticity Test

4.5.1.3 Multicollinearity Test

Co-linearity (or multi-co-linearity) refers to the undesirable situation where one of the independent variables is a linear function of the other independent variables (Gelman, 2006). In this investigation, multi-co-linearity was assessed using tolerance and variance inflation factor (VIF) statistics. Andy (2006) pointed out that a tolerance value of less than 0.1 indicates a severe co-linearity problem. Burns and Burns (2008) also noted that a VIF value exceeding 10 is a matter of concern. In this study, all the independent variables had a tolerance greater than 0.1 and a VIF value less than 10, indicating that multi-co-linearity was not an issue.

Table 4.9 Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Marketing Factor	.917	1.091
	Price Factor	.623	1.604
	Product Factor	.728	1.374
	Infrastructural Factor	.760	1.315
	Output Factor	.736	1.358

Source: own survey 2023

4.5.1.4. Test of linearity

Essentially, the Standard multiple regression technique is capable of providing an accurate estimation of the correlation between the dependent and independent variables, only if the connection between them is linear. When the relationship between the independent variables (IV) and the dependent variable (DV) is non-linear, the outcomes of the regression analysis will underestimate the actual correlation. As depicted in the aforementioned diagram, the association between independent variables (IV) and the dependent variable (DV) appears to be nearly linear, despite not being entirely linear.

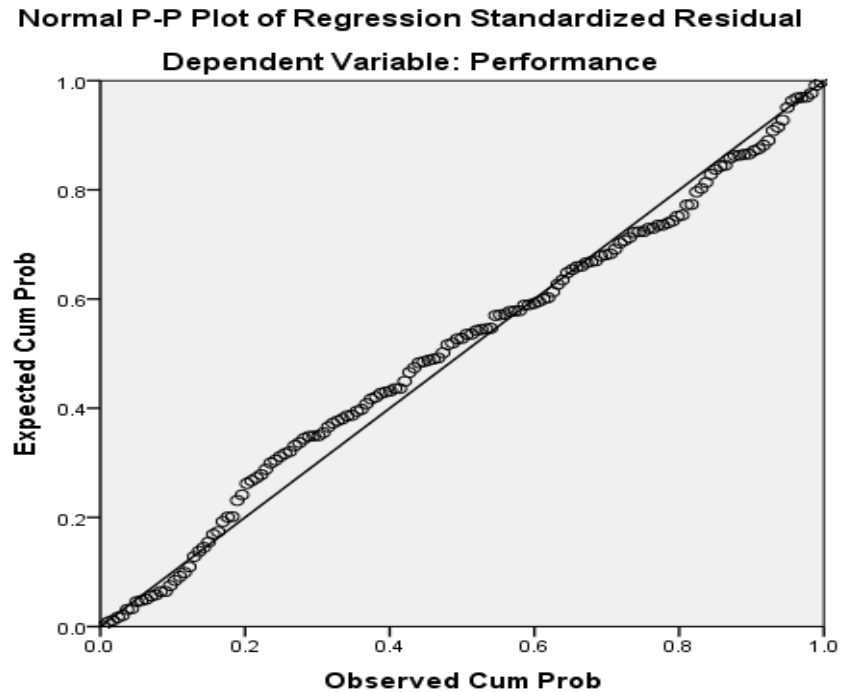


Fig 4.3 Linearity Test

4.5.2 Regression Result Analysis and Discussion

Overall, the entire model passed the four diagnostic tests in accordance with Classical Linear Regression Assumptions (CLRM). The next part will present the results of the regression output to examine the effects of marketing strategies on the export performance. With the help of multiple linear regression analysis, model summary, ANOVA, and Beta coefficient were determined, and the regression model was developed.

Model summary: The table below shows that there are five predictor variables in the study including Output factor, product quality, Marketing factor, Infrastructural and Price factor. Regression model was applied to test how factors had impact on sesame export performance. Coefficient of determination-R² is the measure of proportion of the variance of dependent variable about its mean that is explained by the independent or predictor variables (Hair et.al, 1998). Higher value of R² represents greater explanatory power of the regression equation. The table shows the R² value of 0.65. This result shows that the independent variables (Output factor, product quality, Marketing factor, Infrastructural and Price factor) accounted for 65 percent of the variance in

sesame export performance. This means 65 percent of the variation in sesame export performance is explained by the independent variables whereas the remaining 35 percent of the variation is explained by other factors which are not included in this study.

Table 4.10 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.806 ^a	.650	.638	.39174
a. Predictors: (Constant), Output F, product Qu, Marketing, Infrastructural, Price F				
b. Dependent Variable: Performance				

Source: own survey 2023

The below table i.e. ANOVA test shows if the predictors of this research actually sesame export performance. This can be answered through overall significance of the model, which is typically and traditionally shown through a p-value that is less than 0.05. The table shows that the p-value is appropriately and shows a perfectly significant of all collective independent variables on one dependent variable.

Table 4.11 ANOVA table

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.286	5	8.257	53.806	.000b
	Residual	22.252	145	.153		
	Total	63.537	150			
a. Dependent Variable: Performance						
b. Predictors: (Constant), Outputf, productQ, Marketing, Infrastructural, PriceF						

Source: own survey 2023

Table 4.12 Regression output

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.405	.349		-4.020	.000
	Marketing	.035	.033	.055	1.062	.290
	Price F	.147	.062	.148	2.379	.019
	Product Qul.	.194	.059	.188	3.265	.001
	Infrastructural	.488	.077	.358	6.346	.000
	Output	.468	.068	.397	6.929	.000
a. Dependent Variable: Performance						

Source: own survey 2023

a. Dependent Variable: Performance

The Regression coefficients in Table 4.12 indicate the extent of impact that the independent variables have on the dependent variable's accounted variance. In the study area, foreign price level, product quality, infrastructure, and production/productivity significantly determined and predicted the oilseeds export's performance, as their p-values were 0.019, 0.001, 0.000, and 0.000, respectively, which were all below the significance level of 0.05. However, marketing was not deemed a significant influential variable, with a p-value of 0.29, exceeding the 0.05 significance level.

4.5.3 Summary of the Results from the Model

Production/Productivity

The volume of production and efficiency of production/productivity is found to be a key determinant factor of export performance measurement variable according to the survey results of this study. The basic ground for lower production /productivity is the underutilization/minimum application of improved technology and improved sesame seed variety in the study area. Moreover,

the potential of the study area in terms of the production area coverage is also minimum compared to the suitability of the area for the production of sesame which has a leading impact on the volume of the amount available for export. Hence, the assumption that production/productivity is the leading determinant factor of export performance of sesame in Benishangul Gumuz regional state Metekel zone Dangur woreda is proved to be true. Therefore, it is statistically confirmed that the relationship between production/productivity and export performance of sesame crop is positive and significant.

The positive and significant impact of production/productivity variable is also confirmed by Other researchers. For instance, Kumar (1998) investigated the factors influencing export growth in developing nations and established that GDP has a substantial and beneficial effect on the quantity of exports. Similarly, Fugzza (2004) analyzed the determinants of export performance using quintile regression techniques based on a sample of 149 countries during the years 1988-1999. The results were robust, indicating that the gross domestic product has a positive impact on the export growth rate for developing countries.

Product Quality

The product quality is also found to be another significant variable determining the performance of sesame export in the study area. The actual statistical result shows that the quality standard of sesame from the study area is short of quality controlling mechanisms. This is as a result of poor storage and threshing systems in the study area. The higher quality standard of the sesame product is associated with higher volume of export performance. Thus, the relationship between export performance and product quality is positive and significant. This finding is consistent with the studies conducted by Birtukan Simaw (2022) and Endalkachew Mekonnen Molla (2019), who also discovered that product quality has a substantial and favorable impact on the export performance of sesame in Ethiopia.

Infrastructure/Rural Feeder Road

The performance of sesame export in Dangur woreda, Metekel zone, Benishangul Gumuz regional state heavily relies on the state of infrastructure. The study area is situated in a remote location, approximately 70 km away from the Amhara region border, 60 km away from the Metekel zone of the region, and 50 km away from the Dangur woreda town, Manbuk. The area lacks rural feeder

roads from all directions, which adversely affects its infrastructural facilities. Additionally, the study area is surrounded by multiple river streams, some of which overflow between July-October, making it challenging for farm project owners and top management to supervise and follow up on the project. Despite these challenges, the study found a positive and significant relationship between sesame export performance and the study area. Abera (2009) highlights the challenges faced by the sesame production and marketing industry in Ethiopia, including inadequate road networks. Birtukan Simaw's (2022) study on the performance of sesame seed export in the case of B/dar customs commission exporters identifies infrastructure, particularly rural feeder roads, as the main influential factor that fosters sesame export performance. However, Mengistu's (2018) study on determinants of oilseeds and pulse export performance in Ethiopia found a negative association between infrastructure/rural feeder roads and oilseeds and pulse export performance, which was not statistically significant.

Marketing Information

In the study area, sesame export performance is evaluated based on various independent factors, including marketing. The regression output table reveals that marketing information is not a significant factor for sesame export performance, as its p-value (0.29) exceeds the critical value of p (0.05) at the 5% significance level. As per Birtukan's research in 2022, marketing information does not have a considerable impact on sesame export performance. However, Mershayе Kurabachew's study in 2019 suggests that the marketing factor has a positive and significant relationship with oilseed export performance. Given the negative impact of marketing on sesame export performance found in this study, which contradicts some other research, further investigation is recommended to determine why it is negatively associated with sesame's export performance in the study area.

Foreign Pricing Level

Foreign pricing is another independent variable considered for checking its contribution on the performance of sesame export. Accordingly, the regression analysis shows that the foreign price level is found to be positive and significant. Other researchers such as Mengistu 2018 and Birtukan 2022 has identified that foreign price level is a positive and significant factor influencing sesame export performance.

4.6. Hypothesis Test

Hypothesis testing implies the proof of the underlined assumptions with regards to the independent variables set before knowing the regression analysis result and to interpret the results. The researcher set that the null hypothesis assumed that all selected independent variables are affecting the performance of sesame export. H_0 is null hypothesis while H_1 is alternative hypothesis stated all the variables involved in the model influence the dependent variable as it is discussed as follows;-

Hypothesis (Ho1)

The first null hypothesis states that marketing factor is positively influencing sesame export performance of the study area. The regression result of this study shows that marketing factor is not positively related to export performance of sesame seeds in the study area. As a result, null hypothesis $H_{0.1}$ was rejected because of calculated p-value (0.290) is greater than the critical values of p (0.05) or the marketing factor is not significant at the confidence interval of less than 5%. This may be due to the remoteness of the study area that such advancements are not considered as priority or significant factor to impact the performance of sesame export in the study area.

Hypothesis (Ho2)

The second null hypothesis of this study assumes that foreign price level is an influential factor to export performance of sesame in the study area. The null hypothesis H_{02} is accepted; because calculated p value (0.019) is less than the critical values of p (0.05). The stability foreign price level Policy is the major factor that influences the motives of exporters to increase the volume of export.

Hypothesis (Ho3)

H_{03} . There is a positive relationship between product quality and sesame export performance in the study area. The null hypothesis H_{03} is accepted; because calculated p value (0.001) is less than the critical values of p (0.05). Product quality is a key factor that increases the competitive power of the exporter which in effect increases the demand of the product in the international market that will increase the volume of export.

Hypothesis (Ho4)

Production/productivity is positively related to the export performance of sesame product in the study area. The study finding proves that Production/productivity of the sesame product is the significant factor for the export performance with the p-value of (0.000) which is less than the critical value of p (0.05). Hence, the null hypothesis not rejected. It significantly determines sesame export performance and had a positive relationship. The volume of sesame seeds is very critical to promote sesame export performance. The better Production/productivity of the sesame the better the chance that exporters have to increase their export volume, hence, their performance improved.

Hypothesis (Ho5)

Ho5. Infrastructure/rural feeder road is the most influencing factor to sesame export performance. This null hypothesis of study, which states infrastructure /rural feeder road, is the most significant factor to sesame seeds export performance in the study area will be accepted with the calculated p-value of (0.000). On the result of the study infrastructure is found to be the main factor which influences export performance. If there is facilities like road and other basic infrastructural facilities is the most important for better performance of sesame export in the study area.

Table 13: Summery of Hypothesis Test Result

No	Hypothesis	Reason p-value	Result
1	Ho1. Marketing information factor is positively related to the export performance of sesame product	P=.0.290 >.05	Rejected
2	Ho2. It is assumed that sesame export performance is influenced by the price of international market.	P=.019 <.05	Accepted
3	Ho3 There is a positive relationship between product quality and sesame export performance in the study area.	P=.0.001 <.05	Accepted
4	Ho4. Production/productivity is positively related to the export performance of sesame product in the study area.	P=.000 <.05	Accepted
5	Ho5. Infrastructure/rural feeder road is the most influencing factor to sesame export performance.	P=0.000 <.05	Accepted

Source: own survey 2023

CHAPTER FIVE

5 CONCLUSION AND POLICY RECOMMENDATION

5.1. Conclusion

The primary objective of this research is to identify the major determinants that impact the sesame export performance in Benishangul Gumuz Regional State, specifically in Metekel Zone of Dangur Woreda. The study relies on primary data collected from various stakeholders involved in sesame export activities including producers, farm owners, workers, middlemen, and exporters. The study analyzes the independent variables such as marketing factors, foreign price level, production/productivity, infrastructure/rural feeder road, and product quality to determine their impact on the dependent variable, which is the factors affecting the export performance of sesame in the study area. Multiple linear regression models are employed to estimate the impact magnitudes of the independent variables. The models pass various tests such as reliability statistics, descriptive statistics, correlation ANOVA, residual statistics test, Multicollinearity test, linearity test, and Homoscedasticity test.

The result of the study shows that infrastructure/rural feeder road, production/productivity, product quality and foreign price level are significantly influencing the export performance of sesame in the study area. However, the influence of marketing factor is found to be negative and have very little impact. As the study area is located in very remote and potential sesame growing area where there is almost no infrastructure/rural feeder road, the impact of this variable on the performance of sesame export of the area is very big. In addition, product quality is the second most significant factor influencing the export of sesame product due to the absence of infrastructure and modern storage facility in the area. Moreover, due to the absence of experience in using modern technology of production and shortage of supply of modern technology for production and modern inputs to increase production/productivity is the third most significant factor influencing the export of sesame product in the study area. The foreign price level is the least influential factor challenging the performance of sesame export since the price given is taken as a given with a price taking mentality. However, as the study area is very remote and far away from the central export market, the marketing factor is not found to be influential factor by this study.

In a nutshell, this study area is found in the remote corner of the country where there is no rural feeder road to the study area and many big rivers are crossing the way to the production areas of sesame product but with big potential for the production of sesame. Thus, there needs the policy intervention of the government to seriously improve the problem of infrastructure and availability of modern agricultural technology used to alleviate the problem of productivity, post-harvest crop management and product quality management strategies and devices.

5.2. Recommendation

Sesame product is an essential product for Ethiopian economy. Above all it is a product that engages multi-million Ethiopians for employment and means of living as a source of income permanently and temporarily. Moreover, it is the most export item next to coffee and source of foreign currency for the country to keep the balance of payment of the country. In addition to that, the study area is a big potential for the production of sesame with very small technological intervention as it is also a virgin land where the fertility of the soil is top where fertilizer input is not required to grow sesame product. On the other hand, the study area is characterized as a very remote area without basic infrastructures basically the rural feeder road, health centers, electricity and telephone networks. Hence, the government and non-governmental organizations should work together to alleviate the bottlenecks of the area so that the potential of this area will be fully utilized. Thus,

1. The federal government and the regional government has to develop the all season rural feeder road in collaboration with the concerned non-governmental organizations and donors so that the study area will be easily accessible throughout the year without problem in order to increase production and productivity of sesame produced in the study area.
2. The government has to introduce modern agricultural technologies for production and storage so that the quality of the sesame export will be maintained.
3. The producer associations has to cooperate with the federal and regional government to support the producers in availing modern agricultural technologies to solve the existing influential factors for sesame production/ productivity to boost sesame export.
4. The concerned government body has to work on having stable foreign currency, reducing intermediary on the supply chain, and making the ECX price volatile with international

market will help to enhance sesame seeds export performance and be competitive on the international market.

5.3. Suggestion for future Researchers

This study has assessed only some of the factors affecting the export performance of sesame seed in the study area to bring more attention to the mind of the government so that the problem of the study area will be solved. Moreover, this study is to attract the attention of other researchers for further study in the study area so that the problem of this area will be studied in detail and more comprehensive solutions can be sought.

5.4. Limitation of the study

As a result of the constraints in both time and resources, this investigation is restricted to analyzing only a select few factors that impact the exportation of sesame seeds. This means that other significant factors may have been disregarded. Moreover, this study solely concentrates on sesame seeds and does not encompass other exportable commodities. To enhance future research, it is advisable to broaden the scope of the investigation to include other export items and to consider other variables that were not analyzed in this study. Furthermore, the hypotheses posited in this study could be more comprehensively scrutinized utilizing alternative research models.

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Appendix



ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

Questionnaires for MBA Project Research

Dear respondent,

I am a student pursuing my post graduate degree at Addis Ababa University, College of Business and Economics, Department of Management. As part of the requirement for master thesis, I am carrying out a project research work entitled. “Factors affecting the performance of sesame export in Benishangul Gumuz, Metekel Zone, Dangur Woreda”.The purpose of this questionnaire is purely for academic purpose. Hence, you are kindly requested to cooperate by filling in the questionnaire attached herewith. The information provided by you will remain strictly confidential and will be used for intended purpose only. And you will not be liable for anything arising thereof. Your cooperation in dully filling and timely return of the questionnaire is highly appreciated.

Instruction:

- Writing your name is unnecessary.
- Put a tick mark as per the questions required in the box and put your short and precise answer in the space provided

Thank you in Advance

Tsehaye Taye

MBA student (2021)

Addis Ababa University

1. Background Information of the Respondent

1.1 Gender

Male

Female

1.2. Age

25 years or less

26-35 years

36-45 years

46-55 years

Above 55 years

1.3 Educational Background

Diploma Degree Masters

Ph.D. Other (please specify) -----

1.4 How long have you been in exporting sesame?

Less than 2 years

2-5 years

6-10 years

Over 10 year's

2. Please mark what you feel most appropriate, using the 5 points Likert's scale ranging from 1 to 5.

(Where 1 = strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree)

Marketing factors		1	2	3	4	5
1	There is no lack of information about export procedure of sesame in the study area					
2	There is no International trade procedural complexity to sesame export					
3	There is delay of payment to the sellers for exported sesame in the study area					
4	There is sesame demand in the international market in the study area					
Price Factors						
5	There is a price volatility of sesame in the global market					
6	Exporters in the study area did not know about the export procedure and have lower Negotiation power.					
7	There is a good Contract discipline and honor of contractual agreement between sellers and buyers in sesame export practice in the study area					
Production/Productivity Factors						
8	There is no efforts made so far for introduction of better variety of sesame seed					
9	There exist no utilization of sesame cultivated land potential to increase output					
10	Producers have no capacity to buy improved technology to produce sesame in big volume in the study area					
11	Producers have no access to information/awareness about improved technology for producing sesame around study area					

12	There is no supply of technology in multiple choices for sesame producers in the study area				
Product Quality					
12	There is no regular quality controlling mechanisms at various levels in the value chain in the study area				
13	Investors/Farmers have no post-harvest storage technologies to keep the quality of the product in the study area				
14	There is no modern sesame threshing machine to keep the quality of harvested sesame seed in the study area.				
Infrastructural Factors					
15	Rural feeder road is not accessible to the study area				
16	Road network and modern market centers are not accessible in the study area				
17	There is no telephone access network in the study area				
18	The study area is very far from health centers and hospitals				
19	There is no electric power service around the study area				
Sesame Export Performance Trends					
25	There is no increasing trend in the volume of export of sesame from the study area				
26	There is no increased quality of sesame product from the study area				
27	There is an increasing demand for the sesame product from the study area				
28	There is an overall increasing volume of export from the study area				
29	There is an increasing price trend in the world market for the product of the study area				

Open ended questionnaire

1. What are the challenges and opportunities of sesame production in the area?

2. What are the major constraints of sesame export performance in the area?

3. Based on your experience, what do you think the main challenges that influence your sesame export performance? Consider problems like quality, price, marketing strategies, environmental problems, economic issues, social issues and political/policy.

4. What is/are export policy related problems that discourage sesame export? Consider the loan or credit, process of export, trade relations, and other incentive which you consider as vital problems.

5. What solutions do you suggest to minimize or eradicate the challenges that affect sesame seed export performance?

6. If you have any additional comment or suggestion:
