

BINDURA UNIVERSITY OF SCIENCE EDUCATION

**FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE
DEPARTMENT OF AGRICULTURAL ECONOMICS, EDUCATION AND
EXTENSION**



**ANALYSIS OF SUNFLOWER CONTRACT FARMING EFFECT ON SMALL-SCALE
FARMERS' INCOMES: A CASE STUDY OF UMGUZA DISTRICT, MATABELELAND
NORTH PROVINCE**

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Project for presenting the Agricultural and Science Department of Bindura University of Science Education as a partial requirement for obtaining a degree in Agricultural Economics and Management.

DECLARATION OF HONOR

I, Siphulwazi S Ndlovu, declare on my honor that this work is my authorship and the results of my research; this is the first time that I submit it to obtain an academic degree in an educational institution; any similarity with other works already carried out is a simple coincidence; and that all works by other authors used in this work were duly cited and listed in the list of bibliographic references.

The author

(Siphulwazi S Ndlovu)

ABSTRACT

The purpose of this study was to assess the effectiveness of sunflower contract farming in increasing small-scale farmer's incomes in Zimbabwe's Umguza District. Contract farming has been widely pushed to improve small-scale farmers' incomes by providing access to inputs, technical support, and assured markets.

The study focused on the Umguza District, which is noted for predominantly producing sunflower and looks into how contract farming arrangements affect small-scale farmers' incomes. The study employs a mixed-methods approach, combining quantitative data gathering, such as household surveys, with qualitative interviews with key stakeholders, including farmers, contract farming organizers, and local government officials. The collected data was evaluated to determine the income levels of participants and non-participants of contract farming as well as to discover the major aspects contributing to the contract farming model's success or issues.

The findings of this study shed light on the efficiency of sunflower contract farming in increasing the earnings of small-scale farmers in Umguza District. The study helps to advance our understanding of the potential benefits and limitations of contract farming as a tool to improve farmers' incomes. The findings may not really affect policymaking development practitioners and farmers devise strategies to enhance and spread effective contract farming models across the area.

Keywords: Contract farming and small-scale farmers livelihoods

APPROVAL FORM

The undersigned certified that they have supervised and recommended to Bindura University of Science Education for acceptance of dissertation entitled “**Analysis of sunflower contract farming effect on small-scale farmers’ incomes: A case study of Umguza District, Matabeleland North Province**”. Which was submitted in partial fulfilment of bachelor of Agricultural Economics and Management Degree.

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Date:.....7 June 2024

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

In Zimbabwe, contract cultivation of oil crops such as sunflower has become more common as a result of the need to improve vertical cooperation between agribusiness enterprises and producers (Chisoro-Dube, Dube et al. 2019). The evolving global environment, where competition, customer expectations, technology, government laws and agricultural practices have been taking the spotlight is largely responsible for the increasing significance of contract farming in the nation (Law et al., 2009). Through the creation of both domestic and international market links, contract farming (Barrett et al., 2012) has successfully allowed smallholder farmers in developing nations to commercialize their farming activities (Minot and Sawyer 2016).

Contract farming has gained popularity worldwide as a value chain financing mode for increasing small-scale farmers' efficiency, production, and income (Dalipagic and Elepu 2014). This agricultural financing mode involves agreements between farmers and agribusiness businesses, in which farmers agree to grow sunflowers under the buyer's stipulated terms and conditions (Skepe, 2019). Furthermore, (MacDonald, Perry et al. (2004) points out that such contracts often include provisions for inputs, technical help, and guaranteed market for the generated commodities.

According (Khurana and Singh 2021) sunflower is a highly versatile and commercially significant crop farmed all over the world, prized for its seeds, which are known for their high oil and protein content. The extracted oil from sunflower seeds is not limited to culinary purposes; it acts as a fundamental ingredient in a variety of industries, including food processing, cosmetics, and biodiesel production (Adeleke and Babalola 2020). In the livestock industry sunflower meal, a byproduct of oil extraction, is emerging as a useful protein source for livestock feed, highlighting the crop's diverse utility and economic significance (Katiyar et al., 2021)

Zimgold, an agro-processing company that produces cooking oil from crops such as sunflowers, is a well-known proponent of contract farming. Zimgold's contract farming program actively supports small-scale farmers in Matabeleland North, Zimbabwe. The company has demonstrated that contract farming can assist smallholder farmers in a variety of ways, including access to production inputs, output markets, market development, and other intangible benefits (Bijman 2008). Contract farming has been explained as an agreement between a contractor and the farmer, typically made beforehand the growing season, for a specific quantity, quality, and delivery date of agricultural produce at an established cost or price formula. (Sreymom and Pirom 2015). It is a method that allows agribusiness businesses to outsource their raw materials from smallholder farmers, who are frequently referred to as out-growers (Martiniello & Azambuja, 2019).

As a result, contract farming is now used for a variety of crops, including quality protein maize, sorghum, (Elepu and Nalukenge 2009) organic products, oilseeds, honey, and poultry. Some contract farming schemes have been credited with significantly increasing crop farming profitability, improving small-scale farmers' income, lowering marketing risks, and, most crucially, creating new markets for non-traditional income crops both locally and globally (Minot 2011).

With the assistance of the Ministry of Land, Water, Agriculture, Fisheries, and Rural Development, contractors such as Zimgold sign production agreements with out-growers, providing them with seed, fertilizers, extension services, and working capital to help them maintain the quality of their seed crops while in the fields. However, when contract farming represents a substantial prospect for commercializing small-scale agriculture, small-scale farmers have allegedly encountered contractual challenges when engaging with large agribusiness corporations, forcing some to abandon contract farming (Ncube 2020).

Similarly, agribusiness businesses apparently found contractual issues while dealing with some small-scale farmers, perhaps leading to their exclusion from contract farming (Smalley, 2013). Typically, these contractual issues have attributed mostly to one of the parties' failure to adhere to contractual duties, whether an agricultural enterprise or a small-scale farmer (Ncube 2020). The goal of this study is evaluating the effectiveness of sunflower contract farming in

increasing small-scale farmers' incomes. Case study: Umguza District, Matabeleland North Province (Ruckert et al., 2022).

1.2 Problem Statement

Umguza district in Zimbabwe is predominantly an agricultural region, with small-scale farmers playing a crucial role in the local economy (Phiri et al., 2021). However, these farmers often face challenges in improving their income and livelihood due to various factors, such as limited access to markets, lack of technical knowledge, and inadequate financing (Mpandeli and Maponya 2014). One potential approach is contract farming which improves farmers access to inputs.

Contract farming is an agreement with farmers to raise specific crops or livestock for a buyer, usually a processing corporation or a large-scale commercial farm (Minot and Sawyer 2016). This approach can potentially benefit small-scale farmers by providing them with a guaranteed market, access to inputs, and technical support (Phiri et al., 2021).

The effectiveness of sunflower contract farming in improving small-scale farmer's income within the Umguza district is not yet well understood (Ruckert et al., 2022). To address this gap, this study aims to analyze the impact of sunflower contract farming on the income and livelihood of small-scale farmers in the region (Henningsen et al., 2020). The study investigates the factors that influence the adoption and success of sunflower contract farming, as well as the challenges and barriers faced by farmers in the implementation of this model.

The findings of this study provide valuable insights like market access, quality control and technical support for policymakers, development agencies, and other stakeholders interested in promoting sustainable agricultural development and improving the livelihoods of small-scale farmers in Umguza district including similar regions (Chipfakacha 2019). The study contributes to the broader understanding of the effectiveness of contract farming as a strategy for enhancing the income and resilience of smallholder farmers in developing countries.

1.3 Research Questions

1. To what extent is sunflower contract farming contributing to small-scale farmers' incomes?

2. What is the small-scale farmers' level of satisfaction with sunflower contract farming?
3. What factors are affecting the small-scale farmers in improving their incomes through sunflower contract farming?

1.4 Research objectives

1.4.1 Main research objectives

1. To assess the impact of sunflower contract farming on the income levels of small-scale farmers in Umguza district.

1.4.2 Specific objective

1. To evaluate the contribution of sunflower contract farming towards the income of small-scale farmers.
2. To assess the level of satisfaction among small-scale farmers participating in sunflower contract farming.
3. To evaluate the effect of sunflower contract farming on the income levels of small-scale farmers in Umguza District

1.5 Justification

(Renzaho, Kamara et al. 2017) claims that contract farming is solving crucial oilseed shortages for enterprises involved in oilseed crop processing, as well as farmers who face market access issues. This study examines the implementation and effectiveness of a sunflower contract farming program in Zimbabwe, which is an important agricultural practice. Zimbabwe Vulnerability assessment committee 2022 research claims that farming is the primary source of income for the majority of households in Umguza District, small-scale farmers experience difficulty in obtaining economic stability due to fluctuating market prices for their products. Small-scale farmers in Matabeleland North Province frequently have low incomes due to fluctuating market prices, restricted market access, and weak negotiating power.

According to the AMA 2023 pricing list, sunflower prices can be as low as USD 250 per ton for contract farmers selling their grains to feed corporations or some animal farmers. Contractors (Zimgold) pay between USD500 and USD750 per ton, depending on grain quality. Sunflower Contract Farming Programme is one of the interventions designed to increase market and income

stability for small-scale farmers however, there has been a dearth of extensive research of the efficiency of sunflower contract farming in increasing small-scale farmers' incomes in Umguza District, Matabeleland North Province (Thebe 2018) . Furthermore, the province has a low rate of sunflower contract cultivation.

Small-scale farmer's access to higher-value markets is determined from their market. However, weak market result in fewer profits and income insecurity. As a result, increasing income stability and boosting the economic well-being of small-scale farmers breaks the cycle of poverty and leads to sustainable lives (Neglo, Gebrekidan et al. 2021).

The project's findings can also be utilized to inform government policies regarding agricultural development and small-scale farming. This information can be used by government agencies and other key stakeholders to develop and implement assistance programmes that promote market integration and revenue for small-scale farmers engaged in sunflower contract farming (Neglo, Gebrekidan et al. 2021). Understanding the effectiveness of sunflower contract farming in increasing small-scale farmer wages can shed light on the agricultural practice's long-term viability. The data can be used to detect potential environmental, social, and economic consequences and give mitigation solutions (Costa and Peixoto 2020). The project's focus on sustainable agriculture can help the region's long-term food security and environmental conservation.

To address these issues, a critical analysis of sunflower contract farming's effectiveness in increasing small-scale farmers' incomes will provide valuable insights into its effectiveness in increasing incomes, as well as information for the program, agricultural organizations, and farmers on the necessary interventions and improvements. Understanding the issues that inhibit market and income stability allows stakeholders to develop and implement more targeted and effective solutions to support the socioeconomic growth of the region's small-scale farmers (Makate 2019).

1.6 Scope/Delimitations and Limitation of the study

1.6.1 The delimitations

1. The study focussed on Umguza District in Matabeleland North, Zimbabwe.

2. The analysis examined the incomes of small-scale farmers participating in sunflower contract farming excluding other crops or agricultural activities.
3. The study covered the period 2020 to April 2024, limiting the analysis to the current economic and social conditions prevailing in the Umguza district.
4. The research focused on small-scale farmers involved in contract farming, excluding large-scale farmers or those engaged in other forms of agricultural production.
5. The study relied on data collected through interviews and surveys from small-scale farmers and representatives from the contractors for example Zimgold Company. Other sources of data, such as secondary data from Ministry of Lands, Agriculture, water, Fisheries and Rural Development (Department of AARDS/AGRITEX) and other stakeholders, were included in the analysis.

1.6.2 The limitations

1. The study's findings were limited by the availability and reliability of data sources. Accessing accurate and comprehensive data on market integration and income of small-scale farmers in Umguza District posed certain challenges.
2. The analysis was conducted within the context of the broader socio-economic and political environment of Zimbabwe, which impacted the incomes of small-scale farmers.
3. The study encountered sampling bias due to limited resources and constraints in accessing the representative sample of small-scale farmers.
4. The farmers' responses to survey questions were influenced by social desirability bias and their personal perceptions which might have affected the accuracy and reliability of data collection.
5. Due to the case study nature of the research, the findings were not directly applicable to other regions.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

Sunflower contract farming has emerged as an agricultural strategy that can give small-scale consistent markets and income (Ncube 2020). In Umguza district of Matabeleland North, sunflower contract farming has arisen as a key source of income for rural farmers. The researcher intends to examine existing knowledge on market integration and earnings of small-scale farmers engaged in sunflower contract farming in Umguza district, Matabeleland North, identifying trends, difficulties, and potential prospects.

2.1 Definition of key terms

Contract farming is an agreement between agricultural producers (contract farmers) and agribusiness businesses or buyers contracting parties (Cotula, Blackmore et al. 2021). The parties negotiate the terms and conditions under which the farmer pledges to produce and deliver a specific product in line with established quality standards and quantities, with the buyer committing to buy the commodity at a predetermined price (Tang, Sodhi et al. 2016). Contract farming's primary characteristics are the long-term and legally binding nature of the agreement, the cooperative relationship between the contractual parties, and the transfer of certain production, marketing, or implementation risks from the farmer to the buyer (Pultrone 2012).

2.1.1 Types of Contract Farming

(Baumann 2000) states that there are three forms of contract farming which are market specification contracts, resource-providing contracts and production management agreements. Market specification contracts ensure market for farmers if the product specifications are met. The contractor's intervention is often confined to crop grading during the marketing stage. A resource-based contract provides financing in the form of agricultural production inputs and, in certain cases, working capital. When the farmer sells his produce, he repays the credit he was given. Farmers can also receive extension services under this arrangement, and there is a good likelihood that technology will be transferred.

In Zimbabwe, sunflower marketing is regulated by GMB, provides a ready market through the auction market system thus, the resource-providing contracts and production management agreements categories are more suited given their ability to provide loans to farmers and influence farmers production activities. These definitions highlights issues regarding access to credit as well as market defects (Claessens & Yurtoglu, 2012).

2.1.2 Sunflower Contract Farming and its Benefits

Sunflower contract farming can provide various advantages to small-scale farmers, including easier access to capital, technical assistance, higher yields, and market outlets. According to (Lebdaoui, Chetoui et al. 2024) contract farming agreements can increase farmers' incomes by providing consistent markets and premium prices for their produce.

2.1.3 Income Disparities and Challenges

Despite the potential benefits, small-scale farmers encounter problems in sunflower contract farming. Several studies, notably (Abed, Hussin et al. 2022), have identified income differences in contract farming arrangements. Unequal power dynamics, a lack of transparency, and market instability can all contribute to an inequitable income distribution among participating farmers. There are factors influencing incomes were a variety of things influence farmers' incomes. (Kramer, Hazell et al. 2022) found that the quality of extension services, availability to credit, infrastructure development, and social capital are significant predictors of farmer incomes in sunflower contract farming efforts.

2.1.4 Policy and Institutional Support.

Policy and institutional assistance play an extremely important role in achieving market integration and equitable earnings for small-scale farmers. (Ncube 2020) have emphasized the importance of supportive policies that address contractual disputes, develop ties between farmers and agribusiness enterprises, and provide extension services targeted to contract farming needs. Contract farming enterprises can operate more efficiently if market infrastructure such as transportation networks, storage facilities, and market information systems is developed. In

addition to facilitating timely delivery of sunflowers and ensuring fair pricing for farmers, this infrastructure can assist reduce post-harvest losses.

2.1.5 Value chain Financing Model

Sunflower production in Zimbabwe has gained importance as a cash crop, providing opportunities for small-scale farmers to generate income and contribute to food security. In recent years, contract farming arrangements and value chain finance models have been investigated as viable mechanisms for increasing the competitiveness and sustainability of Zimbabwe's sunflower sector. Value chain financing models, on the other hand, are concerned with providing financial services and assistance customized to the specific demands of the agricultural value chain, such as credit, input supply, and market linkages (Webber and Labaste 2009). Sunflower Contract Farming Experiences in Zimbabwe, there is less literature on sunflower contract farming experiences in Zimbabwe, but anecdotal evidence and few researches shed light on the obstacles and opportunities that smallholder farmers encounter in these agreements (Kabwe, Mutambara et al. 2018).

(Ncube et al 2020) states that sunflower contract farming in Zimbabwe has been hailed as a potential strategy for smallholder farmers to have access to inputs, technical support, and markets, hence increasing production and revenue. However, issues such as power imbalances in contract talks, late payments, and price variations have been noted (Cohen and Knetsch 1992). These challenges underscore the need for transparent and fair contract terms, as well as mechanisms to ensure the timely payment and fair treatment of farmers within sunflower contract farming schemes.

Value Chain Financing Models for Sunflower Farmers in Zimbabwe. Value chain financing approaches in Zimbabwe have generally concentrated on staple commodities like maize and wheat, with little attention paid to oilseed crops like sunflower (Kapuya, Saruchera et al. 2010). However, existing VCF systems can be adapted to help sunflower farmers by providing them with access to loans, inputs, and markets throughout the value chain. For example, in Zimbabwe, warehouse

receipt systems (WRS) have been used to give farmers with collateralized credit based on their stored harvests, allowing them to access finance for input purchases and other expenses (Onumah 2003).

Similarly, collaborations between financial institutions, input providers, and off-takers can help to improve the flow of financial services and support to Zimbabwe's sunflower farmers. Challenges and Opportunities in Sunflower Contract Farming and Value Chain Financing in Zimbabwe. There are several constraints and potential for sunflower contract farming and value chain financing options in Zimbabwe (Ncube 2020). Limited access to financial services, weak infrastructure, and market uncertainties all pose challenges to the sunflower sector's growth and competitiveness. Furthermore, a lack of stakeholder coordination and inadequate farmer skills in financial management and contract negotiation impede the successful implementation of these models (Biénabe, Coronel et al. 2004).

On the other hand (Jengeta 2020) states that factors such as increased demand for sunflower oil, market diversification, and supporting governmental frameworks present chances to strengthen the role of contract farming and VCF in Zimbabwe's sunflower value chain. Strengthening extension services, encouraging stakeholder engagement, and improving farmer financial literacy are critical steps toward capitalizing on these prospects and overcoming the hurdles that sunflower producers in Zimbabwe confront. The literature on sunflower contract farming and value chain financing models in Zimbabwe demonstrates that these approaches have the potential to improve smallholder farmers' livelihoods and boost the sunflower sector's competitiveness (Kariuki 2018).

However, more study and empirical investigations are required to have a better understanding of the specific dynamics and effects of these models in the Zimbabwe environment (Lørup, Refsgaard et al. 1998). To encourage the successful integration of contract farming and VCF in Zimbabwe's sunflower value chain, policymakers, development practitioners and private sector actors should consider conducting extensive value chain analysis to identify the key obstacles and potential for Zimbabwe's sunflower producers, as well as developing new financing methods targeted to

sunflower farmers' needs, such as credit, insurance, and savings products. By addressing these recommendations, stakeholders can work towards improving the sustainability and inclusivity of sunflower production in Zimbabwe, eventually contributing to food security, rural development, and economic growth in the country (Godfrey 2016).

2.1.6 Reason small-scale farmers enter into contracts

Agriculture is a risky business that slows the transfer of farming resources and outputs between corporations and farmers. The parties enter into contracts to better the coordination mechanisms for producing and marketing the desired products, which should benefit both the enterprise and the farmer (Shaffer 1987). (Eaton and Shepherd 2001) further suggested that contracts reduce transaction costs, which encourages parties to engage in contract farming operations.

Sunflower contract farming also provides a structure for risk sharing and management among the parties, thereby increasing agricultural productivity while combating poverty (Kuzilwa, Ilembu et al. 2019). In a study of vegetable producers, (Masakure and Henson 2005) discovered that adopting the Hortico contract system was primarily motivated by imperfect markets; at the time, Zimbabwe was experiencing a severe scarcity of growing supplies. The same situation existed with the introduction of sunflower contract farming in 2004.

The parties' goal of maximizing value is seen broadly. Farmers want to gain from access to resources and higher-paying markets, while businesses want to buy their inputs at the lowest possible cost and with the best possible quality. Businesses are now compelled to contract farm, where they maintain control over the production process, due to the expansion of value chains that demand high-quality products with a high degree of differentiation (German, Bonanno et al. 2020). The benefits that partners to a sunflower contract farming arrangement enjoy are listed in Table 2.1.

(Kumah 2015) mentions incentives such as training, finance access, inputs, and extension services in addition to the same reasons that encourage smallholders to sign contracts. Given the parties' unequal bargaining strength, contract farming is nevertheless viewed as exploitative despite its many advantages. Smallholder farmers' "capacity constraints" are another issue that firms must

address. According to FAO (2013b), the formation of farmer organizations can help to increase capacity and bargaining power, thereby alleviating these constraints.

Table 2.1 Advantages of contract farming

Advantages to farmers	Advantages to firms
Direct market access	Steady supply of raw materials
Facilitate access to high-quality inputs	Frequently extend credit facilities
Provision of improved agricultural practises, improved technology and extension services	Improved crop quality and increased output
Enhance a steady income thus improving standards of living	Contribute in rural development and other investments
Gain knowledge and exposure	Ensured consistence supply of high-quality sunflower grains

2.2 THEORETICAL FRAMEWORKS

2.2.1 Sunflower Contract Farming Arrangements

This element encompasses the type and features of the contracts that small-scale farmers and agribusiness enterprises have with each other (Sartorius and Kirsten 2007). It considers the contract's terms and circumstances, price stability, technology transfer, loan availability, and inputs that agribusiness businesses give to farmers.

2.2.2 Income Generation

This aspect looks at how contract farming for sunflowers affects small-scale farmers' earnings. It covers the income distribution, fluctuations in income over time, and general financial health of farmers engaged in contract farming (Barrett, Bachke et al. 2012). Market demand, yields, price stability, and input costs all have an impact on farmers' incomes. Also, the component of institutional support indicates how institutions assist the Umguza district's contract farming of sunflowers. To facilitate contract farming and provide fair results for small-scale farmers, it is

necessary to have favorable legislation, rules, extension services, and farmer associations (Minot and Sawyer 2016).

2.2.3 Value Chain Theory

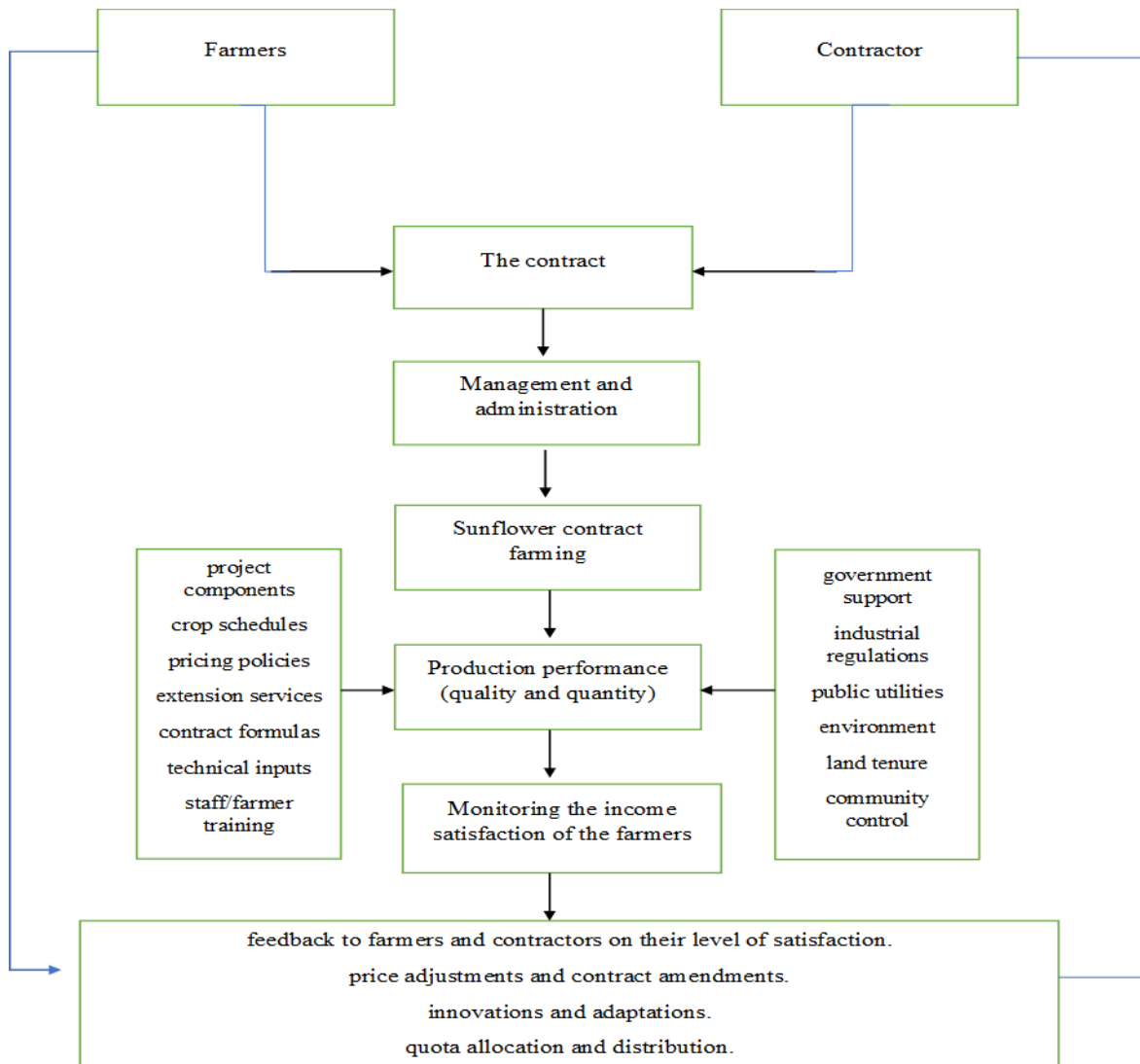
The value chain hypothesis focuses on the steps and procedures that take agricultural products from production to consumption (Liverpool-Tasie, Wineman et al. 2020). The concept advances our understanding of how small-scale sunflower contract farmers are integrated into the larger value chain, opening up markets and allowing them to keep a bigger percentage of the value contributed, potentially leading to an increase in earnings.

2.2.4 Economics of Transaction Costs

Transaction cost economics focuses on the expenses paid during interactions between economic agents. Understanding the contractual arrangements in sunflower contract farming between small-scale farmers and agribusiness companies is advantageous. Sunflower contract farming, according to the theory, can improve market integration and raise revenues for small-scale farmers by lowering transaction costs through information asymmetry reduction, incentive alignment, and contract enforcement (Kuzilwa, Fold et al. 2017).

Figure 2.1 shows the conceptual framework within the agribusiness sector and experiments, the Transaction Cost Theory a branch of the New Institutional Economy which explain market failure caused by many factors (Kuzilwa, Ilembo et al. 2019). Transaction costs are associated with carrying a transaction between the contractor and the farmer. Once the arrangement is done the contractors make it a mission to collect the feedback from all the small-scale farmers and improve on the contract terms to fulfill what all farmers need in return they also benefit by receiving high quality sunflower grains.

figure 2.1: Conceptual framework for sunflower contract farming



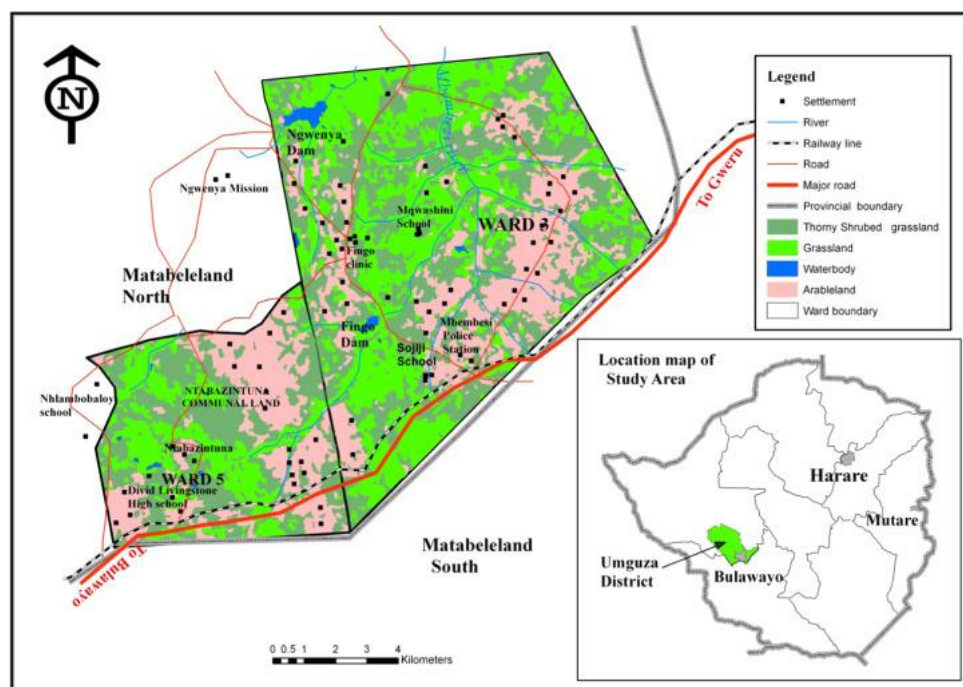
CHAPTER 3

METHODOLOGY

3.1 Brief description of study area

The study area was Umguza District, which is in the southern section of Matabeleland North province. The area surrounds Bulawayo, Zimbabwe's second largest metropolis. The District contains 19 Wards and is distinguished by four types of land tenure which are forestry areas, communal lands, resettlements, and big and small-scale farms (Matsa, Mupepi et al. 2020). Umguza District has a population of 28 258 households, with an average of four individuals (Zim Stat, 2022). This study will focus on small-scale commercial farming in Umguza District. The district's annual temperature is 23.28°C (73.9°F), which is 0.55% higher than Zimbabwe's average (Saunders et al., 2012). The district also receives approximately 27.88 millimeters (1.1 inches) of precipitation and has 54.33 wet days (14.88%) every year.

Fig 3.1: Umguza District Map



3.2 Research Design

The researcher used both qualitative and quantitative techniques to provide a comprehensive understanding of the research problem. The exploration of both the subjective experiences and the objective data related to sunflower contract farming and its effect in improving small-scale farmers' incomes in Umguza District.

3.3 Sampling

The researcher collaborated with local Agricultural Extension Officers to identify and access sunflower contract farmers in the ward 16. The farmers were randomly selected from sunflower contract farmers considering and stratifying the sample based on relevant factors like farm size, years of experience in contract farming and gender. A mix of quantitative (surveys) and qualitative (interviews) data collection methods was used. The researcher collaborated with local programs such as Zimbabwe Vulnerable Assessment Committee and Smallholder Agriculture Cluster Project (SACP), which was created in cooperation with competent researchers who are familiar with the local context and agricultural development approaches. Informed consent and ethical data gathering standards were adhered to.

3.3.1 Target Population

Based on discussions with local Agricultural Extension Officers, it's estimated there were around 150-200 sunflower contract farmers in ward 16. Farmers differed in terms of farm size, years of experience in sunflower contract farming, and other socioeconomic factors. Therefore 70 contract farmers were randomly selected to ensure representation of different farmer groups.

3.3.2 Sampling Techniques

In this study purposive sampling was employed as a non-probability sampling method, chosen when probability sampling was considered inappropriate, particularly for large-scale social surveys. Additionally, convenience sampling was another method utilized by the researcher to engage individual respondents. Convenience sampling is a non-probability sampling technique where participants are chosen based on their easy availability and accessibility to the researcher, rather than through random selection.

3.3.3 Sample Size

The survey targeted a random sample of 50-70 sunflower contract farmers from Ward 16. The total population of sunflower contract farmers in Ward 16 estimated to be around 150-200 farmers, therefore 50-70 farmers represented around 25-35% of the total population. This sample size was deemed sufficient to provide valid insights and statistical conclusions about the impact of sunflower contract farming on the revenues of small-scale farmers in the ward. The sample size considered the relatively small and homogeneous nature of the target population. It ensures adequate representation of various farm size categories through stratified random sampling. The sample size was also limited by practical constraints such as available resources, time, and farmer accessibility.

3.4 Data Collection Methods

Semi-Structured questionnaires and interview guides were used by the researcher. Where data was gathered for the purposes of testing and answering the research question under investigation as well as to assess if contract farming has indeed improved income for smallholder farmers.

3.4.1 Questionnaires

A representative sample of 50-70 small-scale sunflower contract farmers in Ward 16 of Umguza district were selected for a detailed survey on the effectiveness of sunflower contract farming. The survey questionnaire gathered detailed information about the farmers' socioeconomic status, land cultivated, input usage, productivity levels, income from sunflower sales, and overall household income percentage earned by sunflower contract farming. The study also solicited farmers' opinions on the benefits, obstacles, and the efficacy of the contract farming agreement. This quantitative data used to assess how contract farming affects the incomes of small-scale farmers.

3.4.2 Interviews

The interview conducted in-depth with key stakeholders involved in contracting farmers in the program in the district. This comprised contracting firm representatives (Zimgold), local agricultural extension officers, and relevant government officials (the provincial agronomist). The interviews explored the perspectives of these stakeholders on the design, implementation, and perceived impacts of the contract farming model. The subjects discussed were contract conditions,

input provision, technical assistance, pricing strategies, and obstacles. Interviews were a helpful tool for collecting qualitative data. Interviews were a qualitative research strategy that required verbal communication between me and the participants.

3.5 Data Analysis Tools

Objectives	Data collection method	Data analysis tool
1. To evaluate the contribution of sunflower contract farming towards the income of small-scale farmers.	Structured Questionnaires Open -ended Interviews	Descriptive Statistics: Mean Score Ranking Standard Deviation
2. To assess the level of satisfaction among small-scale farmers participating in sunflower contract farming	Structured Questionnaires Open -ended Interviews	Descriptive Statistics: Mean Score Ranking Standard Deviation
3. To evaluate the effect of sunflower contract farming on the income levels of small-scale farmers in Umguza District	Structured Questionnaires	Thematic

3.6 Ethical Considerations

Ethical considerations are at the heart of the research process, especially in studies involving human participants and their personal sensitive information. Ethics act as a basis upon which researchers should assess their conduct throughout the research work (Cohen, Manion et al. 2017). A comprehensive and understandable permission form was provided, allowing participants to make informed decisions about their participation. The voluntary nature of participation and the freedom to withdraw at any stage without repercussion was emphasized.

Confidentiality and privacy of participants was upheld through the anonymization of personal information and secure data storage measure. The idea of voluntary participation was affirmed, guaranteeing that people participate willingly and without compulsion or undue influence. Participant's autonomy and right to decline participation or withdraw from the study without penalties was respected. Cultural diversity and sensitivities were recognized and accommodated in study design and implementation. Cultural norms, values, taboos and practices were respected, ensuring that research activities were conducted in a culturally sensitive and respectful manner. Adherence to these ethical norms guaranteed integrity, trustworthiness, and ethical conduct of research.

CHAPTER 4

ANALYSIS OF DATA AND DISCUSSION OF RESULTS

4.0 Introduction

This chapter investigates the success of sunflower contract farming among small-scale farmers in Umguza District, Matabeleland North Province. To fulfill the research aims, a multidimensional methodology is used, which combines quantitative descriptive statistics with theme analytic methodologies. Furthermore, the qualitative component of this study uses thematic analysis to explore the diverse experiences and issues related with sunflower contract farming. Furthermore, demographic details from participant profiles are incorporated into the study, providing a comprehensive portrayal of opinions across diverse segments of small-scale agricultural communities.

4.1 Profile of the respondents

The study investigated the background information of the respondents chosen for the investigation. The data obtained was principally primary data from the retrieval of distributed questionnaires. The analysis of the demographic profile of participants in Sunflower Contract Farming in Umguza District provides useful insights into the composition of individuals involved in this agricultural practice.

Table 4.1: Cross tabulation of Age and Gender of respondents.

Cross Tabulation of Age and Gender					
			Gender		Total
			Female	Male	
Age	18 - 25	Count	2	11	13
		%of Total	2.82%	15.49%	18.31%
	26 – 35	Count	7	5	12
		%of Total	9.86%	7.04%	16.90%
	36 – 45	Count	4	12	16

		%of Total	5.63%	16.90%	22.54%
	46 - 55	Count	8	9	17
		%of Total	11%	12.68%	23.94%
	Above 55	Count	6	7	13
		%of Total	8.45%	9.86%	18.31%
Total		Count	27	44	71
		%of Total	38.03%	61.97%	100%

The data analysis reveals unique demographic tendencies among respondents involved in sunflower contract farming. The age group with the biggest representation is 46 to 55 years old, accounting for 23.94% of all respondents. The 36-45 age group follows closely after, accounting for 22.54%. Middle-aged respondents (36–55 years old) are more likely to be actively involved in sunflower contract farming due to their collected expertise, access to resources, and financial stability. This conclusion is consistent with scholarly discourse on agricultural involvement (Forsythe et al., 2016) points out that middle-aged farmers frequently have better access to land, capital, and equipment, allowing them to invest in and sustain farming endeavors. Middle-aged farmers may also choose solid income streams to maintain their established households, seeing sunflower contract farming as a dependable source of income (Hartley, 2020). Furthermore, (Nxumalo et al., 2019) observes that their market knowledge and risk management choices influence their active participation in sunflower farming under contract arrangements. Overall, the combination of expertise, finances, financial stability, and risk management propensity makes middle-aged adults more likely to actively participate in sunflower contract farming (Kabwe et al., 2019).

The 18-25 age group has the lowest representation (18.31%), implying that sunflower contract farming may not be attracting a significant number of younger people, possibly due to a lack of awareness, access to resources, or preferences for other types of employment (Robinson-Pant et al., 2016). Furthermore, the prevalence of respondents above the age of 55 (13 respondents) indicates that older people are involved in sunflower farming, either due to post-retirement livelihood choices or a desire to capitalize on their significant farming expertise (Phillips & Johnson, 2021).

Notably, there is a large gender disparity among participants, with males constituting 61.97% of the overall sample and females accounting for 38.03%. This finding is consistent with previous research on agricultural demography in Zimbabwe, which frequently highlighted gender disparities in access to resources and opportunities within the agricultural sector. The increased male engagement could be linked to socio-cultural variables influencing land ownership, financial availability, and decision-making authority, which limit female participation in contract farming efforts (Shayo et al., 2016). According to (Kassa, 2015), active engagement is hampered by cultural and societal hurdles, as well as a lack of time due to their various duties. Addressing the gender discrepancy should entail targeted interventions to encourage and support female participation in sunflower contract farming, boosting gender equity and diversification in the business.

4.2 To assess the level of satisfaction among small-scale farmers participating in sunflower contract farming.

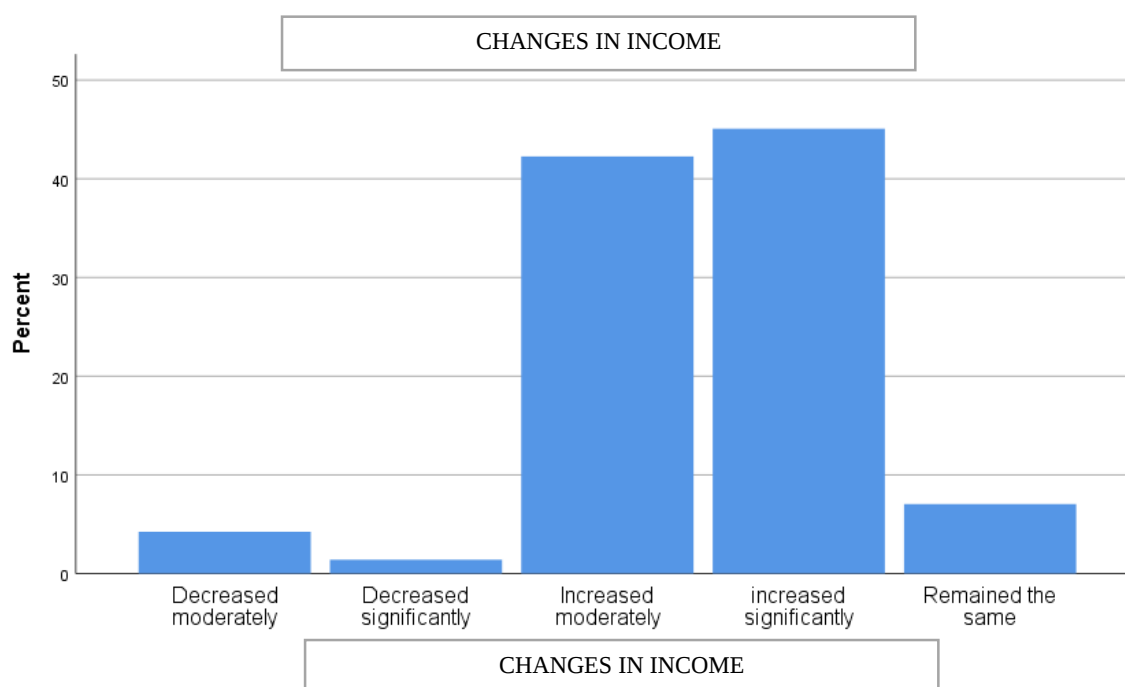


Figure 4.2: Changes in Income of small-scale farmers involved in sunflower contract farming.

The majority of farmers reported a rise in income, with 42.3% reporting a moderate increase and 45.1% reporting a substantial increase. This indicates a good trend in income increase among polled farmers. Only 4.2% of respondents reported a moderate loss in income, while 1.4% saw a major decrease. This suggests that declines in income were less common than rises. A minority of respondents (7.0%) claimed that their income remained constant, showing wages stability for this group.

The higher prevalence of income increases, both moderate and considerable, as reported in the literature, (Artner et al., 2010) suggests that better economic conditions or successful interventions lead to increased income among small-scale farmers. The low frequency of large revenue drops suggests that small-scale farmers are very resilient in the face of prospective obstacles or economic variations. The existence of respondents whose income has remained constant indicates variety in economic outcomes among farmers, with some experiencing stability and others suffering changes, either positive or bad. The data indicate that the majority of respondents' incomes have increased, which could have a favorable impact on their livelihoods, well-being, and general economic development (Oluwatayo, et al., 2021). Understanding the factors that contribute to income growth, such as changes in market conditions, adoption of new technology, or access to assistance programs, is critical for developing strategies to maintain and strengthen these positive trends (Dethier & Effenberger, 2012). In contrast, it is critical to pay attention to farmers whose incomes have decreased in order to maintain inclusive economic growth and help for those suffering obstacles or vulnerabilities.

4.3. Evaluating the contribution of sunflower contract farming towards the incomes of the small-scale farmers

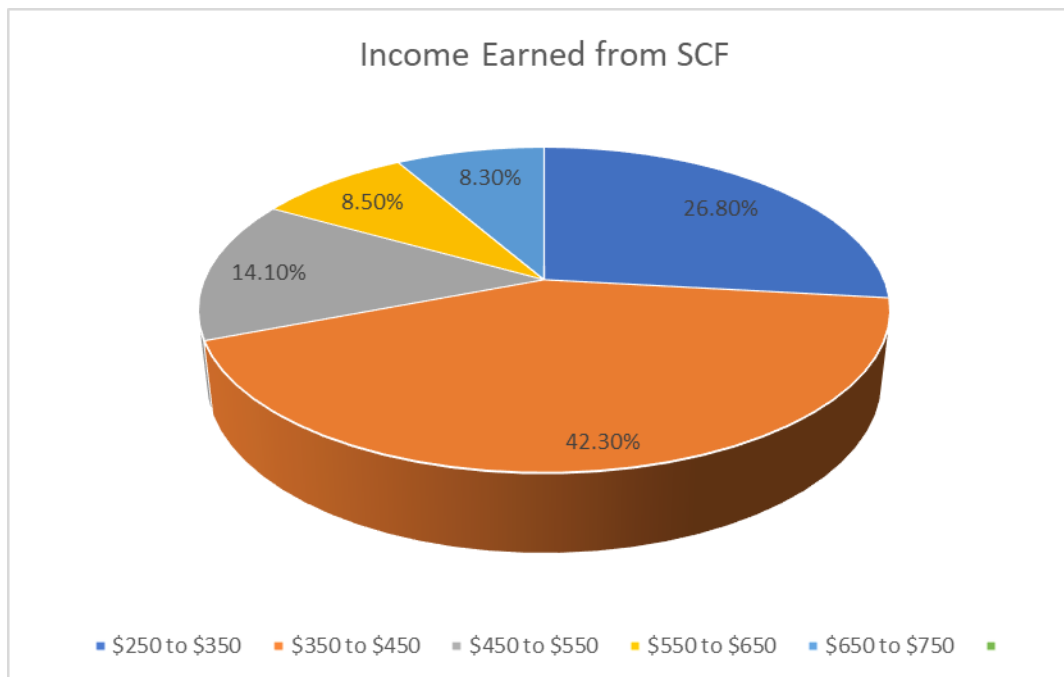


Figure 4.3: Percentage of the farmer's total income derived from sunflower contract farming and overall income satisfaction

The majority (42.3%) of respondents reported earning between \$350 and \$450 per ton. This shows that sunflower contract farmers in Umuza District are most likely to fall into this earning range. The second most prevalent income level is \$250 to \$350 per ton, which 26.8% of respondents fall into. There are fewer respondents in the higher income bands (\$450 to \$550 per ton, \$550 to \$650 per ton, and \$650 to \$750 per ton), showing that fewer farmers earn at these levels.

According to the literature, market variables such as sunflower demand and supply, prevailing market pricing and market competitiveness can all have an impact on income distribution. According to (Miyata et al., 2007), the contract terms between small-scale farmers and the contracting company may also have an impact on income levels. Payment rates, incentives for quality or quantity, and input assistance may differ among contracts, altering farmers' earnings. In contrast, (Ren et al., 2019) said that farmers with larger farms or more efficient agricultural practices may produce better yields and thus higher profits per ton. Whereas (Kipruto Mutai et al

2015) stated that experienced farmers with superior abilities in sunflower cultivation, pest management and post-harvest handling may obtain higher yields and profitability.

4.4 Quantity of the land used, seed used and amount harvested.

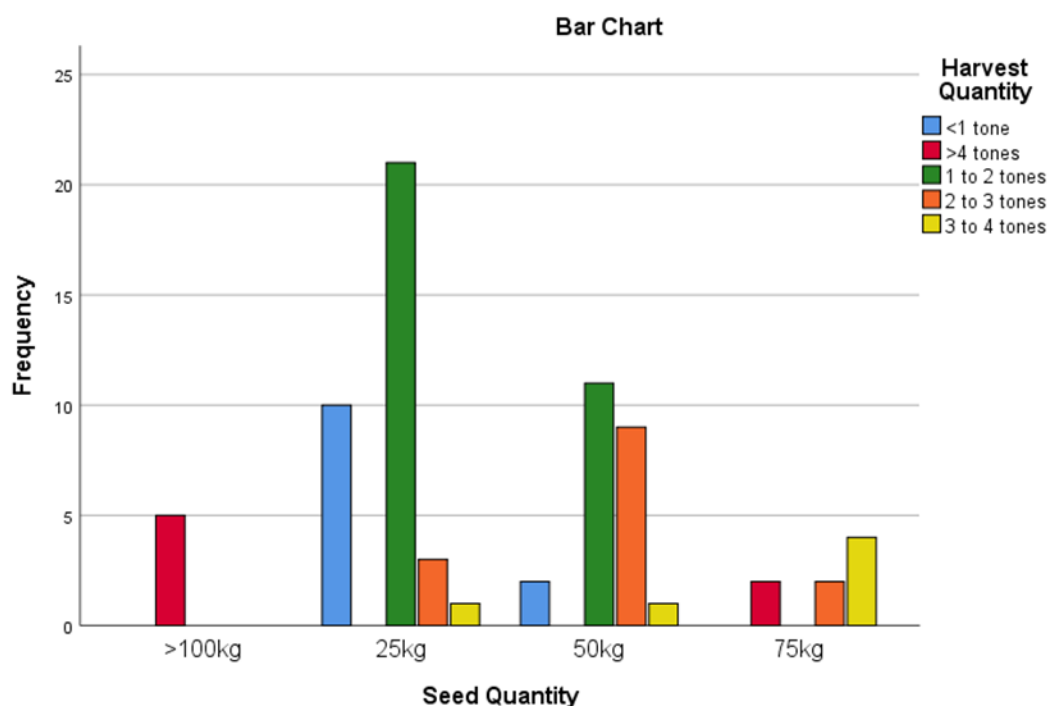


Figure 4.4: Sunflower seed planted and harvest quantity

Different seed volumes result in different harvest quantities. Farmers who utilized 25kg sacks of seeds harvested the most sunflowers (1–2 tons), followed by those who harvested less than 1 ton. This suggests that the majority of farmers who used 25kg sacks produced moderate harvest quantities. Farmers who utilized 50kg sacks of seeds primarily picked sunflowers in the 1 to 2 tones range, with fewer respondents harvesting larger quantities in the 2 to 3 tones range. Farmers who utilized more than 100kg sacks of seeds harvested the most, with all of them reaping more than 4 tons. Using bigger amounts of seeds, such as >100kg bags, tends to be connected with higher harvest quantities, implying greater investment, effort, or success in sunflower cultivation. The opposite is true for lesser seed amounts. Farmers can consider changing their seed quantity based on their production goals, available resources, and predicted harvest results.

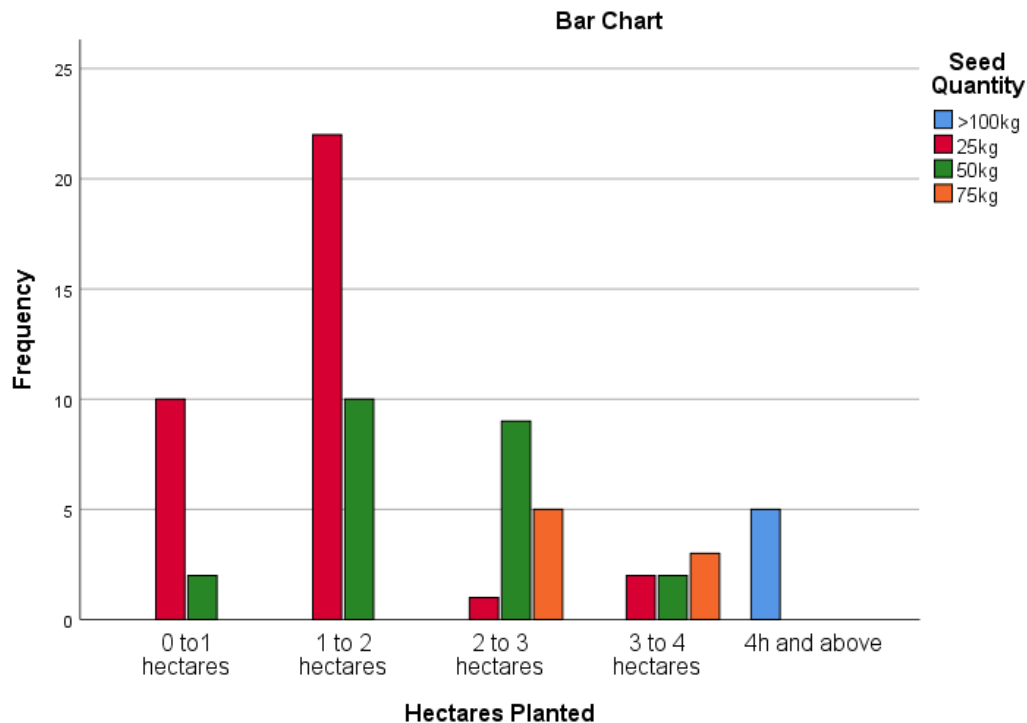


Figure 4.5: Hectares of land planted and the seed quantity used

The number of hectares of land planted correlates with the amount of harvest produced. As the number of hectares planted increases, so does the harvest quantity. Farmers who planted smaller areas (0 to 1 hectare) harvested less sunflowers (<1 ton), whereas those who planted larger areas (4 hectares and beyond) harvested more (>4 tones). The size of sunflower farming operations, as defined by hectares of land planted, determines the amount of harvest produced. Farmers that plant larger plots of land produce more sunflowers, most likely due to economies of scale, increased investment, and enhanced production capacity (Castaño, 2018). However, according to (Zymarioieva et al., 2021), sunflower yields fluctuate depending on factors such as weather, soil quality, and farming practices. Understanding the relationship between hectares planted and harvest quantity can help farmers make decisions about farm size, resource allocation, and productivity targets in sunflower farming.

4.5 Technical support and recommendations

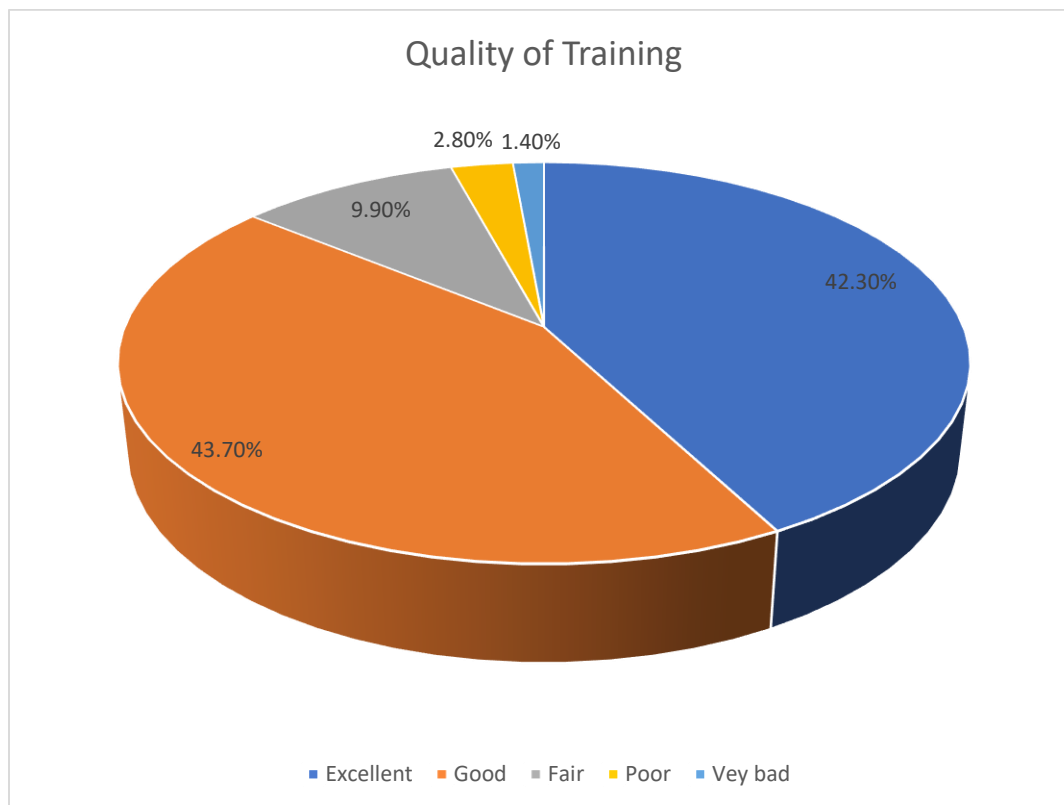
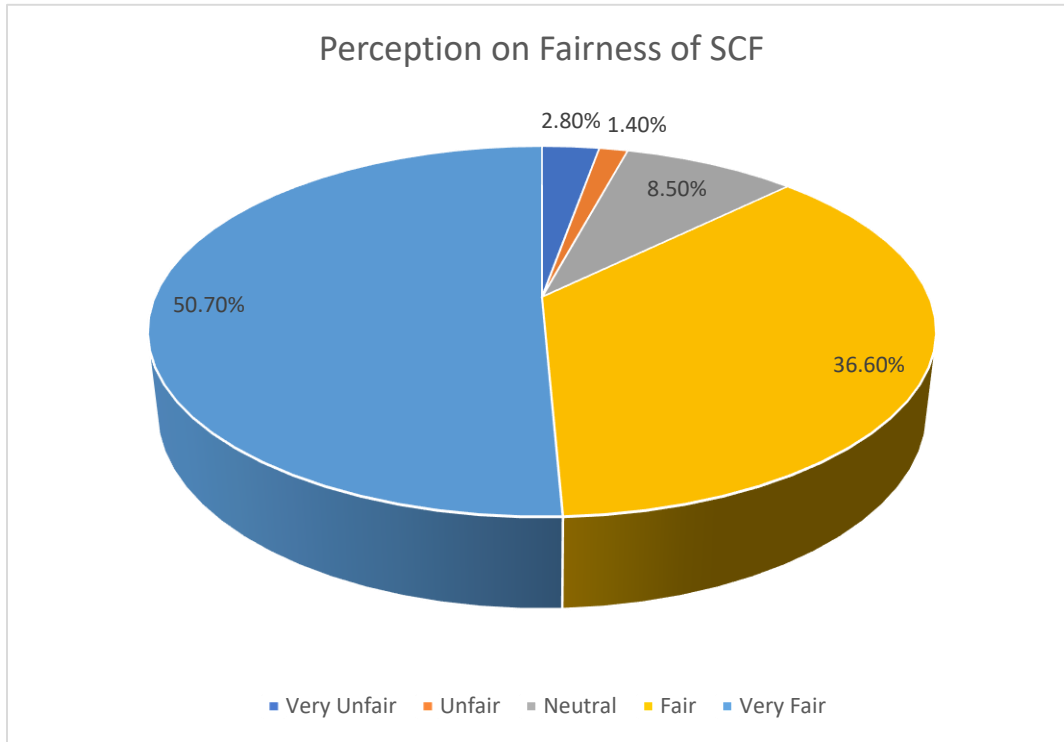


Figure 4.6: Quality of training received by farmers on sunflower contract farming.

Training is vital for production and output, and farmers who received training outperformed those who did not. This is because they are more likely to make educated judgments, effectively adopt recommended practices, and confidently react to changing environmental or market situations (Singh Malik, 2018). As evidence of this, the majority of farmers assessed the quality of training as Excellent (42.3%) or Good (43.7%), indicating that a sizable proportion of farmers perceive the training positively, believing it to be of high quality or satisfactory. A lower percentage of farmers rated the training as Fair (9.9%), indicating that some farmers saw areas for improvement in specific components of the instruction. A small fraction of respondents ranked the training as Poor (2.8%) or Very Bad (1.4%), implying that just a few farmers had a significant option of training quality.

Figure 4.7: Perception of the fairness of the profit-sharing arrangement in sunflower contract farming



The combined percentage of farmers who rated the training as Excellent or Good (86%), demonstrates a high degree of overall satisfaction. This shows that the majority of farmers considered the training useful and helpful in improving their knowledge and skills in sunflower cultivation. The presence of some Fair ratings indicates that there may be areas for improvement or refinement in the training programs, as feedback from farmers who rated the training as Fair could be useful in identifying specific areas that may need attention, such as content clarity, training methods, relevance to farm practices, or resource accessibility. Recognizing the variety of farmer backgrounds, experiences, and learning styles, the sunflower contract farming company should endeavor to provide training programs that are targeted, relevant, and sensitive to the individual needs and situations of their target audience.

The combined percentage of respondents who assessed the profit-sharing agreement as Very Fair or Fair (87.3%) demonstrates a high degree of overall satisfaction. This shows that the majority of

farmers considered the profit-sharing plan to be fair and reasonable. The perception of justice in profit sharing is critical for developing trust and strong relationships between farmers and the sunflower contract farming company. Farmers who believe the profit-sharing arrangement is fair are more likely to feel valued, respected, and inspired to actively participate in sunflower contract farming programs. Transparent communication and clarity about profit-sharing arrangements are critical for farmers' comprehension and acceptance of the agreement.

The low percentage of farmers who assessed the profit-sharing arrangement as Unfair or Very Unfair indicates that the majority of farmers saw no substantial disparities or injustices in the profit-sharing model. This is because the contracting business would have communicated openly about the profit-sharing structure, offering detailed explanations of how earnings are computed and distributed. Farmers are more likely to regard the profit-sharing model as fair if they understand why it exists (Naegele, 2019). Ongoing discussions with farmers, asking input, and addressing any problems or grievances, will aid in identifying potential for improvement and ensuring the sustainability of sunflower contract farming agreements.

4.5.1 Recommendation of sunflower contract farming

Data analysis reveals that practically all farmers polled would recommend sunflower contract farming to others. This enormous endorsement rate (94.4%) indicates that the majority of farmers have had favorable experiences and outcomes from their participation in sunflower contract farming. This is combined with generally good assessments of important components of the contract farming arrangement, such as the quality of training received and the fairness of the profit-sharing scheme. The majority of farmers rated the training as excellent or good, suggesting that they considered it useful and effective in improving their farming techniques. Furthermore, the majority of farmers thought the profit-sharing system was fair, showing that they were satisfied with the profit allocation.

Furthermore, the high referral rate implies that farmers are confident and satisfied with sunflower contract farming. Trust is essential in contractual partnerships, and farmers' good impressions of sunflower contract farming show that the company has successfully developed trust and maintained strong connections with its farmer partners. While the overall results are encouraging, there may be room for further improvement. Addressing any issues raised by the analysis, such as

training quality or profit-sharing fairness, can improve farmer happiness and strengthen the contract farming business.

4.6 Evaluating the factors affecting the small-scale farmers in improving their incomes through sunflower contract farming.

Table 4.2: Categories, codes and themes of the challenges/limitations faced in sunflower contract farming

Category	Codes	Theme
1. Contract terms 2. Stiffness of arrangements 3. The need for back-up services. 4. Lack of bargaining power	1. Terms of contract 2. Stiff contract terms	1. Contractual Challenges
5. Concerns about climate change. 6. Climate effects on sunflower farming 7. Hot Temperatures 8. Ever changing season patterns.	3.Hot Temperatures 4. Climate change	2. Climate Change Impacts
9. Inadequate or improper storage facilities 10. Pests and Diseases 11. Extended periods of storage 12. Issues during transportation, such as	5. Post-Harvest losses 6. Pests and perishing	3. Post-Harvest Management

delays, rough handling		
13. Availability of Labour 14. Technical Expertise 15. Mechanization 16. Supervision and Training	7. Labour availability 8. Equipment and machinery	4. Labour Factors

4.6.1 Contractual Challenges

Small-scale farmers agree that they face issues as a result of the terms of their contracts with contracting companies. These terms include pricing, payment schedules, expected quality standards, and delivery criteria, all of which impose substantial restraints, particularly for people with transportation difficulties or who are struggling to fulfill stated threshold levels due to a variety of constraints. Unfavorable contract terms can limit farmers' ability to negotiate fair prices or efficiently manage their agricultural operations (Minot 2019).

Stiff contract conditions hinder farmers' capacity to adjust to market dynamics or unanticipated occurrences. For example, fixed pricing arrangements might make farmers vulnerable to price changes or adjustments in input costs, especially in Zimbabwe's turbulent economy. To offset the risks connected with sunflower farming, growers may require additional support services such as loans, technical assistance, or insurance coverage. A lack of suitable backup services can make farmers more vulnerable to market fluctuations or production issues (Thomas-Sharma et al., 2016).

4.6.2 Climate Change Impacts

Rising temperatures in Matabeleland North's climatic zone make sunflower farming difficult. The region's short rain seasons, along with protracted dry periods, exacerbate these issues, resulting in heat stress on plants, lower yields, and increased water requirements. Elevated temperatures at important growth stages can disrupt pollination, slow flower development, and delay seed set, reducing total crop output (Ncube 2020). Climate change can disrupt established seasonal rhythms, resulting in unexpected weather and difficulty timing planting and harvesting activities. Erratic rainfall patterns, lengthy droughts, and unexpected weather extremes impair sunflower agricultural operations and raise production risks (Moyo, 2010).

4.6.3 Post-Harvest Management

Farmers point out that a lack of suitable storage infrastructures or facilities leads to post-harvest losses from rotting, pests, and physical damage. Proper storage facilities, such as warehouses, silos, and drying rooms, are critical for maintaining the quality and marketability of harvested sunflowers (Naegele, 2019). Furthermore, pest and disease infestations during storage result in large losses by destroying stored sunflowers. Effective pest control measures, such as fumigation, sanitation, and the use of pest-resistant packaging materials, will be required to reduce post-harvest losses and maintain product quality if implemented to small-scale farmers.

Also, prolonged storage of sunflowers increases the danger of rotting and loss in quality. Prolonged storage occurs due to transportation shortages, and farmers may hold onto their harvest in order to find advantageous pricing for it. As a result, reducing storage time through efficient marketing and distribution channels is critical for lowering post-harvest losses and increasing the economic value of the produced crop. Delays, rough handling, and inadequate temperature management are all contributing factors to post-harvest losses. Proper transportation methods, including the use of appropriate vehicles, packing materials, and logistical planning, are crucial for assuring timely delivery of sunflowers to market while reducing losses (Singh Malik, 2018)

4.6.4 Labour Factors

Farmers clearly recognize the difficulty of getting a sufficient and reliable personnel for sunflower farming tasks, particularly during peak seasons. Seasonal variations in labor availability, migration patterns, and competition from other farms all have a substantial impact on their capacity to recruit and keep talented staff. As (Singh Malik, 2018) points out, efficient sunflower farming necessitates a wide range of technical skills, including seedling preparation, planting methodology, pest management, and mechanical operation. As a result, ensuring that laborers have the necessary experience and training is critical for increasing agricultural output and decreasing operational errors. Furthermore, incorporating mechanized farming techniques has the potential to reduce labor needs while increasing efficiency in sunflower agriculture (Singh Malik, 2018).

However, in Umguza District Ward 16, small-scale farmers encounter difficulties in obtaining and maintaining critical equipment and machinery, as well as training laborers to run them properly,

owing mostly to the harsh economic climate. To maintain safe and efficient farm operations, adequate monitoring and training will be required. To increase workforce productivity and reduce the chance of accidents or injuries, training programs should include topics such as safety protocols, task-specific abilities, and machinery operation (Kisitu 2015).

Addressing these identified difficulties would necessitate collaborative efforts from stakeholders along the agricultural value chain, including policymakers, agricultural extension agencies, research institutions, and farming communities. By prioritizing investments in infrastructure, technology adoption, capacity building, and supportive regulatory frameworks, stakeholders may help farmers overcome obstacles and create resilient and sustainable sunflower farming systems.

4.7 Stakeholders' responses

When the contractors were interviewed (Zimgold representatives) claimed that 95% of small-scale farmers from Umguza district are still being contracted yearly indicating that they are satisfied with the sunflower contract farming program and it has a positive effect on them for their lifestyles have changed. The statement was backed up by the Agritex Director, referring to the Zimbabwe Vulnerability assessment report for 2024 which indicates that yearly most households have managed to improve their diets, take children to school and even for some who have had challenges with water have placed irrigation systems which are functional to an extent that work during the sunflower contract farming period.

However, the ward extension officers still complain about the ignorance of some individuals during capacity building periods. Most adult farmers still want to apply their traditional methods of cultivating sunflowers which sometimes leads to them having significant losses by producing poor quality and quantity of the sunflower grains. These outcomes lead to minimum payment of grain for some farmers while others are terminated from the contract list the following season.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The findings imply that sunflower contract farming can help small-scale farmers improve their livelihoods by providing a consistent market, access to inputs, and technical support. However, the success of this approach is significantly dependent on a variety of factors, including price volatility, contract lengths, market linkages, and farmer capacity. Further research and policy interventions are required to solve these problems and assure long-term income growth for small-scale farmers in Umguza district.

Moving forward, policymakers, agricultural practitioners, and stakeholders must address these concerns with tailored interventions and support systems. To guarantee that sunflower contract farming remains a viable income-generating opportunity for small-scale farmers in Umguza district, strategies to manage pricing risks, improve contract conditions and strengthen market linkages should be established.

Overall, this study adds useful insights to the current literature on contract farming and small-scale agriculture, emphasizing the significance of personalized interventions to increase the effectiveness of such arrangements in boosting farmers' incomes and livelihoods. By addressing the highlighted issues and building on the accomplishments of sunflower contract farming, stakeholders may collaborate to create a more equitable and sustainable agriculture industry in Umguza district.

5.2 Recommendations

It is recommended to farmers in Umguza District

- Institutional support is also critical for the success of the contract farming arrangement.
- Provide training and capacity building programs for small-scale farmers to enhance their skills and knowledge in sunflower production techniques, business management a contract negotiation.

- Facilitate better marketing access for small-scale farmers by establishing strong market linkages, promoting fair trade practices and exploring opportunities for value addition in sunflower value chain.
- Develop risk management strategies to address price volatility, crop failures and other uncertainties associated with sunflower. This may include the use of insurance products and risk management sharing mechanism.
- Implement robust monitoring and evaluation mechanism to assess the impact of sunflower contract farming on small-scale farmers income, livelihoods and overall well-being. This will help in identifying areas for improvement and optimization.

ABSTRACT

QUESTIONNAIRE

Survey on the effectiveness of sunflower contract farming in improving small-scale farmers income in Umguza District Ward 16

1. Please indicate your age range....[]
2. Gender.....male []female[]
3. How many years of farming experience do you have?
4. Are you currently involved in sunflower contract farming?
5. How has your income changed since engaging in sunflower contract farming?
6. What percentage of your total income is derived from sunflower contract farming?
7. How satisfied are you with the income generated from sunflower contract farming?
8. How much have you got yearly from sunflower contract farming?
9. How many hectares of land have you planted with sunflowers?
10. How many kilograms of sunflower seeds have you planted this previous season?
11. What is the quantity harvested?
12. Overall, how satisfied are you with your experience in sunflower contract farming?
13. Have you received any form of training or support from the sunflower contracting company?
14. If you answered "Yes" to the above question, please rate the quality of the training/support received:
15. Are there any specific factors that you believe are preventing sunflower contract farming from improving small-scale farmers' incomes?

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