Bindura University of Science Education

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EFFECTIVENESS OF POULTRY OUT-GROWER SCHEMES IN IMPROVING SMALL-SCALE FARMERS' INCOME: THE CASE OF CHEGUTU DISTRICT, ZIMBABWE

By

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The undersigned certified that they have supervised and recommended to Bindura University of Science Education for acceptance of dissertation entitled Effectiveness of poultry out-grower schemes in improving small-scale farmers' income: the case of Chegutu district, Zimbabwe. submitted in partial fulfilment of a Bachelor of Agricultural Science Honours Degree in Agricultural Economics and Management.

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DECLARATION

I hereby declare that the research project entitled EFFECTIVENESS OF POULTRY OUT-GROWER SCHEMES IN IMPROVING SMALL-SCALE FARMERS' INCOME: THE CASE OF CHEGUTU DISTRICT, ZIMBABWE submitted to Bindura University of Science Education, Department of Agricultural Economics, Education and Extension is a record of an original work done by me under the guidance and supervision of Mrs. Manyumwa and this work is submitted in partial fulfilment of the requirements for the award of a Bachelor of Agricultural Science Honours Degree in Agricultural Economics and Management. The results embodied in this thesis have not been submitted to any University or Institute for the award of any degree or diploma.

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DEDICATION

I dedicate this research project to my parents.

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ABSTRACT

Out-grower schemes in Zimbabwe have been associated with unfair pricing, delayed payments, and limited control over production decisions. This study assessed the effectiveness of poultry out-grower schemes in improving small-scale farmers' income, a case of Chegutu in Zimbabwe. The study was guided by the sustainable livelihoods framework and transaction cost economics theory. This study employed a mixed-methods approach, combining both qualitative and quantitative data collection and analysis methods. A total of 66 respondents were chosen from three categories using probability seedling, which is simple random sampling. A standardised questionnaire and in-depth interviews were utilised to collect data from participants in the study. The study revealed that 69.4% of the respondents were females while 30.6% were males. The findings showed that a large representative of the study (38.8%) were aged 31 to 40 years. In addition, 49% of the respondents in the study area attained secondary level of education. Furthermore, 36.7% of respondents had been involved in poultry out-grower scheme for a period of six to 10 years. Majority of respondents identified technical support as a key factor that influence their income. A majority (53.1%) of respondents agreed that the scheme has enabled farmers to better manage their household expenses. The study results also shows that proportion (44.9%) of respondents agreed that the income from the scheme has allowed farmers to diversify their income streams. Furthermore, 49% of respondents indicated that the scheme has had a positive contribution on household food security and nutrition. These findings were supported with an R value of 0.745 indicating a strong positive correlation between poultry out-grower schemes and the household income. However, contractual disputes were revealed as a major challenge faced by small-scale farmers participating in out-grower scheme. The study concluded that out-grower scheme increased farmers' income and was attributed to the scheme being effective in improving the financial well-being of participating farmers. The study recommended the policymakers and development practitioners to scaling up poultry out-grower schemes as an effective way to improve household income among small-scale farmers.

Key words: Out-grower, Small-scale farmers, Household income, effectiveness, Scheme

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

The study examines the effectiveness of poultry out-grower schemes in improving small-scale farmers' income: the case of Chegutu District, Zimbabwe. This chapter will serve as the study's foundation. These comprise the study's background, problem statement, conceptual framework, research objectives, research hypothesis and significance of the study, study limitations, research assumptions, study restrictions, definitions of important terminology, and a summary of the dissertation's structure.

1.2 Background Study

Millions of small-scale farmers around the world rely heavily on poultry farming as a source of income, making it an essential part of the agricultural sector in many developing nations. Poultry farming is a vital component of the livestock industry, supporting employment, economic growth, and food security, according to the Food and Agriculture Organisation (FAO) (FAO, 2018). However, a number of obstacles that small-scale poultry farmers must overcome can prevent them from improving their standard of living, such as restricted access to markets, loans, and technical know-how. Poultry out-grower programs have been put into place all over the world to help small-scale farmers make money and escape poverty. Poultry out-grower programs have been effective in raising small-scale farmers' incomes and enhancing their food security, according to the Food and Agriculture Organisation (FAO, 2017). These programs entail agreements between small-scale farmers and a contracting business that offers market access, technical assistance, and inputs.

In Asia, poultry out grower schemes have been implemented in several countries, including China, India, and Indonesia. For instance, in China, the poultry out grower scheme has been implemented by the Chinese government in collaboration with the private sector, with the aim of improving the livelihoods of small-scale poultry farmers (MOA, 2020). Similarly, in India, the poultry out grower scheme has been implemented by the Indian government in collaboration with the private sector, with the aim of improving the productivity and profitability of small-scale poultry farmers (DAHD, 2020).

Out-grower programs are frequently used in Africa to support agricultural development and raise the standard of living for small-scale farmers. For example, in Ghana, the government has worked with the business sector to establish the poultry out grower plan, which aims to improve the livelihoods of small-scale poultry farmers (MOFA, 2020). Similar to this, the Nigerian government, working with the commercial sector, has established the poultry out grower plan in an effort to increase the productivity and profitability of small-scale poultry farmers (FMARD, 2020).

Since the 1990s, Zimbabwe has had out-grower programs, mostly in the cotton and tobacco industries (Sibanda, 2018). To improve the livelihoods of small-scale poultry farmers, the Zimbabwean government has partnered with the private sector to execute the poultry out grower scheme (KIPPRA, 2020).

Nevertheless, a number of obstacles prevent chicken out-grower programs in Zimbabwe and globally from effectively raising small-scale farmers' incomes, despite their promise. Market volatility, illness outbreaks, restricted technical competence, and restricted financial access are a few of these difficulties (Makura, 2017). These difficulties show how important it is to conduct more study on how well poultry out-grower programs work to raise the incomes of Zimbabwe's small-scale farmers. In light of this, this study will use a case study of poultry out-growers in the Chegutu District to evaluate how well out-grower programs work to increase the income of small-scale farmers in Zimbabwe.

1.3 Problem statement

In Zimbabwe, out-grower programs have been linked to unjust prices, late payments, and little authority over production choices (Chambati and Moyo, 2020). Despite these difficulties, research also shows that out-growers that participate have a number of advantages, such as stable income. The degree to which the poultry out-grower system is increasing the income of small-scale producers in the Chegutu district and the difficulties they face, however, are not well supported by empirical data. Small-scale producers may continue to be exploited as a result of this ignorance, and their standard of living may not significantly improve. Thus, the purpose of this study is to evaluate how well out-grower programs work to increase the revenue of chicken out-growers in the Chegutu District.

1.4 Main Research question

How effective are poultry out-grower schemes improving the incomes of small-scale producers in Chegutu District?

1.4.1 Specific research questions

1. What are the key factors influencing the income of small-scale farmers in poultry out-grower schemes?

2. What is the contribution of the out-grower schemes to household income of small-scale farmers?

3. What challenges are small-scale farmers facing in the poultry out-grower schemes?

1.5 Main Research objective

To assess the effectiveness of poultry out-grower schemes in improving the income of small scale farmers in Zimbabwe.

1.5.1 Specific objectives

1. To identify key factors influencing the income of small-scale farmers in poultry out-grower schemes.

2. To determine the contribution of poultry out-grower schemes on the household income of small-scale farmers.

3. To analyse the challenges faced by small-scale farmers participating in out-grower schemes.

1.6 Significance of the study

The significance of this study lies in its potential to contribute to the improvement of the livelihoods of small-scale poultry farmers in the study area and developing countries.

1.6.1 To policy

The study's conclusions could serve as a guide for policymakers, development professionals, and private sector businesses by offering suggestions on how to create and carry out successful poultry out-grower programs that assist small-scale farmers.

1.6.2 To practice

The results could help advance farming methods that put social responsibility, environmental care, and economic viability first. Additionally, by boosting the output and financial success of small-scale chicken growers, rural populations will have greater access to wholesome food.

1.6.3 To theory

Give actual proof of how well chicken out-grower programs work to raise small-scale poultry farmers' incomes and standard of living. Many researchers and other interested parties with a strong interest in the topic may find the study's findings useful as a reference. Other scholars who plan to conduct further research on the efficiency of chicken out-grower programs in raising the revenue of small-scale farmers may find the findings helpful.

1.7 Assumptions of the study

If properly planned and executed, chicken out-grower programs can significantly raise the standard of living for small-scale poultry producers. Additionally, if they have the required means, expertise, and experience, small-scale poultry farmers are open to taking part in chicken out-grower programs. Furthermore, if contract farming gives small-scale poultry producers access to markets, technical assistance, and other resources, it can be a good choice for them.

If small-scale poultry farmers have access to training programs, extension services, and other types of technical support, they can receive training and technical assistance. If small-scale poultry farmers have access to local, national, or worldwide markets, they can access markets.

If poultry farming gives small-scale farmers a steady income and enhances their standard of living, it can be a good option for their livelihood. Assuming that the study's sample and methodology are representative of the broader population, the results can be applied to many situations and environments. The validity and reliability of the study's data depend on the validity and reliability of the tools and procedures used for data collection as well as the accuracy of the data's analysis and interpretation.

1.8 Delimitation of the study

The study was carried out in Chegutu, Zimbabwe, an area where small-scale chicken breeders are highly concentrated. Small-scale poultry farmers in Chegutu, Zimbabwe, who take part in poultry out-grower programs were the study's main emphasis. The study was carried out between February and July of 2024, a period of six months. A random sampling technique was used to pick the 70 small-scale poultry farmers that made up the study's target sample size. Surveys and interviews were among the quantitative and qualitative data collection techniques employed in the study.

1.9 Definition of key terms

Poultry Out-grower Scheme refers to a contract whereby a small-scale farmer and a large-scale poultry producer or integrator agree that the farmer will grow chicken for the integrator utilising the integrator's inputs and technical advice (Adeyemi, 2020).

Small-Scale Poultry Farmer is used to describe a farmer that grows poultry on a small scale, usually with little infrastructure and resources (FAO, 2018).

Integrator is a large poultry producer or business that enters into agreements with small farmers to raise poultry for them (DAFF, 2020).

Contract Farming pertains to a farming agreement in which a farmer commits to growing a crop or rearing livestock in accordance with a buyer's requirements, frequently with the buyer offering inputs and technical assistance (Eaton & Shepherd, 2001).

Poultry Farming refers to the activity of keeping domesticated birds for their meat, eggs, or feathers, including ducks, turkeys, and chickens (FAO, 2018).

Livelihoods describes how individuals earn a living, taking into account their possessions, income, and availability of resources and services (DFID, 1999).

Poverty Reduction refers to policies and programs designed to raise living conditions and combat poverty in underprivileged groups (World Bank, 2019).

1.10 Dissertation structure

Chapter One: Introduction

The chapter introduced the research. The chapter addressed the background information, the problem description, the research objectives, the research hypotheses, and the conceptual framework of the researcher. The chapter drilled down to the significance of the study to theory, to practice and also highlighted the assumptions of the study, delimitations, and limitations of the study and definition of key terms

Chapter Two: Literature Review

This chapter focused on literature review where effectiveness of poultry out-grower schemes in improving small-scale farmers' income was discussed. It is also in the review of studies where the gaps making way to research were discovered

Chapter Three: Research methodology

This chapter covered the research methodology and described how participants' information was collected for the study. It clarified and supported the study approach, population, sample, and sampling techniques, as well as the research design and methodology.

Chapter Four: Data analysis, presentation and discussion

This chapter started off with the restatement of the research hypotheses and drilled down to the basic demographics, response rate and presented the research findings; then used literature to discuss the findings sharing areas of convergence and divergence.

Chapter Five: Summary, conclusions and recommendations

The chapter started off with the restatement of the objectives of the research; then moved on to summary of key findings and then conclusions for each objective plus recommendations per each objective.

1.11 Chapter Summary

This chapter provided an overview of the research study on the impact of poultry out-grower schemes on the livelihoods of small-scale poultry farmers in Chegutu, Zimbabwe. The chapter introduced the background of the study, highlighting the importance of poultry farming in Zimbabwe and the challenges faced by small-scale poultry farmers. The chapter also stated the research problem, which is to investigate the effect of out-grower schemes on the income of poultry out-grower farmers in Chegutu, Zimbabwe. The research objectives, research questions, and significance of the study were also outlined. Finally, the chapter provided a summary of the assumptions, and delimitations of the study, which aimed to provide a clear understanding of the scope and boundaries of the research study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides a comprehensive review of the literature on poultry out grower schemes, with a focus on their impact on the livelihoods of small-scale poultry farmers. The chapter discusses the concept of poultry out grower schemes, their benefits and challenges, and the empirical evidence on their impact on the livelihoods of small-scale poultry farmers.

2.2 Concept of Poultry Out-grower Schemes

According to Adeyemi (2020), poultry out-grower programs are agreements in which a small-scale farmer contracts with a large-scale poultry producer or integrator to raise birds on the integrator's behalf. In addition to providing the farmer with supplies like chicks, feed, and vaccines, the integrator also offers technical assistance and advice (DAFF, 2020).

Poultry out grower schemes have been shown to have several benefits for small-scale poultry farmers, including increased income, poultry out grower schemes can provide small-scale farmers with a stable source of income (Adeyemi, 2020). In addition, improved access to markets: Poultry out grower schemes can provide small-scale farmers with access to markets that they would not otherwise have access to (DAFF, 2020). Technical support, poultry out grower schemes can provide small-scale farmers with technical support and guidance, which can help to improve their productivity and efficiency (FMARD, 2020).

2.3 Overview of poultry out-grower schemes in Sub-Saharan Africa

Sub-Saharan Africa is home to numerous out-grower projects. Among them are plans for raising chickens. OGSs have not historically been used in poultry production, mostly because of issues with household retention and plenty of side-selling opportunities (FAO, 2017). It's interesting to note that smallholder farmers are now contracted to produce chicken by Malawi's Agricultural Development and Marketing Corporation (ADMARC).

As governments work to commercialise smallholder agriculture, enhance the incomes and livelihoods of smallholder farmers, diversify the agricultural production base, boost export revenues, and generate local jobs, out grower schemes (OGS), which have been a feature of southern Africa's agricultural landscape for a number of years, are currently gaining more attention. Furthermore, it seems that as governments, funders, and development organisations emphasise a private sector-led approach to development, OGS will only grow in significance.

The poultry programs in Kenya, Malawi, South Africa, Swaziland, and Zimbabwe are well-known and iconic instances of OGSs in Sub-Saharan Africa (Mwenje & Mutambara, 2019). Despite occasional issues, many of these programs have been in place for a number of years and provide convincing evidence of the viability and effectiveness of contract farming in eastern and southern Africa. They also provide important lessons about how smallholder farmers can be incorporated into larger agribusiness and more profitable export-oriented businesses through chicken out grower farming.

The socioeconomic factors contributing to OGS's dominance are ingrained in the local reality, where the vast majority of people live in rural areas and are heavily reliant on agriculture, yet they still face significant barriers to accessing markets for their produce and inputs that increase productivity. By connecting these smallholder farmers with agribusiness firms via OGSs, there are genuine opportunities to increase their access to markets and inputs, which will raise their earnings and standard of living.

2.4 Poultry out-grower schemes in Zimbabwe

Poultry out grower programs have been in place in Zimbabwe since the country's independence. Notably, two farmers in the Darwendale area began an informal grower grill production plan with Irvine in the early 1990s. The program was established in 1997 and, despite reaching a height of over 16 out growers, it is currently only available to roughly 7 out growers, 5 of whom are "indigenous," due to the departure of white LSCFs whose properties were purchased through the "fast track" land resettlement program. The program is restricted to more established farmers who can supply the rearing facilities needed for an economically viable flock size and who are situated within a certain radius (80–100 km) from the processing facilities, as is the case with almost all broiler production out grower schemes (Nhapi & Masiyandima, 2020). Being close to the abattoir is crucial since transporting mature birds over large distances is extremely expensive and dangerous.

A company like Irvine's, after carefully assessing the farmer's capacity and facilities, provides internal equipment like hoppers, feeders, and watering units; the day-old chicks, feed, and vaccines on credit; as well as technical advice and support. In Zimbabwe, the arrangement of out-grower schemes incorporates a company and the farmers follow an agreement. An interest-free loan that is spread over multiple flocks and subtracted from realised sales is used to finance the internal equipment. When the broilers are given to the business, on the other hand, the full cost of the chicks, feed, and vaccinations is subtracted. A three-week clean-out interval between flocks is part of the production process, which follows sound husbandry and hygienic procedures (Moyo & Mudhara, 2019). In exchange, the farmer agrees to sell all of the broilers to Irvine's at a price that is mutually agreed upon.

2.5 Theoretical Framework

The livelihoods of rural households are examined in this study using the Sustainable Livelihoods Framework (SLF) (DFID, 1999). According to the framework, human capital, social capital, natural capital, and financial capital are the five main assets that rural households should prioritise. By giving them access to physical capital like feed and equipment as well as financial capital like financing and market knowledge, poultry out-grower programs can increase small-scale farmers' revenue (Kiptot et al., 2014). Poultry out-grower programs can assist small-scale farmers in improving their livelihood outcomes, particularly their income, by expanding their access to these livelihood assets.

The Transaction Cost Economics (TCE) theory is the second theoretical framework (Williamson, 1981). According to this idea, the efficiency of economic exchanges can be impacted by transaction costs, including information gathering, contract negotiations, and performance monitoring (North, 1990). By giving small-scale farmers access to loans, market data, and technical support, poultry out-grower programs can lower the transaction costs they incur (Okello et al., 2017). Poultry out-grower programs can assist small-scale farmers in improving their revenue and livelihood outcomes by lowering these transaction expenses.

The SLF and TCE theories can be applied to poultry out-grower programs to explain how these programs can increase small-scale farmers' incomes. For instance, Kiptot et al. (2014) discovered that by giving small-scale farmers in Kenya access to both financial and physical resources, chicken out-grower programs increased their income. In a similar vein, Okello et al. (2017) discovered that poultry out-grower programs in Uganda enhanced income and livelihood outcomes by lowering the transaction expenses small-scale farmers faced.

The theories of SLF and TCE offer a helpful framework for comprehending how well chicken out-grower programs raise small-scale farmers' incomes. Poultry out-grower programs can assist small-scale farmers in improving their livelihood outcomes and expanding their revenue by lowering transaction costs and granting access to livelihood assets.

2.5.1 Conceptual Framework

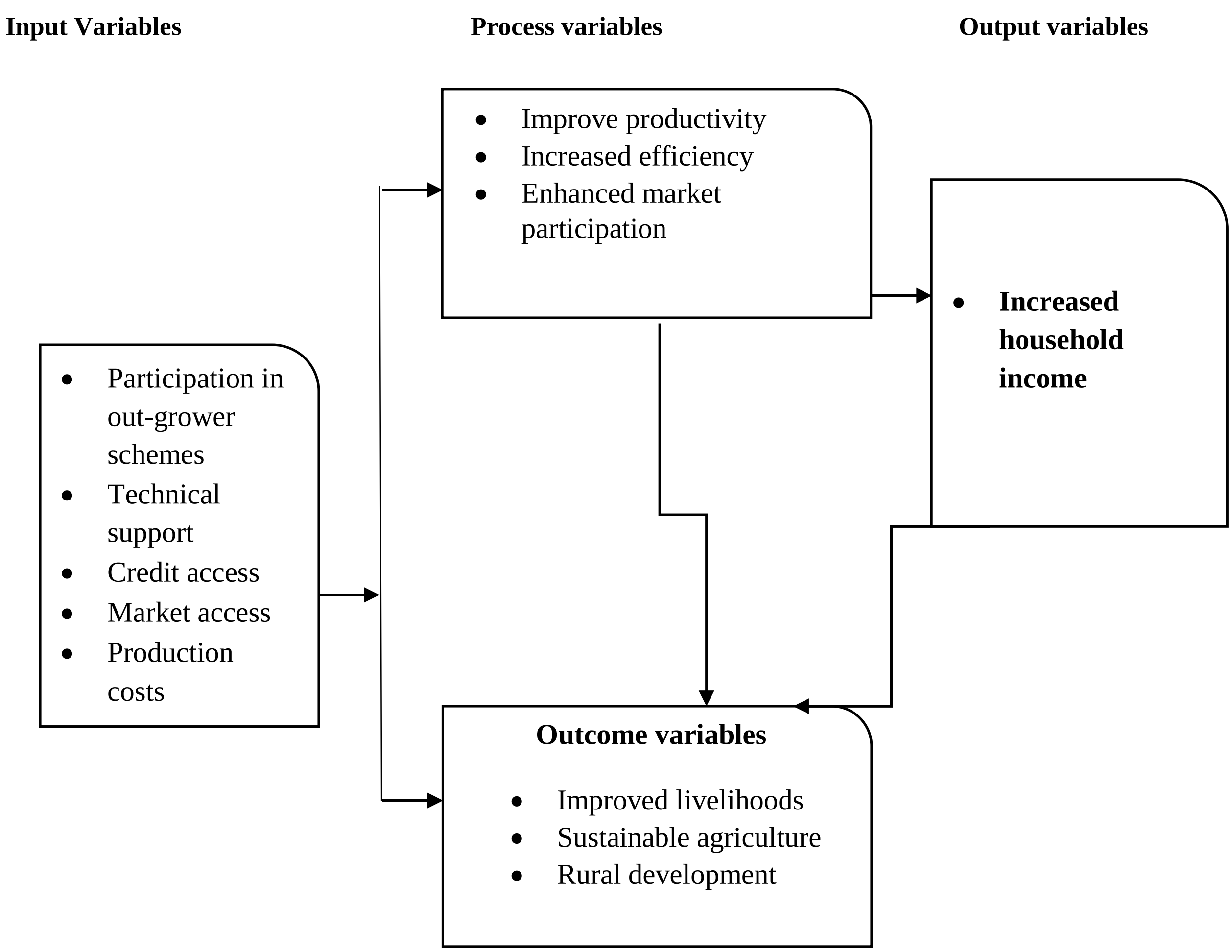

Figure 2.1 Conceptual Framework

Source: Author, 2025

This conceptual framework highlights the input, process, output, and result variables involved in out-grower systems and shows how they contribute to small-scale farmers' household income.

2.6 Factors influencing the income of small-scale farmers in poultry out-grower schemes

The literature identifies a number of important variables that affect small-scale farmers' earnings in chicken out-grower programs. One important element affecting the income of smallholder farmers is production efficiency. Adeyemi (2020), for instance, discovered that production efficiency had a major impact on small-scale farmers' earnings in poultry out grower systems. According to the survey, farmers that increased their production efficiency made more money. However, due to a number of obstacles, small-scale farmers participating in poultry out grower schemes may find it difficult to achieve production efficiency. Limited financial resources and technical assistance are major obstacles (Oxfam, 2019). According to the report, small-scale farmers participating in poultry out grower programs need technical assistance to increase the efficiency of their output, but they frequently do not have access to it.

Another significant element affecting small-scale farmers' earnings in poultry out-grower programs is the price of inputs like feed and veterinary care (Mangwende & Mutambara, 2020). increased productivity and lower expenses translate into increased incomes for farmers who can afford high-quality inputs. The quality of the chicks, the experience and expertise of the farmer, and the standard of the housing and equipment used to rear the birds are other factors that affect productivity.

The income of small-scale farmers participating in poultry out-grower programs can also be significantly impacted by the contractual agreements made between farmers and processing firms or integrators. Farmers may carry an excessive amount of risk, including pricing, production, and market risk, as a result of unjust or badly draughted contracts. Higher incomes are typically earned by farmers who are able to negotiate contracts that give them a fair share of the risks and profits.

The income of small-scale farmers participating in poultry out-grower programs can also be significantly impacted by the institutional and policy environment (Nhapi & Masiyandima, 2020). While unsupportive policies and institutions can limit farmers' options and create barriers to entry, supportive policies and institutions can help to create an environment that makes it easier for farmers to participate in the chicken sector. In chicken out-grower schemes, farmers' socioeconomic traits such as their household size, education, and experience can also affect their earnings.

2.7 Poultry out-grower schemes and household income of small-scale farmers

A small-scale farmer and a large-scale farmer or integrator enter into a contract known as the "out-grower scheme," whereby the small-scale farmer agrees to raise poultry or other livestock on the integrator's behalf. It has been discovered that this program considerably raises small-scale farmers' household incomes. According to a study by Adeyemi (2020), Ghanaian small-scale farmers' household income rose by 25% as a result of the out-grower program.

Small-scale farmers can boost their output and revenue by using the out-grower program, which gives them access to markets, financial resources, and technical assistance. According to an FMARD (2020) research, Nigerian small-scale farmers' production and profitability increased under the out-grower program. Small-scale farmers can also obtain loan facilities through the out-grower program, allowing them to make investments in their fields and raise productivity. According to a 2019 Oxfam study, high interest rates and a lack of collateral make it difficult for small-scale farmers in Africa to obtain credit facilities. Nonetheless, the out-grower program gives farmers access to finance options, allowing them to get past these obstacles.

Particularly in developing nations, poultry out-grower programs have become a key tactic for raising small-scale farmers' incomes. Under these programs, smallholder farmers are usually contracted by larger poultry firms to raise chickens or other poultry species in accordance with predetermined criteria and rules. This arrangement gives farmers a reliable stream of income while enabling them to take advantage of the resources and experience of larger companies. According to research, these collaborations can raise household incomes by improving access to markets and production efficiency (Osei et al., 2021).

The fact that bigger businesses offer technical assistance and training is one of the main benefits of poultry out-grower programs. Small-scale farmers frequently lack the requisite expertise on disease prevention, biosecurity protocols, and best practices in chicken management. Farmers that take part in these programs get training that improves their abilities and output (Moges et al., 2020).

In addition to improving animal health and productivity, this education equips farmers with knowledge that they may employ in a variety of agricultural pursuits, raising household incomes overall.

Nonetheless, it is critical to acknowledge certain obstacles related to poultry out-grower programs. Although they have many advantages, relying on big businesses for market access and inputs carries dangers (Chikanda & Moyo, 2022). Smallholder farmers may have severe financial difficulties if a corporation chooses to leave a region or modifies the terms of a contract in an unfavourable way. Policymakers and other stakeholders in agricultural development must thus establish frameworks that are conducive to reducing these risks and encouraging sustainable practices in the industry.

2.8 Challenges faced by small-scale farmers participating in out-grower schemes

Small-scale farmers that take part in out-grower programs are sometimes subject to price volatility and market swings. Farmers may find it difficult to plan and invest in their fields due to the unpredictability of buyer prices. Barrett et al. (2012) discovered that small-scale farmers in Africa taking part in out-grower programs faced a major obstacle in the form of price fluctuation. Price instability can result in less money being invested in farms, lower production, and fewer profits for small-scale farmers.

Another issue small-scale farmers in poultry out grower systems face is high production expenses. Farmers may find it difficult to turn a profit due to the exorbitant costs of feed, labour, and equipment. According to Okoroafor et al. (2020), one of the biggest obstacles small-scale farmers in Kenya's poultry out grower programs face is high production costs.

Buyers and farmers frequently enter into contractual agreements as part of out-grower programs. These agreements, however, may be lacking or skewed in favour of buyers' interests, which could encourage opportunistic activity. According to Minot (2011), out-grower systems' contractual arrangements may be vulnerable to buyers acting opportunistically, which could result in small-scale farmers being taken advantage of. The possibility of opportunistic behaviour might result in a decline in small-scale farmers' benefits, a fall in participation in out-grower programs, and mistrust among farmers.

Out-grower programs are frequently impacted by regulatory and institutional considerations. Out-grower schemes may operate in an unpredictable environment due to weak institutions and insufficient regulatory frameworks. Bijman (2008) discovered that out-grower plans in developing nations faced a major obstacle in the form of weak institutions. Small-scale farmer exploitation, a decline in out-grower schemes' investment, and a reduction in the advantages for all stakeholders might result from ineffective regulation.

Small-scale farmers who take part in out-grower programs are frequently at risk from environmental deterioration and climate change. Shocks brought on by the climate can affect agricultural output, resulting in decreased yields and poorer farmer earnings. According to a 2007 study by Morton, climate change poses a serious threat to Africa's small-scale farmers. Although implementing climate-resilient techniques can help lessen the effects of climate change, many small-scale farmers lack the tools and expertise needed to do so.

One of the biggest problems small-scale farmers in chicken out-grower projects face is disease outbreaks. Farmers find it challenging to control disease outbreaks because they frequently lack access to veterinary care and have little understanding of disease management. According to Oxfam (2019), one of the biggest problems small-scale farmers in poultry out grower schemes face is disease outbreaks.

Another issue small-scale farmers in poultry out grower systems face is limited access to insurance. Farmers find it challenging to manage risks since they frequently do not have access to insurance products and have little understanding of insurance services. According to Oxfam (2019), one of the biggest issues small-scale farmers in poultry out grower programs face is inadequate access to insurance.

Another issue small-scale farmers in poultry out grower schemes face is their reliance on integrators. Farmers find it challenging to negotiate reasonable prices and contracts because they frequently lack bargaining strength and have limited access to market information. Adeyemi (2020) discovered that one of the biggest issues small-scale farmers in Ghana's poultry out grower schemes have is their reliance on integrators.

Another issue small-scale farmers in poultry out grower initiatives face is limited access to technology. It might be challenging for farmers to obtain information and increase their productivity since they frequently lack access to computers, the internet, and other digital technologies. According to FMARD (2020), one of the biggest issues small-scale farmers in Nigeria's poultry out grower schemes have is inadequate access to technology.

Another issue that small-scale farmers in poultry out grower initiatives face is a lack of social capital. Farmers frequently do not have access to cooperatives, associations, or social networks, which makes it challenging for them to obtain resources and information. According to Oxfam (2019), small-scale farmers participating in poultry out grower initiatives have a major obstacle in the form of low social capital.

2.9 Empirical review

One important tactic for incorporating small-scale farmers into commercial agricultural value chains is the use of poultry out-grower programs, which are frequently confused with contract farming. Although the scope and character of these benefits can vary greatly based on the particular setting and parameters of the contract, empirical research conducted worldwide has generally shown a favourable influence on farmer livelihoods.

Numerous empirical studies conducted worldwide highlight the beneficial effects of chicken out-grower programs on the revenue of small-scale farmers. These programs frequently offer farmers an essential means of overcoming typical obstacles such restricted access to capital, high-quality inputs, technical know-how, and stable markets. In contrast to their non-contracted counterparts, participants in out-grower programs typically obtain higher yields, better product quality, and more secure income streams, according to a 2019 study by Masunda and Mudhara. This is mostly due to the availability of professional veterinary care, balanced feed formulas, and superior genetic stock all of which are frequently out of the price range of independent smallholders. Additionally, the assured market off-take lowers market risk considerably, freeing up farmers to concentrate on production efficiency rather than price negotiating and market searching.

Out-grower methods have become more and more popular in Zimbabwe's chicken industry as a way to empower smallholder farmers and strengthen rural economies. According to empirical data from different parts of Zimbabwe, small-scale poultry farmers' household incomes can significantly increase as a result of participating in these programs. Research indicates that farmers who practise contract farming gain from easier access to loans, premium inputs, and crucial extension services, all of which add up to increased output and profitability. Contract farmers, for instance, have better gross margins and more steady revenue flows, which allow them to invest in other household necessities and raise their standard of living overall, according to study by Mutambara and Manzungu (2018). However, the study also acknowledge challenges such as potential power imbalances between integrators and farmers, and the need for robust contract enforcement mechanisms to ensure equitable benefits.

The benefits of chicken out-grower programs on smallholder income have been observed in other African nations than Zimbabwe. According to an empirical study by Da Silva (2015), contract farming in Ghana's chicken industry considerably boosts small-scale farmers' incomes by guaranteeing markets, granting them access to essential supplies, and offering them technical assistance. Due to decreased production risks and increased efficiency, farmers who take part in these programs frequently report higher revenues and better household welfare. Similar to this, contract farming has been shown to be an essential tool for incorporating small-scale chicken farmers into commercial value chains in Kenya. This helps them get beyond obstacles to market access and funding that have historically impeded their expansion (Donkoh & Awuni, 2017).These findings collectively emphasize the potential of out-grower models to transform subsistence farming into more profitable ventures across the African continent.

Similar patterns have been noted in Asia and Latin America, demonstrating that the benefits of poultry out-grower programs are not just found in Africa. Poultry contract farming, for instance, is a common technique in India that has been scientifically demonstrated to greatly increase the income of small and marginal farmers (Key & Runsten, 2016). These programs reduce production risks and help farmers increase their returns on investment by offering guaranteed markets, technical assistance, and high-quality inputs. Similar to this, Vietnam's rural households have seen an increase in their earnings and stability as a result of smallholders' incorporation into contemporary livestock value chains, particularly poultry, through contract farming arrangements (Warning, 2018). These global examples reinforce the notion that when structured appropriately, poultry out-grower schemes can serve as effective tools for poverty reduction and rural development by enhancing small-scale farmers' economic participation and resilience.

Notwithstanding the benefits that have been shown, empirical research also identifies a number of drawbacks and restrictions that may compromise the efficacy and fair distribution of advantages of chicken out-grower programs. These include possible power disparities between small-scale farmers and integrators, which may result in biassed quality evaluations, delayed payments, or unfavourable contract terms. Additionally, farmers may get overly reliant on the integrator, which would reduce their independence and negotiating leverage. Significant production risks, such disease outbreaks or problems with feed quality, may also be transferred to the farmer via certain contracts. The programs' ability to increase farmer income may also be hampered by problems with contract enforcement, transparency, and the absence of strong regulatory frameworks.

According to a different study by Ogunyinka et al. (2020), Ghana's poultry out grower program increased small-scale farmers' incomes and enhanced their standard of living. According to the report, the program gave farmers access to markets, financial resources, and technical assistance, allowing them to boost their output and earnings.

According to a study by Oyediran et al. (2020), Kenya's poultry out grower program increased small-scale farmers' incomes but also had some adverse environmental effects. The excessive amount of feed and other inputs used in the scheme was blamed by the study for these detrimental effects.

Notwithstanding these drawbacks, most research has shown that poultry out grower programs can be a useful tool for raising small-scale farmers' incomes and advancing sustainable agriculture. According to a research by Akinwumi et al. (2020), by giving farmers access to organic feed and other sustainable inputs, Nigeria's poultry out grower program supported sustainable agriculture.

According to empirical data, poultry out grower programs can be a useful tool for raising small-scale farmers' incomes and advancing sustainable agriculture. However, a number of variables, such as the degree of technical assistance, market and financial resource accessibility, and debt levels, might affect how effective these plans are.

2.10 Research gap

Even though there is a large amount of study on the efficacy of chicken out-grower programs, there are still a number of important unanswered questions, especially when it comes to Chegutu, Zimbabwe. The usefulness of poultry out grower programs in raising the standard of living for small-scale farmers is still largely unknown. In Chegutu, where agriculture plays a major role in the local economy, study is specifically needed to identify the major determinants influencing the revenue of small-scale farmers participating in poultry out-grower schemes. Determining the impact of chicken out-grower programs on small-scale farmers' household income is also necessary. Furthermore, studies are required to examine the difficulties small-scale farmers in Chegutu who take part in chicken out-grower programs encounter. Policymakers and development professionals can better understand how to assist Chegutu's small-scale farmers in their endeavours and enhance the region's poultry industry's overall sustainability by filling this research gap.

2.11 Chapter Summary

This chapter examined research on how well poultry out-grower programs increase the revenue of small-scale farmers. Research revealed that chicken out-grower programs have been used all across the world to help small-scale farmers get out of poverty and make money. However, empirical information about their efficacy in enhancing small-scale farmers' income bases, particularly in Chegutu District, is scarce. Evaluating the success of out-grower programs in raising the income of small-scale farmers in this region is necessary to support the lack of literature in this field.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter looks closely at the research methodology, philosophical underpinnings, research design, sampling method, the sample size, research instruments, and data collection procedures and analyses. According to Grove et al. (2012), the research methodology involves applying the steps, strategies, and procedures to allow one to gather and analyses data. This research methodology seeks to address on key factors influencing the income of small-scale farmers in poultry out-grower schemes, contribution of the out-grower schemes to household income of small-scale farmers and challenges are small-scale farmers facing in the poultry out-grower schemes.

3.2 Research design

This study employed a mixed-methods approach, combining both qualitative and quantitative data collection and analysis methods. Adoption of mixed-methods approach was supported by Creswell (2014) stated that the method provide a more comprehensive understanding of a research problem by combining quantitative and qualitative data.

Table 3.1: Data collection summary

Objective	Data to be collected	Data collection method	Data analysis
Objective 1 To identify key factors influencing the income of small-scale farmers in poultry out-grower schemes.	• Demographic data: • Farm characteristics: - Production data: • Financial data: Institutional data:	• Survey questionnaire • Interviews • Review of existing literature	• Descriptive statistics • Thematic analysis
Objective 2 To determine the contribution of poultry out-grower schemes on the household income of small-scale farmers.	• Household income data • Expenditure data: • Data on household assets	• Survey questionnaire • Interviews • Review of existing literature	• Descriptive statistics • Correlation analysis • Regression analysis Thematic analysis
Objective 3 To analyse the challenges faced by small-scale farmers participating in out-grower schemes.	Data on farmer perceptions Data on institutional support Data on challenges faced by farmers:	• Survey questionnaire • Interviews Review of existing literature	• Descriptive statistics • Thematic analysis

3.3 Study population and sample size

Polit and Beck (2012) define study population as the entire group of individuals or objects to which researchers are interested in generalising the findings. The study drew a sample of 66 poultry out-growers in the Chegutu District. The study will involve a survey in Chegutu District, A sample is a small proportion of a population selected for observation and analysis (Jackson: 2011). To calculate the sample size, the researcher used formulae n= N/((1+Ne^2));

where n= sample size; N=population and e=degree of precision

n=83/(1+100(0.05)^2*

n=66

Table 3 2: Determination of Sample size

Respondent Categories	**Target Population**	**Sample**	**Sampling Techniques**
Poultry out-grower farmers	41	36	Simple random
Contractors	23	17	Simple random
Government agencies	19	13	Simple random
Total	**83**	**66**	

3.4 Sampling

A total of 66 respondents were chosen from three categories using probability seedling, which is simple random sampling. Random, stratified, cluster, and systemic sampling are examples of probability sampling, whereas quota, convenient, and judgmental sampling are examples of non-probability sampling (Cresswell, 2009). Because each respondent had an equal probability of being chosen, the researcher utilised basic random sampling (Ahmed, 2014).

3.5 Data collection Instruments

A standardised questionnaire was utilised to collect data from participants in the study. The questionnaire was divided into two sections: the first contained questions about respondents' demographic attributes, and the second contained questions about the key factors influencing the income of small-scale farmers in poultry out-grower schemes. The third segment contains questions about the contribution of the out-grower schemes to household income of small-scale farmers, and the fourth section contains questions about the challenges are small-scale farmers facing in the poultry out-grower schemes.

The study conducted in-depth interviews to collect data. In conducting Interview, the duration or length of the in-depth interview depended on the ambiance and trust developed between interviewer and interviewee. In this research, the interview was designed to have a duration of about 15 until 30 minutes. This concept is reinforced by Kothari (2004), who claims that questionnaires and interviews are most commonly utilised when gathering information from a big group of people.

3.6 Data collection procedure

The questionnaire was distributed to a selected group of people at the selected companies. The researcher distributed a total of 66 questionnaires to the participants. In addition, the data were collected from in-depth interviews with 6 out-growers and 4 key informants from the lead firm and government agencies.

3.7 Validity and reliability

Following the recommendation of Dan, Zhang, and Li (2015), the researcher also followed the concept of study validity by pilot testing the questionnaire. The questionnaires were then corrected and altered to focus on the study's important sections. Pilot tests are designed to assess the relevance, applicability, and precision of questionnaires and interviews, with items that do not satisfy the criterion being removed (Creswell, 2009). The researcher ensured that research participants were independent in their responses to the offered questions. The researcher realised that interfering with the research method would alter the required raw data, which would reflect the practical image of the effect of out-grower schemes on the income of poultry out-growers in Zimbabwe.

A study is said to be dependable when the same approach is repeated by other researchers in the same research context and produces the same results. Before conducting this investigation, the research instrument was subjected to reliability testing. In order to create a questionnaire, the researcher also took concepts from earlier studies. In this manner, the researcher distributed the questionnaire to out-grower farmers involved in poultry in Norton area. This led in the development of undeniable and unquestionable statistics because the employees shared their feelings about what they went through, hence increasing validity.

3.8 Ethical consideration

Informed consent:

Participants in the study were given an informed consent form to sign. This was done to ensure that the research participants understood the goal of the study (Creswell, 2009). As a result, the research goal was also disclosed to all respondents, and this was done to avoid victimisation of any individual included in the study. Informed consent, according to Bhattacherjee (2012), is that the researcher and the respondents agree to participate and offer information without being pushed to do so.

Confidentiality, Privacy and Anonymity:

To maintain secrecy, the researcher's name was not revealed to the respondents, and no one was permitted to write his or her name on the instrument. This was done to ensure that all privacy concerns were addressed (Kothari, 2014). The primary goal is to avoid harm and assist respondents in deciding whether or not to participate in the study (Bhattacherjee, 2012).

3.9 Data presentation and analysis procedure

Quantitative data were generally presented and analysed using descriptive statistics. This method focuses on a collection of statistical approaches for assessing a single variable or the general parts of a variable (Bhattacherjee, 2012). They were chosen because they are simple to use and interpret. Frequency distribution, central tendency, and dispersion are examples of statistical methodology. In this study, there are three main measures of central tendency; the researcher primarily used arithmetic mean. Therefore, in this research a regression analysis of variables will be performed. The methods are designed to determine the strength of a relationship between two variables. Statistical Package for Social Scientist (SPSS, version 20.1) was used to analyse collected data, whilst graphs, tables, charts were used to present results. All statistical analysis was done at 95% confidence level. On the other hand, qualitative data were presented using thematic analysis.

3.10 Chapter summary

The goal of this chapter was to validate the researcher's approach to data collection for the target population. As a result, the study philosophy and design, as well as sample methodologies, size, and methods, were developed. Methods of data collecting, presentation, analysis, and ethical considerations were also developed. The data obtained will be presented and analysed in the following chapter.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter is concerned with the presentation, discussion and analysis of research findings and it is in this chapter where disagreement and agreement with literature can be seen. Therefore, this chapter highlights the profile of respondents, data presentation, discussion and analysis of the study objectives and testing hypothesis. Much of the comparison will be on understanding if the arguments by scholars in literature matched with reality as obtained from the research findings.

4.2 Response rate

The researcher distributed 66 questionnaires 49 were returned. This implies that a response rate of 74% was obtained. This concurs with Bailey, (2000) who opined that response rate of 50% is satisfactory while a response rate above 70% is very good. Therefore, the response rate was good which could be due the use of very simple language in the questionnaires and as well as their brief nature.

Table 4.1: Questionnaires response rate

Distributed questionnaires	Returned questionnaires	Response Rate (%)
66	49	74

4.3 Demographic characteristics

Table 4.2. Distribution of respondents by socio economic characteristics (n=49)

Variable	Categories	Frequency	Percent	Mean	Standard dev.
Gender	Male	15	30.6		
	Female	34	69.4	.31	.466
	Total	**49**	**100**		
Age	18-30 years	7	14.3		
	31 to 40 years	19	38.8		
	41 to 50 years	15	30.6		.938
	Over 50 years	8	16.3		
	Total	**49**	**100**	1.49	
Education level	No formal education	5	10.2		
	Primary school	14	28.6		
	Secondary school	24	49.0		.834
	Tertiary school	6	12.2		
	Total	**49**	**100**	1.63	
Experience in poultry	Less than 1 year	10	20.4		
	1-5 years	13	26.5		
	6-10 years	18	36.7		1.119
	11-15 years	5	10.2		
	16 years and over	3	6.1		
	Total	**49**	**100**	1.55	

4.3.1 Distribution of respondents by gender

The findings in Table 4.2 show that majority (69.4%) of the respondents were females while 30.6% were males. This implies that poultry out grower scheme is dominated by females.

4.3.2 Distribution of respondents by age

The findings show that a large representative of the study (38.8%) were aged 31 to 40 years while 30.6% of respondents were aged 41 to 50 years. This shows that people in out grower schemes were mostly mature with experience.

4.3.3 Distribution of respondents by level of education

The findings presented in Table 4.2 shows that majority (49%) of the respondents in the study area have attained secondary level of education, while a least (10.2%) did not attend any formal education. Thus, 89.2% of the respondents had the basic tools to be considered literate. Katema *et al* (2017) stated that high literacy levels have a positive influence on improving production capacity and viability of enterprises undertaken.

4.3.4 Distribution of respondents by experience in poultry farming

Majority of respondents (36.7%) had been involved in poultry out grower scheme for a period of six to 10 years, followed by 26.5% of respondents with experience in this scheme of one to five years. Only 6.1% of respondents had over 16 years of experience in poultry out grower schemes.

4.4 Presentation of data

This section presents the data guiding the research objectives.

4.4.1 Key factors influencing the income of small-scale farmers in poultry out-grower schemes.

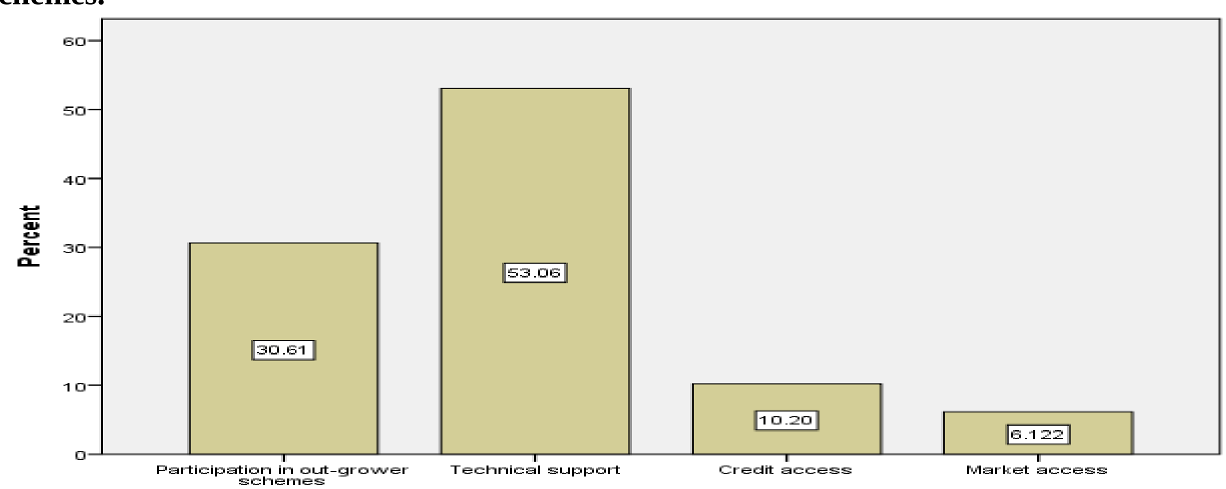

Figure 4.1: Key factors influencing the income of small-scale farmers

The survey results highlight the importance of technical support in influencing the income of small-scale farmers participating in poultry out-grower schemes. A significant majority (53.2%)

of respondents identified technical support as a key factor that influence their income. In addition to technical support, participation in out-grower schemes was also identified as a significant factor influencing household income. Approximately 30.61% of respondents believe that participating in the scheme has a positive influence on their household income. Market access, on the other hand, was identified by a relatively small percentage (6%) of respondents as a key factor influencing household income.

One respondent interviewed shared that;

“For me, the most important factor that influences my income from the poultry out grower scheme is the technical support provided by the scheme. The training and guidance I receive on best practices, disease management, and nutrition have really helped me improve the health and productivity of my flock. With the technical support, I have been able to reduce mortality rates and increase the weight gain of my birds, which means I get more income from selling them. The scheme also provides me with access to quality inputs, like vaccines and feed, which is essential for maintaining the health of my birds. Overall, the technical support and access to quality inputs have been key to increasing my income from the scheme."

Another participant interviewed mentioned that;

"I think the most critical factor that influences my income from the poultry out grower scheme is the market guarantee provided by the scheme. With the scheme, I have a guaranteed market for my birds, which means I don't have to worry about finding buyers or negotiating prices. The scheme also provides a fair price for my birds, which ensures that I get a decent income from my produce. Another important factor is the input support provided by the scheme, which helps me reduce my costs and increase my profit margins. The scheme also provides me with technical guidance on how to improve my productivity and quality, which has helped me increase my income over time. Overall, the market guarantee, input support, and technical guidance have been key to increasing my income from the scheme."

These responses highlight the importance of technical support, market guarantee, and input support in influencing the income of small-scale farmers in poultry out grower schemes.

4.4.2 Contribution of poultry out-grower schemes on the household income of small-scale farmers.

Table 4.3: Contribution of poultry out-grower schemes on the household income N=49

Variables	SD	D	N	A	SA	Mean	Std. Deviation
The poultry out grower scheme has increased farmer’s household income significantly	0	0	0	40.8	59.2	3.59	.497
The scheme has improved ability of farmer to meet my household expenses	4.1	6.1	14.3	53.1	22.4	2.84	.986
The income from the scheme has enabled farmer to invest in other income-generating activities	4.1	4.1	4.1	44.9	42.9	3.18	.993
The scheme has improved household's food security and nutrition	4.1	0	0	46.9	49.0	3.37	.859

The survey results indicate a strong positive perception of the impact of poultry out-grower schemes on farmers' income and livelihoods. A significant majority (59.2%) of respondents strongly agree that the scheme increased farmers' income significantly. In addition to the increase in income, the survey results also indicate that the scheme has improved the ability of farmers to meet household expenses. A majority (53.1%) of respondents agree that the scheme has enabled farmers to better manage their household expenses. The survey results also shows that proportion (44.9%) of respondents agree that the income from the scheme has allowed farmers to diversify their income streams. Furthermore, 49% of respondents indicated that the scheme has had a positive contribution on household food security and nutrition.

One respondent interviewed shared that;

“"Poultry out grower schemes have significantly boosted my household income. With the scheme's support, I've been able to increase my flock size and improve the quality of my birds, which has led to higher earnings. The guaranteed market and fair prices provided by the scheme have also given me stability and confidence in my business. I've been able to invest some of the profits in other income-generating activities, like crop farming, and even saved some money for emergencies. The scheme has not only improved my income but also helped me diversify my income

streams, reducing my vulnerability to market fluctuations. Overall, the poultry out grower scheme has been a game-changer for my household's financial well-being." This response suggests that the poultry out grower scheme has had a profoundly positive contribution on the household income of the small-scale farmer.

4.4.2.1 Inferential statistics

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.745[a]	.712	.688	.823	.712	11.688	4	44	0.001
a. Predictors: (Constant), Participation in out-grower schemes, technical support, credit access, market access, production costs									

Results shows R value of 0.745 indicating a strong positive correlation between the independent variables (poultry out grower schemes) and the dependent variable (household income). R Square of 0.712 shows that about 71.2% of the variation in household income can be explained by the poultry out grower schemes. Adjusted R Square of 0.688 indicates that adjusts for the number of predictors, still indicating a strong relationship of 68.8% being explained variance. F Change value of 11.688 shows a significant F-statistic indicating that the model is a good fit. Finally a Sig value of 0.0001 indicates a highly significant p-value on the relationship is unlikely due to chance. The regression model suggests poultry out-grower schemes significantly contribute to household income of small-scale farmers. The strong correlation and high R-squared value indicate a substantial impact.

Table 4.5: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.688	4	2.922	11.688	.001[b]
	Residual	11.000	44	0.25		
	Total	22.688	48			
a. Dependent Variable: HH income of small scale poultry out-grower farmers						
b. Predictors: (Constant), Participation in out-grower schemes, technical support, credit access, market access, production costs						

The results shows a significant F-statistic of 11.688 indicating that the regression model is a good fit and the independent variables (poultry out-grower schemes) significantly contribute to the variation in household income. In addition, p-value of 0.0001 shows a highly significant, suggesting that the observed relationship is unlikely due to chance.

4.4.3 Challenges faced by small-scale farmers participating in out-grower schemes

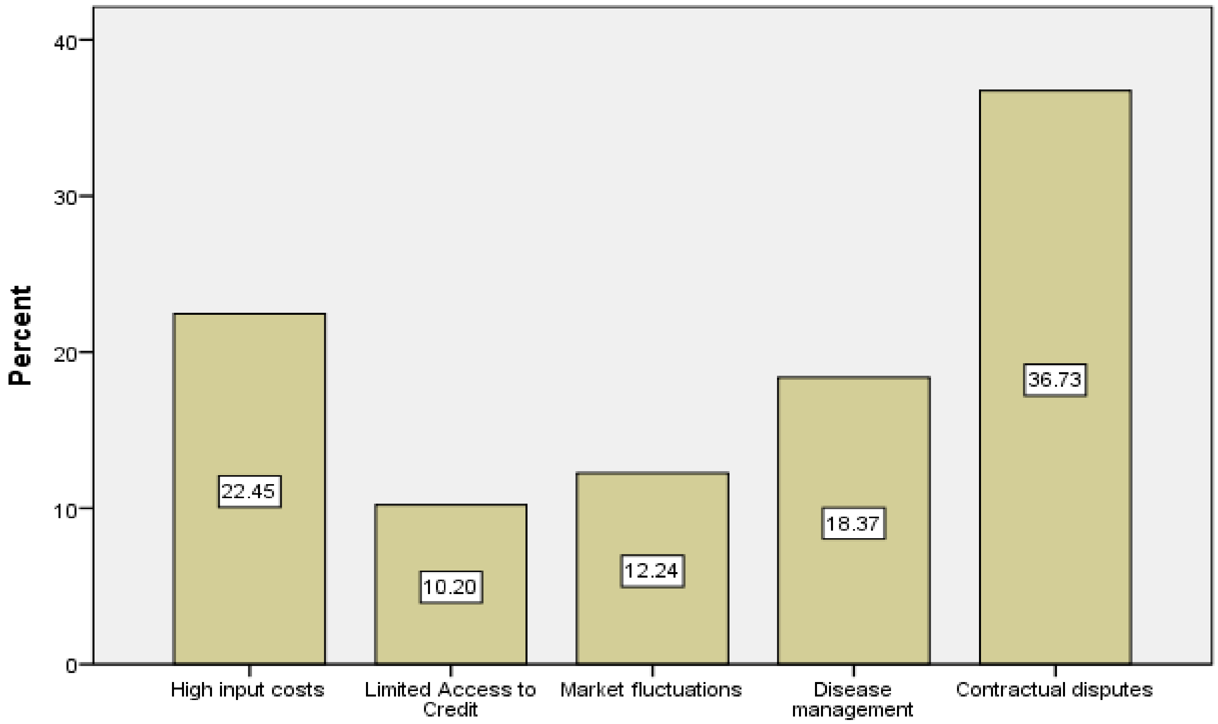

Figure 4.2: Challenges faced by small-scale farmers participating in out-grower schemes

Results in Figure 4.6 shows that 36.7% of respondents identified contractual disputes as a major challenge. In addition, 22% of respondents highlighted high input costs as a significant challenge. Furthermore, 10% of respondents mentioned limited access as a challenge.

The study adopted the qualitative research methods. Interviews were the tools used to gather data.

The findings from interviews evolve around the challenges faced by small-scale farmers participating in out-grower schemes.

Respondent A interviewed shared his views on the issue of challenges have you faced while participating in the out-grower scheme. The respondent asserted that *“"One of the biggest challenges I face in the out grower scheme is side selling. Sometimes, other buyers offer me a* *better price for my produce, and I feel tempted to sell to them instead of the scheme. However, if I do that, I'll risk losing my contract and the benefits that come with it, like technical assistance and access to quality inputs. It is a delicate balance between maximising my profits and maintaining a good relationship with the scheme."*

Respondent B stated that; *"For me, the main challenge is the lack of flexibility in the contract. The scheme dictates the price, quality standards, and delivery schedule, leaving me with limited room for negotiation. If I fail to meet the quality standards or deliver on time, I risk having my produce rejected or being penalised. It's stressful, especially when unforeseen circumstances like weather conditions or pests affect my crop. I wish there was more room for flexibility and mutual understanding in the contract."*

The participants were of the view that common challenges faced by small-scale farmers in out grower schemes, including the temptation to sell to other buyers who offer better prices, potentially jeopardising the contract with the scheme, the scheme's strict requirements and limited room for negotiation can make it difficult for farmers to adapt to changing circumstances and risk of penalties or contract termination if farmers fail to meet the scheme's requirements.

4.5 Analysis and discussion of results

4.5.1 Key factors influencing the income of small-scale farmers in poultry out-grower schemes.

A significant majority (53.2%) of respondents identifying technical support as a key factor that influencing income, suggests that access to technical expertise and guidance is crucial for small-scale farmers to improve their productivity and quality of produce, ultimately leading to increased income. Technical support can include training on best practices, disease management, and nutrition, all of which are essential for poultry production. The findings concur with study by Adeyemi (2020) found that technical support is a critical factor influencing the success of small-scale farmers in the out-grower scheme. The study found that farmers who received technical support earned higher incomes than those who did not.

Furthermore, 30.61% of respondents believing that participating in the scheme has a positive contribution on their household income is consistent with previous research, for example, by study by Oxfam (2019) found that participation in poultry out-grower schemes in Africa improved the income of small-scale farmers by 20-30%. The study on out-grower participation attributed this increase in income to the improved productivity and efficiency of the farmers, as well as the increased access to markets and financial resources.

A relatively small percentage (6%) of respondents identifying market access as a key factor influencing household income may seem surprising, given the importance of market access in determining the profitability of agricultural production. The findings are in agreement with FMARD (2020) found that market access is a critical factor influencing the income of small-scale farmers in poultry out-grower schemes. The study found that farmers who had access to markets earned higher incomes than those who did not. However, it is possible that the out-grower scheme provides a guaranteed market for the farmers' produce, reducing the importance of market access as a factor influencing household income.

4.5.2 Contribution of poultry out-grower schemes on the household income of small-scale farmers.

A significant majority (59.2%) of respondents strongly agreeing that the scheme increased farmers' income significantly could suggests that the scheme has been effective in improving the financial well-being of participating farmers. The increase in income can be attributed to the structured market access and technical support provided by the out-grower scheme, which enables farmers to improve their productivity and quality of produce. The findings are agreement with study by Okoroafor et al. (2020) found that the out-grower scheme improved the livelihoods of small-scale farmers in Kenya. The study found that farmers who participated in the out-grower scheme earned higher incomes and had improved access to markets and financial resources.

A majority (53.1%) of respondents agreeing that the scheme has enabled farmers to better manage their household expenses could suggests that the increased income from the scheme has translated into improved financial stability for participating farmers. The ability to meet household expenses is a critical aspect of household welfare, and the scheme's impact in this area is a significant positive outcome. The findings differ with study by Donkor et al. (2020) found that the poultry out grower scheme in Ghana improved the income of small-scale farmers, but also increased their indebtedness. The study attributed this increase in indebtedness to the high cost of feed and other inputs.

The survey result of 44.9% of respondents agree that the income from the scheme has allowed farmers to diversify their income streams, suggest that the income from the scheme has enabled farmers to invest in other income-generating activities. This finding indicates that the scheme has not only improved farmers' current income but also provided them with the financial resources to invest in other opportunities. Diversification of income streams can help farmers reduce their dependence on a single source of income, making them more resilient to economic shocks. The findings agree with a study by Tunde-Adegbola et al. (2020) found that the effectiveness of the poultry out grower scheme in Nigeria depended on the level of access to markets and financial resources provided to the farmers. The study found that farmers who had access to markets and financial resources earned higher incomes which they channelled towards other income generating projects.

A significant majority (49%) of respondents strongly agreeing that the scheme has improved household food security and nutrition, this finding suggests that the increased income from the scheme has enabled farmers to access a more stable and nutritious food supply. Improved food security and nutrition are critical aspects of household welfare, and the scheme's impact in this area is a significant positive outcome. The findings concur with study by Adebayo et al. (2020) found that the poultry out-grower scheme in Nigeria improved the income of small-scale farmers and also improved their food security.

In addition, the study revealed an R value of 0.745 indicating a strong positive correlation between the independent variables (poultry out grower schemes) and the dependent variable (household income). The regression model suggests poultry out-grower schemes significantly contribute to household income of small-scale farmers. The result concurs with Oxfam (2019) found that poultry out grower schemes in Africa improved the income of small-scale farmers by 20-30%. The study attributed this increase in income to the improved productivity and efficiency of the farmers, as well as the increased access to markets and financial resources. The results suggest that poultry out grower schemes can be an effective way to improve household income and livelihoods, and that such schemes should be considered as part of broader strategies to promote agricultural development and poverty reduction.

4.5.3 Challenges faced by small-scale farmers participating in out-grower schemes.

The high percentage of respondents (36.7%) who identifying contractual disputes as a major challenge may imply that there are issues with contract design, implementation, or enforcement. This can lead to mistrust and conflict between farmers and buyers, ultimately affecting the sustainability of the out grower scheme. Farmers often lack bargaining power and limited access to market information, making it difficult for them to negotiate fair prices and contracts. The findings concur with Adeyemi (2020) found that dependence on integrators is a major challenge facing small-scale farmers in poultry out-grower schemes in Ghana.

The significant proportion of respondents (22%) highlighting high input costs as a challenge could be due to farmers struggling with the financial burden of purchasing inputs, such as seeds, fertilisers, and equipment. This can reduce their profit margins and make it difficult for them to invest in their farms. The findings are in sync with a study by Okoroafor et al. (2020) found that high production costs are a major challenge facing small-scale farmers in poultry out grower schemes in Kenya.

4.6 Chapter Summary

This chapter presented, analysed and discussed results on effectiveness of poultry out-grower schemes in improving small-scale farmers' income, a case of Chegutu in Zimbabwe. The study showed 69.4% of the respondents were females while 30.6% were males. The findings showed that a large representative of the study (38.8%) were aged 31 to 40 years while 30.6% of respondents were aged 41 to 50 years. In addition, 49% of the respondents in the study area attained secondary level of education. Furthermore, 36.7% had been involved in poultry out-grower scheme for a period of six to 10 years. The study results showed that 53.2% of respondents identified technical support as a key factor that influence their income. Approximately 30.61% of respondents believed that participating in the scheme has a positive influence on their household income. Market access, on the other hand, was identified by a relatively small percentage (6%) of respondents as a key factor influencing household income. The study results indicated a significant majority (59.2%) of respondents strongly agreed that the scheme increased farmers' income significantly. A majority (53.1%) of respondents agreed that the scheme has enabled farmers to better manage their household expenses. The survey results also shows that proportion (44.9%) of respondents agreed that the income from the scheme has allowed farmers to diversify their income streams. Furthermore, 49% of respondents indicated that the scheme has had a positive contribution on household food security and nutrition. In addition, the study revealed an R value of 0.745 indicating a strong positive correlation between the independent variables (poultry out grower schemes) and the dependent variable (household income).Results from the study 36.7 respondents identified contractual disputes as a major challenge. In addition, 22% of respondents highlighted high input costs as a significant challenge. Furthermore, 10% of respondents mentioned limited access to market as a challenge.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The last chapter of this study sums up the results of a study that was carried out to assess the effectiveness of poultry out-grower schemes in improving small-scale farmers' income, a case of Chegutu in Zimbabwe. The study's objectives revolved around the need to identify key factors influencing the income of small-scale farmers in poultry out-grower schemes, determine the contribution of poultry out-grower schemes on the household income of small-scale farmers and analyse the challenges faced by small-scale farmers participating in out-grower schemes.

5.2 Summary

Out-grower schemes in Zimbabwe have been associated with unfair pricing, delayed payments, and limited control over production decisions. This study assessed the effectiveness of poultry out-grower schemes in improving small-scale farmers' income, a case of Chegutu in Zimbabwe. This study used the Sustainable Livelihoods Framework to analyse the livelihoods of rural households and the transaction Cost Economics theory which posited that the cost of transactions, such as searching for information, negotiating contracts, and monitoring performance, can affect the efficiency of economic exchanges. This study employed a mixed-methods approach, combining both qualitative and quantitative data collection and analysis methods. A total of 66 respondents were chosen from three categories using probability seedling, which is simple random sampling. A standardised questionnaire and in-depth interviews were utilised to collect data from participants in the study.

The study revealed that 69.4% of the respondents were females while 30.6% were males. The findings showed that a large representative of the study (38.8%) were aged 31 to 40 years while 30.6% of respondents were aged 41 to 50 years. In addition, 49% of the respondents in the study area attained secondary level of education. Furthermore, 36.7% had been involved in poultry out-grower scheme for a period of six to 10 years. The study results showed that 53.2% of respondents identified technical support as a key factor that influence their income. Approximately 30.61% of respondents believed that participating in the scheme has a positive influence on their household income. Market access, on the other hand, was identified by a relatively small percentage (6%) of respondents as a key factor influencing household income. The study results indicated a significant majority (59.2%) of respondents strongly agreed that the scheme increased farmers' income significantly.

A majority (53.1%) of respondents agreed that the scheme has enabled farmers to better manage their household expenses. The survey results also shows that proportion (44.9%) of respondents agreed that the income from the scheme has allowed farmers to diversify their income streams. Furthermore, 49% of respondents indicated that the scheme has had a positive contribution on household food security and nutrition. In addition, the study revealed an R value of 0.745 indicating a strong positive correlation between the independent variables (poultry out-grower schemes) and the dependent variable (household income). Results from the study 36.7 respondents identified contractual disputes as a major challenge. In addition, 22% of respondents highlighted high input costs as a significant challenge. Furthermore, 10% of respondents mentioned limited access to market as a challenge.

5.3 Conclusions

This study concludes that technical support is a key factor that influencing income. This could be attributed to technical expertise and guidance which is crucial for small-scale farmers to improve their productivity and quality of produce, ultimately leading to increased income. Furthermore, participating in the scheme contributes immensely to farmer household income. This could be attributed to the improved productivity and efficiency of the farmers, as well as the increased access to markets and financial resources emanating from participation of farmers. Furthermore, market access is relatively a key factor influencing household income. This is due to out-grower scheme providing a guaranteed market for the farmers' produce, reducing the importance of market access as a factor influencing household income.

The study concludes that out-grower scheme increased farmers' income this could be attributed to the scheme being effective in improving the financial well-being of participating farmers. In addition, the scheme has enabled farmers to better manage their household expenses could be attributed to the increased income from the scheme being translated into improved financial stability for participating farmers. Furthermore, the income from the scheme has allowed farmers to diversify their income streams showing that diversification of income streams can help farmers reduce their dependence on a single source of income, making them more resilient to economic shocks. In addition, the scheme has improved household food security and nutrition implying that the scheme has enabled farmers to access a more stable and nutritious food supply. In addition, there is a strong positive correlation between the independent variables (poultry out grower schemes) and the dependent variable (household income). The result showed that poultry out grower schemes can be an effective way to improve household income and livelihoods.

The study concludes that contractual disputes are a major challenge faced by small-scale farmers participating in out-grower schemes, this could be attributed to farmers often lacking bargaining power and limited access to market information, making it difficult for them to negotiate fair prices and contracts. In addition, high input costs is a challenge faced by small-scale farmers participating in out-grower schemes could be due to farmers struggling with the financial burden of purchasing inputs, such as seeds, fertilizers, and equipment. Furthermore, limited access to markets is a challenge faced by small-scale farmers participating in out-grower schemes implying that while access to markets, credit, and technical support is important, it may not be as significant a challenge as contractual disputes or high input costs.

5.4 Recommendations

The importance of technical support in influencing income highlights the need for investments in training and capacity-building programs for farmers. Additionally, the significance of participation in out-grower schemes underscores the potential of such schemes to provide small-scale farmers with access to markets, technical support, and other resources that can help them increase their productivity and income.

Since the study provided a strong evidence on the effectiveness of poultry out-grower schemes in improving household income among small-scale farmers. There is potential for policymakers and development practitioners to use these findings to inform their decisions. The study recommends that scaling up poultry out-grower schemes could be an effective way to improve household income among small-scale farmers. Additionally, targeting vulnerable populations through such schemes could be an effective way to reduce poverty and improve livelihoods.

Since the study concluded that small-scale farmers participating in out-grower schemes face significant challenges that can impact their productivity, income, and overall well-being. There is need for out grower schemes to address the challenges faced by small-scale farmers. By improving contract design, reducing input costs, and enhancing access to markets and technical support, schemes can help farmers increase their productivity, income, and overall well-being.

5.5 Contribution of the study

The study contributed to the current literature in disclosing the consistency of the findings with previous research and theoretical frameworks, combined with the significant implications for policy and practice, highlighted the importance of considering poultry out-grower schemes as a viable option for improving household income and livelihoods.

5.6 Areas of further study

Since this study focused on assessing effectiveness of poultry out-grower schemes in improving small-scale farmers' income: the case of Chegutu district, Zimbabwe, similar studies can also be carried out in other agricultural sectors of the economy, using a different approach for example, in horticultural industry and the agroforestry sector among other sectors.

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APPENDICES

Appendix I: Informed Consent Form

My name is Joshua Majoni, a student pursuing Bachelor of Science in Agricultural Economics and Management with Bindura University of Science Education. I am carrying out a study on the effectiveness of poultry out-grower schemes in improving small-scale farmers' income: the case of Chegutu district, Zimbabwe. I therefore kindly request you to participate in this study by responding to the following questions. This is to assure you that your name will not appear anywhere in this questionnaire and that the information will only be used for research purposes. Your written consent is required to participate so that I can confirm that you have been informed of the study and that you agree to participate. You are free to decline or discontinue your participation at any time during the study if you wish to do so. All the information obtained in this study will be kept confidential. You will be asked to complete a questionnaire regarding the same. These questionnaire forms should take between 30 minutes but not longer than 45 minutes to complete in one sitting. The outcome of the information obtained during this research will be summarized and utilized in study.

I have read the foregoing information. I understand and agree to the following;

1. My participation in the study is entirely voluntary.

2. I am free to withdraw from the study at any point.

3. I hereby consent to participate in this research.

Signature……………………………………. Date………………………….....................

Appendix II: Questionnaire

This questionnaire is to collect data for purely academic purposes. The study seeks to evaluate effectiveness of poultry out-grower schemes in improving small-scale farmers' income: the case of Chegutu district, Zimbabwe. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire.

Answer all questions as indicated by either filling in the blank or ticking the option that applies.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. Please indicate your gender by making a tick on the appropriate box below.

Male: [ ]

Female: [ ]

2. What is your age? (Tick appropriate age group)

18 – 30 years: [ ] 31 – 40 years: [ ] 41 – 50 years: [ ] Over 50years: [ ]

3. Please indicate your level of education?

No formal education [ ] Primary [ ] Secondary [ ] Tertiary [ ]

Other (specify)…………………………………………….

4. How long have you been involved in poultry farming?

Below 1 year: [ ] 1-5 years: [ ] 6- 10 years: [ ] 11- 15years [ ] 16 years and over [ ]

SECTION B: KEY FACTORS INFLUENCING THE INCOME OF SMALL-SCALE FARMERS IN POULTRY OUT-GROWER SCHEMES

	Facts about key factors influencing the income of small-scale farmers in poultry out-grower schemes (Select all that apply)	
C1	Participation in out-grower schemes	
C2	Technical support	
C3	Credit access	
C4	Market access	
C5	Production costs	

C6 Other (specify)

……………………………………………………………………………………………………

Section C: CONTRIBUTION OF POULTRY OUT-GROWER SCHEMES ON THE HOUSEHOLD INCOME OF SMALL-SCALE FARMERS

Below are some of the indicators of the contribution of poultry out-grower schemes on the household income of small-scale farmers, on a scale of 1 to 5 where (1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree) please indicate by ticking the most appropriate box your level of agreement or disagreement on the indicators

	Facts about the contribution of poultry out-grower schemes on the household income of small-scale farmers.	**1**	**2**	**3**	**4**	**5**
B1	The poultry out grower scheme has increased my household income significantly					
B2	The scheme has improved my ability to meet my household expenses					
B3	The income from the scheme has enabled me to invest in other income-generating activities					
B4	The scheme has improved my household's food security and nutrition					

SECTION D: CHALLENGES FACED BY SMALL-SCALE FARMERS PARTICIPATING IN OUT-GROWER SCHEMES

	Facts about challenges faced by small-scale farmers participating in out-grower schemes (Select all that apply)	
C1	High Input Costs	
C2	Limited Access to Credit	
C3	Technical Support and Training	
C4	Market Fluctuations	
C5	Disease Management	
C6	Contractual Disputes	

Thank you for your Participation

Appendix III: Interview guide

Introduction

I'm a student at Bindura University of Science Education, pursuing a bachelor's degree. We are required to conduct academic research as part of our own evaluation by the institution as a condition of our enrolment. The study seeks to evaluate effectiveness of poultry out-grower schemes in improving small-scale farmers' income: the case of Chegutu district, Zimbabwe. All information will be treated with strict confidence. No names or information about any individual will be published.

Section 1: Key Factors Influencing Income

1. Can you tell me about your experience with the poultry out grower scheme? How has it impacted your income?

2. What factors do you think most influence your income from poultry farming? (Probe: price of inputs, market demand, production costs, etc.)

Section 2: Contribution to Household Income

1. Can you estimate the percentage of your household income that comes from poultry farming?

2. How has your household income changed since participating in the out grower scheme?

3. What specific ways has the out grower scheme contributed to your household income? (Probe: increased income, improved food security, etc.)

Section 3: Challenges Faced

1. What challenges have you faced while participating in the out grower scheme? (Probe: high input costs, limited access to credit, etc.)

2. How have you addressed these challenges?

3. Are there any other challenges you would like to mention that are not related to the scheme itself?

Thank you for sharing your experiences and insights. Your responses will be valuable in understanding the effectiveness of poultry out grower schemes in improving the incomes of small-scale producers.