Assessing the Impact of Contract Cotton Farming Schemes on Smallholder Farmers in Gokwe South District, Zimbabwe

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Abstract: This research investigates the multifaceted impact of contract cotton farming schemes on cotton production growth in Gokwe South District, Zimbabwe. The study aimed to identify the positive and negative changes brought about by contract cotton farming schemes and to provide recommendations for improving the growth of cotton production in the district. Employing a mixed-methods approach, we collected data from 113 participants, including contracted farmers, non-contracted farmers, traditional leaders, cotton company employees, and extension officers. Our findings reveal that contract cotton farming schemes have both positive and negative effects on cotton production. On the one hand, these schemes provide access to markets, reduce production risks, offer credit facilities, and facilitate capacity building and skills diffusion. On the other hand, they are also associated with side-marketing practices, inadequate and delayed input delivery, lack of predetermined prices, exploitation of farmers, corruption, and land degradation. Notably, our research highlights the importance of a robust legal framework to govern contract farming and protect farmers' rights. We recommend that contractors adapt their contracts to account for environmental factors, such as drought, and that the government establish a pro-farmer legal framework. Additionally, empowering farmers to form associations, ensuring timely input delivery, and promoting contract transparency are crucial for the success of contract cotton farming schemes. Our study underscores the need for a balanced approach to contract farming, one that balances the interests of contractors and farmers while promoting sustainable agricultural development and rural livelihoods.

Key Words: contract cotton farming, smallholder farmers, contract farming schemes, cotton production, agricultural development, rural livelihoods and agricultural policy

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1.   Introduction and Background of the Study

The contract cotton farming scheme has been widely adopted in many developing countries as a strategy to promote agricultural development and reduce poverty among smallholder farmers. In Zimbabwe, contract cotton farming has been a significant contributor to the country's economy, providing employment and income to thousands of rural households. However, despite its potential, the contract cotton farming scheme has faced numerous challenges, including price fluctuations, side-marketing, and defaulting on contractual agreements.

This study aims to assess the impact of contract cotton farming schemes on the growth of cotton production in Gokwe South District, Zimbabwe.

Globally, contract farming has been recognized as a powerful tool for linking farmers to markets and buyers to supply sources (Will, 2013). According to UNCTAD (2011), contract farming can provide small-scale farmers with access to markets, credit, and inputs, enabling them to increase their productivity and income. However, the success of contract farming schemes depends on various factors, including the design of the contract, the relationship between the contractor and the farmer, and the market conditions (Karaan, 2012). In many developing countries, contract farming has been promoted as a way to improve the livelihoods of smallholder farmers. For example, in South Africa, contract farming has been used to promote the production of cotton, sugarcane, and other crops (Karaan, 2012). However, the success of contract farming schemes in these countries has been mixed, with some studies reporting positive outcomes, while others have highlighted the challenges and limitations of this approach.

In the Southern African region, contract cotton farming has been widely adopted as a strategy to promote agricultural development and reduce poverty among smallholder farmers. Countries such as Zambia, Malawi, and Mozambique have implemented contract cotton farming schemes, with varying degrees of success (Kasome, 2012). In Tanzania, contract cotton farming has been used to promote the production of cotton, but the scheme has faced challenges, including side-marketing and defaulting on contractual agreements (Williams, 2012). In Zimbabwe, contract cotton farming has been a significant contributor to the country's economy, providing employment and income to thousands of rural households. The country has a long history of cotton production, dating back to the colonial era (Woodond, 2003). However, the cotton industry has faced numerous challenges, including price fluctuations, side-marketing, and defaulting on contractual agreements (Musara and Dziva, 2015).

The contract cotton farming scheme in Zimbabwe has been designed to provide smallholder farmers with access to markets, credit, and inputs. However, the scheme has faced challenges, including the exploitation of farmers by contractors, and the lack of transparency and accountability in the contractual agreements (Mtetwa, 2015). In Gokwe South District, contract cotton farming has been widely adopted as a strategy to promote agricultural development and reduce poverty among smallholder farmers. However, the scheme has faced numerous challenges, including price fluctuations, side-marketing, and defaulting on contractual agreements hence the need to undertake this study.

2. Theoretical Framework

This study is grounded in the dependency theory, a seminal concept developed by Andre Gunder Frank in the 1960s. The theory posits that a country's development is shaped by its relationship with other countries in the global economy (Frank, 1966). In the context of contract cotton farming, the dependency theory reveals that smallholder farmers in developing countries like Zimbabwe are inextricably linked to large corporations and government institutions for access to markets, inputs, and technology. This creates a stark power imbalance between farmers and contractors, with contractors wielding significant control over contract terms and prices paid to farmers.

The dependency theory sheds light on the unequal relationships between smallholder farmers and large corporations in the cotton industry. It suggests that farmers are exploited by contractors who take advantage of their weak bargaining position to pay low prices for their cotton (Ferraro, 1996). This exploitation can perpetuate poverty and inequality among smallholder farmers, a pressing concern in Zimbabwe. The dependency theory provides a valuable framework for analysing the impact of contract cotton farming schemes on smallholder farmers. It highlights the critical power dynamics between farmers and contractors, which is essential for

understanding the challenges faced by farmers in the cotton industry in Zimbabwe. Furthermore, the theory offers a useful framework for identifying potential solutions to these challenges. For instance, collective action by farmers can improve their bargaining position, enabling them to negotiate better prices and terms with contractors (Eaton, 1998).

3.   Literature Review

Contract farming has been widely adopted in the cotton industry in Zimbabwe, with many smallholder farmers participating in contract farming schemes (Musara and Dziva, 2015). However, the impact of these schemes on smallholder farmers has been mixed, with some studies suggesting that they can improve farmer livelihoods and increase cotton production (Eaton, 1998), while others argue that they can lead to exploitation and poverty among farmers (Ferraro, 1996). One of the key challenges faced by smallholder farmers in contract farming schemes is the lack of bargaining power (Rehber, 2007). Farmers often have limited access to markets and inputs, which makes them dependent on contractors for these services. This can lead to unequal relationships between farmers and contractors, with contractors having more control over the terms of the contract and the prices paid to farmers. Several studies have highlighted the importance of collective action by farmers to improve their bargaining position (Eaton, 1998; Rehber, 2007). By organizing themselves into groups or cooperatives, farmers negotiate better prices and terms with contractors, which help improve their livelihoods. However, collective action can be challenging to achieve, particularly in contexts where farmers are dispersed and lack access to resources and support. The literature also suggests that contract farming schemes have negative impacts on smallholder farmers, particularly if they are not well-designed or implemented (Ferraro, 1996). For example, contracts that are biased towards the interests of contractors lead to exploitation and poverty among farmers. Similarly, contracts that are not transparent or accountable can lead to mistrust and conflict between farmers and contractors.

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According to Eaton (1998), contract farming consists of five broad models that can be used by farmers depending on the product, resources of the sponsor (buyer), and the intensity of the relationship between the farmer and the sponsor. The models include the centralized model, informal model, intermediary model, multipartite model, and nucleus model. The centralized model is the most common model, where the buyer has control over most of the production aspects (Mike, 2014). The informal model is the most transient and speculative, with a high risk of defaulting by both the sponsor and the farmer (Dorris, 2015). The intermediary model enables the buyer to subcontract an intermediary who then contracts the farmers (Willis, 2014).

In Zimbabwe, contract farming has been widely adopted in the cotton sector, with contractors providing inputs and technical assistance to farmers in exchange for a guaranteed market (Mtetwa, 2015). However, the contract farming arrangement has been criticized for being exploitative, with contractors benefiting at the expense of farmers. According to Musara and Dziva (2015), the cotton industry has experienced several challenges, including side-marketing and defaulting by farmers. These challenges have led to a decline in cotton production and a loss of trust between farmers and contractors. To address these challenges, the government and industry

stakeholders have implemented various initiatives, including the development of statutory instruments to regulate the industry and protect the interests of farmers and contractors.

4.   Research Methodology

This study employed a robust mixed-methods approach, seamlessly integrating qualitative and quantitative methods to collect comprehensive data from participants. Combining these methods offset the weaknesses of each approach, gathered more nuanced insights, and provided a richer understanding of the research problem (Neuman, 2000). Our research design was grounded in a phenomenological philosophy, which emphasizes the importance of understanding the subjective experiences and perceptions of participants (Cobbler, 2008). This approach enabled gathering detailed, contextualized information through structured questionnaires and interview guides, facilitating a deeper understanding of the participants' perspectives.

The target population consisted of 1000 cotton farmers in the Gokwe South District, from which a sample size of 113 participants was selected using the Yamane (1967) formula. This sample size was deemed adequate to represent the target population, given the precision level and significance level used. Participants included 65 contracted cotton farmers, 12 non-contracted farmers, 12 traditional leaders, 12 cotton company employees, and 12 Arex Extension Officers. Two primary research instruments were utilized: self-administered structured questionnaires and face-to-face interviews. Self-administered questionnaires allowed participants to respond to questions without the influence of the interviewer, reducing bias and improving data accuracy (Anderson, 2008). Face-to-face interviews provided an opportunity for probing and seeking clarity on participants' responses (Cris, 2008).

Descriptive statistical techniques, such as graphs, tables, and histograms, were used to analyse quantitative data collected through self-administered questionnaires. Thematic analysis was employed to analyse qualitative data from interviews, where preliminary codes were assigned to the data and patterns or themes were identified (Creswell, 2009). Pilot testing ensured the reliability and validity of the study, identifying any errors or biases in research instruments (Wain and Braun, 1998). The sample size adequately represented the target population, and data collection procedures were transparent and consistent. The combination of qualitative and quantitative methods provided a more comprehensive understanding of the research problem and a deeper insight into the impact of contract cotton farming schemes on cotton production growth.

5.   Research Findings

This section presents the key findings of our study on contract cotton farming in Gokwe South District. The results are based on a comprehensive analysis of data collected from participants, providing insights into the demographic characteristics, production systems, socio-economic factors, and effectiveness of current processes and support systems in contract cotton farming. Our findings shed light on the opportunities and challenges associated with contract farming, highlighting areas for improvement and potential strategies for enhancing the sustainability and productivity of cotton production.

5.1. Demographic Data of Participants

The dominance of male adults (68) in the farming industry is notable, suggesting a potential gender imbalance in agricultural participation. This finding warrants further investigation into the role of women in contract farming and potential barriers to their involvement. The majority of participants (65) being married may indicate a level of stability and commitment to farming as a livelihood. However, this finding also raises questions about the impact of marital status on farming practices and decision-making. The educational background of participants, with 56 having secondary-level education, highlights the potential for targeted training and capacity-building programs to enhance farming practices.

5.2. Operation of Production System

The prevalence of small-scale farmers (32) underscores the importance of contract farming in supporting smallholder agriculture. However, the relatively low number of large-scale farmers (6) may indicate challenges in scaling up production. The experience of participants in farming business, with 58% having over 10 years of experience, suggests a high level of expertise and potential for knowledge sharing. The majority of participants (84%) being contracted as individuals rather than groups may indicate a preference for individualized support and services.

5.3. Socio-Economic Factors

The lack of adequate inputs for contract cotton farming (64%) is a significant concern, highlighting potential issues with supply chain management and farmer support. The high rate of loan default (64%) and failure to honour contractual obligations raises questions about the effectiveness of risk management strategies and the need for more robust credit assessment processes. The allegation of poor monitoring and evaluation by contractors (33%) as a contributing factor to defaulting repayment of loans highlights the importance of robust monitoring and evaluation systems.

5.4. Effectiveness of Current Processes and Support Systems

The production levels of participants, with 31 producing over 46 bales of cotton, suggest a high level of productivity among contracted farmers. The majority of participants (36%) receiving good services from contractors indicates a level of satisfaction with the support provided. However, the need for training in cotton farming (74%) highlights an opportunity for capacity building and skills development. The findings on the positive and negative impacts of contract cotton farming schemes underscore the complexity of these arrangements. While contract farming provides access to markets, risk sharing, and capacity building, it also raises concerns about exploitation, side-marketing practices, and corruption.

6. Analysis and Discussion of the Research Findings

The contract cotton farming scheme in Gokwe South District presents a complex landscape of opportunities and challenges. This section synthesizes the research findings, exploring the multifaceted impact of contract farming on cotton production growth. By examining the demographic characteristics, production systems, socio-economic factors, and effectiveness of current processes and support systems, we gain valuable insights into the dynamics of contract cotton farming. Our analysis reveals both promising trends and areas for improvement, providing a foundation for informed decision-making and strategic interventions. Therefore, the impact of contract cotton farming schemes on cotton production growth in Gokwe South District is multifaceted. Our analysis reveals that male adults dominate the farming industry, corroborating Musara and Dziva's (2015) findings that men are more involved in cotton production. This trend underscores the need for initiatives promoting gender equality in agricultural participation.

Marital status also plays a role, with married individuals being more likely to engage in farming activities (Coetzee & Schreuder, 2010). This may be attributed to the stability and support that marriage provides, enabling individuals to invest in farming. Education is a crucial factor, with most participants having secondary-level education. This aligns with Borg et al.'s (1997) assertion that education enhances farming practices. The significance of education in cotton production highlights the potential benefits of targeted training programs.

Employment opportunities generated by cotton production are substantial, supporting Mlambo et al.'s (2008) findings. Family size, averaging 4-6 children, also influences farming dynamics, as noted by Mutanga (2009). However, our analysis reveals challenges, including inadequate access to inputs, which constrains productivity (Watkins, 2008). Loan default rates are also concerning, echoing Endra and Chizema's (2016) observations on the downward trend of cotton contract farming.

Productivity varies, with most participants producing over 46 bales of cotton per hectare. This outcome supports Marvelous' (2018) assertion that contract farming can boost cotton production. The quality of services provided by contractors is generally satisfactory, aligning with Adams' (2015) recommendations for good service provision. The need for training in cotton farming is evident, underscoring Casper's (2010) emphasis on knowledge and skill acquisition for farmers. Targeted training programs could address this gap and enhance productivity.

Contract cotton farming schemes have both positive and negative impacts on cotton production growth. While they provide opportunities for increased productivity and access to markets, challenges such as inadequate input access and loan defaults need to be addressed. Understanding these dynamics, stakeholders can work towards creating more effective and sustainable contract farming models.

7. Conclusions and Recommendations

This research investigation into the impact of contract cotton farming schemes on cotton production growth in Gokwe South District, Zimbabwe, reveals a complex interplay of benefits and drawbacks. Contract farming offers smallholder farmers access to markets, reduces production risks, and provides capacity building and skills diffusion. However, it also exposes farmers to exploitation, side-marketing practices, and land degradation. The dependency theory aptly explains the contractor-farmer relationship, highlighting the power imbalance that can lead to exploitation. Contractual obligations are often not observed by both parties, underscoring the need for a better loan recovery formula and a more robust legal framework to protect farmers' rights. To improve the effectiveness of contract cotton farming schemes, we recommend the following:

- Contractors should consider the impact of drought and little rainfall on farmers and readjust their contracts accordingly.
- The government should establish a legal framework that governs contract farming and protects the rights of farmers.
- Farmers should be empowered to form vibrant farmers' associations to increase their bargaining skills and negotiate better prices.
- Contractors should deliver inputs to farmers on time to avoid disrupting the production chain.
- Farmers should be given enough time to analyse and understand the contracts before signing.
- Both parties should observe the contractual obligations and fulfil their promises.
- The monitoring and evaluation system should be strengthened to ensure quality cotton produce and minimize side-marketing practices.
- Farmers should diversify their activities to reduce dependence on cotton and improve their livelihoods.
- Farmers should prioritize education on their rights and contractual obligations to avoid exploitation.
- The government should expand the land distribution exercise to ensure that farmers have adequate land for contract farming.
- Contractors should do away with discriminatory buying, late payments, and corruption.
- The government should capacitate and empower farmers to increase their bargaining skills.
- The government should play an important role in protecting farmers by ensuring the financial and managerial reliability of potential sponsors.

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