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JONATHAN HOVE

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RESEARCH TOPIC: *THE ROLE OF CONTRACT FARMING ON COTTON PRODUCTION AND PEASANTRY LIVELIHOODS: THE CASE OF JIRI COMMUNAL LANDS OF GOKWE SOUTH IN ZIMBABWE [DISSERTATION BY HOVE JONATHAN IN PARTIAL FULFILMENT OF THE MASTERS DEGREE IN DEVELOPMENT STUDIES]*

Abstract

The prevalence of contract farming in the cotton industry of Zimbabwe implies that it has become the dominant marketing system. Even the independently produced cotton is eventually sold to the contracting cotton companies owing to enacted regulations which compel all prospective cotton buyers to finance production through contract farming to be licensed to purchase seed cotton from farmers. However, the prevailing seed cotton marketing system is riddled with challenges characterised by price negotiation impasses that recur every marketing season, prompting Government intervention in a supposedly free market system. While peasant farmers accuse cotton companies of colluding in undertaking unfair pricing practices, the cotton buying companies on the other hand blame it all on the peasant farmers for failure to increase yield levels to expected national and international standards, and also failure to be reliable in loan payments. This study seeks to assess the role of cotton contract farming in the Jiri communal lands of Gokwe, Zimbabwe in addressing peasantry socio-economic livelihoods. Results of this study show that the contract farming system in the area under study has failed to address the welfare of the peasants in the area, and there is need for consorted effort to come up with other alternatives besides relying on cotton production. Alternative options, though few, are available for the peasant farmers to reduce reliance on the cotton cash crop. However, contracted farmers have guaranteed markets and less hassles in inputs sourcing. All things being equal, it would be advisable for farmers to produce their cotton independently and realise higher returns.

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Dedication

This research is dedicated to my dear wife, Portia Chibi, and daughter, Nyashadzaishe Hove. To my wife, words can be limited, but it's only me who knows what it means to have a wife and life partner like you. Thank you very much for the social, psychological, and mostly, financial support you have provided me throughout my research.

You are a lioness, MaSibanda. Thank you for choosing to stay with me.

List of Acronyms

CMB – Cotton Marketing Board

COTTCO – Cotton Company of Zimbabwe

UNCTAD – United Nations Center for Trade and Development

GDP – Gross Domestic Product

GM – Genetically Modified

AMA – Agricultural Marketing Authority

RNFU – Rhodesian National Farmers 'Union

TDPs – Test Demonstration Plots

AFC – Agricultural Finance Corporation

AGRITEX – Agricultural Technical and Extension Services

CCGA – Commercial Cotton Growers Association

LSCF – Large Scale Commercial Farmer

FIV – Farmer Input Voucher

NCC – National Cotton Council

GLOBALG.A.P – Global Partnership for Good Agricultural Practices

CF – Contract Farming

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Introduction

The Gokwe South Cotton farming scenario

This introductory chapter is aimed at providing readers with an understanding of the background information of the area under study. It aims to expose the geographic location of the area under study and justify why the researcher saw it worthwhile to carry out a research on the role of cotton production on cotton production and peasantry livelihoods. A number of scholars are going to be mentioned, and their input pertaining to the topic under study is going to be reviewed. Finally, the objectives of the study and the research methodologies that the researcher used are also going to be outlined.

Cotton farming in Gokwe South District became the most viable business for cotton companies in the area under study after the liberalization of the cotton sector. The inception of contract farming in the Gokwe South region attracted a number of both local and foreign companies to invest in the business of cotton buying the cotton growing business was liberalised in 1994, with the privatization of the Cotton Marketing Board [CMB], which was later known as the Cotton Company of Zimbabwe [Cottco]. As a result, a number of companies interested in the cotton farming enterprise came to the fore, and also became buyers of cotton from peasant farmers in rural communities. This left farmers in a dilemma, in that these buyers provided the needed inputs to farmers, but at the same time operating an exploitative contract farming system in the communities that involved themselves with the enterprise.

Peasant farmers in these communal lands became attracted into the cotton farming business through involving themselves in contracts with the cotton companies operating in the area. This contract farming is agricultural production carried out according to an agreement between buyer or company and the seller or farmer, which establishes conditions for the production and marketing of a product. The buyer usually agrees to supply the farmer with production inputs, extension services, transport for the inputs, and also buy the farmer's product. The farmer also is bound to produce a certain amount of the crop and sells it to the company or buyer to whom he or she is contracted.

It is against this background that the researcher analysed the role or contribution of this farming practice on cotton production, and on the other hand, the peasantry's socio-economic livelihoods. The research was aimed at uncovering the strengths and weaknesses of the farming practice on cotton production and also on how it impacts the farmer's livelihoods. At the end, ways of improving the peasantry life were also explored.

Background to the Study

The majority of peasants in Jiri communal lands, just as the case with other rural dwellers in the surrounding areas, depend mostly on agricultural activities as their source of income and livelihoods. It is disturbing to note that in spite of this, the farming business in the area under study has been neglected by the government as a mechanism to deal with the peasantry livelihoods of the rural people in the area in particular, and in Zimbabwe in general. Support has not been adequate, which usually came in form of seed and at times fertilizers. It is important to point out that the support from the government has been, and is unsustainable. In many African countries, the major concern is that whilst agriculture is the dominant source of income for the rural peasantry, indications are that government's involvement in promoting agriculture has dwindled. This can be partly attributed to the ineffective state policies, coupled with the macro-economic environment prevailing in the country, which is impacting negatively on agricultural production.

The Zimbabwean economy has been struggling since the turn of the new millennium. The situation has been further worsened by the fact that much of the civil society is now very cautious in its efforts to assist the vulnerable peasant farmers in rural areas, which has been helping farmers when the state failed to provide for its citizens. This development is impacting on the ability of farmers to engage in sustainable agriculture. It is against this background that cotton contract farming has gained momentum in Jiri communal lands through the various companies operating in the area as the major driving force. As such, there has been a proliferation of cotton companies in the area under study. The major companies in the cotton farming enterprise are Cotton Company of Zimbabwe [COTTCO], Cargill [which however has decided to close its operations in Zimbabwe at the end of this 2014 buying season], Olum, Tarafern, Graffax and many other emerging small companies that have plunged into the lucrative business. As observed by Davies et al, [2007] there are a number of

driving forces behind contract farming in Zimbabwe, including but not limited to diminishing national agricultural productivity, economic downturn, and raw material shortages for agro-processing and increasing food insecurity which in recent years has been increased by the negative impacts of both climate and environmental changes.

In an attempt to redress the colonial land imbalances in Zimbabwe, the government of Zimbabwe embarked on a massive Fast Track Land redistribution exercise in 2000, and this has extended into the present day. As noted by Nhodo and Changa, [2013], because of its lack of proper planning, the programme failed to fit into the category of an agrarian reform. As a result the beneficiaries of this exercise, including the Jiri cotton farmers were not given strong supporting structures for sustainable agriculture since the programme was violent and revolutionary in nature. The situation has made it difficult for cotton farmers, who have also found themselves immersed in a vicious cycle of poverty as their livelihoods options have been severely curtailed. They have thus resorted to cotton contract farming with the aim of improving their livelihoods.

In spite of the growing levels of contract farming and cash crop production in Zimbabwe, these peasant farmers have continued to experience challenges related to lack of capital and access to credit facilities from lending organisations. As a result, a lot of the peasant farmers in the Jiri communal lands have resorted to contract farming since it promises to be the solution to their livelihoods, due to the fact that the farming system supplies farming inputs to the Jiri rural peasants.

According to Davies et al, [2000], contract farming refers to a contract signed between a farmer and a company with an agreement between the two parties that the firm will buy the farmer's product in order to process them or sell them. The farmer, in return, will have access to the agricultural inputs s/he needs such as seeds, fertilizers and agricultural chemicals. Davis et al[2007] also note that the system can potentially provide farmers with so many benefits that extend beyond provision of markets, including access to input loans, credit, provision of extension and technical services, use of appropriate technology which is a missing link for sustainable agriculture in rural economies.

Although contract farming has gained regional, continental and national interest as a way of pulling farmers out of poverty and improving rural livelihoods, it has been romanticised as a

potential panacea for reducing rural poverty [Nhodo. and Changa, 2013]. Contract farming has therefore been adopted as a blueprint or top-down approach to dealing with rural poverty. The vulnerable farmers have therefore been wrongly conceptualised as tabula rasas or passive recipients of development intervention programmes. This is the cause of the negative impacts of contract farming in these communal areas. In this case, the contract farmers are those who have entered into agreements with cotton contracting companies. The research is based on how the conflicting interests and perceptions of the farmers and companies impinge on the peasantry's socio-economic well being in the area under study.

Problem Statement

Since the adoption of contract farming in Jiri communal lands as a way of increasing farmers' incomes, cotton farmers are still struggling to improve their socio-economic lives, despite a marked increase in the production of the cash crop, therefore the researcher wanted to have an in-depth understanding of the nature of the contracts and the position of the parties involved in the contract. Despite a dramatic increase in production of cotton as a result of contract farming, peasants' income levels have remained low and poverty is rampant amongst the inhabitants of this community. Although there has been a marked increase in the production of the cotton crop in the area, this has been because of the availability of inputs from these companies, but is it these companies again that determine the prices of the cotton crop after harvest, which leaves the peasantry in an economically vulnerable situation. Despite the fact that the peasant farmers in Jiri communal area can opt to buy cotton farming inputs on credit basis, the cotton companies have a monopoly of cotton inputs and to give them for credit at inflated prices. This is why over the many years since the beginning of the new millennium, cotton production in Jiri communal lands has been marred with grievances from farmers about the services they get from the cotton buying companies. The grievances range from those of cotton seed prices, increase in prices of inputs, and grading of the cotton crop at the market, the perceived insensitive measures that the contracting companies take in the event of farmers' failure to pay back the loans, and that farmers do not contribute in gazetting the price of the cotton crop after harvest, the pricing of inputs received in contract farming arrangements, as well as the price of the crop at the market. To this effect, misunderstandings between the rural cotton farming peasantry and the cotton companies have arisen as a result of the above mentioned problems. Because the cotton companies are much more organised into unions, the peasant farmers are no match for the big companies in

the bargaining processes, and also the peasant farmers' production systems are not unionised. Other problems like side marketing has also been a result of the clashes of interests between the farmers and the contracting companies.

In terms of cereal production, there has been a marked decrease in area planting of traditional crops such as maize, sorghum, millet, and rapoko, at the expense of the cash crop, cotton. This has contributed to a rise in food insecurity in the area. Farmers in the area, hoping that they can buy food crops from the proceeds of selling cotton, have over the years favoured to grow cotton with the hope of getting profit. This has however not been practical; instead, farmers see themselves in a dilemma after selling their cotton, as they are left without much left for themselves after paying their arrears to the cotton companies.

The basis of these challenges, especially on the part of farmers, also emanates from lack of basic civic education, and misunderstanding and ignorance of the terms and conditions of the contracts they sign with the cotton companies. Most of the peasantry in the cotton farming business sign contracts without understanding their terms. There are situations where some farmers are given inputs on credit by cotton companies and somebody [an area representative or village head] would sign the contract forms on their behalf.

On the social aspect, the adoption of cotton farming in the area under study has contributed to social decay. There has been a marked increase in HIVand AIDS prevalence, at the cotton buying points where prostitution has become rife. Prostitutes have found a living by waiting to prey on the cash of those people who have sold their cotton at the buying points, which happen to be at shopping centres like Marapira, and growth points like Manoti. There has been a marked increase in school dropouts as the youths have been lured by the seasonal cash inflow of cotton farming in the area. Children of school going age are dropping out of school, to resort to cotton farming. This has also contributed to the rise in early marriages in the area under study.

Aim of the study

The aim of the study was to analyse the role of cotton contract farming as a system, in improving peasantry livelihoods among the peasantry in Gokwe South, and bringing about positive socio-economic changes particularly in the communal lands of Jiri, wards 21 and 22.

The study also looked at the production levels in terms of quantity of cotton produced as a result of the introduction of contract farming. The study also looked at the relationship of cotton farmers and the cotton buying companies, also taking a look at the contracts and contract terms and conditions they are working with, the services which the companies are expected to provide to the farmers and the farmers' contribution in the drafting of the contracts. The analysis was aimed at coming up with logical conclusions on the relationship of the contractors and the farmers and how it is impacting or affecting the production system and the socio-economic life of the general peasantry. At the end, the researcher intents to come up with recommendations that will help sustain cotton production and redress areas where unequal practices between buyers and farmers prevail. Recommendations on other alternatives besides cotton farming are also going to be explored and advocated for, if ever they prove to be the panacea of the problems within these communities.

Objectives

1. To have an insight into the operation of the production system of contract farming in Jiri communal lands
2. To investigate the benefits of contract farming as a system amongst the peasant farmers in Jiri Ward 21 and 22
3. To assess the challenges associated with contract farming among the peasantry in the area under study

Study Delimitation

Gokwe South district is part of the Midlands province, situated in the North-western part of the country, Zimbabwe, with an area of 11399, 46 square kilometres in size. There are 32 administrative wards in the district, and among them are wards 21 and 22, which cover the Jiri communal lands under study. These areas are situated around 110 km and 120 km respectively away from Gokwe town centre, the majority of people in Jiri communal lands are mainly peasant farmers and they sustain their lives through cotton farming. Loamy sands characterise the soil type in Jiri communal lands, and cotton thrives well in these soils, if grown with adequate inputs and enough rainfall. As a result, the area has witnessed a proliferation of cotton buying companies since the 2000 economic crisis.

Important and central places within the area under study include Marapira business centre, Choto shopping area, Marirangwe, Maboke and Ndoza clinic. Cotton buying depots have

been set Marapira and Manoti because of the centrality of the two places in relation with the surrounding communities. On these points, cotton companies' agents meet with peasants, liaise contracts, give them inputs and also buy their cotton.

Ward 21 has a population of 9 519 [CSO, 2014]. There are four primary schools namely Choto, Jiri, Matura and Paradza; and one secondary school namely Choto Tafara. The most prominent business centre in the ward is Choto shopping centre. The centre is electrified but does not have a police station, bank or a post office.

Ward 22, also known as Jiri 2 has a male councillor, Mr Mukuvazvivi. The area has a population of 7 684 [Ibid, p44]. The ward has 7 primary schools known as Gwetsanga, Maboke, Marirangwe, Murwira, Jiri, Mudzimundiringe and Zengeya; and three secondary schools namely Maboke, Marirangwe and Marimasimbe. There is one prominent business centre in the ward, known as Marapira Business Centre.

Theoretical/Conceptual framework

This study is influenced by the Political Economy of Agrarian Change theory. The "political economy of agrarian change" was a relatively influential school of thought in the 1970s and 1980s. As noted by Shanin and Hartmann [1987,] the theory is based on the control of land, labour and capital, this Marxist and neo-Marxist perspective necessitated the increase of capitalist relations of production within farming societies, mainly in terms of changes in class, but also in terms of gender, kinship and household reproduction.

Contract farming was generally viewed as a means through which capital could extract surplus value from the peasantry through exploitative terms. Singh [2002] summarises the main tenets of this school's interpretation of contract farming as follows; that contract farming develops only when the state has limited its involvement in the provision of agricultural inputs and also limited its involvement in selling of the same agricultural products, and when markets shows signs of failure; that contracting often relies on monopolies to be profitable and sustainable; that it leads to self-exploitation as farmers involuntarily choose to lose control of their land and labour, but fail to receive a corresponding income that equals the value addition and production of the product; that despite their lack of coping capacity, farms usually bear all production risk and losses from

natural disasters and in event of crop failure; that farmers do not benefit from a stable wage labour contract, or have the ability to manage their own farms for their own benefit but instead they lose their autonomy to the cotton farming companies or firms; that contract farming usually changes the distribution of labour within the household setup, and tend to put women on the disadvantage and frequently involves child labour within the household production setup; that, when successfully implemented, contract farming creates a class of peasant- capitalist farmers, which increases the loss of autonomy of poorer peasants on their land, with peasant capitalists acquiring their land; and that contract farming can have substantial spill-over effects into local communities and markets, such as reduced food crop production, which can lead to a rise in food prices on the local markets; the provision of inputs for contract farmers can lead to thinner spot markets and higher prices for non-participants, usually because the uncontracted farmers will find it difficult to sell their produce, even if they are producing the same crop as that of the contracted farmer.

Contract farming was conceptualized as agricultural production carried out according to a prior agreement in which the farmer commits to producing a given crop, in a given manner, and the buyer commits to purchasing it as propounded by Nicholas Minot, [2011]. Contracts vary in scope, ranging from being formal [written], non-formal [oral] contracts. Some provide inputs on credit, others do not, some provide technical assistance and monitoring, others do not, and prices may be fixed, set by formula, or unspecified [Ibid, p67].

According to Rehber [2007], contract farming is a contractual arrangement between farmers and other firms, whether oral or written, specifying one or more conditions of production, and one or more conditions of marketing, for an agricultural product, which is non-transferable. The Rehber [2007] definition helps us place contract farming within two [out of the three] conventional types of agricultural contracts [as originally defined by Mighell and Jones, 1963]. The first of these are market-specification contracts, which guarantee a farmer a marketing outlet and time of sale, and possibly a price structure, if some degree of quality is met. Minot [2007] outlines how market-specification contracts reduce co-ordination costs, particularly for perishable products or those with complex quality attributes, through addressing marketing information asymmetries. Clearly, farmers retain full control over production.

The researcher conceptualized contract farming as a farming system done according to an agreement between the buyer and the seller, or farmers, with clearly established conditions of production and marketing of the crop. The farmer agrees to provide the buyer or company with a specific quantity of product, meeting the quality standard and delivery schedule set by the purchaser or buyer. In turn the buyer is bound to purchase the crop. The buyer in some cases, as in cotton contract farming, commits to support production through supply of inputs, provision of technical services and arranging transport to the buyer's premises or processing points.

Davis et al [2008] have noted that some of the benefits of contract farming are improved access to local markets, assured markets and prices, enhanced farmers' access to inputs, mechanisation and transport services and extension advice. There is also assured quantity and timeliness in delivery of farm products, improved land infrastructure and establishment and development of cotton collection centres. The centralized model is the type of contract used for cotton growing in Gokwe South. The companies provide inputs to smallholder farmers purchase the crop from the farmers and then processes, packages and markets products, thereby controlling its quality.

Peasantry or peasant farmers in this case refer to those farmers in the communal areas under study, or the communal peasant farmers. Throughout this document, "smallholder farmers" is a term that is going to be used synonymously with peasantry, or peasant farmers. These are mostly economically challenged farmers who enter into a contract with the cotton buying companies and are supplied with inputs, extension services, and markets and assured support in transporting from mini depots to the contractor's premises. These peasants are the rural farmers who depend largely on farming for their economic and social well-being.

Livelihoods in this case refer to the society's way of life influenced by their economic base, and also socio cultural practices. Economic well being refers to income levels and situations. It is about the position of the peasants in securing their economic base.

Production in this case refers to the amount of cotton produced by the farmer as a result of their engagement with the companies in the cotton farming business. Production will also be used to refer to the yields of other traditional crops, in as far as how they have been affected by the advent of cotton contract farming in the area under study.

Literature Review

Wooded [2003] highlighted that the institutional arrangement of contract farming has reduced the transactional cost and improved market efficiency to benefit the smallholder farmer. In Zimbabwe, the cotton contract farming schemes have commercialized the cotton peasant farming through provision of assured markets, and the so-called "favourable" prices perceived to be fair to the farmers, the much needed input provision and knowledge on agriculture technologies to farmers as a driver to rural development. The contract farming arrangements are creditable for playing an important role in increasing profitability of crop farming, reducing market risk and above all opening new markets [Larpar, Holloway and Ehui, 2008]. Contract farming has somehow proved viable in integration of peasantry producers in that provisions of seasonal finance is made to farmers that they cannot access through normal commercial channels as acknowledged by Wooded [2003]. This has lightened the burden of sourcing scarce and expensive inputs to rural farmers.

Furthermore, the system has also promoted infrastructural development in the rural areas for cotton industries such as agrochemicals, fertilizer and cotton marketing companies. As a result, the adoption of contract farming has created family labour employment, and therefore has proven to be a vehicle for occupying the unemployed rural folks. Wooded [2003] also appraises contract farming for giving the smallholder farmer the opportunity to earn income as evident by a large participation of smallholder farmers in cotton production as a means of acquiring cash.

Contract farming is less subjective if smallholder farmers are involved and sponsors have or attainment of political acceptability. As long as the farmer is not a tenant to the sponsor contract farming is less likely to be subject to criticism. With the land reform program in Zimbabwe contractors have managed to overcome land constraints through assessing crop production to land that is unavailable to the company with the additional advantage that it does not have to purchase it .Working with the peasant farmers enables cotton companies to share the risk of production failure, weather, diseases and other mishaps. The farmer takes the risk of loss of production while the company absorbs losses associated with reduced or non-existent throughput for processing facilities.

However, the above literature leaves gaps especially by heralding the benefits of contract farming to the peasant farmer. There is also need to assess the demerits of the system on the peasant farmers. What is left by the above literature is the nature of the contracts, that is, the terms and conditions of the contracts, and how they impact negatively to the farmer.

Little and Watts [1994] have studied contract farming in a number of African countries and highlighted that the income levels have increased amongst most cotton farmers. This is however disputed by the situation of the area under study, where although contract farming has been adopted in the area as a way of addressing income levels and livelihoods, it has not provided the panacea to the socio-economic problems. Nicholas Minot [2000] indicates that there are situations whereby contract farming makes economic sense, and also situations that contract farming may not make economic sense, but also fails to address the social aspect of the result of cotton farming under contractual basis.

Nicolas Minot [2000] noted that the persistence of poverty among the peasantry is rooted in a number of reasons. He noted that contract farming exploits small farmers because of unequal relationship between farmers and large agribusiness companies; that additional income from contract farming creates inequality, friction within community, and disputes within households and also that contract farming excludes some of the peasantry because some companies prefer to work with medium and large farmers. However, his emphasis on middle and large farmers creates a gap in that the area under study is populated by peasant farmers, and it is these peasant farmers that the research is interested in.

Scholars like Nhodo Lloyd and Changa Moses, [2013] in their study of contract farming among the Mukosi cotton growers have highlighted that the orthodox conceptualization of the cotton contract farming as the panacea to the incessant production challenges bedevilling rural communities is neither true nor effective. They assert that in spite of the much heralded virtues of contract farming as a catalyst of improving rural livelihoods, the Mukosi cotton farmers' experience reveals that the said farming practice, far from being an antidote to the problems bedevilling such rural communities, has actually degenerated into a battlefield where the local farmers and the private companies compete to position themselves in relation to the pricing system, culminating in a serious impasse that is relentlessly threatening to render contract farming obsolete. These scholars have however not been clear on the role of the farming practice on production of the plant. As for livelihoods, they have been elaborative

on the economic aspect, whilst the impact on the social aspect has not been clarified. Nhodo Lloyd and Changa Moses have studied cotton farming among the Mukosi farmers in Masvingo, which is a totally different area from the area under study, in terms of environmental conditions, the soil types, rainfall patterns and the labour availability. Nhodo Lloyd and Changa Moses were mainly focusing on livelihoods, but this study aims to uncover both social and economic impacts of contract farming among the Jiri communal farmers, as well as its impact on production.

Davis et al [2002] observed that there are a number of driving forces behind contract farming in Zimbabwe, including, but not limited to diminishing national agricultural productivity, economic situation which is unfavourable for the government's continuation in supporting and supplying the farming sector, and raw material shortage for ago-processing and increasing food insecurity which in recent years has been exacerbated by the catastrophic impact of climate change. They also assert that contract farming can potentially provide farmers with so many benefits that extend ways beyond the provision of markets, including access to input loans, credit, and provision of extension and technical services of appropriate technology which has ironically emerged as missing link for sustainable agriculture in rural economies.

The above literature of Davis leaves a gap in emphasizing the negative side of contract farming, socially and economically. Therefore this research is going to explore the social and economic impacts of contract farming.

It is evident that production levels are a result of various interrelated factors such as soils, rainfall patterns, availability of inputs and many more. The researcher is going to put emphasis on input supply and availability as an important factor of production in the area under study. Nicholas Minot [2011], in a study of contract farming in Africa, has also highlighted the socio-economic aspects of contract farming on the whole continent, giving case studies of a number of African countries. The gap to be addressed here is to come up with measures to improvise and device locally applicable ways to deal with problems affecting the peasantry. The researcher is going to narrow the study to a more local level, because of fear of generalizations, since there exists different socio-economic environments from country to country.

Tschirky et al [2009] have highlighted that cotton contract farming makes economic sense in many communities, basing their studies from the Malian, Cameroonian, Senegal and Chad case studies, where the production of cotton is a state enterprise. What has to be addressed in this study which was not covered by the above mentioned authors is that the production of cotton in the Zimbabwean scenario is no longer under state control, hence there is need to analyse the role of contract farming as a liberalized commercial business run by private companies and no longer under state control. So the studies of Tschirky et al [2009] do not fit into the operational framework of cotton companies in Zimbabwe, where the business has been commercialized.

Poulton and Mlambo [2001] have noted that the liberalisation of the cotton industry in Zimbabwe in 1994 resulted into the domination of Cottco and Cargill running in the cotton farming business, but were not clear on the socio-economic aspect of the system. Nick [2000] also asserts that contract farming of cotton has come to be an important development process in the North western region of Zimbabwe, on which the majority of households in the region depend for their livelihoods. He also stresses that cotton farming has impacted negatively on the production of other once popularly grown traditional crops such as bambara nuts, sweet potatoes, cow peas, sorghum and millet. This has impacted the household, food, security in the communities. Economic and social aspects of cotton farming have not been highlighted by Nick and it is why the researcher has seen it necessary to examine the economic and social aspect of the practice and will also look at the impact on both cotton production and traditional crop production.

Research methods

This research was grounded qualitative methodology. qualitative methodology was the dominant research method. The researcher's choive of qualitative methods helped the researcher to gain in-depth responses about what the respondents think, do and feel with regards to contract farming as a mechanism of improving rural livelihoods. Qualitative methodology also enabled the researcher to obtain insight into attitudes, motives and behaviours of the cotton farmers in the area under study as a result of the farming enterprise exposing the unequal relations embedded in contract farming [Mwanje 2001]. The choice of qualitative methodology is influenced by the fact that the researcher was concerned with how beneficiaries of contract farming define their social and economic world. The

qualitative methodology was dominant because it is more concerned with quality and depth of information of social issues such as the contract farming system.

Quantity and cost of inputs were represented numerically as well as quantity of output in terms of kilograms. The number of respondents will be represented numerically.

Sample size and sampling procedure

The size of the sample was determined by the use of sampling methods. Respondents were drawn from villages in these wards. There are 5 villages in ward 21, namely Choto, Matende, Rukara, Paradza and Lukukwe. There are 7 villages in ward 22, namely Tosiyana, Tabvaneyi, Chirobho, Marirangwe, Ndoza, Marapira, Maboke. For each village random sampling was used to come up with four respondents representing the cotton farmers. The researcher, on the respondents of the questionnaires in the villages concerned, would visit households in the villages, and because of the longevity of the cotton season, the researcher usually visited households in the morning between 9: 00 am and 10: 00 am. This was mainly aimed at maximizing the chances of getting the household heads before they plan other journeys soon after fieldwork.

Per each household, the researcher would identify the household head, and this choosing of households was not done using any probability sampling measures, such that any household had a chance to be picked for questionnaire answering.

As of the responses of village heads focus groups discussions were used as the main data soliciting techniques within the qualitative paradigm. Secondary sources of data such as company records, extensive literature from a number of scholars who have also studied on contract farming was also used to solicit data for the research. Primary data gathering techniques such as oral interviews were also done, triangulation of data sources helped to enhance the validity of the findings made in this study.

Convenient sampling or judgemental sampling technique was used to select respondents in issues where random sampling techniques were not applicable, or where specific people with particular knowledge on needed issues were to be interviewed. This was done through the help of inhabitants, extension officers in the area and also village heads and officials from

the companies administering contract farming arrangements in the area. Snowballing was also used since references were given to people who were knowledgeable about cotton contract farming in the area such as agricultural extension workers and the winners of the master farmer accolades like the likes of Mr Juru of Ndoza Village.

The researcher also designed questionnaires, both structured and unstructured ones. The questionnaires were directed to both the peasant farmers and the cotton buying companies extension workers. The researcher also used interviews, both structured and unstructured interviews.

Permission to carry out the research was sought from the D.A [District Administrator] though the process was tiresome and economically challenging since it involved referring to provincial offices and country offices for grating of the permission. The DA's office was informed of the objectives significance of the research, how the information gathered would be used. Permission was sought from the councillors of the above mentioned wards.

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Chapter One

Introduction

In this chapter, focus is going to be on the history of cotton production in the world, in Zimbabwe at large and also paying particular reference to the area under study, the Jiri Communal Lands in Gokwe south. It is going to address questions on why the production of cotton was, and is still being done in these marginal areas, where rainfall is not reliable, and where temperatures are very high in summer. It will also look at specific groups of people, to whom the crop was introduced, and why these people embraced the idea of cotton production for a living. The chapter is going to look at the definitions of contract farming from a number of scholars. The chapter is also going to look at how inputs were obtained from the then responsible authorities, and the challenges faced by the farmers in the cotton production process.

The purpose of this chapter is to give readers deep insight into the meaning and different perspectives of contract farming in the world, insight into the history of the production of cotton in the world, in Zimbabwe in general, and then Gokwe South in particular, paying much attention to the area under study, and in turn facilitate understanding of how contract farming was introduced amongst the communities. Information used to compile this chapter was mainly acquired from written documents, as well as some oral interviews carried out in the area under study.

1.2 The meaning of contract farming

Contract farming is a form of vertical integration within agricultural commodity chains, such that the contracting company has greater control over the production process, as well as the quantity, quality, characteristics and the timing of what is produced. The conventional approach to vertical integration has been for firms to invest directly in production through large-scale estates or plantations. In this research, contract farming refers to the agreements between the peasant farmers in the area under study, and the cotton buying companies who supply contracted farmers with inputs. Contract farming, in its various forms, allows a degree of control over the production process and the product without the firm directly entering into production [Prowse, 2010]

Thus, a useful starting point is the recognition that contract farming sits somewhere between fully vertically-integrated investments [when a firm is involved in all the nodes of the value chain, from production, through processing to marketing] and spot markets [where price determination is a function of supply and demand] [Young and Hobbs, 2002].

Catelo and Costales, [2008] defined contract farming as a binding arrangement between a firm (contractor) and an individual producer [contractee] in the form of a 'forward agreement' with well-defined obligations and remuneration for tasks done, often with specifications on product properties such as volume, quality, and timing of delivery.

Da Silva, [2005] defined it as an intermediate mode of coordination, whereby the conditions of exchange are specifically set among transaction partners by some form of legally enforceable, binding agreement. The specifications can be more or less detailed, covering provisions regarding production technology, price discovery, risk-sharing and other product and transaction attributes.

Rehber [2007] asserts that contract farming is a contractual arrangement between farmers and other firms, whether oral or written, specifying one or more conditions of production, and one or more conditions of marketing, for an agricultural product, which is non-transferable.

Kisten and Sartorius [2002] also highlight how contract farming is an intermediate form of agricultural production, somewhere between spot markets and full vertical integration. Contract farming as conceptualized by the researcher includes marketing-specification contracts, as well as resource-provision and production-management contracts. The researcher will start by defining contract farming precisely, before outlining the history and extent of contract-farming practices in developing countries, particularly in Zimbabwe in the area under study.

Agricultural production carried out according to a prior agreement in which the farmer commits to producing a given product in a given manner and the buyer commits to purchasing it is what Minot, [2007] envisage as what contract farming is about.

The Rehber [2007] definition helps us place contract farming within two [out of the three] conventional types of agricultural contracts [as originally defined by Mighell and Jones, 1963]. The first type of contract arrangements the researcher is going to elaborate on are market-specification contracts, which guarantee a farmer a marketing outlet and time of sale, and possibly a price structure, if some degree of quality is met. Minot [2007] outlines how

market-specification contracts reduce co-ordination costs, particularly for perishable products or those with complex quality attributes, through addressing marketing information asymmetries. Clearly, farmers retain full control over production.

The second type of contract arrangements the researcher would like to explain are resource-providing contracts, where certain physical or technical inputs are provided by a company, with the requirement that produce is marketed through that same company. This reduces the farmers' cost of choosing, accessing and purchasing inputs, and the contracting company is assured quality of produce and repayment. Resource- providing contracts are often used for crops that require specific inputs or quality standards and in circumstances when farmers struggle with imperfect input markets.

The third type is production-management contracts, where the contracting company stipulates and enforces conditions of production and farm-based processing. Farmers thus relinquish a degree of control over the production process on the farm. The costs to the contracting company for ensuring compliance are recouped from the sale of higher-quality produce.

For the purposes of this research, contract farming is defined to include market specification contracts, resource- providing contracts; and production-management contracts. However, if a marketing contract provides specific technical advice regarding the crop-production process, we regard that as a production-management contract and, hence, as a form of contract farming.

Thus, building on Rehber's [2007] definition, we can tentatively define contract farming as a contractual arrangement between a farmer and a contracting company, and for the purpose of this research, the contracts are usually written ones, which provides resources and/or specifies one or more conditions of production, in addition to one or more marketing conditions, for an agricultural product, which is non-transferable.

Hamilton [2008] highlights a number of further components of contract farming that the researcher incorporated in his definition of contract farming, which are not fully recognised in the Rehber definition: that the agreement is for a fixed term; that the agreement is signed or entered into before production begins; that the contract calls for production of a crop on land owned or controlled by the producer; that the producer generally has no legal title to the crop ,and that in legal terms, the producer is often an independent contractee rather than an employee or partner of the firm, or in a joint venture.

Incorporation of these elements leads to the final definition utilised in this research, that contract farming is a contractual arrangement for a fixed term between a farmer and a firm, agreed in writing before production begins, which provides resources to the farmer and specifies one or more conditions of production, in addition to one or more marketing conditions, for agricultural production on land owned or controlled by the farmer, which is non-transferable and gives the firm, not the farmer, exclusive rights and legal title to the crop [Prowse, 2010].

Contract farming can take the form of a long-term strategic alliance, where farms and contracting companies collaborate closely to produce and market a product, but where each retains its own identity. More commonly, it also takes the form of simple, short- term specification contract, where each party not only retains its identity but also its autonomy [Ibid, p34]. However, in its strictest practical sense, the cotton contracting production system in the area under study does not provide for as much autonomy as described above. The fact that peasantry usually face recovery operations in event of crop failure, and that they are not in any capacity to resist the practice is an important factor that shows lack of autonomy on the part of the peasant farmers.

1.3 History and extent of contract farming

While sharecropping contracts between tenants and landowners have been a feature of agricultural economies for millennias such as in ancient Greece and China, [Eaton and Shepherd, 2001], contracts between contracting companies and farmers with tenure by the latter over their own land appears to be an innovation of the last 100 years or so. For example, Watts [1994] highlights how the Japanese utilised contract farming in Taiwan in the last decades of the nineteenth century, right into the early decades of the twentieth. Moreover, contract farming was used for vegetable production in the US, by the seed industry in Europe in the decades before the Second World War [Rehber, 2007], and for pig production in the US immediately afterwards [Hamilton, 2008].

Since its inception, contract farming has expanded to become a significant and expanding form of agricultural production system. Rehber [2007] suggests that it accounts for around 15% of agricultural output in developed countries.

Rehber also asserts that contract farming also plays an important role within transitional economies. For example, he suggests that the percentage of corporate farms using contracts

varies from 60% to 85% in the Czech Republic, Slovakia and Hungary. Further east, in Armenia, Georgia, Moldova, Ukraine and Russia, the percentage of food companies utilising contracts rose from 25% in 1997 to 75% in 2003 [ibid,p44].

The expansion of contract farming has taken place in all regions of the world. Latin America has seen rapid growth in contract farming since the 1950s [such as for bananas in Honduras, barley in Peru, and vegetables and grain in Mexico]. For instance, banana corporations such as Chiquita, Dole, Del Monte and Fyffes all have contract farming operations [UNCTAD, 2009]. In Brazil, over 70% of poultry production and 30% of soya production is now through contract farming [ibid. p67].

In Southeast and South Asia contract farming has also increased rapidly in recent decades [Swinnen and Maertens, 2007]. For example, since 1956 the Indonesian government has promoted contract farming through the Federal Land Development Agency [FELDA] with considerable success [Rehber, 2007]. In Malaysia, contract farming is also widespread, mainly based on state-promoted out-grower arrangements [Morrison et al., 2006]. In Vietnam, over 90% of cotton and fresh milk, and over 40% of rice and tea comes from contract farming [UNCTAD, 2009].

As reiterated by UNCTAD [2009], in India, contract farming has been used for seed production since the 1960s and is now widely utilised for the production of poultry, dairy products, potatoes, rice and spinach, among other things. In Pakistan, contract farming is most frequently conducted by Nestlé whose local affiliate collects milk from more than 140,000 farmers covering 100,000 square kilometres.

In East Asia, contract farming is also widespread. In China, the government has supported contract farming since 1990 with dramatic results: by 2001, over 18 billion hectares were planted under contract-farming arrangements [Guo et al. 2005, cited in Rehber, 2007]. Examples include contract farming for rice by Japanese firms, as well as for fruit and vegetables by domestic companies.

Little and Watts, [1994] assert that in sub-Saharan Africa, contract farming is also on the increase. While in the late 1980s many contract-farming arrangements had full or partial government ownership, most projects are now initiated by the private sector. For example, Swinnen and Maertens [2007] point out that in Mozambique almost 12% of the rural population is involved in contract farming [with all cotton grown through contracts]. They

also assert that in Kenya, over 50% of tea and sugar is produced under contracts, in addition to the large number of contract growers of horticultural exports. Further, crops with successful contract-farming operations include coffee [Bolwig et al., 2009] and tobacco, such as Alliance One's expanding programme in Malawi [ibid, p23].

It is fair to say that the private sector is now the dominant force in contract farming in developing countries: for example, in 2008 Nestle had contracts with more than half a million farmers in over 80 developing and transitional economies; Olam from Singapore contracts with around 200,000 farmers in over 50 countries to supply 17 agricultural commodities; Unilever sources over 60% of its raw materials from approximately 100,000 small and large farms in developing countries [as well as third- party suppliers]; and Carrefour [France] contracts with farmers in 18 developing countries [UNCTAD, 2009]. There are also many smaller-scale initiatives. For instance, SAB Miller [UK] contracts with more than 16,000 farmers in India, South Africa, Uganda, Tanzania and Zambia; in 2008, Grupo Bimbo [Mexico] had over 3,000 contract suppliers throughout Latin America; and Kitoku Shinryo [Japan] contracts with more than 2,000 farmers in Vietnam, Cambodia and Thailand through a joint venture [ibid p73].

As the examples of Olam and Grupo Bimbo make clear, corporate contracting is no longer a North-South affair. UNCTAD [2009] highlights how net South-South cross- border mergers and acquisitions within agriculture accounted for 40% of the world total. Examples include Sime Darby's [Malaysia] investment in Liberia in 2009; Chinese investments in maize, sugar and rubber in Cambodia and Laos; and Zambeef [Zambia] expanding into Ghana and Nigeria [ibid.p56].

1.4 .Why contract farming has become so widespread in the world

Agricultural commodity chains in both developing and emerging economies and developing countries have undergone a period of substantial restructuring since the 1970s. There are a number of reasons for this, on both demand and supply sides. Larger populations, greater urbanisation, higher incomes and changing food and crop preferences have all played a role in changing demand for agricultural products.

Reardon, et al.[2009] note that on the supply side, the liberalisation of national and international markets, changes in transport and logistics, improvements in information and

communication technology, the increasing importance of standards and the traceability of products, and greater concentration within agricultural supply chains, have all contributed to the greater prevalence of contracts. Thus, agricultural commodity chains have become more integrated, globalised and consumer driven, referred to as the industrialisation of global agriculture [ibid p46]. The above mentioned scholars outline how this process occurred first in wholesaling, then in processing, and more recently in retailing, over the past twenty five years. During this time, agricultural production has evolved from supplying an array of generic, standardised commodities to a much broader series of highly-differentiated products fulfilling different requirements [Kirsten and Sartorius, 2002].

Demand for agricultural products increases each year, due to population growth. The United Nations Population Division estimates that the world's population will increase to 9.2 billion by 2050, an increase of 56 million people per year over the 2010 figure [6.9 billion]. [ibid, p45] The fastest rate of population growth during this time will continue to be in some of the poorest regions, particularly sub-Saharan Africa [Narrod et al., 2007] Along with a larger global population, recent decades have also seen a rapid increase in urbanisation, which tends to alter preferences and diets. Around half of the world's population now resides in urban areas, and this proportion is expected to increase to 69% by 2050 [ibid, p12]

Demand for food has also increased due to higher incomes in many developing countries. For example, in the mid-2000s, annual income growth rates were greatest in Africa at 4.2%, Asia at 3.5% and Latin America at 2.3% [Narrod et al., 2007, Catelo and Costales, 2008]. Moreover, projected GDP per capita growth rates for emerging and developing economies are much higher than for developed countries, not least due to the former's faster and stronger recovery from the recent global recession [Addison et al., 2010].

More people, living to a greater extent in urban locations, with higher incomes, have had a profound effect on demand for food and on food preferences, particularly towards greater protein consumption and higher-quality produce. For example, Da Silva [2005] presents FAO forecasts that overall demand will increase from a base figure of 2803 kcal/person/day in 1997/1999 to almost 3000 kcal/person/day in 2015, and will exceed 3000 kcal/person/day by 2030.

As noted by Catelo and Costales, [2008], additional factors have also contributed to the changing global-consumption basket: increased female participation in the workforce has increased demand for pre- processed foodstuffs; higher public awareness regarding healthy

diets and food safety has altered purchasing patterns; and, particularly in developed countries, environmental and developmental credence factors have altered patterns of demand.

Overally, consumers have become increasingly discerning, demanding greater quality, increased differentiation of food products, and, very importantly, greater information not only regarding the nutritional and chemical composition of the products they buy, but regarding the entire supply chain. Recent food health scares [such as the use of antibiotics in livestock, avian flu, British mad cow disease, E. coli, salmonella, and listeria] have heightened consumers' need for detailed knowledge about their food purchases [Giovanucci et al., 2008]. This trend has contributed to the buyer-driven nature of many agricultural value chains as traceability has become a vital attribute of quality.

Such a change in consumer requirements has caused considerable restructuring within agricultural supply chains. Thus, modern processors and retailers are demanding greater standards and quality controls from their suppliers, and where necessary, they have vertically incorporated production units into their portfolios [Reardon et al., 2009].

As Swinnen and Maertens [2007] note, less than three decades ago the vast majority of agricultural systems in developing, emerging and transitional economies were governed by state-owned enterprises, such as marketing boards and parastatal processing units. Such institutions, often created post-independence and with an implicit mandate to ensure "national" ownership and control over agricultural supply chains, frequently benefitted from mono/oligopsonies in strategic crops [ibid, p87].

Such systems of state control have been radically restructured since the mid-1980s, in the era of liberalisation and globalisation. For example, liberal investment regimes, the privatisation of state-owned assets, and market liberalisation have contributed to an increase in the value of international trade in agricultural commodities, particularly high-value, non-traditional commodities, such as horticulture and seafood [Swinnen and Maertens, 2007; Da Silva, 2005]. Moreover, there has been a substantial increase in the value of processed food exports throughout this time period, especially from Argentina, Brazil, Malaysia, Thailand and Taiwan Wilkinson, 2004].

The opportunities presented by liberal trade, investment and marketing regimes have favoured large firms with the greatest technical efficiency and the ability to meet public and private standards [in other words, those with modern and cross-border supply-chain

operations [Da Silva, 2005]. Thus, recent decades have seen increasing concentration within agricultural value chains. There are now usually fewer, but larger, firms within supply chains, with a great degree of vertical and horizontal co- ordination [Giovanucci et al., 2008]. This has occurred within the input-supply nodes, with forward linkages to production, as well as within the marketing and processing nodes, with backward linkages to production and input supply [Humphrey and Memedovic, 2006]. In addition, retail nodes have seen tremendous concentration [Reardon et al., 2009]. As we have seen, vertical integration that was previously implemented by the state is now more frequently conducted by the private sector, not least because the finance and extension services previously provided by the state no longer exist in the same form or with the same coverage [Key & Runsten, 1999].

Alongside economic liberalisation, recent decades have seen changes in transportation, logistics and information and communication technology. Products now tend to move much further from production to consumption than in the 1980s, facilitated by improvements in freight services and cooling technologies [Da Silva, 2005]. In addition, computing and communication technologies [such as global positioning systems and mobile networks] reduce co-ordination costs. Improvements in the systems used by retailers [such as linked sales, inventory and ordering systems] continue to improve efficiencies in procurement.

A further technological innovation that has increased vertical integration has been the use of biotechnology, such as genetically modified [GM] crops. Since such advances hold the promise of substantial gains in productivity, GM crops have been embraced by some key agricultural producers,. However, their use is contentious. Such controversy ensures that in some countries production is often through vertically integrated arrangements, as there is a need for full traceability.

This brings us to the vital issue of standards, or, in other words, the agreed criteria, or external points of reference, by which a product or service's performance, its technical and physical characteristics, and/or the process and conditions under which it has been produced or delivered can be assessed" [Nadvi and Wältring, 2004].

The manner in which standards influence agricultural systems "is intimately linked with functions of governance within the value chain; that is, how conditions for participation in the chain are set, implemented, monitored, and enforced" [ibid., p. 2]. While previously the main determinants in market participation were cost and stability of supply, now standards such as

safety assurance, traceability, quality control, and credence factors are, in many cases, significant barriers to entry.

Humphrey and Memodovic [2006] outline how agricultural standards have changed considerably in recent decades. Standards are both internal and external to the specific value chain, and can be created by companies, associations, governments, trade blocs, third parties, and non-governmental organisations. Often, public standards form a baseline with an emphasis on public health and safety, while private standards allow for greater product differentiation (with the former now becoming less important than the latter [Reardon et al., 2009].

In addition, standards can be seen as a response to the increasingly discerning consumer who demands quality and highly differentiated products. Needless to say, meeting such standards is expensive and time consuming. This is especially the case for smallholder suppliers in developing countries. As Giovanucci et al.[2008] point out, "smallholders in the supply chain often lack the internal capacity and the economies of scale to establish effective quality assurance and traceability systems, and may be marginalized unless they can make standard compliance cost effective and guarantee traceability for the buyers". Contract farming is one response to this challenge.[ibid, p44] The radical changes in recent decades, which continue apace today, have meant that contract farming offers opportunities to companies and farmers, including peasant farmers.

1.5. Historical Background and the Economic Reform process: The Zimbabwe Cotton Sector Prior to Liberalization

In the country in general, cotton farming for sale began in 1923, with the state paying an active role in the early developments of the cotton sector, ensuring that cotton was a profitable crop for the white commercial farmers [Poulton and Mlambo 2008]. There was an unbroken history of central state control over both support services to white cotton farmers, and the ginning and marketing functions.

With the onset of cotton farming in the country, a cotton research station was set up in Kadoma in 1925 [Ibid, p 24]. Early research, up to 1950, was mainly focused on effective pest control methods. This included varietal selection for resistance to jassids and bollworms,

and the development of appropriate cultural practices. The early 1950s saw the introduction of Albar breeding stock from Uganda, starting with Albar 49 in 1952 [Mariga 1994]. Albar 637 introduced in 1959-60 was a particularly high yielding variety. Combined with breakthroughs in chemical control of red bollworm achieved during the 1950s, this paved a way for a rapid expansion of production in the 1960s [Ibid, p37].

As Poulton and Mlambo [2008] point out, a Cotton Research and Industry Board, established in 1936, was responsible for both research and marketing of cotton. The first ginneries in the country were built in 1943, while the spinning mills were set up in 1951. Later, the responsibilities of marketing were given to the Cotton Marketing Board [CMB], a parastatal that operated as a monopoly [Mlambo et al, 2002]. In 1967, the Agricultural Marketing Authority [AMA] was set up to coordinate the CMB and other major parastatals. According to the above literature, AMA's governing board had fifty percent representation from the Rhodesian National Farmers Union. In 1976, AMA began to announce minimum guaranteed cotton prices prior to planting. Rukuni, [1994] also point out that attractive prices remained a feature of the sector until the 1980s, when a requirement to provide subsidised lint to the domestic textile industry became burdensome to CMB.

1.6. Introduction of Cotton in Gokwe South

Takavarasha, [1994] asserts that the crop was introduced in Gokwe as a whole and Gokwe South by the colonial administrators. In the 1950s, Gokwe South had experienced an influx of immigrants, called Madheruka by the local indigenous people, and these Madheruka had been moved by the colonialists from the Rhodesian crown lands [Ibid, p 49]. The area they moved into was inhabited and populated by the Shangwe indigenous ethnic group, as they called them.

The advent in of the Madheruka in Gokwe South coincided with the introduction of the cotton plant in the area. As Nyambara,[2000]notes, the colonial regime regarded immigrant Madheruka master farmers as the embodiment of modernisation, because they had been exposed to forces of modernisation in their areas of origin, while both official and the new black comers regarded the indigenous Shangwe as backward and primitive.. It was argued that the construction of Madheruka and Shangwe ethnic identities dates to the early 1960s, with the coming of immigrants and the introduction of cotton [Nyambara, 2000]. Shangwe

people defined immigrants as Madheruka, a term whose origins lay in the evictions of the immigrants from the crown lands by colonial officials in the early 1950s, while Madheruka termed the indigenous people Shangwe, or backward [Ibid, p5].

During the 1960s, Gokwe as a whole was perceived as the wild, remote and culturally backward area populated by the Shangwe ethnic group. The influx of Madheruka from the Rhodesian Crown lands coincided with the introduction of cotton in Gokwe by the colonial administrators, and the Madheruka readily took to cotton cultivation while the local people were reluctant to venture into cotton farming. As noted by Rukuni, [1994] the immigrant farmers dominated cotton farming partly because they had brought the knowledge of commercial farming with them from their original areas, and they were also leaders in cooperative societies in which the credit schemes and technical advice was channelled . Some of the Madheruka farmers were holders of Master Farmer certificates, and some had been rich tenants on white farms.

Cotton became the popular crop in Gokwe South for a number of reasons, notably economic, political and agro-ecological reasons. Cotton was well-grown in Gokwe because the region had an advantage of availability of labour. Labour was abundant because there had been forced migrations of black people from different parts of the country, notably the crown lands. Cotton farming thus fitted in developing the newly resettled areas, and also as a means of generating income for the migrants.

Baumann, [2000] asserts that for political and economic reasons, the colonial government in 1965 had announced the illegal Unilateral Declaration of Independence [UDI] from Great Britain; hence sanctions were imposed on the Rhodesian government. The sanctions had destructive effects on the economic arena. This made the Rhodesian government to try to be self- sufficient. The government then introduced crop diversification in agriculture to get foreign currency, of which cotton was an important product for the emerging textile industry, and fitted in as an important product which earned the government foreign currency [ibid, p44].

Dawes et al [2009] also note that the introduction of cotton as an economic cash crop was not as smooth as expected by the government. Cotton production fuelled some rebellion among the black majorities in the areas of Gokwe, who had been producers of other cash crops like tobacco, which they used to pay tribute to the Ndebele before colonisation. Tobacco producers had continued producing the crop and selling it to the Europeans till 1922-23

when the tobacco lost its market due to competition from manufactured cigarettes [Ibid, p27]. Their tobacco was used to make snuff and snuff lost its market to the new urban brand of cigarettes. The Shangwe resorted to working for wages in various areas like Copper Queen farms and at state run farms in neighbouring Sanyati, where they weeded and picked cotton, a crop which they were reluctant to grow [Nick, 2008].

The Shangwe were not ready to take on cotton farming, as directed by the colonial agricultural officials. Most of the population of the Madheruka had come from the Southern part of the country, and had been exposed to the agricultural practices that the colonial agricultural officers recommended [Ibid, p34]. On the other hand, the majority of the indigenous people in Gokwe South had not been exposed to the agricultural expertise like thee immigrant, and above all, they had not seen agricultural demonstrators prior to the 1960s. In terms of schooling, the local inhabitants saw the establishment of the first mission school in their area in 1963. A delineation officer summarised the thinking of colonial officials when he wrote,

"*The introduction of new settlers [the Madheruka] in Gokwe would be one way to attack on the local backwardness. This has combined effects of bringing in capital investment, settler capital, bush clearing by settlers as a deterrent of the tsetse fly and perhaps most important, the introduction of people with fresh ideas and more sophisticated demands into areas where a catalyst is needed."* [Hill et al, 2006]

Mr Matoto, an Arex officer stationed at Marapira Business Centre revealed that during that time, much of the agricultural extension services were meant to benefit white farmers. There was a cotton advisory officer stationed in Kadoma. Melville Reid, the senior agricultural officer for Gokwe, introduced the first cotton planting in 1963-64 on Test Demonstration Plots [TDPs]. Extension officers use to select farmers on grounds that they were part and parcel of some cooperatives who showed interest in farming [Chizarura, 2007]. The selected farmers were given free agricultural inputs such as seeds and fertilizers by the department of agriculture. These farm inputs were therefore to be used on the TDPS, whose results were to be displayed for the benefit of all to motivate interest of growing the cotton crop.

TDPS became the means of educating people on cotton production in Gokwe as a whole. Colonial extension staff trained farmers through meetings and field days, using handouts, discussion groups, field trips and discussions with prominent farmers. As reiterated by Mr Matoto, the early demonstration plot holders received regular visits from Mr Fitt, the cotton

Advisory Officer stationed at Kadoma Cotton Research Station. Interested farmers who participated in the TDPS usually also visited Kadoma Cotton Research Station for further expertise experience. The TDPs also served as venues for field days, discussions and plot holder training, and the morale booster for the field staff and local cultivators, and they supplied vital information to farmers. Mr Matoto further stated that the TDPs also were an extra half plot of cotton to each interested farmer, and knowledge on cotton production was provided that way.

1.7 The Zimbabwe Cotton Sector before the Adoption of Contract Farming

The state played a very important and active role in the early developments of the cotton sector, ensuring that cotton was a profitable crop for the commercial farmers. There was an unbroken history of central state control over the support services to cotton farmers, and the ginning and marketing functions [Esterhuizen, 2004].

Indigenous cotton was grown in some areas of what was then Southern Rhodesia at the end of the 19th century. During the early 1900, the first research trials were conducted by the British South Africa Company, using seed from Egypt, Brazil, USA and Peru [Ibid, p9]. To facilitate for sustainable production of the cotton crop and regulate the product, the government introduced a statutory marketing board, named the Cotton Marketing Board [CMB] in 1969. The board coordinated the cotton industry from purchase and delivery of seed cotton from the farmer to the ginning points. CMB also recruited workers of reputable experience from established companies such as CONNEX and DEVAC. As Goreux, [2003] states, the first group of farmers to which cotton farming was introduced were recruited by these extension workers.

As reiterated by Kabwe and Tschirley [2008] Agricultural Extension workers worked with volunteer farmers in the local communities in the early days of the advent and introduction of the cotton crop in Gokwe. CMB appointed a group chairperson from the group of farmers with potential, and the group representative would help CMB with identifying farmers who were liable to be supplied with input on credit basis, but in a more informally protracted manner.

CMB was the only principal buyer of cotton in the country during these years and therefore enjoyed a monopoly in the buying and selling of cotton in the country. As mentioned above, the board had an informal relationship with farmers in as far as inputs provision was concerned. Material inputs were restricted to provision of seed and fertilizers. Technical advice was restricted to grading and quality control, and the farmers relied on the government support services such as extension.

Mr Chigodho, the headman of Tabvanei village in ward 22, whose family produced cotton since the 1970s recalls,

"There was no provision of transport to the small scale farmers. Extension workers were from the government and none of them came from CMB. There was a company called Windmill which sent its extension personnel to sell inputs to farmers."

The transport issue was a challenge to those farmers who were interested in the cotton farming enterprise. Because of the bad roads in the area, scotch carts were the main means of transport suitable to transport the cotton bales, and farmers would spent days on the way to the buying points in Sanyati. The farmers were also ill-equipped in terms of agricultural equipment. Mr Tabvanei, one of the peasant producers of cotton in Marimasimbe area, Jiri, said that farmers had to improvise on a lot of issues, ranging from pesticide or chemical application, to organising transport for their cotton during the selling time.

As a result, there were a number of cases when farmers were directly or indirectly affected by the chemicals they used to apply in the cotton fields during those days, which included DDT and Rogor. All these chemicals were later discovered that they had serious negative impacts to people and the environment.

Takavarasha [1994] notes that the grading process of the harvested crop was the duty of CMB. The grading process took consideration of the soil type and trash content of the harvested crop, as well as insect content. Payments were done after the grading process, but occurred in part payments. The board usually gave farmers some bonuses at the end of the selling season, together with the remaining part of the payment of the crop.

Cotton was graded into five categories, namely grades A, B, Upper D and Lower D. Upper and Lower D was seed cotton with a lot of chaff and also being the worst grade and the least priced. There was no grade C, since this was mainly for machine picked cotton. The highly priced grade was Grade A, and the prices reduced as the letters descended [Ibid, p37]

As Kabwe and Tschirley [2008] note, the grading process was not transparent because farmers who would have produced the crop were not consulted of the fairness of the process, nor were they involved in the grading process. This did not go well with the farmers, and also , the board would usually peg a production quota to be achieved by the farmers, in tonnages. Once the production quota was attained, the board would stop buying cotton from the farmers, even if it is still available for sale.

Cotton production in the country peaked in the 1970s and after independence in Zimbabwe, cotton production boomed again, with the state actively promoting the production of the crop [Ibid, p18]. The government intensified on its extension services, and made it a point that large area coverage was attained in agricultural extension work. As noted by Jackson and Cheater, [1994], the organisation of the cotton industry was efficient by that time. Research and extension in cotton farming became more pronounced than ever, and there was a notable increase in the area planting of cotton in the country, at the expense of food production, because many peasant farmers in the area were now embracing cotton production as a way of getting some income.

1.8. The Harvest of Independence: Cotton Boom in Gokwe

Takavarasha [1994] notes that at independence, the broad thrust of the Zimbabwean agricultural policy was to extend agricultural extension into communal areas, where most of the peasantry live. In the 1980s, cotton research focused on moisture conservation, simpler pest control and scouting methods and breeding for good performance under low management regimes. At the same time, there was an expansion in the number of CMB depots in communal areas from five in 1980 to sixteen by 1985 [Ibid, p35]. Together with attractive prices in the early 1980s, this encouraged the initial peasantry involvement into the cotton business. During the 1980s, the Agricultural Finance Corporation [AFC] was also actively lending to better off farmers in communal areas. This support collapsed around the end of the decade under a burden of bad debts. Nevertheless, peasant cotton farmers soon found alternative support through the CMB credit scheme, established in 1992, with support from the World Bank.

As noted by Burgess [1997], the factor behind the post-independence agricultural boom in Zimbabwe was the redistribution of agricultural services. Soon after independence,

agricultural institutions, including the extension service, Agricultural Technical and Extension Services [Agritex], the credit agency, Agricultural Finance Corporation, and parastatal marketing boards, such as the Grain Marketing Board and Cotton Marketing Board, were reoriented to assist communal area farmers. Infrastructural development aimed at promoting the viability of the cotton sector began to be more pronounced in the late 1990s. The government regularly adjusted the prices of the cotton crop as a result of the activities of the farmers unions during that time. In Gokwe the cotton boom in the early years of independence was particularly phenomenal. The number of registered cotton growers and the value of cotton increased tremendously during the 1980s. Cotton production grew rapidly in the early 1980s, with bumper years in 1980/ 81 and 1983/84, which were back-to-back record years in the district and the communal areas as a whole. The number of cotton growers registered in the district increased from 24,800 in 1980 to 55,700 in 1985. The value of cotton in Gokwe also increased from Z$5-3 million in 1979 to Z$ 16-9 million in 1980/81 and further to Z$43-2 million in 1984/85 [Agritex, 1986: 9]. Cotton production in Gokwe grew faster than in any other region, perhaps because of favourable weather conditions and because of cotton's superiority over other crops in this area. In Gokwe, cotton accounts for about 30 per cent of the cropped area, compared with only 5 per cent in other cotton-producing regions. [Ibid, p11] The average area under cotton increased from 0.5 ha per household in 1980 to almost 10 ha in 1985/86, while the average devoted to maize dropped substantially [Ibid p12].

The increase in the number of peasant farmers who became interested in cotton production, and in the area brought under cotton cultivation can be accounted for by a number of factors. Rukuni [1994] asserts that following the end of the guerrilla war in 1979, there was a large and immediate increase in the number of immigrants who poured into Gokwe from crowded communal areas such as Masvingo and Mberengwa in southern Zimbabwe, where the pressure on land had become excessive. Other immigrants came from the Mapfungautsi Forest Area, just to the south of Gokwe, where, after independence, large numbers of squatters who had occupied the Forest Area during the war period were evicted by the state. Secondly, the above mentioned scholar also noted that as hostilities wound down in late 1979, thousands of families who during the war had run away to towns and other more secure places returned to their homes and took up farming again and expanded their holdings. Young couples who had married during the war took advantage of this period of flux to move away from their parents and establish independent farms. Fields abandoned during the war

were reclaimed. Farmers expanded cultivation into land designated as grazing areas. Thus, as noted by Bruce [1990], much of the increase in cotton production especially during the early years of independence can be associated with the transition from war to peace. Survey data for Gokwe in 1986 show that established and experienced cotton growers increased their acreage and new producers came on the scene [ibid, p22]. The new producers began with cotton in a modest way, building their acreage as they gained experience with the crop. It appears therefore that the increase in production was largely due to the expansion that is, increase in area planting, rather than the intensification of cultivation. In the early 1980s official reports on the Jiri area of Gokwe pointed out that the population had increased to such an extent that there was a general shortage of land and the problem was worsened by recent immigration into the district. As noted by Rohrbach, [1988], during the war control measures of protecting the land were abandoned. However, the impressive commodity expansion that took place in the communal areas after independence as a whole was very uneven. It was largely confined to a small stratum of the peasantry. The vast majority saw very little, if any improvement. The skewed pattern of agricultural commodity production including cotton farming created sharper socio-economic differentiation among peasant households than prior to independence [Amin, 1992] which was, in part, a function of differential access to land. The new government attempted to redefine communal land in order to assert control over land allocation and land use, but in the process created confusion, which led to numerous local power struggles over the control of land allocation.

CMB remained a generally effective and well-run organisation through the 1980s. From 1983 onwards, however, it was directed to provide lint to the domestic spinning industry at prices below export parity [Ibid, p86]. At the end of the 1980s, the prices of lint paid by the domestic spinners were less than sixty percent of the average price received for export. Less than half of national cotton production was exported, compared with eighty percent in 1980. Jansen and Rukovo [1992] asserted that this restricted the prices that CMB could pay to producers, and the producer price of cotton fell from 1985 till 1990. As a result, the number of commercial farmers growing cotton began to decline. Commercial production of seed cotton peaked around 200 000 tons in 1987/88, and had fallen to a third of this level by the early 1990s [Ibid, p44]. By contrast, cotton production by peasant farmers, who did not have access to the higher value alternatives that were open to commercial producers, continued to rise. By the end of the 1980s, over fifty percent of the national production was accounted for by peasant farmers [Ibid, p45]. Despite this rise, it took more than a decade for national

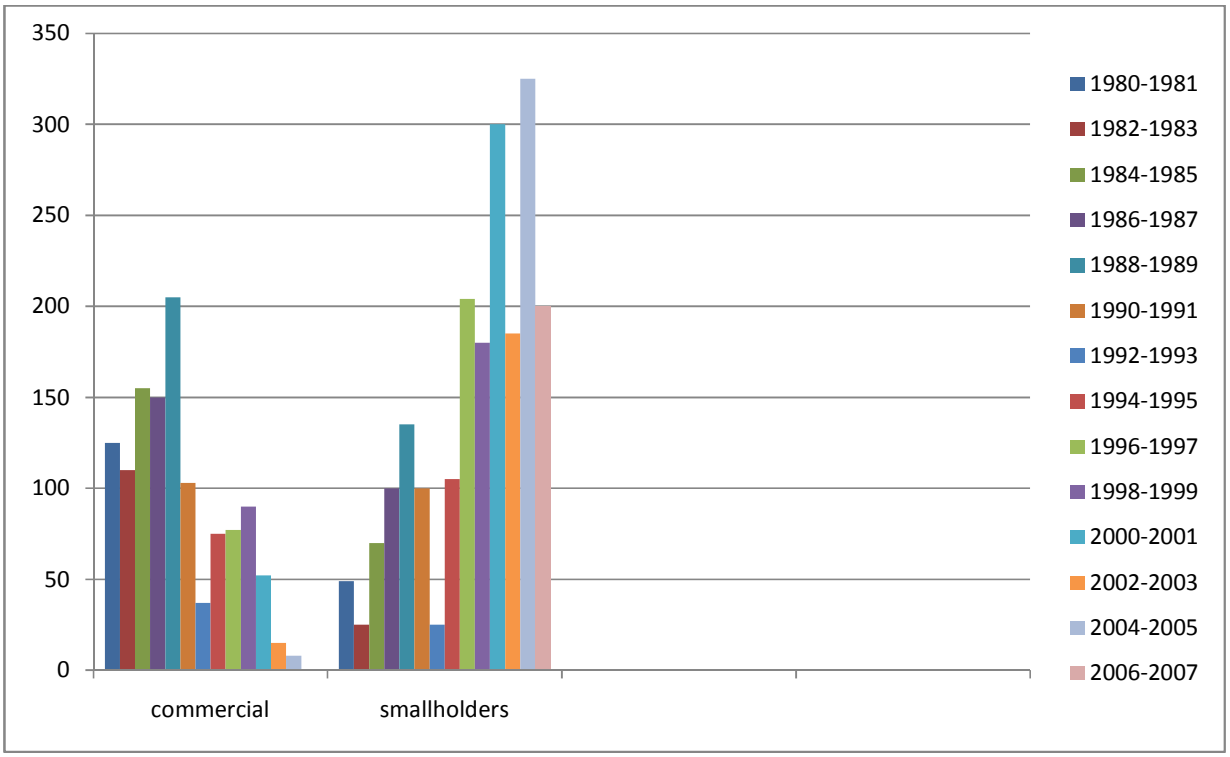
production to surpass its 1987/88 peak. The table below shows the trends in the production of cotton by both commercial farmers and smallholder peasant farmers in the country from the year 1981 up to 2006

Fig 1.1 Seed Cotton Production in Zimbabwe from 1981-2006

Year	**80-1**	**82-3**	**84-5**	**86-7**	**88-9**	**90-91**	**92-93**	**94-95**	**96-97**	**98-99**	**00-01**	**02-03**	**04-05**	**06**
Commercial farmers [thousand metric tons]	125	110	155	150	205	103	37	75	77	90	52	15	8	0
Smallholder farmers [thousand metric tons]	49	25	70	100	135	100	25	105	204	180	300	185	325	200

Sources: CSO, Crop Forecasting Committee, CottcoNotes: "smallholder" combines communal, resettlement and small-scale commercial farmers (however, the main component is communal peasant farmers); large-scale comprises production by large-scale commercial farmers and on estates owned by the parastatal ARDA.

Fig 1.2. Column graph showing cotton seed production by commercial farmers and smallholder farmers in Zimbabwe from 1981-2006



Sources: CSO, Crop Forecasting Committee, CottcoNotes: "smallholder"combines communal, resettlement and small-scale commercial farmers (however, the main component is communal peasant farmers); large-scale comprises production by large-scale commercial farmers and on estates owned by the parastatal ARDA.

The CMB's monopoly in the cotton business was removed in 1993/94 growing season, after the establishment of the new cotton buying company, the Cotton Buying Company of Zimbabwe [COTTCO]. This was triggered by the adoption of the World Bank's Economic Structural Adjustment Programmes [ESAP], which called for the commercialisation and privatization of CMB. This implied that new companies were now free to get into the cotton farming business, marking the liberalisation of the cotton sector of Zimbabwe. The coming in of new companies into the cotton industry made it impossible for them to continue working in an informal relationship, as was the case with the operational framework of CMB, hence the adoption of contract farming.

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Chapter two

Introduction:

The Advent of Contract Farming and Emergence of new Cotton Buying Companies in Gokwe South [1993 to the present]

In this chapter, the researcher is going to briefly look at the general nature and history of contract farming system prior to the liberalisation of the cotton sector in 1993. The researcher is then going to look at the introduction of the farming system under contracts from 1993 to the present, and explain the contract specifications. The chapter is also going to look at the major players or companies in the cotton business from 1993, and also subsequently look at the other players which ventured into the cotton farming business after the liberalisation of the cotton industry. The chapter is also going to look at the reasons why the peasantry in the study area have embraced contract farming in their area, that is , the reasons for involvement into contract agreements with the various cotton companies that sprouted in the area after 1993. Subsequently, the discussion in this chapter will end by looking at the opportunities of the farming practice, particularly to the peasantry, and also to the contracting companies.

2.1 The General Nature of the Cotton Sector prior to 1993

During the time when CMB was still enjoying a monopoly in the cotton industry in Zimbabwe, the peasantry did not enjoy flexible choices of entering into contracts and acquiring the so much needed cotton farming inputs. The peasant farmers had no power to alter the terms of production of the cotton crop and the terms of trade, and the smallholder farmers were not visible as an entity. They lacked power in the decision making processes concerning the sale of the crop they produced. On the other hand, CMB was more visible and had power to further its interests. To this end, the farmers were not a free society, since they depended on the mercy of the CMB as a cotton monopoly in the country. It is evident that much of the poverty and low productivity of these Gokwe South communal areas are due to these past government polices of racially segregated land apportionments, under which the Africans were restricted to the agriculturally marginal parts of the country. The fact that the farmers lacked access to the credit facilities and extension services meant that they were not able to develop and succeed in the cotton farming enterprise, given also the remoteness of the

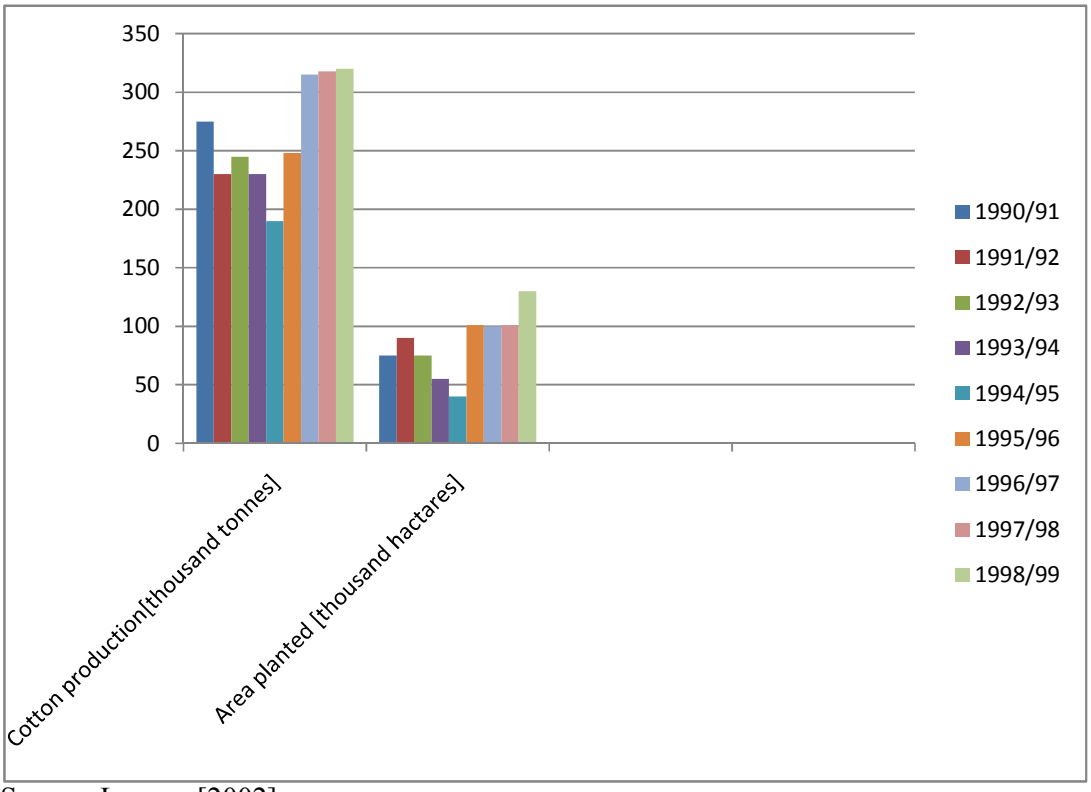
Gokwe South area, in terms of access to infrastructure and unavailability of mobile phone communication networks, especially in the ward 22 area of Marapira and Maboke.

2.2 The privatization of the Cotton farming Sector

Poulton and Mlambo, [2008] assert that the cotton sector of Zimbabwe was liberalised in the 1993/94 growing season, when CMB's statutory monopoly in the cotton enterprise was removed, and a new company, the Cotton Company of Zimbabwe Limited, [COTTCO] was formed to replace and carry on with the duties that CMB had been doing. This saw the privatization of the cotton industry in Zimbabwe, as a number of cotton companies entered the cotton farming business. As a result there was a marked increase in cotton yields and a marked increase of the area planted for the cotton crop.

The graph below shows transitional changes in area planting and production of cotton from 1990 to the period after the liberalisation of cotton, till the 1999 growing season.

Fig 2.1 Cotton Production and Area planted in Zimbabwe [1990-99]



Source: Larsen, [2002]

The graph shows that there was a marked increase in both the area planted and the production in tonnes soon after the liberalisation of the cotton sector. There was however a drop in both area planting and production of cotton in the 1994/95 season, particularly as a result of the effects of the ESAP on the whole agro-economic environment. Cotton production and area planting of cotton saw a marked increase in the 1995/96 growing season onwards. This is going to be explained throughout this chapter, since it was a result of intervention by private actors in the cotton industry as a result of the liberalisation of the cotton sector.

COTTCO was commercialized in 1995, with the government taking responsibility of the debts of CMB, and then privatized in 1997 [Ibid, p9]. The government relinquished its monopoly and day to day operations of the CMB, but however maintained a 25% shareholding capacity within COTTCO up until 2001[Cottco, 2001]

Soon after the liberalization of the cotton industry in Zimbabwe, two private companies came to the fore in the cotton business, that is, Cargill, which was a US based cotton company, and also Cotpro, which had its roots in France. Cotpro was formed as a result of the merging of large-scale commercial cotton producers and the investment arm of the Commercial Cotton Growers Association [CCGA] [CCGA. 2000], out of frustration with the policy of subsidising the domestic textile industry immediately prior to liberalisation. As Larsen, [2002] points out, initially it ginned cotton at the CCGA-owned ginnery in Triangle, but built its own ginnery in Chinhoyi, in a joint venture with COPACO and CFDT of France [ibid, p22].

Larsen, [2002] asserts that Cargill purchased two ex-CMB ginneries from Cottco in February 1996. Larsen also points that Cargill has remained one of the largest cotton growing companies in Zimbabwe and the study area, occupying a 25% share in the cotton growing business in the country. The privatisation of CMB to form Cottco, together with the limited competition in the purchasing and ginning arenas in the 1990s meant that the fact of cotton production under a more centralized model survived right into the 1990s, after the privatization and liberalization of the industry .

Rukuni and Eicker, [1994] also point out that the department of agriculture accordingly underwent a shift in focus. The Department of Agriculture and Technical Extension Services, [Agritex], established in 1982, after the gaining of independence in the country, was now emphasizing on improving both peasant cotton production in the communal areas.

According to Jackson and Cheater, [1994] "...marketing systems were extended to the communal areas through the opening of marketing depots and delivery systems."

Another important facet during this period in the communal areas was the provision and expansion of credit to the peasantry in the communal areas. After the attainment of independence, lending of the Agrcultural Finance Corporation manifested itself through the Small Scale farmer credit scheme, enabling farmers in communal areas to acquire short-term and medium term loans [Auret, 1990]. This resulted in a tremendous boom in the production and marketing of crops in the communal areas.

Mlambo, [1997] and Sachikonye, [1999] point out that because of the implementation of ESAP by the government, the economic policy environment altered dramatically during the 1990s. ESAP was formerly launched in 1990, and a more tight version in 1991, January. The key components of the programme – designed within the framework of the IMF/WB programmes, included trade liberalisation, macro-economic reforms [reduction of the fiscal deficit, public enterprise reform, monetary reform and financial liberalization], as well as deregulation: removal of price controls, investment controls and labour legislation, relaxation of local government control and regulation.[ibid, p25]. To this effect, the agricultural sector also suffered a heavy blow since government was called to reduce its expenditure in the public domain, including agriculture.

As has been mentioned earlier on this meant that the state involvement in various spheres of daily lives of the peasantry was to be limited, with the market left to determine what happens in the economic arena. The cotton sector was no exception to these proceedings, and this meant that the sector was open to entry by various private competitors or companies.

The privatization of the cotton sector in 1994 would sound as if it increased peasant and private sector equal participation in the cotton farming and selling business, from a layman's point of view. Apart from the re-orientation of the extension agency and expansion of buying depots into the communal areas, it is worth noting that a very important aspect of the cotton boom in the 1980s was necessitated by relatively high cotton prices at that time. Herbst [1990] asserts that cotton producers during that time succeeded in price negotiations compared with other agricultural producers.

As mentioned above, the first step of ESAP, in relation to the agricultural sector, was once the semi-commercialization rather than completely privatizing the marketing boards. This

meant that CMB stopped being regulated by the Cotton Marketing and Control Act, [1969] reporting to the ministry of lands and agriculture- to a company under the companies Act.

As a result of the privatization of the cotton sector, capital was now allowed to enter the market in every stage of the production process of the cotton sector. This implied that companies could now buy and export cotton to various markets as the market determined the prices of the cotton crop. With regards to exporting, this no longer required licences, and since July 1994, exporters retained 100 percent of earnings [Ibid, p36]

2.3 The interception of other competitors into the cotton farming sector

As noted by Friis-Hansen, et al [2000] the first two companies that entered the cotton market in the buying, ginning and sales of lint were Cargill, a US-based multinational trading company, and Cotpro, cooperative representing Large-scale Commercial Farmers [LSCF]. Cotpro used the ginnery in Triangle until the company's own ginnery was commissioned in 1998/99 with an annual ginning capacity of 40 000 tons seed cotton.

Cargill entered the Zimbabwean Cotton market in the 1995/96 buying season. Rather than investing in new ginneries, Cargill initially leased two ginning plants from Cottco [Ibid, p33] until the sale of the ginnery was formalised in February 1996. Cottco , by 1994, was a more established company which operated an 80% ginning capacity in the country.

Dawes [2009] asserts that in the 1998/99 season Cottco and Cargill had 67 percent and 21 percent of the market share respectively. For many years the two companies were the major players in the cotton industry, and these two companies dominated the cotton industry in the country in the 1990s. Cottco and Cargill maintained the reputation of buying high quality lint in the country and maintaining the quality of cotton on the market, for the domestic and the foreign market [Ibid, p32]. Cottco,during this time offered good prices of cotton to the farmers in the country in order to encourage reinvestments by the farmers in the farming business.

The coming in of other cotton companies in the cotton business in the country brought varying levels of competition, and at the same time bringing new problems to the industry. Farmers also faced a number of challenges as a result of competition amongst themselves. As noted by Gazi, [1999], to resolve the problems, the companies had to come up with ways

in which they could relate to the farmers to bring sustainable production of the seed cotton. Meanwhile, competition between Cottco, Cotpro and Cargill entailed two different aspects; direct competition in relation to prices offered to farmers and market coverage; and secondly, some less direct forms of competition related to availability and cost of inputs, as well as input credit schemes [Ibid, p54].

Cottco and Cotpro adopted basically similar price settings policies based on the so-called seasonal pool price system. This was an option whereby farmer is paid an interim price on delivery of their cotton and an end of season adjustment when the company's financial year once had ended. The prices offered to the farmers during the season, however, were subject to change according to market situations at that point in the season.

Out of the 48 respondents randomly selected in the 12 villages of ward 21 and 22, all of them indicated that receiving payments twice a year was the most important reason why peasant farmers in the area under study chose to sell their seed cotton to Cottco and Cotpro in the mid and late 1990s. Producers who delivered their seed cotton through Cottco's seasonal pool in the 1998/99 buying season received an additional Zim $1,80 per kg seed cotton for grade A in December 1999.

Fig 2.1 below shows price indices Zim$/kg seed cotton for grade A, offered by Cottco, Cotpro and Cargill from 1994-99 growing seasons

Company	1994	1995	1996	1997	1998	1999
Cottco	3.89	4.30	5.81	6.0	9.37	14.5
Cotpro	-	4.83	6.25	6.32	9.35	14.75
Cargill	Not yet in operation	5.0	5.7	6.0	8.02	15.0

Source: Survey Data from the Cotton Growers Association [2000]

As shown in the table above, Cotpro and Cottco offered more or less the same price during the last few years. Average prices for peasants during these buying seasons varied only slightly between Zim$ 14.50 to $15.50 according to number of competitors in the district and ginning capacity.

The companies had comparatively similar ways of organising their buying networks in their operational areas. According to Larsen [2001], Cottco remained the largest buyer and had a head start over the other cotton companies arising from a well established marketing network

developed prior to the liberalisation of the cotton sector. Cottco had more than 32 depots throughout the main cotton growing areas in the country and established for new transit depots in upcoming cotton areas to increase market coverage [Ibid, p12],while Cargill only operated 14 buying posts and a few collection points. Typically, Cargill's depots were situated next to Cottco's, all based in the rural area where peasants had taken a keen interest in the production of the cotton cash crop.

Cotpro's primary major focus was not the cotton produced by the peasantry in the communal areas, but that which was produced by the LSCF. However, with the heightening of competition in the cotton business, the company expected to purchase around 80% from the peasant produced cotton in the 1999/2000 buying season. Cotpro's only grading facilities were at the ginneries in Chinhoyi, therefore all seed cotton purchased through the company's ten temporary collection points was transported to Chinhoyi for grading.

In relation to organisation of buying networks, all the major players in the cotton business had their networks of buying depots staffed with their own workers, while prices were set centrally at the headquarters. The grading systems of the companies were similar, and took place at the buying points established in the areas of operation.

2.4 The Introduction of contract farming in the country and the study area

The ESAP of the 1990s resulted in farmers failing to profitably stay in the cotton farming business as a result of heightened economic hardships. As a result most of the companies operation in the area under study brought about the idea of contracting peasants in the production of the cotton cash crop. As explained in the previous introductory chapter, this was a system in which the production of the seed cotton was done according to an agreement between the companies and the peasant farmers. Companies were expected to supply cotton farming inputs to the peasantry in the contract agreements, and in return the peasant farmer would sell his or her seed cotton from the company from which they would have obtained their inputs. As noted by Mlambo, [1997] almost all of the cotton buying companies adopted a more formal way of supplying inputs to the peasants, as opposed to the informal model that had been in use during the days of CMB.

The major difference between the formal and informal models was that in the informal model, no contracts were signed between the companies and the peasant farmers. The relationship was based more on trust, and since most of the farmers who got inputs under the informal model were the ones recommended by their area chairpersons, it was in most cases rare that they would default and fail to repay the loans. The informal contract meant that the companies would not make direct financial investment since the peasant farmers had no large financial resources. The companies started supplying the peasant in the area with material inputs which were mainly in the form of fertilizers and seeds, and the peasant smallholder farmers relied on the government for extension services. On the other hand, the contract farming system stipulated that the cotton buying companies would be the centralized provider of inputs, involve themselves in the production of the crop, and would buy the crop once it was harvested, then market or sell it to the established domestic and foreign markets. Because the government had implemented ESAP and subsidies in the agricultural sector had been removed, the adoption of contract farming proved to be the solution to the rampant shortages of the inputs needed in the production of the cotton.

Muir-Leresche, [1998] notes that new cotton buying companies in the years 2000 and beyond continued to populate the cotton sector mainly because they had seen that the business was proving to be lucrative, as was seen on the side of the established companies such as Cottco and Cargill, and that these established companies had found a way of regulating the prices of the cotton crop.

Mlambo [2009] noted that from 2001 to 2002, the number of cotton buying companies rose from five to eleven in 2003, and grew to seventeen in 2006 to 2007. Most of the new companies were Zimbabwean owned cotton companies, or from other developing countries rather than the international trading companies. The ginning capacity also increased with the coming in of new firms, which Mlambo [ibid, p12] termed a "scramble for cotton" in the early 2000s. The table below shows companies that once operated, and some still operating in the area under study since the liberalisation of the cotton sector to the present.

Fig 2.2 Cotton companies operating in the Jiri Communal lands since 1993 to the present

Company	**Ownership**	**Period of Emergence**
Cottco	Zimbabwe	1994/5

Cotpro [though it has since ran into liquidity.]	Zimbabwe and France	1994/5
Cargill	USA	1999/2000
Grafax	India	2003/4
Alliance	Kenya	2002/3
Insing	India	2003/4
Olam Zimbabwe	Singapore	2005/6
Sino Zimbabwe		
Viridis		
Dande Holdings		

Source: Mlambo [2009]

2.5 Supplying of input to peasant farmers

Rising input prices and unavailability of credit facilities were major constraints facing peasant farmers in the area under study. Whilst cotton is the only communal sector crop where there is a relatively high level input use [Zhou, 1999] consumption of non labour inputs is low, resulting in low productivity, particularly in comparison with the LSCFs sector. Gordon & Goodland [1999] assert that the cotton companies on the other hand, looked for way of acquiring sufficient supply of seed cotton by linking the marketing of seed cotton to the provision of production services, mainly credit and income. With regard to the farmer, the cotton peasant farmers have to buy seed each year due to the nature of cotton production, particularly, the need for de-linting as well as the annual controlled release of new cotton seed varieties.

Cargill operated a "Farmer input voucher" system [FIV], where farmers can purchase inputs for the following season when they sell their seed cotton to one of the ginneries or depots. Out of the 48 questionnaires that were administered to the randomly selected farmers in the two wards of the area under study, 36 of the respondents indicated that the Cargill's FIV had numerous advantages. The first notable advantage of the system was that it did not indebt the peasant farmer, as opposed to Cottco's input credit scheme which had interest rates of 27-30%. Secondly, high inflation made advance purchases of inputs attractive, and lastly, the cost of inputs are below prices offered by Cottco, and other agro-chemical companies in the country [notably Agricura], thereby obtaining discount prices which are passed on the

farmers. Thus, farmers perceive cotton inputs from Cargill as comparatively cheaper than those of other operating companies in the study area.

Gordon and Goodland [1999] noted that Cargill has experienced problems in obtaining enough chemicals from suppliers, thus, in an effort to ensure timely acquisition of chemicals, Cargill provided its main suppliers with foreign currency during the 1999/2000 season, and at the same time, the company intends to build up stocks in the forth coming seasons to prevent similar situations in the future.

Cottco and Cotpro also later started offering peasant farmers the needed inputs. Companies made it a point that they recover the loans either by having explicit purchase rights on seed cotton produced by theses farmers i.e. linking the provision of credit, input supply and extension advice to the marketing of seed cotton, [Larsen, 2001] or engagements in the dreaded recovery operations, which involve grabbing peasant assets in event of failure to repay loans.

Raikes & Gibbon, [2000] assert that Cottco's input credit scheme commenced in the 1992/93 growing season with funds provided by the World Bank. The scheme was initially a post-drought input package to growers, after the severe drought of 1992, and during a period when the parastatals still operated a crop purchase monopoly. Cottco managed to recover loans in the early years of operation because it used to have a set production target and a stipulated amount of inputs that was to be given to farmers. A minimum requirement from the 1998/99 season was 600kg/hectare [Ibid p36].

Moyo, [1991] also asserts that In addition, Cottco also introduced individual cash loans to farmers who achieved high production and have a good repayment rate. Good performing farmers coined the "Gold Club Members" or "Diamond Class Farmers" are withdrawn from their groups and provided inputs six times more than those provided to other smallholder peasant farmers. The input credit scheme or contract farming has been one important way to tie producers to the companies and thereby securing sufficient and reliable supply of high quality seed cotton. Cottco has recently increased the level of participants involved in the company's contract farming provisions from 50 000 in the 1998/99 growing season to 250 000 in the 2013/14 growing season. Contact farming in conjunction with the promotion of the so-called Gold Club Members, have improved yields and grades significantly amongst the peasantry.

The table below show increase in smallholder cotton yields and quality of three growing seasons as a result of contract farming in Gokwe South.

Fig 2.2 Smallholder cotton yields and quality – 2000-2014

Year	Yields/kg per hectare	Grades
2000/01	1200 A	5%
	B	20%
	Upper D	30%
	Lower D	45%
2010/2011	2400 A	7%
	B	33%
	Upper D	30%
	Lower D	30
2013/14	2300 A	8%
	B	62%
	Upper D	26%
	Lower D	4%

Source: Cottco, Manoti Depot, 2014

2.6 The specifications of the contracts and organisation of farmers

Companies used to make the peasants sign the contracts in groups in the early days, but with time, the peasants were to sign the contracts individually, but under the leadership and references of a lead farmer. Self-selecting groups of up to 30 farmers elected a lead farmer or a chairperson for representation [Shepherd and Farolfi. 1999]. The lead farmers combined to form a lead farmer committee which elected an executive chairperson [in the case of Cargill] or area representative [in the case of Cottco] who deals directly with the company agronomist. Most of the companies organised the farmers using this system of mobilising the

farmers, then looking for representatives from the mobilized groups and the executive representative of the leaders as explained above.

With the growth in number of many cotton buying companies in Zimbabwe, a number of problems in the cotton farming sector bedevilled the cotton business. The problems affected the peasant farmers and also the cotton companies in the operating area. The National Cotton Council [NCC] was established by the ministry of lands and agriculture to regulate the problems in the cotton industry. According to Jackson & Cheater [1995], "..The main objective of the NCC was to provide a forum for discussion among stakeholders in the cotton sector and to act as an advisory board to the ministry of agriculture."

All the major stakeholders, including the producers were represented by the Zimbabwe Farmers' Union and the buying and ginning companies were represented by the Cotton Ginners Association. Larsen [2001] asserts that spinners, oil pressers, research institutions and the Agritex were invited to participate at frequent meetings. An arbitration committee within the NCC was entitled to force agreements established among stakeholders and penalise non-compliant companies. All the cotton companies were required to register with AMA. The NCC was contracted to create a database for all contracted farmers throughout Zimbabwe to minimize the farmer malpractice, including double contracting. The system was allowed for the identification of credit defaulters.

Rukuni and Eicker, [1994] mention that different to traditional marketing in which farmers produce under their own decisions on variety, quantity, quality and timing, and then to sell to the open market at harvest, contract farming stipulated agricultural production carried out according to agreements between the cotton companies and farmers which established conditions for the production and marketing of a farm product or products.

Written contracts typically specify pricing, delivery timing and volumes, quality standards and conflict resolution mechanisms. In the early days, companies preferred engaging in oral rather than written contracts. First, the companies wanted to maintain flexibility so that at any rate they could renege on contracts, especially given the fact that the market is not promising, and that some of the peasants may have failed in delivering the agreed volumes and quantities of the crop to the companies. Secondly, companies tended to favour informal contracts when they had strong pre-existing relationships with their suppliers, when nonrenewal of the contract provides adequate contract enforcement, and when it is too costly to resort to the formal legal system to enforce contracts [Fafchamps and Minten 2001].

A contracting company in this sense tailors contract terms, and it chooses volume, price, post-harvest processing, quality standards, production schedule, and delivery, to differentiate the contracted commodity from otherwise identical commodities that the peasant sees elsewhere. Product differentiation by companies put them on the advantage since the buyers and the market is growing sensitive of product quality and reputation of the suppliers.

Contracts link the buying of the cotton crop by the contracting companies, with companies' provision of inputs to the peasants, but usually the price of the cotton is not divulged up until the beginning of the selling season. Such inter-linkages of contract terms complicate empirical comparison of the contract price received by the peasant farmers with alternative local spot market prices, that is, the prices offered by other cotton companies during the buying season. Stricter grading of contracted commodities, in this case the cotton crop, drive up the peasant farmer's production costs relative to alternative outlets, thereby making his or her production of the contracted commodity too expensive to be sold on the local market.

2.7 Peasantry Contract Acceptance

Once presented with a contract, the farming peasantry are expected to choose whether to accept the offer. Because companies cannot perfectly observe a prospective supplier's reservation expected welfare level in a given region, it is possible that a contract offer will be strictly inferior to a peasant's opportunity cost from entering the contract, which may lead to renegotiation of contract terms or an outright rejection of the contract on the part of the peasant; or the contract terms will yield expected welfare gains to the peasantry well in excess of their reservation utility. [Chiwele, Muyatwa-Sipula and Henrietta Kalinda, 1996]

Theoretically, a peasant famer accepts the company's contract offer when his subjective perception regarding his expected welfare level from participating in the contract farming agreement [CFA] is at least as high as that of not doing so. A peasant's participation in the CFA does not imply, however, that he perceives the contract as fair. It merely implies that the peasant expects to be better off with than without the contract [Ibid, p44]. In most cases, peasants in the Jiri communal lands usually accept cotton farming contracts because there are very limited alternatives or options for them, especially considering the fact that most of the inputs are under the monopoly of the cotton buying companies, such as cotton seed itself.

The contract can potentially alter the peasant's subjective expected level of welfare in several ways. First, contracting may resolve market failures in financial markets by providing access

to credit, in input markets by providing access to the inputs necessary to produce cash crops; and information, particularly the uncertainties associated with the marketing and production of the high-return, non-traditional cotton crop and the provision of agricultural extension services.

Second, the company's logistical capacity may generate economies of scale or economies of scope which reduce costs, yielding efficiency gains that can be shared among farmers and the company. Such gains depend fundamentally, however, on the efficiency of the contracting institutions and on trust among the contracting parties.

If, at all costs, the contract reduces farmer exposure to risk, it provides the peasants with incentives to increase the cotton crop production [Bellemare et al., 2011] or to invest in yield-stabilizing technologies such as artificial fertilizer applications or yield-increasing inputs such as fertilizer or improved varieties [Liu 2010; Michelson 2010]. Risk reduction may come directly through the contract terms or indirectly by linking peasants to a broader distant market otherwise inaccessible to them.

Cotton companies certify compliance with standards for which distant consumers are willing to pay a premium. Much of the Fair-trade movement is organized around this idea, as are the Global Partnership for Good Agricultural Practices [GLOBALG.A.P] and the Rainforest Alliance. Research to date suggests that the primary sources of farmer gains from contracting arise from the resolution of market failures, economies of scale or economies of scope, and reduced exposure to market risk [Grosh, 1994; Bijman, 2008], rather than Fair-trade or certification standards. Empirical evidence on this matter nonetheless remains too thin to form a strong conclusion.

While generalisations and empirical observation suggest that peasants who participate in CFAs by contracting with contracting companies enjoy gains from participation on average, it is certainly in most cases that peasants in the study area accept contracts that are ex ante welfare reducing. As Platteau [2000] notes, these undesirable results usually are emerging from power relations or social pressure as well as from misinformation or incorrect beliefs on the potentials of contract farming on the welfare of peasants in the area.

Michelson [2010] notes that there are possibilities that some peasants may not enter into contractual agreements because of perceived fears of risks and uncertainties provided by the contract, hence will holdup and wait to learn from the experiences of others before joining.

This possibility of strategic delay implies an externality due to learning effects that could justify subsidized interventions to stimulate and accelerate peasantry participation in CFAs. Externalities due to learning effects may be trumped by the benefits of early entry if a company's contract terms are especially generous as it establishes itself and has to attract initial suppliers and has fewer options for holdup than an established buyer might have as the number of willing suppliers increases [Williamson 1985]. There may be an important fallacy of composition associated with scaling up the participation of peasants in CFAs; what is appealing to a single grower in the absence of general equilibrium effects may be less appealing once the system has fully responded and shifted the expected returns.

Peasant choice of contract acceptance generates a selection effect that complicates precise estimation of the behavioural or welfare effects of CFA participation. Anecdotal evidence and observations from the field and village visits done by the researcher suggests that many of the smallholder selection effects are associated with unobservable measures such as peasant risk aversion, social networks, entrepreneurship, and technical ability and also how much the grower trusts the company or its extension workers.

As already discussed, selection on unobservables substantially complicates inference in the absence of a randomized controlled trial in which peasants are randomly assigned to participation in an CFA, which would be plagued by issues of non-compliance and questionable external validity [Barrett and Carter 2010].

2.8 Companies and Peasants' Honour of the Contract Terms and Conditions

After agreeing on a contract, the peasants and the cotton buying companies are both equally footed to honour or dishonour the contract once the time to deliver the crop to the buying points arrive. Peasants usually have opportunities to breach by diverting some of the company-provided inputs to non-contracted crops, by not adhering to the production schedule agreed upon with the company, by side-selling, or by failing to deliver the agreed volume and quality on time. According to survey data from interviews in the area, the companies in the study area usually breach by not showing up to collect contracted harvest, by inappropriately rejecting product, by lowering the sales price after the peasant farmers have incurred production costs, or by delaying or defaulting on final payment. The opportunities for breach of contract are many because of the multidimensional nature of contract terms and because

of the time lags and the relationship-specific investments involved. Further opportunities are provided by the asymmetry of information between the two parties, which enables farmers to mask side-selling as adverse production shocks, and by market power, which often allows the companies to unilaterally revise contract terms on suppliers lacking alternative outlets.

As discussed earlier on, the chances of holdups on both the companies' side and the peasants' side have negative impacts on the enforcements of the contract terms, especially in the event of one of the two parties holding up on a certain provision of the contractual agreements. This is why production of some other crops under contract farming have been vertically integrated, as is the case with the production of sugar cane in the south-eastern low velds amongst the out-growers, have been vertically integrated. Hence the importance of selection on unobservables associated with trust, reliability and reputation.

In the event of reneging of contractual agreements, the ball is usually in the companies, hands to make it a point that the peasants pay their credits by embarking on recovery operations. It is only if the peasants in this respect are represented by intermediary groups such as producer organisations [POs] or civil society organisations that they may be in a position to challenge the companies in one way or the other either in court or by any other means necessary. It is clear that in the study area, instead of just dropping a noncompliant peasant farmer, the companies recover their inputs by grabbing property of the peasants of non-payers or non-performers. With the growth of the cotton contract farming system, companies are now conducting strict recovery operations on nonperforming farmers in the area, which has brought resentment to the farming system amongst a number of peasant farmers in the area.

Contract performance matters not merely because of the immediate payoff implications but also because of its potential dynamic effects on the CFA. Both the companies and the peasant farmers update their prior beliefs based on each other's contract performance before re-evaluating the contract offer and accepting decisions in future periods. The companies usually drop farmers whose performance did not meet expectations. Conversely, peasants in the study area exit the CFA if they find that the contract delivers less than anticipated, if new outside opportunities emerge, or if their circumstances change. Because of changing company and peasant attributes and learning from imperfect contract performance by both parties, change in contracting status is to be expected on both sides.

The decision to honour the contract or not likewise raises problems for estimating the determinants, behavioural and welfare effects of CFA participation. In cross-sectional data,

the core problem surrounds the dynamic effects of learning and associated selection on unobservables, much as in the technology adoption literature [Besley and Case 1993].

2.9. The peasants' motivations to contract farming: Findings from the study area

In this section the researcher is going to start by looking at the general picture of why contract farming has gained momentum in the world over. A number of examples of countries are going to be sited, where contract farming is being practised, and a number of crops and foodstuffs are going to be sited, which are being grown under contractual basis. The reason for this overview is to give the readers an insight into what is motivating the practice all over the world, which will in turn stimulate an understanding of what is happening closer home, in the country and in the area under study in particular. The researcher is then going to outline the findings in the study area as to why peasant farmers in the area engage in contract farming. The section also looks at the opportunities or benefits of contract farming to the peasant farmers in the area, and also the benefits of the farming practice to the companies that operate in the area.

A large body of literature by various scholars such as Miyata [2000] have written on the probabilities of a peasant farmer to get into the contract business, and there have emerged various explanations on motivational factors towards contract farming. It is vital to fully understand which factors are associated with farmers' willingness to contract, in order to leverage welfare gains and economic development. Below are various findings in the study area, which farmers highlighted as important factors that make them engage in contract farming. The researcher has classified the factors into a number of groups, ranging from demographic factors, economic factors and also other factors ranging from political factors and social factors, including the unobservable social factors.

2.10[i] Demographic Factors

Age, gender, and education are the major demographic factors the researcher found out in the study, and they have been seen to contribute greatly in the peasant's probability of contract participation. The researcher found that the age of the head of the household has a

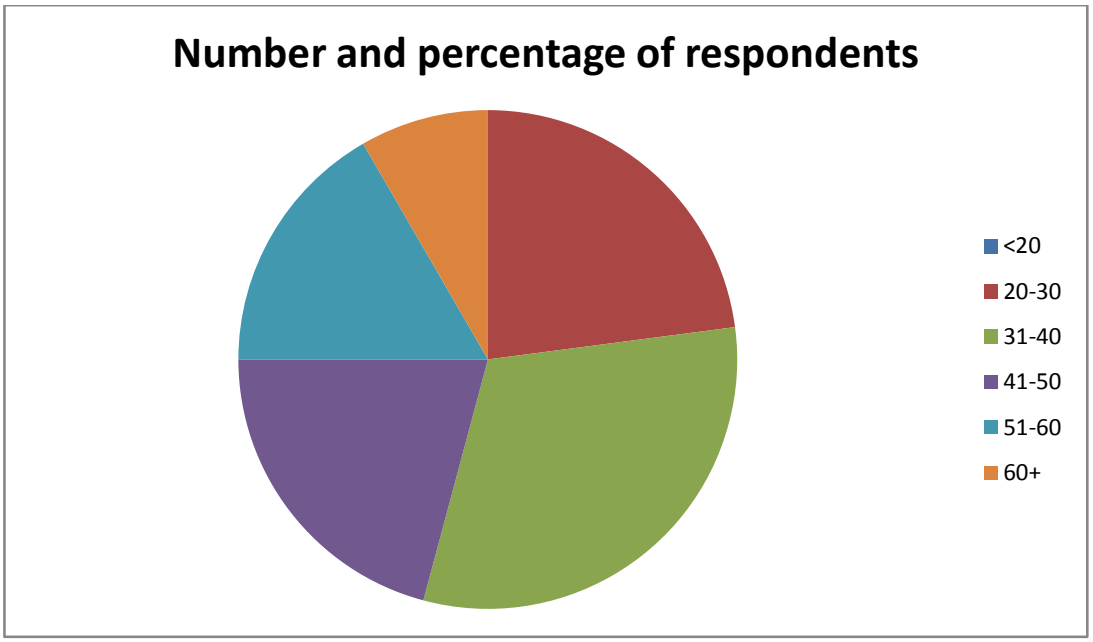
significantly profound effect, and this is in tandem with the findings of scholars such as Simmons et al. [2005] for seed corn in Indonesia. The researcher made conclusions on age, noting that the older the head of the household becomes, the less likelihood of getting into contract farming.

Below is a table showing the effect of age in cotton contract farming participation in the study area.

Table 2.1. Effect of age on contract participation in Jiri area

Age group of respondents in years	**Number of respondents [out of 48]**	**Frequency in percentages**
Below 20	0	0
20-30	11	23%
31-40	15	31.25%
41-50	10	20.83%
51-60	8	16.7%
60+	4	8.3

Source: survey data from the questionnaires administered by the researcher.



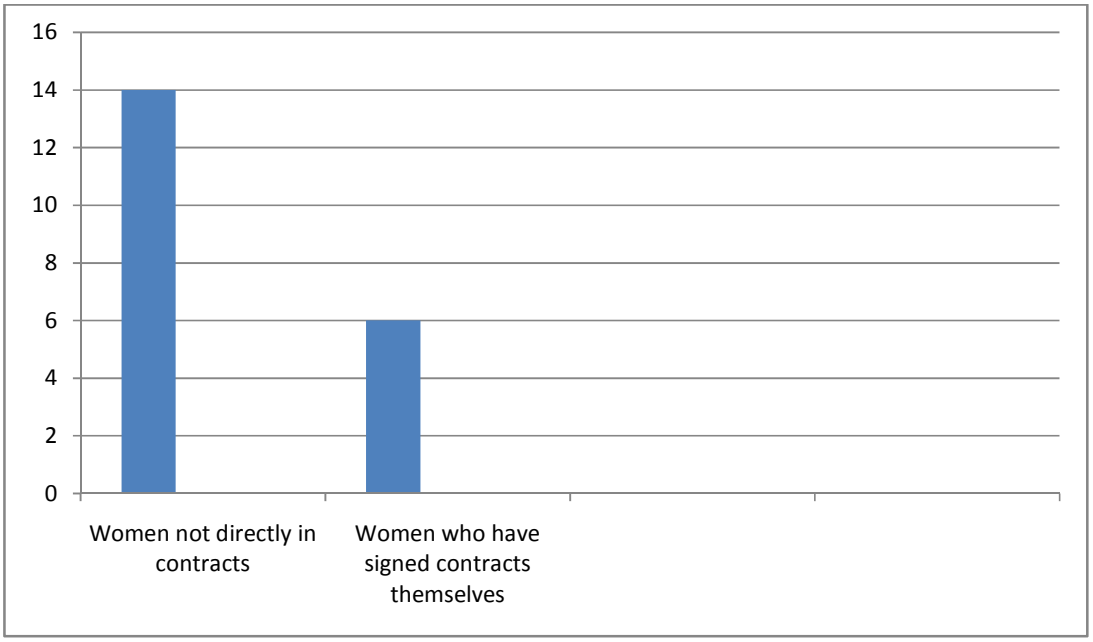
Source: survey data from the questionnaires administered by the researcher.

From the statistics above, it is evident that the age of participants is an important factor in contract engagement. It shows that the young, those below 20 years, though they participate or take part in the cotton production process, they are not likely to have signed any contract with the cotton companies. The research revealed that adults above 20 to 59 years are the ones that normally engage in contracts with the farmers. Those ones above the age of 60 yeas seem to tire off from the cotton contracting business as it is an involving business.

For gender, the researcher found out that females are significantly less likely to adopt CF than males in the study area. One possible explanation is that, in the study area, institutional forces may provide females with disadvantageous contract opportunities or conditions. Women in the study area are inferior to their male counterparts, and most of them own nothing to provide as collateral security. Livestock and farming implements are regarded as the male head's tools in the rural area under study. This setup means that women have no collateral and usually find it difficult to get credit in form of the inputs supplied by the cotton buying companies, hence cannot borrow inputs. According to the research findings obtained from field visits, most cotton producing families are headed by males.

Out of the 20 oral interviews carried out by the researcher amongst women, it showed that most women are not engaged directly to the cotton companies operating in the area, either by means of written or verbal contract. Most of them are indirectly involved in the contracts, since it is their husbands who are directly engaged in the contracts. Of the 20 women respondents interviewed orally, only six indicated that they had signed a contract with one of the companies operating in the area. Below is a graph which represents the findings on gender and its effects on contract engagements

Fig 2.2. Relationship of gender and contract participation in Jiri communal lands



Source: survey data from the oral interviews by the researcher.

From the research findings on gender and contract engagements, it reveals that a few women are the ones who enter into contracts on their own. Most of the women who enter into contracts have proved to be credit worthy, as a result of them being in possession of assets and farm implements. This is usually due to them being widowed, and are taking charge of the home, or being in stable employment, such as women civil servants who reside in the area. An interview with Mrs Mafa, a female cotton farmer who is residing at Marapira business centre, and is a teacher at Mudzimundiringe Primary school has revealed that some females can enter into contracts on their own, given that they have a steady flow of monthly income.

The researcher noted that education attainment is a very important demographic factor influencing peasant farmers in the area to engage in contract farming. Both the questionnaires administered to the 48 randomly chosen respondents in the area, and the oral interviews conducted in the area revealed that the level of education had a strong bearing in contract engagements. Of the 48 respondents who answered the questionnaires, only 8 of them indicated that they had attained secondary education, and the rest just attained primary education. Out of those who attained secondary education, 4 respondents indicated that they

were in contract engagements with one of the many companies operating in the area. Out of the 40 respondents who indicated that they had only attained primary education, 36 of them were engaged in contract farming. This indicated that the level of education had a bearing in whether farmers would get contracted or not. Probably it is worthwhile to generally note that the more people get educated, the more they become calculative and wary of risks associated with being contracted to a company. Below is a table showing the above information on education.

Table 2.2. Education level of farmers and contract participation.

Level of education	**Number of respondents**	**Number of people in contracts**
Primary education	40	36
Secondary education	8	4

While one might anticipate differences in the relationship between these basic demographics and contract participation across the various areas in which contract farming is being practised, the researcher concluded that the level of education is a very important contributing factor in contract involvement and participation in the Jiri communal lands. Possibilities of differences in various geographical settings in the country pertaining to education and contract involvement is that institutional differences across farming regions in the country and across commodities within the country may lead to heterogeneity. It suggests policymakers who seek to promote CF as a means of increasing farmer welfare should use caution when designing policies targeting farmer participation, and be wary of the implications of heterogeneity.

2.10[2] Economic Factors

Farm size, farmer experience, specialization, risk preference, and credit constraints were also investigated. Farm size is measured by either the number of family labourers on the piece of land, or land acreage in hectares. The researcher found that the differences on farm sizes owned by peasants in the study area are a very important factor to contract participation. The dominant result the researcher came up with was that the larger farms are more likely to involve themselves in contract farming than smaller ones, since the contracting companies

giving inputs for farming stipulate a minimum of one hectare for a farmer to be given credit for cotton contract farming. However, it is likely that small farmers may gain more from contracting, and encouraging small farmers to contract is important from a developmental perspective.

The number of farm labourers is generally significant in as far as cotton production in the Jiri communal lands is concerned. This is because labour availability at household level in the study area does affect the participation in contract farming, and its effect can be represented by land acreage. The researcher found that the size of the land was a very important factor in as far as contract participation is concerned. Information from the focus group discussions, interviews and questionnaires indicated that all the cotton companies operating in the area under study have stipulated farm sizes that they perceive as worthy for a farmer to secure a contract. The information revealed that all the companies gave inputs on credit to a farmer starting on a hectare of land. This means that all the farmers who were involved in contract farming were to plant an area of not less than 1 hectare. The tables below show the inputs needed to effectively produce cotton on a one hectare piece of land, and also the costs of acquiring the inputs needed on the piece of land.

Table 2.3. Input requirements for a hectare of land

Input	**Type of input**	**Area required per hectare**
Seeds		20-25kgs
Fertilizers	Compound L	200kgs
	Ammonium Nitrate	100kgs
Chemicals	Cabaral	2kgs
	Fenvelerate	1litre
	Lambda cure	1 litre
	Rogor	1 litre

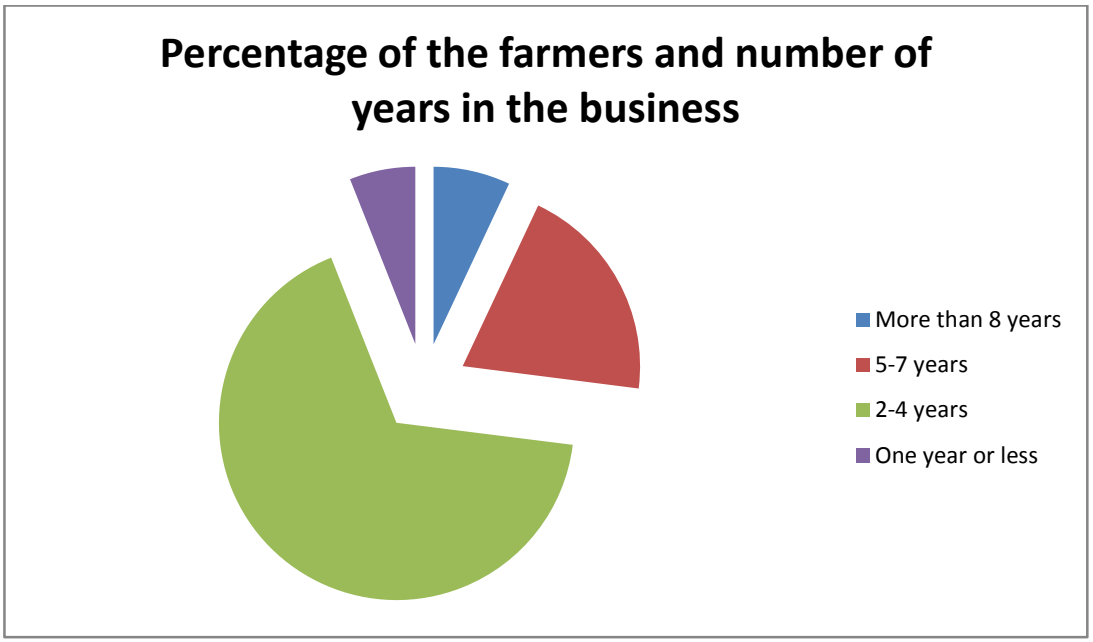
Source: Cottco, Manoti Depot, 2014.

Table 2.4 cost of inputs per hectare of land

Inputs	**Amount offered**	**Price/ unit**	**Required amount/hectare**	**Total amount**
Compound L	50kgs	$38	200kgs	$152
Ammonium Nitrate	50kgs	$37	100kgs	$74
Seed for planting	25kgs	$27	25kgs	$27
Lambda cure	500mls	$6	1 litre	$12
Acetamark	50g	$1	300g	$6
Cabaryl	1kg	$16	4kgs	$64
Total amount				$335/hectare

Source: Tarafern [Marapira Depot] and Cottco [Marapira Depot], 2014

The effect of farm experience, measured by the number of years farming, was again found to be a very important factor in motivating farmers into contract participation in the study area. Bellemare [2012] finds a positive and significant effect, indicating that more experienced farmers are more likely to contract; and the commodity specific effect propounded by Birthal et al [2005] experience increases the likelihood of contracting. The researcher also found that the more experience a farmer had in farming the crop, the more likelihood that s/he will engage in contract farming. Of the respondents who were interviewed orally, the information revealed that farmers who had had a considerable time and experience with cotton farming were more likely to engage in cotton contract farming. The chart below indicates the information on farm experience and contract farming in Jiri communal lands.



Source: survey data from oral interviews in the study area

The information above can be illustrated in tabular form as shown below.

Table 2.5. Years of contract participation amongst interviewees

Period of cotton farming by farmers	Percentage of the population interviewed
One year or less	6%
2-4 years	67%
5-7 years	20%
More than 8 years	7%

Source: survey data from oral interviews in the study area

The information above reveals that the majority of the farmers are those who have had experience in farming the cotton crop for more than one year. This is shown by the number of farmers who have grown the crop for more than two years, which indicates that they constitute 67% of the total population interviewed. The 5-7 years experience category also shows that farmers still accommodate contract farming as their way of generating income. There are few farmers in the one year or less category, as well as those who have been farming under contractual basis for more than 8 years. This may be an indication that those farmers in the one year or less category are still not certain of the potential of contract

farming. Those in the above 8 years category are getting fewer, maybe because they are tiring off, and have realised that the system does not provide a panacea to their problems.

The effect of farmer specialization, measured as the share of income from their primary crop to that from other farm and non-farm activities, on CF is also diverse in earlier studies, with general findings being divided across significantly positive and insignificant effects. These effects, as indicated by both Katchova and Miranda [2004] and Birthal et al. [2006], are commodity specific. On the production of cotton in Jiri Communal lands under contract farming, the researcher found out that farm specialization is an important factor in contract participation. The more a farmer specializes in the production of the crop, the more s/he thinks of participating in contract engagements with companies. Specialization results in farmers cultivating large areas of land, and hence, the possibility of getting more from the cultivated area. The table below shows the expected yields of cotton [in bales] from different areas of cultivated land, and the expected income. The standard measure for weighing cotton is the bale, of which one bale averages 290 kgs.

Table 2.6. Expected yields and income at different pieces of land

Area planted	**Expected yield [bales]**	**Expected income [at a rate of $0.60/kg]**
1 hectare	5	$870
2 hectares	10	$1740
3 hectares	15	$2610
4 hectares	20	$3480
5 hectares	25	$4350
6 hectares	30	$5220
7 hectares	35	$6090
8 hectares	40	$6960
9 hectares	45	$7830
10 hectares	50	$8700

Source: Cottco, Manoti Depot, August 2014

Simmons et al. [2005] consider farmer access to credit as one potential motive for contract participation. They find that credit constraints are a limiting factor in the involvement of

farmers in contracting farming. This significant effect is intuitive because farmers with poor access to credit may be particularly vulnerable to market fluctuations, and may find increased safety in a contract. This was also noted in the study area, whereby the researcher found out that the access to credit facilities from contracting companies has raised the probability and chances of peasant farmers to get into the cotton contracting business.

The impact of farmer risk aversion and the degree of market risk on contract participation has been investigated by the researcher. CF is relatively new to some people in the study area, which makes risk wary farmers wary of contracting. Furthermore, price volatility over the years in the business of cotton farming has made some risk wary farmers not to participate in contract farming. One interpretation of this scenario is that market risk may not be an important driving factor leading farmers to contract in Jiri, but that price risk in an economy where cotton price keeps on being not predictable to farmers without being locked in a fixed price contract. Policymakers in the country should be aware that the introduction of CF may appear risky to farmers who are unaccustomed to contracting. If policymakers wish to use contracting as a policy lever for improving farmer welfare, minimizing initial fears of new ventures into contracting may be crucial.

Many empirical studies have also considered the impact of a farm's assets on the likelihood of participation, measured as either the value of household assets or the value of farm equipment. Warning and Key [2002] identify a significantly positive effect of the farm equipment assets on contracting for a sample of Senegalese peanut farmers, indicating that farmers with more equipment may have higher productivity and are more capable to repay the initial loan in the contract. This has also been noted in the study area. According to the field visits done in the area, the researcher identified that the assets of a smallholder farmer have got an impact on the possibility of farmer participation in a contract. As noted by the above scholars, farmers with more farm implements such as scotch carts, ploughs, sprayers and livestock mainly cattle, were seen to be more liable to contracting in the study area. However, some farmers in the area are also contracted to companies despite the level of farm implements.

The distance to market was also seen to be a particularly important factor for farmers in far away from the marketing points, such as those as far as Rongaronga, Masekesa and Maboke area. These areas are far from both the main road, and the marketing depots. Farmers that do not have access to a main road are less attracted by the cotton contracting business, since it

will be costly and labour intensive to transport the cotton from far, off-road environments , to the marketing depots, since transport will be mainly animal draught power. Hence, according to the observations of the researcher, CF effects may also be dependent on infrastructural development. Interviews with people living in the areas far away from the roads revealed that most of the farmers in the area do not engage in the cotton contract farming business mainly because of the remoteness of the areas.

Several other authors have explored a few interesting participation motives in contracting. Zhu and Wang [2007] find previous experience with CF contributes positively, which suggests that farmers' previous CF experience was likely successful. Although it is obvious that previous positive or negative experience will strongly influence the future decision, given that many studies find evidence that CF increases farmer welfare, the Zhu and Wang's [2007] result indicates that future contracts may be adopted more readily. This result is also consistent with Wang et al. [2011] in that risk averse farmers are less likely to contract given uncertainties of entering into a contract without much precedent.

Government promotion policy is another factor that contributes to CF participation. The Zimbabwean government has encouraged contract farming by creating a conducive environment for the cotton companies to invest and operate freely in the study area, indicating that recent government efforts to encourage CF have been successful.

2.10. Reasons for cotton farming in Jiri Communal Lands

Cotton farming in the area under study has been curtailed by the adverse climate conditions usually experienced in the area. The issues of climate variability has seen the Jiri peasant farmers under immense threat of losing in the farming business, especially considering the fact that some are still growing maize for their economic benefit, of which maize is known by agriculturalists to be of little thermal tolerance. As a result, cotton farming in the area has been seen not only as a solution to the economic problems farmers face, but also that cotton is known for its high degree of thermal tolerance, which makes it a suitable cash crop in the area

UBINIG research [2011], points out that there are several reasons that can be put forth for the adoption of contract farming in the Jiri communal lands, including cash earning, perceived high profit, guarantee of inputs and market that have attracted farmers into cotton

farming. At the same time lack of support for food production in the Jiri lands by the department of agriculture is discouraging farmers to remain in food production. Cotton companies have easily taken advantage of the situation. The attractions that draw farmers to cotton production are lump sum cash income at a time, that is, the fact that they get an opportunity to have a perceived large amount of money once they sell their cotton to the companies. Input and credit advance from the companies and ensured market through procurement of cotton by the cotton farming peasantry is also a very important contributing factor to the farming of cotton in the Jiri communal lands. The lack of policies to support farmers for marketing the food crops becomes a big hindrance for remaining in the food production. Below are some of the main reasons the various respondents aired out, as to why they choose to grow cotton, instead of other crops.

Prevalence of unattractive Market Policies on some agricultural products

Poorer market structures of other crops such as maize especially in the whole country have resulted in farmers in the Jiri communal lands shifting to perceived better alternatives of cotton production under contracts. Market forces have gone a long way in determining what and when to produce, and this has facilitated dynamics in crop production. In the Jiri communal lands comparative analysis of information from the interviews and the questionnaires showed that farmers are neglecting crops that were traditionally grown such as maize, sorghum, finger millet, round nuts for cotton because they enjoy more satisfaction in cotton farming.

The drastic fall in market prices of grain in Zimbabwe has led to wide adoption of cotton as a remedy by poor communal farmers in the Jiri communal lands. For example, farmers resent the idea that when they sell their maize to the Grain Marketing Board at Manoti Business centre, they usually will have to wait for months before they can be paid. This is in total contrast to the spot cash payments that the cotton farmers enjoy when they sell their cotton to the cotton buying companies in the area. On the other hand cotton farming has not only been associated with comparatively higher returns, but also there is provision of ready market especially the spot cash payment systems contract farming secure market for farmers. Reardon et al [2009] reiterate that incentives are the major attracting forces that have led farmers to adopt cotton at the expense of other food crops where in most cases they are compelled to sell their products in a price lower than their cost of production. The same author further contends that rural communities would vie for a crop that is competitive on the

open market. According to an interview by Cottco manager, Mr Muparuri, in August 2014, farmers are lured into cotton farming mainly due to improved access to inputs and credit facilities such as seeds and fertilizers.

The need for Income

Due to failing market prices for most food crops in the country, farmers have diversified their means of production in a bid to enhance their livelihoods. According to Arnold [2004], cotton has proved beyond figures that it can accrue much more disposable income for the rural households. This has resulted in growing interests on how cotton farming can be used as an integral part to augment household food access. Responses of most of the interviewed people in the area indicated that they are into cotton farming because of the need to generate income for their households.

In most rural communities of Zimbabwe, farmers have diversified food crops with non food crops such as cotton to augment other livelihood options [Mutanga, 2009]. The same author further highlights that the effects of drought, famine have worsened the situation. Therefore farmers have shifted to crops that tend to give them higher income per hectare. According to Zimbabwe livelihood profiles study [2004], it indicates thats income is positively associated with nutritional outcomes for households that are into cotton farming. Therefore higher returns directly translate to improved family dietary needs.

Periodic droughts

Persistent droughts in the country, especially the area under study have resulted in a change from low paying agriculture crops to perceived high paying crop production in enhancing household food production and access. Cotton in its resisting capacity has been favoured in the area because of its thermal tolerance, since the area is bedevilled with periodic droughts that make ventures into other crops uncertain. According to Arnold [2004], there has been a general paradigm shift from food crops that have in most cases been affected severely by climate variability and persistent drought recurrence. The food security concern in the area has been countered by the fact that the farmers now depend on the selling of the cotton crop to augment their food reserves, rather than growing the food crops themselves. In a bid to counter such losses farmers have searched relentlessly on how to adopt cotton production to cushion them and sustain food access at household level. This view is reinforced by the

findings in the Jiri communal lands, where droughts are persistent, and the rainfall patterns are unpredictable. As a result, most farmers have turned to cotton production because of its resistance to high temperatures. The high thermal tolerance of the crop has led farmers. to see it as a remedy or solution to the periodic droughts. Most of the farmers interviewed indicated that they had turned to cotton production not because they like growing it, but because there is no other alternative crop that is promising in their area, which they can lucratively sell for cash.

2.12. Opportunities of contract farming in Jiri communal lands

As noted by Aghion and Holden,[2011], well-managed contract farming is an effective way to coordinate and promote production and marketing in agriculture. Despite the fact that it is essentially an agreement between unequal parties: companies, government bodies or individual entrepreneurs on the one hand and economically weaker farmers on the other. It is, however, an approach that can contribute to both increased income for farmers and higher profitability for contracting companies. It is perceived that when well managed, contract farming reduces risk and uncertainty for both parties as compared to buying and selling crops on the open market[ibid, p23]

Critics of contract farming tend to magnify the inequality of the relationship and the stronger position of contracting companies with respect to that of the peasant farmers in the cotton contract faming business. Contract farming is viewed as essentially benefiting contractors by enabling them to obtain cheap labour and to transfer risks to peasant farmers [Ashraf, Giné and Karlan 2009]. However, this view contrasts with the increasing attention that contract farming is receiving in many countries, as evidence indicates that it represents a way of reducing uncertainty for both parties. Furthermore, it will inevitably prove difficult to maintain a relationship where benefits are unfairly distributed between sponsors and growers.

Barrett, [2008] asserts that the advantages, disadvantages and problems arising from contract farming vary according to the physical, social and market environments. More specifically, the distribution of risks will depend on such factors as the nature of the markets for both the crop produced and the processed product, the availability of alternative earning opportunities for farmers, and the extent to which relevant technical information is provided to the contracted farmers. These factors are likely to change over time, as will the distribution of risks.

Guaranteed market for the cotton

The prime advantage of a contractual agreement for farmers in the study area is that the contractor will normally undertake to purchase all produce grown, within specified quality and quantity parameters. Contracts can also provide farmers with access to a wide range of managerial, technical and extension services that otherwise may be unobtainable, as with the case of the Jiri communal lands, where cotton buying companies are fielding extension workers to help farmers in the day to day management and production of the cotton crop. Farmers can use the contract agreement as collateral to arrange credit with a commercial bank in order to fund inputs. Thus, the main potential advantages for farmers are provision of inputs and production services; access to credit; introduction of appropriate technology; skill transfer; and access to reliable markets [Bellemare, 2010]. These advantages are going to be elaborated below, citing cases from the field surveys and also the various interviews conducted in the study area.

Provision of inputs and production services

Cotton contractual arrangements involve considerable production support in addition to the supply of basic inputs such as seed and fertilizers, as well as free training and extension. This is primarily to ensure that proper crop husbandry practices are followed in order to achieve projected yields and required qualities. Most of the companies operating in the area provide inputs to their farmers with the exception of Alliance Cotton Company, Grafax and Olum. Interviews revealed that farmers appreciate the fact that their companies they are contracted to provide them with inputs to use in the production process. There is, however, a danger that such arrangements may lead to the farmer being little more than a labourer on his or her own land [Dorward, 2001].

It is often difficult for the peasant farmers outside the contract-farming context to gain access to inputs. In the study area, the only way through which a farmer can obtain farm inputs is by being contracted to a particular company. In Zimbabwe in particular, fertilizer distribution arrangements have been disrupted by structural adjustment measures, with the private sector having yet to fill adequately the void created by the closure of parastatal agencies. In many countries a vicious circle has developed whereby the low demand for inputs provides no incentive for the development of commercial distribution networks and this, in turn, further adversely affects input availability and use. Contract farming in the Jiri communal lands is

helping to overcome many of these problems through bulk ordering by company management. Contract farming in the area is also a way of securing a ready market for farmer's produce, as uncontracted cotton will not find its way easily onto the market. An interview with Mr Sipho Dhlamini, a young man who is involved in the cotton farming business revealed the above facts when he said;

"*...apart from getting farm inputs from these companies, farmers usually get contracted to these companies because it is another way of securing market for the cotton, since it is difficult to sell the crop if you are an independent farmer*."

The need for access to credit

The majority of peasant producers in the study area experience difficulties in obtaining credit for production inputs. Eaton and Shepherd [2001]point out that with the collapse or restructuring of many agricultural development banks and the closure of many export crop marketing boards in the country, which in the past supplied farmers with inputs on credit, difficulties have increased rather than decreased. Contract farming usually allows farmers access to some form of credit to finance production inputs. In most cases it is the sponsors who advance credit through their managers. However, arrangements can be made with commercial banks or government agencies through crop liens that are guaranteed by the sponsor, i.e. the contract serves as collateral. An interview with a "Gold Club Member" of Cargill, Mr Mahove, who is working as clerk for the company indicated that these farmers are accessing credit from financial institutions, especially banks, to buy other production inputs besides seeds, fertilizers and chemicals.

The tendency of certain farmers to abuse credit arrangements by selling crops to buyers who are not their contracting partners, or by diverting inputs supplied by company staff to other purposes, has caused some companies to reconsider supplying most inputs, opting instead to provide only seeds and essential agrochemicals. The policies and conditions that control advances are normally described in attachments to contracts.

Introduction of appropriate technology

New production techniques have been brought forward in the operating area, which has raised productivity as well as to ensure that the commodity meets market demands.

However, as noted by Glover and Kusterer [1990], peasant farmers are frequently reluctant to adopt new technologies because of the possible risks and costs involved. They are more likely to accept new practices when they can rely on external resources for material and technological inputs. Nevertheless, the introduction of new technology will not be successful unless it is initiated within a well-managed and structured farming operation. Private agribusiness is offering technology more diligently than government agricultural extension services because it has a direct economic interest in improving farmers' production [Goodman and Watts, 1997]. Most of the larger sponsors prefer to provide their own extension rather than rely on government services. Cottco and Cargill are the major companies that are providing profound technological expertise in the area, mainly through fielding their own extension officers. An interview with Mr Tiyanane, an extension officer working for Cottco reinforced the above facts, when he said;

"...is that we [Cottco] are the leading company in this area in terms of provision of agricultural expertise to our farmers, followed by Cargill"

The transfer of skills to farmers

Larpar, Holloway and Ehui , [2008] assert that the skills the peasant farmer learns through contract farming include record keeping, the efficient use of farm resources, improved methods of applying chemicals and fertilizers, knowledge of the importance of quality and the characteristics and demands of export markets. Farmers can gain experience in carrying out field activities following a strict timetable imposed by the extension service. In addition, spill over effects from contract farming activities could lead to investment in market infrastructure and human capital, thus improving the productivity of other farm activities. Farmers often apply techniques introduced by company extension officers such as ridging, fertilizing, transplanting, pest control, to other cash and subsistence crops. Mr Oliver Ndadzemerwa, a farmer in Tosiana village also added that apart from the above mentioned skills, the farming system has left a lot of them better off in terms of animal husbandry skills. This is so because cattle are the main source of draught power in the area, in terms of transporting cotton bales to the market, fetching water and also ploughing in the fields. As a result, farmers will be obliged by these circumstances to look after their livestock well.

Guaranteed and fixed pricing structures.

The returns cotton farmers receive for their crops on the open market depend on the prevailing market prices as well as on their ability to negotiate with buyers. This can create considerable uncertainty which, to a certain extent, contract farming can overcome. As for cotton prices in the area under study and the country in general, they are not based on fixed prices but are related to the market prices at the time of delivery. In these instances, the contracted farmer is clearly dependent on market volatility [Runsten, 1992]. This is the situation prevailing in the Jiri communal lands, where in some years companies usually announce the price that they will buy the cotton crop with after the crop has been harvested. This has, according to companies, managers, to do with companies first of all looking at the world market of cotton at the beginning of the season, before coming up with a local buying price for the crop. However, for the past four years the farmers in the area had had to know the price of what they have produced only after harvest, when the time to sell the produce to the contracting companies arrived. Almost all the people interviewed in the study area indicated that they are discontented with this issue.

Market access

The researcher observed that cotton peasant farmers are often constrained in what they can produce by limited marketing opportunities, which often makes diversification into new crops very difficult. Farmers will not cultivate unless they know they can sell their crop, and cotton companies will not invest in ventures unless they are assured that the required commodities can be consistently produced. Contract farming offers a potential solution to this situation by providing market guarantees to the peasant farmers and assuring supply to the companies. Even where there are existing outlets for the same crops, contract farming offers significant advantages to farmers. They do not have to search for and negotiate with local and international buyers, and companies usually organize transport from the buying depots such as that at Marapira and Manoti, for their crops.

Farm Family Employment

As noted by de Janvrey, Fafchamps and Sadoulet [1991], peasant farmers benefit from additional employment opportunities arising from contracts since they often face high transaction costs when selling labour off the farm. Farm contracts provide a way to minimize some of these costs because production is usually labour intensive, reflecting both its horticultural nature and contractor requirements for high quality. Thus, farm contracts are an

important source of employment for farm family members that otherwise would have limited work opportunities. Interviews in the study area indicated that most of the school leaving youths are being intercepted in the cotton contract business, thereby providing a source of employment to the many school leaving youths, and many more adults in the area. As a sway of employment, families in the study area are managing to deal with the problem of widespread national unemployment levels, given the fact that the country is not able to provide jobs to the vast majority of the strong and energetic youths in the country. So, the researcher found out that much of the unemployment rampant in the country is actually hidden within farm family labour provisions under cotton contract farming in the area under study.

Improvement of women positions in society

There are also some indirect benefits from contract farming arising from smallholder contracting in relation to changes in cultural values driven by the contracting process. In particular, these include empowerment of women and benefits associated with development of a more commercial outlook by participating peasant farmers. As noted by Glover & Kusterer, 1990; Torres, 1997, a not uncommon outcome of contracts is that women and younger family members provide much of the labour while cheques are paid to the male household heads that holds title to the contracts. Porter and Phillips-Howard [1997] report an African case study where women, despite being the principal farmers, held titles to contracts only when they had no husbands and where additional labour demands arising from contracts were met by women and children. While this indicates that contracts have the potential for exploitation in some family situations, the importance of women in contracts may raise the power of women in the family by increasing the dependence of the family unit on their production. Glover and Kusterer [1990] and Kirk [1997] report that women's subjective feelings about contract experience were positive in terms of improved self-esteem and self-confidence and feeling more powerful. This was particularly so for female process workers employed downstream from contracted production. These women were often recruited from domestic help positions where hours were long and uncertain and pay was low.

However, in the Jiri communal lands the adoption of contract farming by some women has made them more visible in the decision-making processes of their households, and has exposed these women to the more wider community of commercial functions that had been no go areas for women in the area before the adoption of contract farming. Women who have

adopted the cotton farming system under contractual basis have managed to enjoy some degree of autonomy and decision making. From the interviews amongst women in the study area, women have shown that they also want to enjoy autonomy and influence in as far as the day to day running of the farming processes of the home are concerned. These women have raised issues that their male counterparts usually become irresponsible with the proceeds from the selling of cotton, and have added that women are more responsible in as far as financial management of the home is concerned.

Commercial Culture development

Peasant farmers in the Jiri communal lands have benefitted from the learning process that underlies contract participation. By participating in contracts, peasant farmers are involved in negotiations over production, storage, delivery and communication that often lie outside of traditional farming experience. While much of this decision-making may be facilitated by participation in groups, farmers bear the final responsibility for these decisions. In the context of pressures from the new cash economy, urbanisation and reduced government support associated with liberalisation of domestic markets, contract farming has become a facilitating component in a broader shift in the country's agriculture towards a cash exchange culture. Ponte [2000] argues a major effect of modernisation has been replacement of traditional exchange mechanisms based on mutual obligation, kinship and class structure with cash exchanges. Farm families now need cash for school fees, funerals and basic items such as food, clothing and medicine. Farming contracts in the study area are providing the cash to meet these needs and facilitate adjustment to modernisation by increasing peasants' awareness of options and knowledge of commercial practice.

In addition to financial and social benefits, the impact of CF on productivity is also important, because it increases total welfare instead of just redistributing it among different groups. Morrison Paul et al. [2004] and Key and McBride [2007] find a positive impact of CF on productivity, especially in developing countries, the agricultural sector tends to be laidback and slow in receiving technology transfers from developed countries. Advanced farming technology such as mechanization is often based on large scale farming; these techniques are difficult to apply on small scale, fragmented operations in developing countries. CF helps facilitate technology transfers and improves productivity.

Beyond the farm gate, CF also improves the efficiency for downstream links of the supply chain. The agribusiness companies can now have a reliable supply of raw materials of their required variety and quality with less price uncertainty [Allen and Lueck 1995; Ma et al. 2011]. The transaction cost is reduced through contracting

The supply chain efficiency gain can further trickle down to the consumers. The fragmented small farm operation with heterogeneous commodity quality is the main reason behind food safety problems. CF can cope with this fragmentation problem. In the study area of Jiri communal lands, CF enables farmers to pool their land and animals together, as has been demonstrated by the Marimasimbe cooperative group that has set aside a considerable hectrage of portion of land to work together. Burial societies in the area have proved to be very productive as a result of pooling resources together to farm cotton on set aside pieces of land.

Farmer cooperatives in Jiri area are playing an important role in CF, helping small farmers to gain more bargaining power in negotiations with large firms. Interviews with the Marimasimbe farmer cooperative have indicated that farmers will have an increase in the bargaining power. This further reduces transaction costs for the companies to deal with individual farms, and improves the contract compliance rate in these areas where contract violations are hard to prosecute.

Wooded (2003) highlighted that the institutional arrangement of contract farming has reduced the transactional cost and improved market efficiency to benefit the peasant farmer. In Zimbabwe, the cotton contract farming system has commercialized the cotton peasant agriculture through provision of assured markets, laying out producer prices, though this point is subject to debate on cotton production in the area, except the much needed input provision and extension services on agriculture technologies to farmers and as a driver to rural development. The schemes are creditable for playing a key role in increasing profitability of crop farming reducing market risk and above all opening new markets [Larpar, Holloway and Ehui, 2008]. Contract farming has proved effective in integration of peasant farmers in that provisions of seasonal finance is made to farmers that they cannot access through normal commercial channels as acknowledged by Wooded [2003]. This has lightened the burden of sourcing scarce and expensive inputs to rural farmers.

Furthermore, the system has also promoted infrastructural development in the rural areas for cotton industries such as agrochemicals, fertilizer and cotton marketing companies. As a result, the adoption of contract farming has created employment especially for the rural poor. Wooded [2003] also appraises contract farming for giving the smallholder farmer the opportunity to earn income as evident by a large participation of smallholder farmers in cotton production as a means of acquiring cash.

Contract farming is less subjective if peasant farmers are involved and cotton contracting companies have an attainment of political acceptability. As long as the farmer is not a tenant to the contractor, contract farming is less likely to be subject to criticism. With the land reform program in Zimbabwe contractors have managed to overcome land constraints through assessing crop production to land that is unavailable to the company with the additional advantage that it does not have to purchase it .Working with contracted farmers enables cotton companies to share the risk of production failure, weather and crop diseases. The farmer takes the risk of loss of production while the company absorbs losses associated with reduced or non-existent throughput for processing facilities.

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Chapter 3

Challenges to the contract farming practice in Jiri communal lands

Introduction

This chapter is mainly focused at exposing the relationship between the farmers and the companies in the contract farming enterprise, particularly the challenges of the system. The main sources of information that are going to be used in this chapter are interviews conducted in the area, group discussions and a number of secondary data sources, that is, sources from other authors' views which will help to come up with logical conclusions pertaining to the relationship of the companies and the farmers. The chapter is also going to expose peasants' experiences, problems they encounter in their day to day operations of the farming business, and also the how they are trying to address them. The chapter is also going to look at the social challenges associated with the production system, such as domestic violence issues as a result of unequal resource distribution within the household unit from the sale of the agricultural produce, HIV and AIDS issues in the area of study as a result of an increase in social interaction at buying points, breeding anti-social behaviour at the end.

3.1 The operational framework of contract farming and input distribution system in Jiri area.

From the research findings in the area, the researcher noted that there are seven active cotton companies operating in the area under study. The other companies that had been operating in the area under study have since stopped their operations, that is, Dande Holdings, Insing, Viridis and Cotpro, which has since ran into liquidity. The companies that are still operating in the area are Cargill, Cottco, Sino Zimbabwe, China Africa, Alliance Zimbabwe, Olam and Grafax. These companies are the major players in the cotton business in the Jiri communal lands. It is from these companies that the farmers are mainly dependant for inputs. The farmers are supposed to register with the Agricultural Marketing Authority [AMA] and the National Cotton Council [NCC], which are authorities monitor the operations of cotton companies and regulate their conduct in the study area.

Information on how inputs are distributed was acquired from interviews, observations and companies records. The researcher carried a non participatory observation at Marapira depot on the 14th of January 2014, when Cargill was distributing inputs to farmers, and noted how inputs were given to the farmers in the area around that collection centre. In most cases, seeds and fertilizers are the ones that are delivered first, and then the chemicals next. This is however, not always the case in all growing seasons, according to Cottco, which indicates that in some years they supply all the inputs at once.

Because farmers have no other alternative of getting the inputs they want, especially cotton seed, they heavily depend on the companies for the procurement of cotton seed to them. Farmers in most cases desperately take inputs from these cotton companies without understanding the terms of the contract and in most cases without having carried a research or inquiry on the unit prices of the inputs they take from the companies. This impacts negatively on the farmers' side because they will not be in a position to calculate profits or losses from the farming enterprise. Late distribution of inputs has also been noted by a number of farmers as another major challenge to the farming business. Farmers have cited late distribution of inputs as a major factor in them not being able to reach their maximum yield levels.

Apart from that, farmers also complained that some of the companies are not giving adequate inputs per hectare, considering that they may give half the inputs of what is required per hectare. For example, according to Arex officers, per every hectare of land, 200kgs of Ammonium Nitrate is required, and the farmers may be given half of the amount. This will result in farmers looking for other sources of income to top up the required inputs per hectare, so that they may produce better yields.

The farmers are represented by group chairpersons, who explain the contracts to the farmers and liaises with the cotton company staff on their behalf. This leaves the common farmer in a situation where by s/he does not engage directly with company extension officers.

An interview with a young cotton farmer, Mr Thabani Ndlovu revealed that some of the farmers resent the idea of being represented by the group chairpersons because they want direct interaction with the company staff so as to get a better understanding of the terms and conditions of the farming system they are in, when he said that,

"*We see the problem with the system emanating from the fact that we do not have direct interaction with companies' staff. We are represented by these group chairpersons who do not explain to us fully of what we have to expect from these contract arrangements*."

The terms and conditions of the contracts are not written in the local language, which, is Shona, but they are written in English language which most of the farmers, because of their educational level, will not be able to fully comprehend. The result is that most of the farmers will just sign the contracts without having a deep understanding of the contents of the contracts, and the implications of not abiding to the agreed terms of the contract.

Companies in the area make it appoint that the farmers abide to the terms and conditions of the contract by conducting strict "recovery" operations if and when farmers fail to abide to the contract terms. An interview with Mr Matoto, an Arex officer, revealed that the farmers in the area dread the recovery operations done by the companies operating in the area. He said that farmers are obliged to pay back what they owe to the companies in whatever way because they will be subject to company recovery programmes, whereby company officials will come to farmers' households and take whatever they can put to auction to recover what farmers owe to them. The companies do this without considering the value of what they take from the farmers' homes. He revealed this when he said,

"*..they can even take a scotch cart, even if the farmer owes them a sum of let's say $100, without considering the market price of the scotch cart*."

Company debt collectors are concerned about recovering what farmers owe to them, without asking why these farmers have failed to repay their debts. Above all, when the farmers get the money to pay their debts, in most cases they will not be in a position to get back their implements that will have been collected in the recovery process. If these implements are still in the custody of the company before auction, the companies usually would charge storage fees, which are not part of the contracts. This increases farmers' expenses in the long run.

Most of the chemicals that are used in cotton farming are harmful to both people and the environment. This was revealed when one of the farmers, in Maboke area, Mr Manhivi, said that,

"*You never know why some of us succumb to illness, maybe it is because of the cotton chemicals which we use in the fields. Our livestock sometimes succumb to strange diseases,*

which I suspect is caused by contact with cotton chemicals when they go to drink water in Lutope River."

Most of the farmers in the study area are not well versed in the English language, in which the prescriptions of the chemicals are written in. Usually, they are negatively affected by getting in conduct with the cotton chemicals, since they do not usually know what measures to take in the event of poisoning by certain chemicals.

On the other hand interviews with extension workers from major companies revealed that they blame the farmers for not being competitive enough to produce the required and expected targets. An interview with Mr Tiyanane, an extension officer from Cottco revealed that they cite problems of unavailability of inputs at agricultural outlets for the late distribution of inputs to farmers. Mr Tiyanane said that inputs like Ammonium Nitrate may not be available at producing companies such as Sable chemicals in Kwekwe. He reiterated that inputs at times may not be available, but the company has never failed deliveries of the inputs to farmers.

An interview with Mr Muparuri, an operations manager at Cottco revealed that the companies are also worried about the problem of side marketing on the part of the farmers. This problem, according to Mr Muparuri, is caused by those farmers who want to avoid paying back the inputs they owe to the companies. Some farmers, however, side market because they will not be aware of the contract terms that forbid them from side marketing. Delays in payment to farmers on the part of the companies are now a thing of the past, since these companies now give spot payments to farmers for the cotton delivered. The other reason for side marketing that farmers pointed to was the lack of transport facilities in their area, given the fact that some farmers are located very far away from marketing points, such as those in the far Rongaronga area, where some new companies like Grafax offer higher prices than Cottco and Cargill.

Catelo and Costales [2008] note that the expansion of contract farming has the potential to benefit peasant farmers and, through linkages to other parts of the economy, to have flow-on effects benefiting others outside of contracts. Linkages include creation of downstream investment and employment activity, increased profits leading to new investment and general multiplier effects at all levels of the production process. However, the expansion of contract farming is not a sufficient condition for poverty alleviation amongst the peasantry. Issues exist about whether peasants are likely to be excluded from benefits and whether contracts

may in some situations lead to increases in absolute poverty or in relative poverty where some are left behind in the development process. These issues focus attention on institutional reforms that might reduce these undesirable effects.

3.2 Exclusion of some of the poorer farmers

From the observations of the researcher, exclusion from the benefits of contracting is occurring through bias by cotton companies against relatively poorer farmers in selecting farmers for contracts, second-round effects of contracts in local and national markets, changing income patterns and driving up farm input prices and through narrowing of local farm markets resulting from agricultural resources being diverted to contractors. This is a very serious problem noted in the study area.

3.3 Selection against Small Farmers

Companies benefit from contracting with larger farmers who are likely to have lower average costs and be more reliable as suppliers in terms of quality and quantity. Much of this follows from pure monopolist theory where these cotton companies sell in competitive export markets where they are price takers however act as price makers when they purchase supplies from contracted farmers. Maximising profits depends on paying as low a price as possible for raw materials and results in exclusion of high cost producers. The monopolist pays contracted farmers a price that gives them a gross margin slightly higher than they would earn in their next most profitable activity so that the relative profitability of contracting is likely to be low.

3.4 Increased prices of foodstuffs and competition for land

Ponte [2000] argued in his African study that contracting increased local food prices. Hence, contracting can result in winners and losers at a community level where the winners are contractors and the people they buy things from while the losers are people who do not receive new income but must pay higher prices because of the second-round effects of the contract. There is a parallel story in markets for farm inputs. A contract that is a significant part of the local economy will increase demand in local input markets; particularly markets for land and labour. Contracting in the area, according to field findings, has increased

demand for land as new farmers have come into the cotton business. Labour available to the rest of the community has also decreased because of contract engagements or if labour is no longer hired out by farm families because of their contracted production. Other local input markets such as those for transport and rental machinery also face increased competition. Around the Marapira mini depot, there is stiff competition for transport facilities during the cotton selling season, since there are only two Lorries available to nearby farmers, belonging to the Chawa family.

Contract farming is leading to a narrowing of markets for produce outside the contract as farm resources are diverted to contract production and as increased demands for local farm inputs make non-contract production of the cotton crop suicidal to the producers since it is difficult to access market for non contracted cotton. This creates problems for non-contract producers who then face thin markets and are forced to join the contract farming system for their crop to be absorbed into the market. Market narrowing is also creating barriers to exit from contracts. Peasants who opt out of contracts are discovering that the local markets they served previously are missing or operating only intermittently and hence face price discounts and additional costs of finding and accessing new markets (Little & Watt, 1994).

Cotton farmers in the local agricultural business are making other agricultural production undertaken in the community less profitable. For example the growing of groundnuts, which had been a lucrative agricultural venture in the area, is facing stiff competition from the contract farming business. An interview with Mai Chigeza of Tabvaneyi village, ward 22, revealed that the cotton contracting system has negatively impacted groundnut production, when she said,

"Farmers are no longer interested in growing groundnuts, which they used to grow, because of their high expectations from the cotton farming business. As a result, MaBhuruwayo [groundnuts buyers] are no longer coming to buy our groundnuts because it is now produced in small quantities than before."

Changing relative incomes of members of a community is likely to cause social tensions as people discover that previously secure positions in social hierarchies are under threat. A losing group may be forced to sell more labour, possibly on a casual or day basis, leaving them in different social and economic circumstances than previously. Also, this poorer group may previously have benefited from traditional reciprocity arrangements and find themselves disadvantaged as traditional values diminish in importance in the face of the strong cash

culture that goes with contracting [Clapp, 1988; Wilson, 1994]. The above scenario occurs mainly when a perceived weaker group gains economic power over the once economically and socially stronger groups, for example, when headmen's families sell their labour to their subjects' families, social tensions are likely to occur.

3.5 Impact of cotton farming on food production

Cotton farming has brought varied effects on household food production and access in the Wards. Various respondents on the impact of cotton farming on food production and access were given out by the sampled population.

From the research 68% of the interviewees confirmed that cotton production is reducing food production in the area. The once popular food crops that had been grown in the area have experienced a marked drop in both area planting and tonnages of production . the researcher found that from the 48 respondents who filled the questionnaires, 68% of them agreed that they had reduced food crop production as a result of the cotton contract farming system in the area.. However, 32% of the sampled population gave a different view from the one that was given by the majority, saying that cotton production had no impact on food production.

3.6 Uses of income from cotton farming

The researcher also interviewed different people on what the people in the area used income from cotton production for. Varied responses were also gotten from the respondents. Table 4.5 shows intended use of income within the household.

Table 3.1 Intended uses of income from cotton.

Response	Number of Respondents out of 48	Percentage of respondents
Buying food	20	41.7 %
Paying school fees	16	33%
Buying agriculture inputs	10	20.8 %
Farm development	12	25%

Hire labour	2	4.2%

Source: interviews in the study area

From the research, 63.3% of the sampled households indicated that they use an average income of 11 to 30 % of their annual sale to buy food. This is attributed to low income derived from food crop sales. Moreso, smallholder farmers have families to support and hence need more food to feed the family and general welfare. More income from cotton in most cases cushions the household from shortages in food access and availability. The researcher found out that 26.6% of the sampled population does not entirely depend on cash from the produce to carter for household food needs, but rather use other alternative sources such as groundnut sale.

3.7 Engendering cotton production in the Jiri communal lands

Da Silva [2005] notes that women play a very important role in the production of cotton in the study area. Besides involvement in the cotton farming enterprise, women are burdened with a number of household activities, which increase their workload in their everyday lives. Cotton is a labour intensive crop which is very involving, and this affects women negatively, since they bear the brunt of the burden of the cotton production system [Baumann, 2000]. According to the observations made in the area, the contract farming system has proved to be insensitive to women's needs in a variety of ways, since the majority of the women in the study area have no collateral disposable to them to access inputs from the cotton buying companies.

The major problem in the area is that women, though they are deeply involved in the cotton production business, in most cases, they are not the ones who market the crop at the cotton buying depots of Marapira and Manoti in the study area. It is mostly their male counterparts who are mostly involved in the selling of the crop at the cotton buying centres. Men have a reputation of abusing the funds from the proceeds of cotton farming by drinking beer, funds diversion and also involvement in prostitution. Interviews with a number of women reveal that men usually involve themselves with prostitutes during the cotton buying season. An interview with Mrs Vengesai revealed the above facts when she said,

"It is during the buying season that men usually become wild, involving themselves with women at the business centres, and some of them may even go to the extent of marrying a

new wife using the proceeds of the cotton harvest. Many men have also contracted HIV as a result of the mischief that heightens during the selling season."

An interview with Constable Pawandiwa stationed at Marapira police base also revealed that cases of domestic violence also heighten during the cotton selling season, as men abuse funds and indulge in anti-social behaviour, when he said,

"Most of the domestic violence cases are quite prevalent during the selling season, since families usually have disagreements over the use of the money from the cotton farming enterprise. We have received a lot of domestic violence cases this season..."

Oral interviews from various women respondents in the study area have revealed that physical abuse also heightens during the growing season. An interview with Mrs Tosiana revealed the above fact when she said,

"Unoona dzimwe nguva murume anogona kuti shamhu kumombe, shamhu kumunhu [wife] kana tichirima nemombe. Zvinenge zvakaoma panguvaa iyi..."

Observations from the study area have also revealed that some men who work in towns may at time rush to the rural areas to collect cash from the proceeds of cotton farming, regardless of the fact that it is the woman who would have laboured till the crop is ready for sale. The woman, who is the principal producer of the cash crop, will be left with very little or nothing, after all the labour.

As mentioned earlier on, the production system of cotton contract farming has tended to heighten the prevalence of the HIV and AIDS pandemic, mainly as a result of men's involvement with prostitutes at cotton buying centres. Because the cotton companies operate a spot cash payment system, some men start squandering the money they will have gotten, by involving themselves with prostitutes. Observations at Marapira business centre and Manoti growth point have shown that the contract farming system has heightened the prevalence of the HIV and AIDS pandemic as cash from the spot cash payment system has increased disposable incomes to the people who are responsible for selling the cotton.

3.8 The impact of cotton farming on water resources in the Jiri communal lands

Runoff from fields

Due to spraying of agricultural chemical on cotton fields, water run-off from fields to adjacent rivers, wetlands and lakes is common.\, which has proven to have a negative effects on the water resources in the area. During rainfall, there is runoff from fields. This run-off, however, does not only contain soil sediments but also pesticide residues, salts and fertilisers, which have a negative impact on the environment and the animals and livestock of that catchment area. The pesticides have a direct toxic effect upon livestock and people.
Evidence has shown that this impacts negatively on animals and people's health, since the contaminated water will find itself into the bodies of people and their livestock, resulting n long and short term effects.

Investigations into a case of animal diseases in the study area showed that, even when pesticides are properly applied according to the technical instructions, impacts on freshwater ecosystems are still possible. In this case Cabaral and Lambda are the most commonly sprayed on cotton fields. In August 2013, contaminated run-off from these fields resulted in the death of more than 24 cattle which drank water on the Gwetsanga dam, due to suspected water contamination.

As propounded byBirthal,[2008], run-off has also lead to contamination by fertiliser of rivers, lakes and wetlands. In contrast with pesticides, fertilisers are not directly toxic but instead alter the nutrient system and in consequence the species composition of a specific freshwater ecosystem. Their most dramatic effect is eutrophication of a freshwater body - an explosive growth of algae which causes disruption to the biological equilibrium, including killing fish. Evidence from the Lutope River in ward 22 has shown that there has been a marked increase in algae growth in the river as a result of the effects of fertilizers which find their way in one way or the other into the river. As a result, water bodies in the area will be contaminated.

Application of pesticides

Bolwig and Jones [2009] point out that even when pesticides are applied properly, affecting non-target organism cannot be prevented. Beneficial insects in and around the cotton fields can be killed and other animals eating these insects can be injured or even poisoned. In many

cases, many organisms are poisoned by a parathion application designed to kill bollworms on cotton fields a distance away from where spraying is being done. In addition to run-off contaminated with pesticide, by certain application methods, surface water and even ground water can be directly polluted with pesticides and fertilisers. Pesticide application for example, can lead to spray drift, i.e. pesticides do not hit the targeted field but adjacent fields, rivers or wetlands instead, and this leads to direct poisoning of freshwater species [Catelo and Costales, 2008]. Ground water, on the other hand, is impacted by deep percolation, which can also be contaminated by pesticides and fertilisers, by faulty equipment [e.g. leakage] or improper handling of equipment [e.g. cleaning of equipment in surface water].

Dam construction for irrigation

Eaton and Shepherd [2001] also reiterate that in addition to habitats and ecosystems which are directly destroyed by dammed water, the reduced and regulated water flow also affects freshwater ecosystems which lay downstream of the dam. Freshwater ecosystems are adapted to a certain water flow and any alteration in water amount or its temporal distribution can affect either single species or whole freshwater ecosystems. In only 11 years, from the early 2000s to the present, more than 10 dams were built in the study area, primarily built for irrigation purposes. The Marimasimbe irrigation project is an example of such dams in the study area, built to boost irrigation for vegetable growing for the cotton farmers. This has disturbed the natural flow of water downstream, as people downstream have complained of shortage of water for their domestic and agricultural use.

Land reclamation

The increase in arable land leads directly to a change from natural landscape to agricultural area. In particular, flood plains [areas with chidhaka] and wetlands with their flat shape and usually fertile soil are preferable areas for agriculture. However, due to drainage of the soil and to the monocultural cultivation of cotton, the farmland no longer provides a habitat for its original plants and animals [Little and Watts, 1994]. Besides, the remaining natural habitats are fragmented into isolated pieces which are too small to secure the continued existence of the natural ecosystem. Even though this initially concerns terrestrial ecosystems and wetlands, freshwater ecosystems in rivers or lakes are affected by the interrupted links between ecosystems [Masakure and Henson, 2005]. There has been a need for land reclamation due to a gradual change from over-used farmland to newly cultivated areas. One

reason for this change is the effect of diminishing returns on the part of the soil. Because of this change, the area affected by cotton planting over the last 20years is much larger than the recently cultivated area, which is to some extent proving to be comparatively fertile.

Consequences of the use of pesticides and fertilisers can affect rain-fed cotton. There are indications however, that less pesticides and fertilisers are used on rain-fed cotton gown in the area under study. This is mainly because of the low availability of the cotton pesticides disposable to the farmers in the area, mainly due to the shortages of disposable income to buy pesticides. Impacts on freshwater ecosystems can also be caused indirectly by human use of other resources than freshwater, such as land, vegetation and air. For example, reduction of vegetation cover, increased soil compaction and surface sealing reduce infiltration and increase run-off and soil erosion, thus altering the water balance of the catchment. [Reardon et al, 2009]

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Chapter 4

Ways of addressing problems to contract farming.

Introduction

This chapter is aimed at exploring and discussing ways in which the threats to contract farming can be addressed. This covers forms of contractual, technological, financial, institutional, political and legal innovation that can, and have been used to reduce the threats to contract farming initiatives in other parts of the world where the system is prevalent. A number of examples from across the globe are going to be cited, where various solutions are being implemented to address the challenges or threats to contract farming. Much of the information in this chapter is work of various scholars, pertaining to the ways though which contract farming can be improved. Information was also acquired from views and suggestions of various respondents interviewed in the study area. The works of various scholars, together with the views and suggestions of the local farmers will help in coming up with solutions and recommendations to the contract farming business.

4.1 Solutions to contract farming problems in Jiri communal lands

Contract-design innovation

Contracts are supposed to ensure co-ordination and motivation at the lowest possible cost. Farmers and producer organisations need to be created and strengthened at grassroots level, for example, at village and ward levels, which will represent farmers in the contracting bargaining and marketing processes, negotiating with companies on farmers' behalf to ensure they derive benefits. Below are a number of innovations in contract design that can help mitigate the failures that contract-farming initiatives often suffer from.

Longer-term contracts help to overcome holdups and moral hazard problems. Farmers can be rewarded for agreeing to longer-term contracts through more favourable repayment terms such as cheaper inputs or reduced rates of interest [Gow and Swinnen, 2001]. Moreover, contracts that require specific assets need to be of a sufficiently long duration so that farms can pay off and profit from the assets they've acquired. Contracts need to be sensitive of the

amount of returns farmers get from the proceeds of cotton farming in the area and the whole country in general.

Pricing of the contracted commodity is a very important factor in the contract business. Farmers need to be aware of the prices of the cotton well before the selling season commences. Peasants should be able to receive a bonus at the end of the season for the degree to which their production was higher or lower than the mean quality for all growers. Cottco and Cargill are the two companies which used to give farmers a part payment meant for bonuses at the end of the season in the study area, but have since stopped the practice, probably because of the unstable economic environment currently being experienced in the country.

Wu (2006) asserts that a common complaint and source of conflict within the cotton contract farming business is the lack of transparency associated with measuring the quantity and quality of produce. As has been stipulated to earlier, the grading system is not favourable to the farmers, since it's the companies' officials who do the grading processes, without any consultations with the farmers. One solution is to stipulate a third party to measure the produce, in Zimbabwe preferably the AMA and CCZ, or there should be government intervention during the grading stage, so that farmers may be protected against the brunt of cheating companies' officials.

There are also particular contractual concerns when companies are in a position of monopoly power. Companies in the study area tent to monopolize the provision of certain crucial cotton inputs such as seeds and chemicals. Such circumstances reduce the incentive for farmers to carefully study the terms of the agreement as there is nothing to compare this against. Wu [2006] highlights how this can lead to companies inserting clauses in contracts that increase farmers' risks while increasing their own benefits. One solution is to implement a national policy that all contracts must disclose the risks in plain language. Farmers need to understand the terms and conditions of the contracts in plain vernacular language which they understand, since most of them are not well versed in the English language. Again, Wu [2006] suggests that such scenarios should be discouraged through legislation. A further complaint is the ability of the contracting company to alter the terms of payment ex post through provisions in the contract. Such clauses need to be regulated by law and make sure that small farmers in the area are not manipulated in the process.

Unfairness in performance-related farmer competitions is another problem that farmers are facing. The master farmer accolades and field day conducted in the Jiri area at the close of each selling season are examples of such performance related contracts. The rationale for such "tournaments" is not only that they seek to increase productivity through competition, by that they control for covariate shocks in a particular district or region. However, KIT et al., [2006], and KIT/IIRR, [2008] reports that growers have found such practices can be used as a cover for dishonesty. For example, certain disfavoured growers might be provided with poorer-quality inputs. Thus, if such competitions among farmers are to be conducted, there is a need for third-party verification of produce measurement, and transparency in the comparisons. Moreover, splitting farms into groups for "tournament" contracts can reduce the sharing of information and incentive to succeed.

The cotton sector of Zimbabwe must also offer more flexible separate packages for women farmers who in most cases do not have access to the cash from the cotton production business, because of various socio-economic environments they live in, and because of the gender relations between men and women in the study area, and the country at large. It appears that adding to their wives' incomes in kind as opposed to in cash reduces conflict within the household and also circumvents wider claims on cash crop income by kin and neighbours. Such a contractual innovation offers a useful example for other perennial crops that rely strongly on the gendered division of labour and may suffer from a breakdown in co-operation between household members.

Hamilton [2008] and Wu [2006] suggest that some of the risks to smallholders can be deduced from clauses within contracts. For example, contracts that require long-term investments or the acquisition of specialised equipment, but offer short-term contracts; for example, planting shrubs/trees with long maturity periods, but entering into contracts with a much shorter time period. Additional problem areas include flexible definitions of quality, non-existent or less than transparent procedures by companies for adjudicating quality, or a lack of detail regarding how producers will be compensated if the company goes bankrupt during the production cycle.

Clearly, the power balance in these partnerships is tilted toward the contractor, more often than not. This is the baseline from which this research needs to consider threats to contract farming with peasant farmers in the study area. In other words, it is more likely that companies will have greater leverage and power in many rural settings like the study area.

This is especially the case since enforcing a contract through legal procedures is often too costly, time consuming and too uncertain. Thus, the only leverage farms and contracting companies have is the threat of a holdup or discontinuing the contract.

Technological innovation

Young and Hobbs [2002] highlight how technology could play an important role in assessing quality attributes at the point of delivery to a marketing depot. Using technology at this earlier stage would enable contracting companies to pay farmers a greater percentage of income earlier [when a split-price schedule is utilised], and reduce the risk of conflict due to disagreement over subjective quality standards..

Glover [1987] and Bijman [2008] recognise that contract farming may be one of the only channels through which technological advances can be passed on to peasant populations, with appropriate support. Jain [2008] adds to this line of argument when he suggests that contracting companies should be compensated for the dissemination of technology and technical knowledge among smallholders. The public sector also has an important role to play in technological dissemination. For example, Sriboonchitta et al. [2008] highlights how academia can play a role in biotechnological research to improve the quality or characteristics of specific crops. However, Bijman [2008] also suggests that peasants are most likely to gain from contract farming when growing standard crops that do not involve technological innovation. To support his argument, he quotes Glover's [1987] study which suggested that small farmers are technologically averse due to poor quality information, greater risk aversion and lower levels of savings. But technological innovations in agriculture have throughout history proved that it brings about improvements in the quantity and quality of products.

Knowledge on the inputs amounts needed per a piece of land has to be faithfully disseminated to the farmers. Most of the farmers are not able to calculate the amount of inputs required per hectare of land in the cotton production business. As a result company officials and input suppliers tent to take advantage of this situation by giving farmers wrong information on the exact quantities of inputs that are required per unit of land, probably due to shortages of the inputs from company suppliers. Workshops on budgeting and financial management are also a necessary thing on the part of the farmers, so that they are able to budget and manage their finances well.

Company and government extension workers must also educate farmers on the type of soils and the requirements of the different types of soils in the area. Around the Marimasimbe area, the most common type of soil is sandy soil [Senya in Shona], while the Ndoza low-lying river basin is characterised by black clayey soil [Chidhaka in Shona]. The problem is that the extension workers do not emphasise on the differences of these soils and the differences in requirements of fertilizers and tillage requirements. The fact that the extension workers do not emphasise on the heterogeneity of the soils brings about problems of differences in harvests, emanating from the differences in the soil requirements.

Financial innovations

Above and beyond the pricing mechanisms such as group lending, split payments, bonus payments, etc., the contract-farming literature offers very few examples of financial innovations that can potentially mitigate the threats to contract-farming arrangements. Below are some examples of financial innovations that can be employed to improve the contract farming business.

Woodend [2003] highlights how a contracting company engaging peasant farmers to rear ostriches stipulated that farmers needed to reinvest 20% of their profit in the partnership [it is not clear if profits included imputed labour cost] if they wished to continue with the contract the following season. This reinvestment allegedly nurtures a sense of ownership in the contract. This type of financial innovation is also starting to infiltrate the Jiri communal areas, being spearheaded by the non-governmental organisation, German-Agro [GA]. The organisation is encouraging farmers to pay a sum of US$40, and then receive a voucher worthy US$120 farm inputs. This is aimed at making farmers feel a sense of ownership in their agricultural endeavours in the area.

Despite the fact that there is a problem of mobile phone networks in some parts of the study area, it is not hard to envisage mobile phones playing a role in reducing the threats to contract farming; for example, through the use of mobile phones and the Internet. First, by distributing cheap mobile phones to farmers, with the costs recouped at a later stage, cotton companies can create an instant communication channel with producers. On a basic level, this enables easy communication through text messages regarding the delivery of inputs, collection of production, and dates for extension and training for particular farmers, reducing transaction and co-ordination costs. But such technology could also play an important role in improving agronomic practices. For example, details on the application of fertiliser, weeding and the

application of agrochemicals could be sent to farmers depending on their planting date. Moreover, such an approach could be used to improve quality standards. For example, the literature on contract farming contains examples of extension agents needing to visit individual farms in order to apply the appropriate level of agrochemicals required to meet export standards [Woodend, 2003, Key and Runsten, 1999]. In addition, the literature highlights cases where increased direct action by company officials on farmers' land reduces farmers' control over production and can lead to increased resentment and conflict. In contrast to the rather paternalistic approach to direct company involvement in production, the use of precise text message instructions would foster a relationship on more equal footing that recognises the skills and experience of the farmers. Second, the Internet could also be utilised by the national or regional government to develop a clearinghouse for linking area representatives with companies for the purpose of contract farming. This would take the form of a match-making service where producer organisations [perhaps through partnerships with NGOs] would detail their characteristics, experience and desired crop preferences, and companies would detail their requirements and plans. Such a setup would be very easy to create and could provide both parties with a wealth of information on potential partners, transport and export, contract negotiation, dispute resolution services, and partnerships in extension and credit provision.

For example, Woodend [2003] details how Cottco in Zimbabwe uses contracts that ensure that all group members are jointly and severally liable for loans. The firm also pays the chairpersons of each farming club, thus making them pseudo employees who monitor other group members. Second, cross-ownership between firms and farms helps to create mutual interest and benefits. Singh [2008] also suggests that farms taking an equity interest in the firm, and receiving dividends, increases the longevity of contracting initiatives. Moreover, Gow and Swinnen [2001] suggest that including third-party providers of credit can reduce the likelihood of firm holdup or breach of contract due to the greater reputational losses suffered by the firm.

Institutional innovation

This brings us to the major institutional innovation for overcoming threats to contract farming - producer organisations. Penrose Buckley [2007] details how the number of producer organisations has grown in many developing countries in recent years. In addition, Penrose Buckley [2007] outlines how recent decades have seen the emergence of producer-owned,

market-orientated producer organisations, which are distinct in origin and outlook from the old state-owned co- operatives. The term producer organisation [PO] thus refers to member-owned, market-oriented cooperatives [Rivera, 2008].

While this actual practice may not be directly transferable to other commodities, the principle could be: namely, that companies and producer organisations could create trust fund accounts that tie up a certain amount of capital for a fixed time period [the release of these funds would be penalised on a sliding scale, and would require both parties' signatures]. This could act as insurance against holdup and moral hazard.

From a farmer's perspective, POs can help to rebalance the power relationship between companies and farms: collective bargaining, and the creation of relationships with rural transport providers, can help reduce the risks farmers face. Moreover, POs provide a forum for farmer dissatisfaction [on prices, timing and extension], and it is more likely in such cases that a contracting company will recognise its social and environmental responsibilities.

POs facilitate higher producer prices by being able to supply bulk quantities that have some quality assurance, and have been graded and packed professionally; they are more able to seek alternative market outlets if the contracting company reneges on the agreement, and can negotiate more effectively with prospective contractors; they can channel outside actors and assistance [such as NGOs or extension workers] to the farmers who need the assistance; and they are more able to access market information [thus helping smallholders adapt better to changing market conditions] and financial markets.

POs reduce transaction costs per farmer and address information and communication blockages. They are also an important channel for fostering trust and good farmer-company relations, and, as we have seen, can provide peer-embedded incentives for members to repay loans.Importantly, such organisations play a dual role: they act as a bonding mechanism within communities, but also provide a more important bridging function between that community and outside actors [such as contracting companies and development agencies]. As Swinnen, J. and Maertens, M., [2007] state, while POs are partially aimed at regulating "internal relationships in the groups concerned...their essential function is to organize relationships with the outside".

Scholars tent to have a general consensus on market-orientated, member-based POs that provide benefits only to members, noting that they are more likely to foster successful

contract-farming arrangements as opposed to community-orientated participatory POs [which mainly focus on providing public goods to an entire community]. For example, Wilkinson, J. [2004] asserts that producer organisations have a hard time balancing the provision of public goods to an entire community [or creating a sphere for participatory governance with market-orientated activities to increase and stabilise smallholder incomes; thus, "market-oriented POs may be appropriate in certain contexts, while community-oriented groups may be more appropriate in others" [Ibid p. 3]. In this respect, any donor support for POs needs to be very clear about the priority outcome it is working towards: increasing and stabilising smallholder incomes or providing a sphere for participatory governance and empowerment.

In essence, producer organisations work because local social networks and reputations are important in many rural settings in developing countries [Kirsten and Sartorius, 2002]. For example, ESFIM [2007] highlights that if members are unmotivated and include free riders then not only does this put a drag on the motivation of the group and potentially cause conflict, but the costs of coordination fall disproportionately on the motivated members.

However, it is also important not to romanticise POs. Bernard et al. [2006] highlight the frequent finding that poor, small farmers are not well-represented in producer organisations as the costs of membership are prohibitive. For example, Bernard et al. [2006] report the findings from a large-scale review of POs by Thorp et al. [2005]: that the chronically poor are rarely members of producer organisations [due to their lack of assets, time, cash, and reputation for unreliability]. Moving away from producer organisations, the contract-farming literature also highlights four additional institutional forms and practices that can reduce the threats inherent in contract-farming arrangements.

Dispute-resolution agencies.

UNCTAD [2009] suggests that government or non- state agencies can reduce the likelihood of disputes between peasant farmers and cotton contracting companies by providing arbitration procedures and spaces for reconciliation. Jain [2008] suggests that local magistrates can play an important role in resolving disputes. Although there is no consensus in the literature regarding who should play this role, there is general agreement that it needs to be provided and should be referenced within contracts.

Intermediary organisations.

Jain [2008] argues that intermediary bodies should be integral to all contracts. For example, such organisations can play an active role in brokering the contract between peasant farmers and contracting companies, verifying the pricing structure and delivery schedules at the start of the season, advising farmers on crop development and harvesting part way through the season, and reviewing the quality of produce delivered to companies and the payment to farmers at the end of the season. There is clearly a role for donors here in supporting such intermediary organisations. Farmers must be in a position to know the unit price of the cotton crop they grow well before the selling season commences, so that they may be able to determine whether they are making profits or not.

Other actors can be included in the terms of the contracts [such as traders or other farms]. For example, Woodend [2003] highlights how nearby large-scale farms provide tillage services to smallholders. The fee for this service is paid by the contracting companies and recovered from smallholders' gross profits. Unfortunately, the area under study is not bordered by large scale cotton farmers, which renders this innovation, void.

Hayami [2006] suggests that the threats to contract-farming arrangements between farms and contractors can be mitigated by contractors attending local community functions, such as weddings, funerals and sports events. Hayami highlights how weak judicial systems can result in contract enforcement occurring through community and kinship-based social networks, so that companies who engage with these communities are well-known within a farming community [even if they live in town]. These social relationships are a form of social insurance. Thus, companies that are willing to undertake such practices will gain social status and trust, and thus increase their chances of successful contracting arrangements. As it is hard to distinguish between political and legal approaches to overcoming threats to contract farming, these two spheres of action are now considered together.

Political and legal innovation

The potential role of the state beyond the provision of public goods [such as infrastructure, research and development, etc] is very important in contract farming systems. Political and legal measures to support producer organisations and broader measures the state can take to ameliorate the threats to contract-farming initiatives are going to be discussed.

Bijman et al. [2007] suggest that good arguments can be made for the state supporting the formalisation of producer organisations. For example, formal legal status allows access to

credit, provides instant recognition by outside actors, allows some protection against internal fraud, makes clear the liability of the organisation and its members, and offers the potential for co-operation with other similar bodies. Thus, formalisation can be seen as an important factor for POs engaging in long-term, contract-farming arrangements. Legislation can modify general laws on the incorporation of companies, non-governmental organisations and co-operatives, how they are taxed, and provisions regarding the marketing of agricultural production [such as the role of state marketing boards] [ibid, p34].

Bijman et al. [2007] also offer three reasonable arguments as to why producer organisations should be subject to special legislation separate from that designed for co-operatives: first, that such targeted legislation provides legitimacy and an enabling environment; second, that it distinguishes POs from other forms of association and clarifies that they are member-owned institutions; and third, such legislation allows exemption from tax regimes or competition laws.

Turning to broader measures that the state can undertake, there are 10 possibilities that the state can employ, namely

[1] Enactment of antitrust legislation and market regulation that reduce the market power and uncompetitive behaviour of contracting companies and can bring substantial benefits to smallholders [Young and Hobbs, 2002]. For example, Minot [2007] suggests that while monopolies can decrease the rate of side-marketing and defaults among smallholders [and allow contracting companies with large investments in specific assets the time horizon to generate a return], this may not be the most effective way of enforcing contracts and the lack of competition can reduce prices paid to producers [Young and Hobbs, 2002].

[2] Facilitation of contracts through the provision of information and acting as a broker between farmers and companies. For example, UNCTAD [2009] highlights how in Brazil the government supports a television programme to educate farmers on contract-farming issues. In this respect, government provides a clearinghouse service to link producer organisations and contracting companies. Importantly, this role does not need to be restricted to farmers and companies. The state can play an important role in integrating traders and middlemen within contract-farming arrangements.

Government can also provide better information about farmers and companies through "naming and shaming" persistent defaulters. Minot [2007] offers the example of Benin where

a government-created clearinghouse offers information on cotton growers who default on inputs received for cotton. Naturally, such a clearinghouse would need to include cases of firm default as well [Ibid, p23]

Of particular importance here is that the state offers clear direction on product standards, which can have a strong impact on supply chains and actors further up the value chain; for example, the development of consistent grades and standards based on consumer and trade requirements [Minot, 2007]. This decreases the risk of confusion and conflict between farmers and companies, and can be a first step toward promoting compliance with important export standards. One way of doing this is to facilitate certification programmes to provide quality assurance [such as for credence attributes]. A different approach is to provide information and support on the standards required for the different supply chains.

[3] The promotion of unconventional forms of training and extension, such as collaboration with the field officers of the companies contracting with peasant farmers [Minot, 2007]. For example, in the study area, local government can encourage companies to take over extension services for all peasant farmers producing cotton, in addition to the service they get from the company extension officers.

[4] The provision of direct start-up subsidies to smallholders or certain growers to facilitate better participation in contract-farming initiatives. This form of positive discrimination can be justified when there are substantial market failures that are not being overcome by contract-farming arrangements, or when a legacy of discrimination has disenfranchised and disempowered a particular group in society.

[5] The establishment of public-private partnerships to encourage technology transfer, and demonstration communities that adhere to the most exacting quality standards.

[6] Fostering a favourable investment climate, such as reducing high capital thresholds for the incorporation of foreign companies, simplifying registration procedures for foreign companies, limiting licensing requirements, and simplifying the tax and trade requirements can also provide a favourable climate for outside investers to come into the communities in question to invest in the cotton producing business [Minot, 2007]. Woodend [2003] highlights how the state in Zimbabwe created Export Processing Zones and concomitant grant and tax incentives to support contract-farming initiatives. A first step in this regard is that direct transactions between companies and farmers need to be liberalised. For example,

Jain [2008] outlines how agricultural marketing act in many Indian states still requires that produce be channelled through wholesale markets, thus restricting the extent to which contracting companies can instigate contract- farming arrangements with smallholders. In other cases, the prohibition of direct purchase from farmers has the negative impact of increasing marketing costs given the utilisation of a third-party intermediary [Minot, 2007].

[7] Making it more difficult to establish or expand estate agriculture in the country also creates a favourable environment for contracting companies and farmers to expand the contracting business enterprise, thus encouraging the- longevity of contract-farming arrangements [Grosch, 1994].

[8] Promoting corporate social responsibility, such as through the provision of local public goods or the use of beneficial technologies within communities that are participating in contract arrangements, thus maximising the benefits of contract farming (Setboonsarng, 2008).

[9] Promoting dispute-resolution services to overcome conflict, such as through an intermediary organisation, an agricultural extension office or a third-party reconciliation service. Most important is the ability to offer innovative ways for enforcing contracts above and beyond the judicial system.

[10] Providing a clear legal framework in the contract farming enterprise is also another means of trying to address contract farming problems between contactors and farmers. Wu [2006] highlights how courts and legislation can play a role in ensuring the clarity and completeness of contracts. For example, legislation can ensure that a common vocabulary is used across all contracts within an industry, and can supply default clauses for issues not specified in a contract. A good example here is when farmers' produce is ruined due to an accident en route to the delivery point. Wu [2006] suggests that legislation could ensure that "the party who is "in the best position to bear the risk should bear it". In other words, the contracting company should cover the losses suffered by the farmers in question. A further enhancement can be that all contracts are to be written on the "implied promise of good faith". This can help farmers reduce dishonesty by firms.

Contract farming in the country at large and the study area needs to be regulated, emphasizing on important aspects such as duration of the contract, quality specifications,

transport arrangements, pricing and credit agreements, compulsory registration with the local authority, and procedures for dispute resolution, and the monitoring of quality and yields.

UNCTAD (2009) highlights how Thailand and Vietnam have also implemented special regulations regarding contract farming in the recent past. This legislation includes, among other things, the creation of registers for contract farming initiatives, dispute resolution mechanisms, compensation if companies breach the contract and clauses to address the issue of force majeure. [Ibid, p44].

The European Union is encouraging the Zimbabwean cotton industry to develop a cotton-to-clothing strategy that aims at enhancing development and competitiveness of the sector. The cotton-to clothing strategy, funded by EU and the African, Caribbean and Pacific Group of States [ACP] and implemented by the International Trade Centre [ITC], will provide Zimbabwe with an improved policy framework and detailed implementation plan. The program is aimed at taking into account all specific export constraints and opportunities in order to improve the export competitiveness of Zimbabwe's cotton sector and providing a clear and detailed framework for the implementation of the strategy.

The program is also aimed at assisting Zimbabwe's Ministry of Industry and Commerce in its resource mobilization efforts required to ensure the implementation of the strategy, i.e. through the development of bankable project proposals aligned with the priorities identified by the strategy. This initiative is done in close collaboration with the Common Market for Eastern and Southern Africa [COMESA] Secretariat, which developed its regional sector strategy a couple of years ago.

"With this initiative, the EU aims at supporting the Zimbabwean Government and the private sector in generating as much value addition as possible in-country, while at the same time improving the competitiveness of Zimbabwean products in the globalised markets," said Ambassador Aldo Dell'Ariccia, Head of the EU Delegation to Zimbabwe. To initiate the strategy-development process, a workshop was held on April 2-3, 2014 in Harare, which was attended by all relevant stakeholders along the whole value chain from cotton to clothing.

Another alternative to improve the cotton sector in the study area is by encouraging companies to provide social support information on HIV and AIDS, which the community is still lagging behind. Much of the community is still blogged by superstitious beliefs of witchcraft and witch doctoring. Information on the HIV and AIDS pandemic is still lacking

amongst the majority of the populace in the study area. Companies operating in the area must not restrict themselves to providing information on crop production only, but to collaborate with health providers in the area in disseminating information pertaining to HIV and AIDS.

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Conclusion

From the findings in the study area, cotton production needs to be income-focused than price-focused through contract farming. The Agriculture Produce Market Committee Act [2005] has enabled direct marketing between the peasant farmers in the study area, and private companies, and has opened up contract farming to create avenues for the private sector. [Mahofa G. 2008].

According to AMA [2011] to maintain a strong relationship with the peasant farmers in the study area, the cotton buying companies should not only focus on input provision to contracted farmers, but should also work hand in glove with the Zimbabwe government so as to improve both the agricultural sector and the welfare of the farmer, hence should also capture a major portion of public agency in the state. This study has concluded that the private agency has sharpened its competitive edge while the public agency has lagged behind in competitive race due to obsolescence of technology, weak management, capital constraints and the general instability of the economy of the country at large because of the devastating effects of the SAPS on the poor peasants.

Moreover, the government's socio-legal framework should encourage active participation of the private sector in cottonseed business. The contract farming has posed as an alternative model which provides assured and reliable input service to farmers and desired farm-produce to the contracting companies in the Jiri communal lands, given that the majority of the peasants are not in a position to source inputs on their own.

Given that it is much more profitable to produce cotton outside any contractual arrangements or through self-financing, it is also advisable for cotton farmers to mobilise their own resources for independent production of free cotton. Resources may be mobilised through savings from crop sales or other sources like the farmer cooperative schemes in the area, and incorporating *mikando* for purchase of inputs during the off-peak period when input prices will be reasonably lower. Contract farming should be considered as a spring board towards self-sustenance, when a farmer will be able to make independent decisions. However, where resource constraints are the order of the day, farmers should consider contract farming as a panacea to their agricultural financing problems. Conditions under which contract farming arrangements should be entered into should ensure that the contract is clear so that each party

clearly understands its obligations. Since farming requires good planning, inputs need to be availed on time by the contractors to the farmers.

The World Bank [2000] has noted that there is great need, therefore, for the farmers to be trained in the contract farming process to understand its importance, manage productivity, avoid side-marketing and use inputs properly. As such, contractors, on the other hand, must be passionate players who take cognisance in the fact that their long-term requirements must sustain and satisfy the needs of the farmers and therefore must guarantee a win-win situation. Stakeholders in the cotton industry must always have a platform to continuously engage in dialogue meant to discuss and resolve issues pertaining to the industry. This platform is crucial in ensuring that pre-planting and pre-delivery producer prices are always worked out and set for concerned stakeholders to make informed choices and decisions.

Rukuni et al [2006] note that a legal framework that governs engagement of parties in contract farming is missing. It is important for such a framework to be put in place and for peasant farmers, who are the majority players, to be consulted in the drafting of this framework. The situation that supply of cotton planting seed is still monopolized and centralized with Quton in Harare should be ended to enable the farmers to access the planting seed at competitive prices throughout the country. This will provide the farmers with an option to get out of the contract farming trap and be able to produce "free" cotton [Mujeyi 2012]

Generally, as noted by SNV [2009], there is need for fair and competitive seed cotton producer prices to be paid to the peasant farmers to avoid collapse of the cotton industry which is the only major source of livelihoods for these farmers, majority of whom are in the semi-arid regions. In the short to medium term, the Government of Zimbabwe must put in place a producer price subsidy to cushion the farmers from the effects of international price fluctuations [Poulton and Hanyani-Mlambo, 2009]. In the long term, the Government of Zimbabwe should make concerted efforts to resuscitate the local textile industry and protect them from unfair competition posed by dumping of cheap finished textile products and second hand clothing which have, lately, seen the flourishing of second hand clothing boutiques across the country. This has devastating impacts on the survival of the domestic cotton market. Of late it is no surprise to learn of the closure of one of the cotton giants in the country, Cargill, which has decided to relocate to nearby Zambia at the end of the 2014 selling season.

Under the auspices of the Indigenization and Economic Empowerment Programme, there is need to empower the small scale cotton peasant producers with micro-ginning equipment and skills to operate the same for value addition of the seed cotton they produce. This move will ensure that the farmers realise higher returns through gaining control over higher valued cotton lint and at the same time retaining ownership of valuable by-products like ginned seed [ZIMCODD, 2010]. Ownership of the ginned seed will provide the farmers with an option to further value add by processing the seed into cooking oil and cotton seed cake for livestock feeds.

Cotton companies and extension services should facilitate introduction of irrigation farming in the marginal lands of Jiri so as to reduce the impact of dependency on rain-fed agriculture. Emphasis should also be on crop diversification, instead of relying on cotton for all the economic and household consumption demands. A drop in the cultivated area for food crop in the area, in favour of cotton has contributed to the periodic shortages of grain for families in the area. This should be redressed and crop diversification must be encouraged to avoid over-reliance on the cotton crop, lest in some seasons the crop fails, and farmers must have some sort of cover in place other than the seed cotton.

Cotton companies must make sure that the farmers they work with participate in all spheres of the contracting business. Farmers must be involved in the planning, drafting of the contracts, grading of the cotton crop they produce, and also the implementation of various policies in the cotton contract farming business.

The contracts are not elaborate on the measures to be taken if one of the parties in the contract fail or derail in the contract arrangements. This should be addressed since the farmers are usually on the disadvantage in the event of company derailment. For example, contracts do not specify what action would be taken if contractors fail to buy the seed cotton produced by the farmers. Contracting companies also have reputations of closing or ending the buying season whilst farmers are still having a lot of cotton, and this is not covered for in the contracts.

Educating farmers in various issues of both economic and social life, such as that of domestic violence will also cultivate an enabling environment for women who want to fully participate in the cotton contract farming business. Companies also have to be gender sensitive when drafting the contracts, which will help women farmers to enter the cotton farming business

A final issue which should be mentioned in conclusion is that of the fragility of the broader global framework within which private coordination has evolved in Zimbabwe. Should the world price for cotton continue its downward path, it is unclear whether the existing actors will see it in their interest to invest in the sector at all, let alone its coordination.

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Appendices

Appendix 1. Questionnaire For Peasant Households

My name is **Jonathan Hove**. I am a student at Midlands State University doing a Master's Degree in Development Studies and currently undertaking a research project as part of my Degree programme requirements. I am kindly asking for your assistance in answering questions below. The aim of this research is to **"**ASSESS *THE ROLE OF CONTRACT FARMING ON COTTON PRODUCTION AND PEASANTRY LIVELIHOODS: THE CASE OF JIRI COMMUNAL LANDS OF GOKWE SOUTH IN ZIMBABWE"* Information generated from this interview will be used for academic purposes only.

QUESTIONNAIRE No……..

Section A: BACKGROUND INFORMATION

Instruction: Put a tick in the box that best describes your response.

1. Gender Male ☐ Female ☐

2. Age <20 ☐ 20-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ >60 ☐

3. Marital Status Single ☐ Married ☐ Widowed ☐ Divorced ☐

4. Occupation Formal ☐ Informal ☐ Farming ☐

5. Education level Primary ☐ Secondary ☐ Tertiary ☐

6. Household size <5 people ☐ 5-10people ☐ >10people ☐

7. How did you get the field? RDC ☐ Inheritance ☐ Other…….

8. Nature of household head? Female headed ☐ Male headed ☐ Child headed ☐

SECTION B: To have an insight into the operation of the system of contract farming in the Jiri area of wards 21 and 22

9. What are the major motivating factors behind peasant farmers' engagement in cotton production?

……
……
……
……

10. Are you in any contract with any cotton company? YES ☐ NO ☐

11. If yes , which company?.....

12. Which crops did you used to grow mostly before introduction of contract farming?

……
……
……

13. Can you briefly explain the terms of the contract you are in……
……
……
……
…….

14. For how long have you been growing cotton

≤ 1 year ☐ 2-4 years ☐ 5-7 years ☐ ≥8years ☐

SECTION C: To investigate the benefits of contract farming as a system among the Jiri Peasantry

15. What are the perceived economic benefits of the farming practice?.....
.....

.....

.....

16. What expertise and knowledge have you acquired from the farming practice? Briefly explain……

……..

17. What are the challenges of the farming system to the rural cotton farmers?

<u>SECTION D:</u> To assess the challenges associated with contract farming among the peasantry in the area under study

18a. Have you ever sold your cotton to a company you were not contracted to?

Yes ☐ No ☐

18b. Explain your response.

……..

.....

.....

19. How do you perceive recovery when farmers have not paid their arrears to cotton companies?.....

.....

.....

20. What do you use income from cotton for?

……

……

……

21. What percentage of income is used to purchase food?

……

…….....

22. Did the shift to cotton change household food consumption patterns?

Yes ☐ No ☐

23. If yes, what is new in your diet or no longer available?

……
……
……
……
……

24. Can you list the challenges you are facing within the contract farming business……
……
…….

THANK YOU!

Appendix 2: Interview Guide for AGRITEX Officers and company extension workers

INTERVIEWER…….

INTERVIEWEE…….

<u>Objective 1</u>: To have an insight into the operation of the system of contract farming in the Jiri area of wards 21 and 22

1. How does the contract system function in the study area?.....
.....
.....

2. What has led farmers to engage in cotton farming?.....
.....
.....

3. What is your position on the issue of contracting peasant farmers in cotton farming?.....
.....
.....

4. When did farmers shift to cotton farming in the area under study?.....
.....
.....
.....

<u>Objective 2</u>: To investigate the benefits of contract farming as a system among the Jiri Peasantry

1. How has the farming system benefited farmers in the area under study?.....
.....
.....

2. What are the estimated yields of cotton crops per hectare?.....
.....
.....

3. What are the perceived benefits of the farming system to farmers?.....
.....
.....

<u>Objective 3</u>: To assess the challenges associated with contract farming among the peasantry in the area under study

1. Is cotton farming proving to be a solution to the Jiri cotton peasant farmers?.....
.....
.....

2. How are the proceeds distributed within the households……
……
……
……

12. Is income obtained from cotton farming adequate to support other on farm projects?.....
.....
.....
.....
.....

13. What are the major challenges to the farming practice on both peasants and companies?.....
.....
.....

Appendix 3- Interview Guide For Company management and personnel

INTERVIEWER……

INTERVIEWEE……

<u>Objective 1:</u> To have an insight into the operation of the system of contract farming in the Jiri area of wards 21 and 22

1.What has led farmers to engage in cotton farming?.....

.....

.....

2. What is your role in cotton farming in Ward 21and 22 of Jiri area?.....

.....

.....

3. Do farmers have a say in the designing of the contracts?.....

.....

.....

3. Do you assist farmers in selling the produce?.....

.....

.....

4. Do you a database on numbers of farmers contracted to you, growing cotton over the past 8

years?.....

.....

.....

<u>Objective 2</u>: To investigate the benefits of contract farming as a system among the Jiri Peasantry

5. On average, how many hectares of land are dedicated to cotton peasant farmers?.....

.....

.....

6. Do you happen to know the estimated yields of cotton which are being produced by peasant

farmers?.....

.....

7. Is cotton farming providing safety nets to smallholder farmers' household food security?.....

.....

.....

8. In your opinion how is cotton farming boosting other food crop production?

……

……

……..

9. On average, what is the estimated income per season from cotton sales per hectare?.....

.....

.....

<u>Objective 3</u>: To assess the challenges associated with contract farming among the peasantry in the area under study

10. How has the cotton farming system affected household food security?.....

.....

11. Is the income obtained from cotton farming adequate to boost other farm projects?.....

.....

12. Why do some of your farmers side-market cotton?.....

.....

13. What makes farmers unable to repay their loans?.....

.....

14. What is the nature of your relationship with the farmers in the area?
……
……

Appendix 4: Observation Checklist

Any grain reserves at homesteads	Yes ☐ No ☐
Any prepared fields for both food and cotton farming for the coming season	Yes ☐ No ☐
Sources of drinking water	Borehole ☐ Deep well ☐
State of dwelling houses	Good ☐ Bad ☐
Any noticeable valuables	1. 2. 3.