

**ASSESSMENT OF THE CONTRIBUTIONS OF CONTRACT FARMING ON
ALLEVIATING FINANCIAL CAPITAL CONSTRAINTS OF RURAL FARM
HOUSEHOLDS IN TANZANIA**

A CASE OF TANSEED INTERNATIONAL LTD

**By
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**A Dissertation Submitted in Partial Fulfillment of the Requirements for Award of
the Degree of Master of Science in Accounting and Finance of Mzumbe University.**

2013

CERTIFICATION

We, the undersigned, certify that we have read and here by recommend for the acceptance by the Mzumbe University, a dissertation entitled “**Assessment of the Contributions of Contract Farming on Alleviating Financial Capital Constraints of Rural Farm Households in Tanzania**” A case of TANSEED International Ltd, in partial/ fulfillment of the requirements for award of the degree of Master of Science of Mzumbe University.

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DEDICATION

I dedicate this thesis to my beloved parents Mgonja. F. S and Elimasia A. M for their parental care, prayers, encouragement and sacrifice towards my educational developments. To my adored brother Ezekiel Mbogo, to my lovely young sisters Neema, Haika and Anna for they were there whenever I needed them. Thanks for your love and prayers you mean a lot to me.

LIST OF ABBREVIATIONS

AGITIF	Agricultural Input Trust Fund
ASARECA	Associations for Strengthening Agricultural Research in Eastern and Central Africa
AgFirms	Agricultural Finance Market Scoping
BOT	Bank of Tanzania
CRDB	CRDB Bank Plc
CF	Contract Farming
EAC	East African Community
FIs	Financial Institutions
FAO	Food Agricultural Organization
FOs	Farmers Organizations
IFAD	International Food and Agriculture Development
MAFC	Ministry of Agriculture Food and Cooperatives
NAMC	National Agricultural Marketing Council
NMB	National Microfinance Bank
NGOs	Non Governmental Organizations
PASS	Private Agricultural Sector Support
TANSEED	Tanseed International Ltd
SAP	Structural Adjustment Program
WB	World Bank

ABSTRACT

The purpose of the study was to assess the contributions of contract farming on alleviating financial capital constraints of rural farm households in Tanzania. The main objective of the study was to identify the potential offered by contract farming on agriculture financing in Tanzania. Specific objectives were: the role of contract farming on credit access by farmers in Tanzania, appraising the influence of contract farming on input access by farmers in Tanzania, comparisons of capital capability (wealth) between contract farmers and non-contract farmers. The study used purposive sampling techniques in choosing a sample of 98 respondents. Data were analyzed by computer software “Starter version 12” whereby, quantitative information was obtained by a way of tabulations and rankings where frequency tables and pie charts used to present qualitative results. Results show that: there were acceptances for both farmers and Financial Institutions on the contribution of contract farming on agricultural financing per each objective. Financial Institutions are interested, under agreed terms to lending on contract farmers who are organized by providing farming credits. Results show contract farmers are better off obtaining farm inputs and other farming supports from contract farm arrangement. Moreover results show that engagement in contract farming improved farmers’ wealth in terms of acquisition of farming land, productivity and gross yields per acre and level of farm investment. From the findings of the study since the contract phenomena is not widely adopted for benefits of the farmers in Tanzania, thus the study recommends that there should be organized governmental body to: first, make all arrangements for widely acceptance of contract farming and educate the advantages farmers ripe out of contract farming. Second, the formation of legal environment that help the conduct of contract farming arrangement is vital. Third, the government should embark on concessional agreement with the private sector on the will to developing agricultural infrastructure in potential rural areas.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This Chapter introduces the key research problem. It contains different parts such as background of the problem, the statement of the research problem, Objectives of the study, Research questions, Significance of the study, the scope and Significance of the study and Justification of the study.

1.1 Background to the Problem

Contract farming can simply be defined as a firm lending “inputs” — such as seed, fertilizer, credit or extension — to a farmer in exchange for exclusive purchasing rights over the specified crop (Martin Prowse, 2012). Contract farming is not a new phenomenon in Tanzania. It dates back during the colonial era where contract farming arrangements were practiced in some of the major cash crops plantations of sugar and tea. During the Ujamaa era, the public sector through parastatals and the cooperatives were the ultimate buyers of most agricultural produce. Back in 1980s and early 1990s the ideology of liberalization influenced the debate, Structural Adjustment Programs (SAP) were introduced aimed at deregulation, subsidy reduction and privatization. During this period donor and government reduced the use of credit lines in favor of grants, loans, and technical assistance linked to the liberalization of the crops marketing systems. Cooperatives could no longer enforce repayment of the credit for the inputs given as farmers were now also able to sell to private traders. Since then Tanzania has moved from the centralized economy to a liberalized economy, a characteristic that is also traced in contract farming. After market liberalization and state withdrawal from direct production and marketing activities, more private sector actors have joined the scene. Another marked phenomenon is that there have been a number of non-state actors that have come into the scene facilitating access to market for smallholder producers and trade became more competitive, grain markets also became more

spatially integrated (Morrissey and Leyaro 2007; MAFC,2006). This assertion is widely supported, by various development practitioners who have promoted contract farming as a means to organize commercial agricultural production of both small and large-scale farmers. The supporters of contract farming argue that CF has the potential to substitute for the state in the wake of reforms in the agrarian sector. As the state disengages from the provision of inputs, extension services, credit, and price supports, private firms can enter to fill the same roles, and do so more efficiently. The growing global trade in fresh and processed agricultural produce is one of the driving forces for contracting farming arrangements. Sophistication of seed industries in Tanzania is taking the lead as seed is subjected to quality standards. The government of Tanzania through various policies for example, the National Strategy for Growth and Reduction of Poverty (NSGRP) and Agricultural Sector Development Strategy (ASDS) both focuses on a broad-based growth with specific attention on agriculture sector through contract farming (MAFC, 2006). In a nutshell, there is a mixed picture of why and how contract farming is operating in Tanzania. It is against this background that the study critically looked at contract farming practice in relation to supporting agricultural financing in Tanzania in order to draw lessons for its further promotion.

1.2 Statement of the Problem

In most developing countries, poor farmers have limited access to formal financial services. This is because risks involved in agriculture finance including covariant risk such as the variations of weather, pests and disease besides commercial risks, discourage banks which tend to steer clear of agricultural financial especially if it involves smallholder farmers. Volatile prices of agri-produces, linkages with global markets and a general lack of infrastructure in rural areas discourage financial institutions from extending finances to producers as well to other players. Microfinance has to some extent tried to address the gap in rural finance at the producer level but the products are not suited for agriculture and do not address the entire financial needs of the farmers. In any case, the amounts involved are very small (AfDB, 2012). Coupled with this, poor credit track record of smallholder farmers, disputable land titles

and a general lack of knowledge about the functioning of formal financial institutions make the demand side look to be very weak. On the supply-side high transaction costs (overcome to some extent by group lending), lack of understanding of the segment and a higher perceived risk makes up for very reluctant financial institutions. (RIU, 2010) contends, under contract farming the three major aspects of inputs, production and sale of produce is provided for, the issue of financing is not well addressed fully however credit provision is seen as vital part of contract farming and is one of the major incentives for smallholders to join contract farming schemes. Financing gap exists, as little is known about the contributions it makes against agricultural financing. Therefore, whether credit are given in cash, in kind, or in the advance of services or capital inputs, and recoveries made from sales of agricultural products, the researcher's concern is to assess whether such arrangement has contributions in agricultural capital needs of rural farm households in Tanzania?

1.3 Research Questions

The study has tried to address the following question in an attempt to contributing to its objectives.

1. What role does contract farming play on credit access by farmers in Tanzania?
2. Does contract farming have any influence on input access by farmers in Tanzania?
3. Is there any difference in terms of income between contract and non-contract farmers?

1.4 The General objective of the research

The purpose of the study is closely to examine the financing aspects of selected commercially driven contacts to smallholder farmers (out grower scheme) in Tanzania with a view to identify the potentials of contract farming arrangements to financing smallholder farmer's activities. The focus of the study rests on the role of contract farming on linking smallholder farmers to financing sources as evidenced by advance

agreement on pricing, production, and quality control, this study has provided evidences to reach the specific objectives:-

1.5 Specific Objectives

The study has thrived to contributing in agriculture's development by meeting the following specific objectives;

1. To assess role of contract farming on credit access by farmers in Tanzania
2. To appraise the influence of contract farming to input access by farmers in Tanzania
3. To compare income capacity between contract farmers and non-contract farmers

1.6 Scope and Significance of the Study

This paper focused on the role played by contract farming in financing agriculture primarily for small farmers. Significantly the study seen to have major contributions as:-

1. Source document in designing agricultural finance products around stakeholders along contract farming.
2. The researcher believes his work serve in addressing the critical rural urban financial services as this model will be taken as a stand point to implement the recommendations.
3. Advancement of literature surrounding agriculture financing modals in Tanzania

1.7 Justification of the Study

Agriculture sector in Tanzania accounts for 25.5% of GDP, absorbs 74% of the labor force, meets 95% of the food requirements and comprises of 34% of the foreign export earnings. Despite these potentials the sector offer in the economy, its growth over the

years has been low, averaging to about 4% while the overall growth of the Tanzania economy has been between 6% and 7 % per annum for the past 10 years (ASARECA, 2012). This asymmetry is the problem in that, financing agriculture in Tanzania still considered a risky business in aggregate terms; the sector has been receiving a steady amount of lending from the private commercial banks. In 2009, 2010 and 2011 agriculture consisted of 12.38%, 10.2%, and 15.4% respectively of the total commercial credit vis viz of the total population that accessed the loan. BOT 2009 report shows that concentration of banks is at an average of 100,000 rural adults per commercial banks huge impediments towards rural agricultural financing. This study therefore, seeks to document the contribution of contract farming as alternative towards agricultural financing and convenient way for rural community in accessing agricultural commercial inputs. Other studies have revealed that contract farming is predominant in perishable and labor –intensive crops, but less evidence on the opportunities of contract farming in other crops (cereals, paddy) and its contribution to farmers on alleviating financial capital constraints. Against these authorities the study is being undertaken to add knowledge base, academic-wise to show the need for contract farming and its contribution on the local environment setting towards financial capital provisions.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter begins with giving out the definition of terms regarding contract farming and agricultural financing followed by theoretical grounding, types of contract farming, empirical methodology and finally conceptual framework of the study.

2.1 Definition of terms

The terminologies cover the economic sector, geographic location and size of financial transaction and financial engineering terms surrounding agricultural finance.

Contract farming is defined as an “agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices. The arrangement also invariably involves the purchaser in providing a degree of production support through, for example, the supply of inputs and the provision of technical advice. The basis of such arrangements is a commitment on the part of the farmer to provide a specific commodity in quantities and at quality standards determined by the purchaser and a commitment on the part of the company to support the farmer’s production and to purchase the commodity” (FAO, 2005).

Agricultural inputs are agricultural production necessities ranging from seeds, fertilizers, extensions services, and pesticides. These inputs constitute an important portion of farm productivity when applied on time. Firms engaging in contract farming are normally supplying these inputs as incentives to farmers (Meyer, 2013)

Agricultural credit is normally provided in cash, but for this study agriculture credit including cash may mean in-kind loans for seed, fertilizer, and other farm production inputs (Meyer, 2011)

Agricultural value chain finance refers to financial products and services that flow into or through an agricultural value or supply chain. Providing credit into or through a value chain for an agricultural commodity is viewed as a complementary approach to the financial systems approach (Meyer, 2011)

Contract farmer (contractee) is defined as an individual or an institution engaging in the production of agricultural products (crops) on behalf of contractor for the agreed terms of contract. The part bears all production risks for the produce that are bought later on the forward contracts.

Contractor is an institution or body corporate that solicit contract farmers there by become for production on behalf by contract farmers and has sole responsible of regular monitoring checks that guarantee the quality of the produces at the agreed price. Therefore the firm acts as the market for the produce conformity with the standards.

Forward contract is the contract where the farmer and buyer of the agriculture output agree in advance on the terms of delivery, including the price (FAO, 2009). It is the contract referred under the contract farming, mostly used as a means of pricing shielding from adverse movements.

Vertical-integration is when the industry is developing and its player take full advantages of investing in all nodes of the value chain, from production, through processing to marketing. This is the case of agribusiness industry in recent times in the history in Tanzania.

2.2. The benefits of contract farming

For firms, the opportunities provided by contract farming are clear and convincing:

1) increased reliability in supply quantity and quality (reducing screening and selection costs); (2) the off-loading of production risk onto farmers, in many cases; (3) greater

control over the production process and crop attributes, to meet standards and credence factors; (4) reduced co-ordination costs, as a more regular and stable supply permits greater co-ordination with wider activities; (5) greater flexibility in expanding or reducing production (since there are fewer fixed assets, especially compared to full vertical integration); (6) economies of scale in procurement, via the provision and packaging of inputs. In addition, lower direct-production risk can improve a firm's credit rating, and also allow a firm to maintain intellectual property protection (for example, for new germplasm or genetically modified crops (this is purely for the case of seed companies). There are also less tangible potential benefits.

Contract farming can provide greater confidentiality in pricing levels (so that those competitors are less able to access this information). It can also provide status and reputational benefits, through involvement in national development programs or projects that have state involvement (for example seed companies are complimenting governments campaign on Big Results Now through production of the seed to be given to the farmers) .On a broader note, and especially where access to land is highly politicized, it can overcome land constraints. For example, firms may find it hard to obtain land, or may run the risk of expropriation if they do own it. Overall, contract farming can increase profits from, and improve governance of, the value chain.

Contract farming also offers numerous opportunities for farms: it can allow access to a reliable market; it can provide guaranteed and stable pricing structures; and most importantly, it can provide access to credit, inputs, production and marketing services (seed, fertilizer, training, extension, transport, and even land preparation). On a wider note contract farming can open doors to new markets for a farm's produce, stimulate technology and skill transfer (particularly for higher-risk crops, which resource-poor farmers might typically avoid), and it can support farmers in meeting vital sanitary and phyto-sanitary standards (seed production) .For farms, the main opportunity from contract farming is the promise of higher incomes. But, while important, this is not the

sole criterion: for example, both Masakure and Henson (2005) and Guo *et al.* (2006) cited in Martin Prowse (2012) point out that stability and technical knowledge were, *inter alia*, cited as the most important reasons why farmers join contract-farming initiatives (quoted in Bijman, 2008). Contract farming can also provide many additional benefits and opportunities: it can increase on-farm diversification; technical assistance and knowledge transfer can spill over onto adjacent fields and into nearby villages; by-products from contract farming can be used for other farming activities; it can simplify marketing decisions, thus improving efficiency; it can stimulate the broader commercialization of smallholder farming; and, finally contracts can be used as a form of collateral for credit.

Although Swinnen and Maertens (2007) posit that the higher transaction costs and investment constraints would tend to limit smallholder participation in contract farming, a clear rationale for contracting smallholders can be found in the literature on the relative merits of small versus large farm production in sub-Saharan Africa (*ibid*). Small farms are frequently the most efficient agricultural producers, and have advantages over large farms in terms of labor related transaction costs, in particular supervision and motivation. However, small farms often suffer from capital constraints, and a lack of capacity to adopt technological innovations. Moreover, and as we have seen, smallholders often lack the ability to meet exacting standards from actors further down the value chain. Contract farming can overcome these limitations: it can deliver the scale benefits typically associated with large-farm production systems. Economies of scale through the firm decrease the cost of inputs and transport. In addition, firms have a comparative advantage in marketing and technical knowledge, and product traceability and quality. In terms of poverty reduction, contracting with smallholders can reap large dividends: small farms are generally owned and operated by the poor, often using locally-hired labor, and often spend income within nearby locales, creating multipliers (*ibid*). Overall, there are good reasons why contract farming with smallholders can succeed. It is through this advantages outlines the study wants to shoe

such relationship specifically to narrow down to the contribution this contract farming arrangement can be beneficial towards agriculture financing.

2.3. Types of contract-farming arrangements

This study describes five different “types” or models of contract farming that are largely practiced. Some of these models are also predominant in Tanzania especially in cash crops. The models described can as well be applied in cereals crops. See Eaton and Shepherd, 2001; Da Silva, 2005; Bijman, 2008) as cited in Martin Prowse (2012).

First, the *centralized model*, this model involves a large processor or packer buying from large numbers of farmers. It requires high infrastructure for processing. Used in tree and annual crops, poultry and dairy. It is vertically coordinated with quota allocation and tight controls. Sponsor’s involvement goes from extremes minimal to full control of most production aspects. Eaton and Shepherd (2001) suggest that products suited to this contracting model require substantial processing prior to retail — for example, sugarcane, tea, coffee, cotton, milk and poultry. The degree of input provision varies widely. In addition, Bijman (2008) states that the contracts under this model are often entered into with large farms due to the large volumes required to make processing a success

Second, the *nucleus-estate model*, where the firm (again, often a processor) enters the production node through an estate or plantation but also contracts with independent producers (for greater volumes, or for seed). Thus, in Tanzania this contract-farming model that utilizes out growers from a central estate. A core estate and factory is established and farmers in the surrounding area grow crops on part of their own land, which they sell to the factory for processing. This is like the case of Kilombero Plantations Limited and Kapunga Rice Plantations where they engage surrounding farmers to grow rice for their factories and then buy from these farmers.

Third, the *tripartite model*, where a joint venture (between a public entity and a private firm enters into a contract with farmers. Eaton and Shepherd (2001) indicate that this model can involve national and/or local government, and Bijman (2008) cited in contends that it is particularly popular in China. In Tanzania the government is embarking this model for rice seed productions under Big Results Now campaign. Due to government involvement, contracting based on this model could potentially be politicized.

Fourth, the *informal model*, where smaller firms or traders enter into annual agreements, often on a verbal basis, with a limited number of farmers, frequently for fruit and vegetables that require minimal processing. As firm size is usually small, the success of such initiatives partly relies on the extent to which other providers (such as the state and/or NGOs) can offer inputs, such as extension and credit (Eaton and Shepherd, 2001). Due to its non-formal nature, this model often suffers from extra contractual side-marketing.

And lastly, the *intermediary model*, this involves intermediate organizations brokering between sponsors and farmers. It may have a danger of clarity of roles e.g. sponsor losing control on production, quality and prices. The firm sub-contracts interaction with the farmers to an intermediary, such as a farming committee or a trader. Eaton and Shepherd (2001) state that this model is popular in Thailand and Indonesia, and that the increased distance between firm and farm decreases the degree of control that the firm has over the process and the product (one of the main reasons for contract farming).

Having defined contract farming, shading light on benefits of contract farming described the types the author now turn to theoretical perspectives, the critical literature review followed by the conceptual of this review.

2.4 Theories of Contract Farming

The study considers three selected theories of; The Life-cycle Theory, The Transaction-cost Theory and Political Economy of Agrarian Change, connected to the conceptual approach regarding contract farming, and before moving on to a comparative review of cases. In addition to the global and regional trends discussed so far on contract farming, these theories and concepts in this section help to partly explain why contract farming exists, and why it is increasing in frequency in Tanzania especially in agribusiness sector. Each conceptual approach or theory helps to shed some light on the contract-farming arena, by abstracting from empirical material.

2.4.1 The Life-cycle theory

First, life-cycle theory Starting with Adam Smith's dictum that "the division of labor is limited by the extent of the market", Stigler's life-cycle theory posits that industries tend to be more vertically integrated in the early stages of their development (since specialization takes place when the size of the market supports economies of scale – see Rehber, 2007). In addition, after an industry matures, vertical integration may also take place due to product differentiation and traceability requirements (*ibid*). Thus, vertical integration is predicted to be most frequent in very new and old industries. A good example of the latter are conventional tropical exports – such as coffee and cocoa – previously traded as generic, bulk commodities but now subject to substantial differentiation and traceability requirements. A good example of the former are second-generation biofuel crops – such as jatropha – for which markets do not yet fully exist. The main argument of life-cycle theory is that the contract farming practices tend to capture popularity against the development and sophisticated of agribusiness industry. In Tanzania, the sector has opened the doors to access international markets, the expansion which requires the differentiation of the products the market offers.

2.4.2 Transaction-cost Theory

A more common approach to understanding contract farming focuses on transaction costs. The starting point for this perspective is Coase's (1937) simple question quoted in Martin Prowse (2012): why do firms exist? Coase's answer is: to minimize the transaction costs of exchange. Thus, if it is cheaper for a firm to produce an input (compared to purchasing it in an uncertain and unreliable market, with the possibility of substantial losses), then it will integrate backwards to do so. Conversely, in neo-classical approaches, transaction costs are ignored since it is assumed that prices within perfectly competitive spot markets carry all the information that economic actors require to make decisions (see Rehber, 2007). Transaction-cost approaches suggest that markets are comprised of economic actors who have bounded rationality (in other words, they suffer from severe information deficiencies, and are unable to process all the information available to them) and are opportunistic (they can mislead, lie, trick and steal). In Williamson's words, 1979, p. 234; Young and Hobbs, 2002 (*ibid*) such actors seek self-interest with cleverness. Thus, market transactions are risky and can entail considerable losses. Attempts by a firm to reduce or minimize these losses result in transaction costs, example, Williamson (1979) cited in Martin Prowse (2012) identified two main forms: *ex ante* (such as the costs of finding a trading partner, negotiating terms, drafting, safeguarding and monitoring an agreement); and *ex post* (the costs incurred to settle a dispute, such as legal fees, as well as the spill-over costs into the firm's activities and pricing levels). Transaction costs are clearly greatest in slight and imperfect markets (such as the agricultural markets in many developing countries). Indeed, they contribute to market failures (where the lack of exchange reduces production and innovation, and increases poverty). Williamson 1979 (*ibid*) posited that the level of transaction costs for firms are primarily defined by three transaction characteristics: *Uncertainty* - incomplete information on current and future conditions, and the probability that the other party will engage in opportunistic behavior; *Asset specificity* - the extent to which the firm's investments have a sole or limited range of practical and economically-useful applications; *Frequency of exchange* - the frequency

of trade. Thus, economic institutions and practices have been created to reduce uncertainty, ensure that firms can specialize and invest in specific assets, and increase the frequency of exchange (Williamson, 1979). For example, legal systems, trade associations, grade and standards systems, informal codes of conduct, and certification procedures (see Minot, 2007) cited in Martin Prowse (2012). Such institutions do not eliminate the risks associated with market exchange, but they do limit the costs firms face. Vertical integration through contract farming can be understood as a response to these risks. “For one, contract farming reduces uncertainty by providing a guaranteed marketing channel for the farmer and reducing the likelihood of cheating and dishonesty. It also provides the firm with greater certainty regarding the quality and quantity of product it will receive. Second, it allows farmers to invest in specific assets, such as permanent shrubs or curing facilities, due to the assured marketing channel, and, perhaps, the provision of credit. Moreover, it allows firms to invest in specific assets, such as more refined processing equipment or refrigerated storage, as they have more certainty regarding the amount and type of product they will receive. And third, it encourages repeated exchange between farms and firms” (Martin Prowse, 2012).

A further retailers need to ensure the integrity of their products. This increases their information costs in sourcing from the right suppliers, and increases monitoring and enforcement costs for these and other upstream actors Young and Hobbs, (2002) as cited in Martin Prowse, (2012). Contract farming offers a way of reducing these costs. This theory relates with the study in the sense that institutions engaged in contract farming are seeking right information and establishing relationship with right suppliers such that it is easy to trace back quality of the products and adherence to standards as stipulated in the engagements contacts. Seed business is regulated by laws where by the any engagements of the contracting is governed by the law which is supported by this theory.

4.2.3 Political Economy of agrarian change

The “political economy of agrarian change” was a relatively influential school of thought in the 1970s and 1980s. Based on the control of land, labour and capital, this Marxist and neo-Marxist body of work mapped the deepening capitalist relations of production within agrarian societies, mainly in terms of changes in class, but also in terms of gender, relationship and household reproduction (for example, see Shanin 1987, Hartmann and Boyce, 1983; Mackintosh, 1989; Murray, 1987). Contract farming was generally viewed as a means through which capital could extract surplus value from the peasantry through exploitative terms. Singh (2002) as evidenced in Martin Prowse (2012) summarizes the main tenets of this school’s interpretation of contract farming *ibid* (see also Little and Watts, 1994; Glover, 1984; 1987; 1990), as follows: (1) that contract farming develops only when the state’s role in agricultural input and output markets is limited and when markets shows signs of failure; (2) that contracting often relies on monopolies to be efficient; (3) that it leads to self-exploitation as farmers choose to relinquish control of their land and labour, but fail to receive payment that equals the value they’ve added to the product; (4) despite their limited resilience, farms usually bear all production risk and losses from force majeure calamities; (5) farmers neither benefit from a stable wage labour contract, nor the ability to manage their own farms for their own benefit; instead they become semi-proletarianised peasants or pauperized laborers; (6) contract farming frequently alters the intra-household distribution of labor/income to the detriment of women, and frequently involves child labour; (7) that, when successful, contract farming creates a class of peasant capitalist farmers, which accelerates the proletarianisation of poorer peasants, with peasant capitalists acquiring their land; and (8) contract farming can have substantial spill-over effects into local communities and markets: reduced food crop production can lead; the provision of inputs for contract farmers can lead to thinner spot markets and higher prices for non-participants. Clearly, some of the findings from this body of work still revolve around current contract-farming debates — for example, to higher food prices in local markets and spill-over effects. But it is also interesting to note within this body

of work, the theory has submits that farmers are able to assess inputs around contract farming, and therefore the relevance of this theory to the study is aligned to answer the question: What spill-over effects are? Probably contributions to agriculture financing for which it is the theme addressed in the study.

The theories explained above are linked to research question in that, since the study seeks to answer the questions shown above. The Life cycle for example posits agribusiness industry is not yet developed through, it is against this theory, the work submits some theoretical perspectives that can be worked out for practicing Contract Farming. Likewise Transaction theory has tried to show how the firm invest specific assets that benefits the community by being certain with investment it commits, thus the contractee enjoy technology of inputs. Another theory, Political Economy of agrarian change has showed Contract Farming quest to answer both question number two and three respectively in the sense that local communities enjoying contract farming are on better side accessing wider markets as opposed to thin spot markets.

2.5 Other Studies Related to this Study

Arthur & da Silva (2005) and Birthal (2008) used secondary data and reviewed various literatures and international experience to study the growing role of contract farming in agri-food systems development. Their findings suggest that, under appropriate enabling environments, the potential advantages of contracting for farmers and agribusiness firms tend to outweigh the potential disadvantages. Enhanced access to credit by farmers is reported as one of the advantages of contract farming. The study provides that, under a resource provision contract, working capital credit is typically supplied in kind, via input provision, by the contracting firm. The contract firms, or the banking system, may also offer investment credit for the acquisition of machinery, buildings, etc. These transactions are guaranteed by the commercial commitment between the borrower and the agribusiness firm. By the same token, credit access for both working and fixed capital is enhanced in the case of market specification contracts, because

banks accept the contractual commitment as a sufficient guarantee for the granting of loans. Other advantages to farmers include provision of inputs, farming technology, information and access to markets. However; the assertions of these studies need to be validated to the Tanzanian context particularly contract farmers for Seed companies.

IFAD (2003) conducted surveys in Kenya, Zambia and Mozambique to study agricultural marketing companies as sources of smallholder credit in eastern and southern Africa. The study showed that credit by agri-marketing companies is an important source of funding for small-scale producers in all the three surveyed countries. In Mozambique, these arrangements are in practice as the only source of input credit for smallholders. The same applies to Zambia, with the exception of the government fertiliser credit scheme. Even in Kenya, where rural financial services are better developed, the importance of credit from marketing companies has increased particularly as many large cooperative unions, earlier major input providers, have collapsed. The study revealed that the financial services provided by market intermediaries are often grouped into three general categories namely, credit by input suppliers and traders to increase their input sales, crop buying advances to their agents by marketing or processing companies, and input credit to smallholder producers under contract farming/out-grower schemes with interlocking arrangements. It is the third category that is dominant in all the reviewed countries. In contract farming, a processor or a marketing company issues the inputs to farmers on credit in cash or in kind to help secure produce of sufficient quantity and quality. The credit enables the farmer to acquire the required inputs to which he/she would not otherwise have access. These findings however, need to be checked whether they are valid to contract farmers for seed companies in Tanzania.

Baumann (2000) uses case studies combined with extensive literature review to conduct a study on equity and efficiency in contract farming schemes. The study reviewed the experience of contract farming and out-grower schemes for five agricultural tree crops:

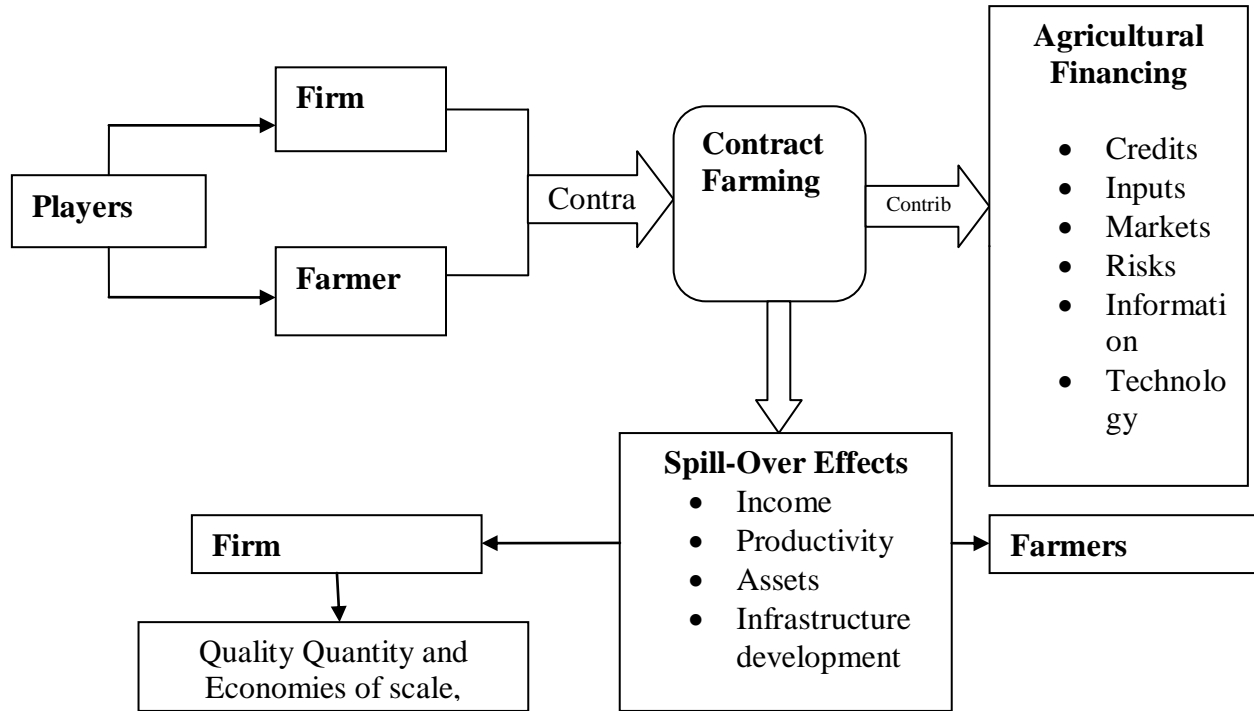
cocoa, rubber, palm oil, coffee and tea. The primary objective was to draw lessons from this experience to inform similar schemes with tree crops. The study revealed that access to credit is one of the big incentives for smallholders in joining contract farming schemes. The credit can be given in cash, in kind, or in the advance of services or capital inputs. Loans are usually given on the security of the land or the anticipated value of the export crop. Loan recoveries are usually made from crop sales or as service charges. Sometimes the farmers obtain loans separately from an existing national credit agency or a bank, in which case the contract itself can serve as collateral. This conclusion is in line with findings by other studies (e.g. Arthur & da Silva, 2005, BIRTHAL, 2008 and IFAD, 2003) but need to be validated in the Tanzanian context.

FAO and NAMC (2009) on their study “contract farming in Africa” used two case studies of Seed Companies in Kenya “FRESHCO Seeds”, and Mali “Faso Kaba”. the case studies show that contract farming not only promote agricultural development in modern and commercial context with regards to rural farmers but also, the advantages farmers get through direct link to commercial agriculture and agribusiness in which one among many advantages they source is “provision of inputs and credits”. Captain Karanja from FRESHCO noted “ the company works with 60,000 farmers who own on average 10 trees and are involved with different partners, as they contracts individuals: they make in season payment to farmers and link them to credit funds. By doing so, FRESHCO has achieved a better income for the rural farmers, and created employment opportunity, provision of services and cash advances and new technology to mention few. Further the study stressed, contract farming for seeds depends on making inputs available on credit; and assuring that quality and quantity requirements are met, this arrangement encouraged governments to improve infrastructure in the rural areas where the project is undertaken. This study has tried to apprise issues of raising finances to contact farmers and improving their welfare. Nevertheless, the study is reporting the findings from both Kenya and Mali the fact that necessitate this study to validate the same study in Tanzania seed industry context.

2.6 Conceptual Framework

The reviewed theories and strands of empirical literatures provide insights on the contributions of contract farming on agricultural financing and its multiplier effects in Tanzania. The contributions evidences is identified on the basis of contract farming theories: The life-cycle, Transaction cost and Political theories are identical to, or can be absorbed by 5 contributions analyzed in a study discussing contributions of contract farming in agricultural financing (MAFC,2006). For example, provision of inputs, extension services, credit, and price supports. The same holds for the contributions identified in the literature explaining the contributions of contract farming in agricultural financing. It is against this background the current study conceptualize that, contract farming contributes 5 relevant agricultural financing gears presented below. This financing is conceptualized with its spill-over effects on the wealth status of both contract farmers and a firm under contract farming arrangements.

Figure 1: Conceptual Framework of the study



Source: Researcher's own design (2013)

Building on the model above the author resembles contract farming schemes as a principal-agent game in which a firm (the principal) works with a grower (the agent) to produce a crop in form of contract. The formation of this contract relationship is further describes agency relationship. The benefits participants accrue will depend on the terms of the contract and their own characteristics. MAFC (2006) asserts that the extent that the benefits from a contract-farming scheme accrue to farmers do favor larger growers than to smaller growers, the scheme will reinforce income stratification. To the extent the opposite is true; the scheme will have an equalizing effect. It is further argued that firms and growers will choose to contract with one another based on the gains they expect to obtain from the contract. Moreover, the transactions costs and information costs in the market environment in which production takes place jointly influence both

processes. Glover and Kusterer, (1990) suggest that contracts can be thought of as varying in ‘intensity’. According to them it depends on the nature and content of a contract that matters. Therefore the model appreciates the contribution of the contract farming on alleviating financial capital constraints of rural farm household in Tanzania.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The purpose of this Chapter is to describe in detail the type of study, study area, study population, sample size and sampling techniques types and sources of data, data collection methods, validity issues and data analysis methods that were used for this study.

3.1 Research Design

This study utilized descriptive case study design. The choice about this kind of research design was made simply based on several reasons amongst included; the study on contributions of CF on alleviating financial capital constraints of rural farm households in Tanzania was carried out using TANSEED as a case study area. A case is an in-depth study rather than breadth that is; it places more emphasis on full analysis of a limited number of events or conditions (Kothari, 2004). Thus the study conducted with a focus to understanding the involvement of farmers, Financial Institutions and agribusiness community on contract farming and the contribution it offers to agricultural development. The case study involved careful and complete observation of all population units that are key in gathering information with regards to problem on hand. The researcher used case study as an in-depth study to collect data from whole of TANSEED's out growers database.

3.2 Study Area

Designated study area is Tanzania as a whole, but most information was collected from TANSEED. The rationale behind this choice is that; while the study seeks to draw a country based general conclusion on the contributions of contract farming in agricultural financing, the company is engaged in contract farming for its seed production since 2002.

Also, the company being member to the Tanzania Seed Trade Association (TASTA) that holds secondary data for various seed companies has information that used as a reference against contract farming status. The objective population of contract farmers was extracted from the company's database.

3.3 Study Population

To illustrate the above information in most precise manner; all contract farmers of TANSEED International Ltd constituted a significant population/universe for this study. Other partners: lending institutions, Agribusiness firms and key informants were included to form the universe of the population. Since the study seeks to draw the conclusion of contract farming from the view point of farmers and other stakeholders, the study used the whole contracted farmer list as a sample and included key Financial Institution which are championing lending in agriculture. In the same regard, it should be remembered that, identifying population was a significant step as it stands as foundation for sample sizing all those cases the researcher wanted them to appear in any study. Total targeted population for this study was 98 respondents. The population included respondents from contract farmers, Financial Institutions in agricultural lending, contracting firms (agribusiness) and key informants. The whole universe was taken to form the base as sample in the sense that it was convenient to either interview or get questionnaire filled by each individual identified as potential for the study.

3.4 Sample and Sampling Techniques

The sample size of this study was taken from to including other stakeholders that are part and parcel of contract farming financing and practitioners however the large number constituted out growers engaged on contract farming. More precisely, the sampled growers allocated the whole number of farmers since the company started its operation as one category of respondents. The kind of information required to accomplish the study in hand seems to be too critical as this would require the

researcher take units that are real informed about CF, this consideration called for the reason for why this study had to use purposive sampling technique. The choice about this sampling procedure was done based on several reasons among which included; the study had demanded to study only respondents who were found convenient for some reasons or other. Since, it seemed in advance, some of the respondents would go reluctant in providing open information or if so false information.

3.4.1 Sample size

Identified Sample by the researcher were 98 qualified respondents representing a population that included farmers, Financial Institutions, Agribusiness and key informants that are involved in contract farming engagements. 77 sampled farmers are the representative of contract farmer as per TANSEED’s register year 2011-2013. Others are 8 Financial Institutions that are lending from agriculture, 3 agribusiness contracting firms and 10 key informers were reached for face to face interview. The farmers chosen are taken from the TANSEED’s farmers register book which updated yearly. Financial institution are clearly taken to include only front line banks that are dedicated and have separate agricultural financing window. Agribusiness firms were reached out of those performing the same mechanism as TANSEED do, hence represented other seed companies around Morogoro. Key informants are the knowledgeable individuals who have clue on operations of the contract farming.

Table 1: Population and sample size computation

Respondent Group	Population Size	Sample Size
Farmers	77	77
Financial Institutions	8	8
Agribusiness Community	3	3
Key Informants	10	10
Total	98	98

Source: (Researcher, 2013)

3.4.2 Sampling Techniques

Sampled populations were equal to sample size included for the study. This was done purposeful in such a way that to including 77 contracted farmers who were interviewed. Same sampling method used to including 8 financial institutions that deal with lending to agriculture. The 3 contract companies were included to verify the contract mechanisms used and substantiate the incentive to their contracts. Key informants were included to gather free opinions on with respect to the study to enhance its reliability.

3.5 Data Collection Techniques

Bothe Primary and Secondary Data used in this study. Since some of the needed information required expressions in both oral and written manner, the study had used both questions in the form of questionnaire and documented sort of interview guidelines (Annex part of this work) both supported by documentary review from CRDB, NMB and PASS publications, Libraries materials and some online sources formed a significant secondary materials of this work in polishing the its facts.

3.5.1 Primary Data Collection

Actual research findings recorded during interview and some informal meeting (non-taped) were collected from the first time and direct from the source. With this data the researcher had confidence that multiple evidences gathered at the site. Note book used to recording findings, observation and impressions relating to informal evidences.

3.5.1.1 Questionnaires

A structured questionnaire of 17 questions in total used to gauge the understanding of the respondent to the study. Some questionnaires are open ended and some are self explanatory (see appendix 1). Enumerator's checklist was used to keep truck of answering the questions and some questions were asked out of the printed ones. This

was done purposely to have flexibility of the data collected from the respondents. These unwritten questionnaires were based on the understanding capacity of the enumerator on the context for more enlightening of the answers given.

3.5.1.2 Interview

There was a checklist of some areas of agriculture finance that was prepared. Specifically these were used mainly to Banks and agribusiness. This group of respondents seemed to be sensitive with data on their accounts and some are on rush attending business cases fact that questionnaires were not properly filled. This method had advantage of exploring more on non formal way as the spokesman was top official of the institution.

3.5.2 Secondary Data

Secondary data have been included as a source of information. Both published annual reports for CRDB, NMB banks, AGITIF and PASS captured for polishing data results. These institutions' data were taken because their mainly extending loan to agribusiness sector and individual farmers in particular. Retrieving of this information was helpful in that, forms a considerable benchmark for comparison purposes.

3.6 Reliability and Validity Issues

After collecting, all the questionnaires went a manual cleaning exercise by checking that the questionnaire had a full set of pages, correct identification and good handwriting. A score was given to each questionnaire based on the legibility and the completeness of enumeration. This score used to assess the quality of enumeration and supervision. Validation was instituted to incorporate the procedures varied from simple range checking within each variable to more complexes checking between variables. As a result of this, it is believed that the study is highly accurate and represents the

experiences at the field level during the study. With very few exceptions, the variables in the questionnaire were within the norms for Tanzania and followed the cultural believes of every group interviewed.

3.7 Data analysis Methods

After collection of responses from the interview, questionnaire and other particular information the analysis of data undertaken through tables, and pie charts meanwhile certain procedures were followed to ensure all data are collected and analysed accordingly. Some other information sorted by the use of computer based software like; Excel and Starter to yield frequencies, percentages, Mean and deviations. Thus, tables and pie charts had presented data summarized way (qualitative part) which supplemented by the use of mean, percentages and frequencies and other sophisticated statistical measures (quantitative part) performed by accredited machines and programmes.

3.7.1 Qualitative Analysis of Data

Tables, pie chart have been used to describe the results. The description mean make data clear, draw patterns of relationships, values of parameters tested and generally for drawing populations' inferences.

3.7.2 Quantitative Analysis of Data

Quantitative part was also used though percentages, frequencies, with an aid of computer statistical software "starter version 12". Microsoft Excel was used to import bar charts and compute the additional indicators, and summarize and organize data in meaningful way. GenStat Discovery Edition 4 Computer software used to run Chi-square test to compare the statistical similarities/dissimilarities that exists under income capacity between contracted and non contract farmers.

3.8 Research Hypothesis

In answering question number three of this study, the researcher had employed statistical measure to help tell if there is any difference that exists between contract farmers and non-contract farmers under contract farming arrangements. Question number 7 of the annex section of this work (Questionnaires) used to gauge the perception. Chi- Square Test fewer than 95% confidence level run by a computer software GenStat Discovery Edition 4 used to give the results of the hypothesis stated:

H_0 : There is no income difference between contracted and non-contracted farmers under contract farming.

H_1 : There is income difference between contracted and non-contracted farmers under contract farming.

Where: H_0 and H_1 are Null and Alternative hypothesis respectively

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION

4.0 Introduction

This chapter analyses and interprets the data in relation to the research objectives of the study. The findings are discussed and interpreted based on the research questions. It was anticipated that the study would judge the contributions of contract farming on rural farmer household's financial capital constraints alleviation.

4.1 Respondents Profile

The tables below describe the demographic profile of respondents in terms of their business engagements. The frequency distribution in Table 4.1 below gives the frequency and percentage of respondents' profile. Table 4.1 reveals that 77 (79%) of the respondents were contract farmers while 10 (10%) of the respondents were Key informants, 8 (8%) were financial institutions and 3(3%) were agribusiness sector.

Figure 2: Pie chart represents number of sample size

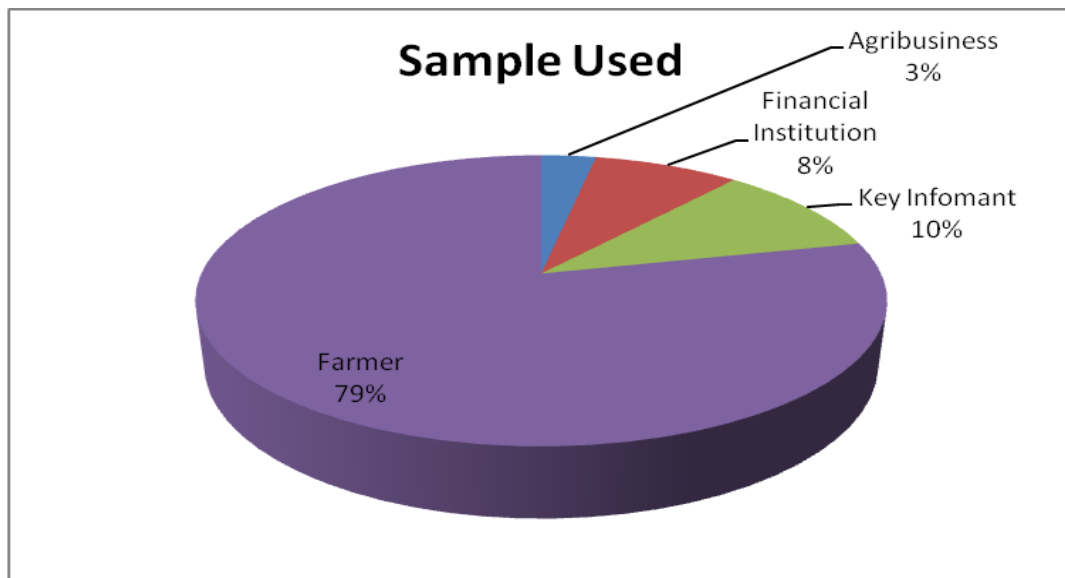


Table 2: Respondents' Frequency Distribution table

	Freq.	Percent	Cum
Agribusiness	3	3	3
Financial Institution	8	8	11
Key Informants	10	10	21
Farmer	77	79	100
Total	98	100	

Source: Study's Compilation (2013)

According to Table 4.1, the large portion of 79% constitutes farmers who disclosed that their level of understanding towards contract farming. Out of 77 farmers 52 were contract farmers from year 2011-2013 and the 25 were non- contract farmers sampled for inclusion for comparison purposes. The total number of respondents who participated in the study 80 (82%) have knowledge of contract farming existence at least from 3- above 10 years, 18 (12%) do not know anything about contact farming and this represent the portion of non-contract farmers.

4.2 Presentation of Findings and Discussion of Results

The study found that farmers were 77 (79%) while key informants 10 (10%), and others were less than 11%. The findings showed that more than half of the respondents 88 are aware of financing availability for their farming activities. Data show that 80 (82%) of respondents knows contribution of contract farming on agriculture financing for the range between 3-10 years. This finding shows that contract farming in Tanzania is well known phenomena and assimilates to background of the study. To scale up its functionality to reach more farm households there is a need to be built as an institutional vehicle to helping financing agriculture along with the findings of the study. This section dealt with presenting findings and discussions of the three research questions that guided the study. Therefore the discussion of the study's findings is presented below:-

4.2.1 Contract farming and credit access

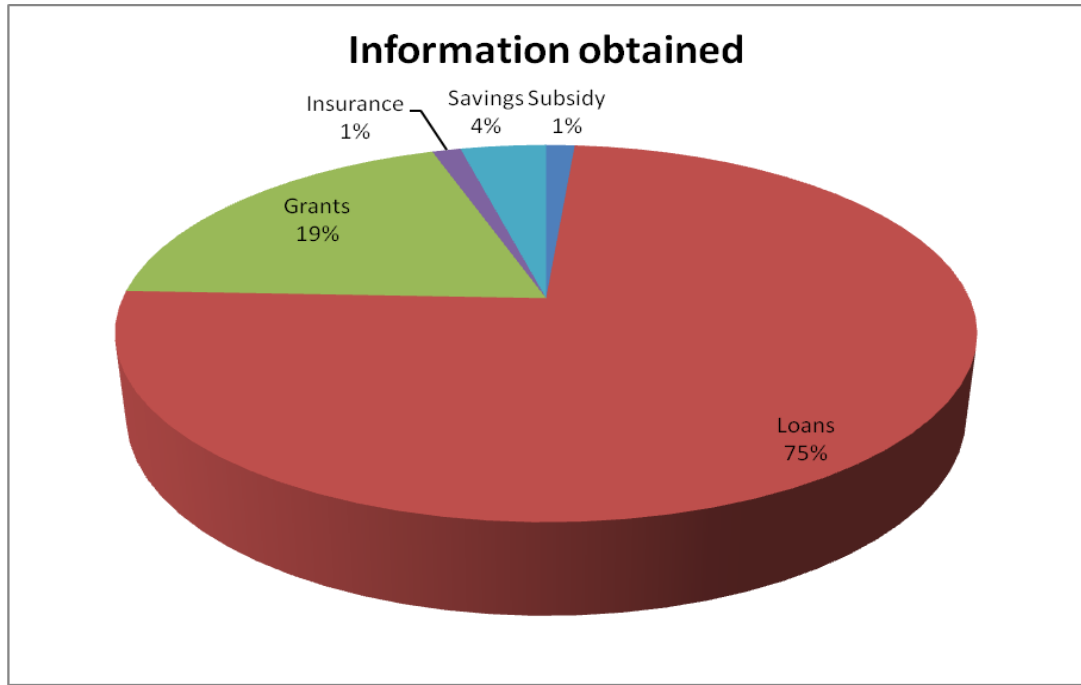
In answering question involving the information farmers get when get in contract farming about financing; the step involved the analysis of responses on the question. The findings are described in terms of frequencies and percentages as summarized and presented in both pie chart and table below:

Table 3: Informations on Credits availability

Inform	Frequency	Percent	Cum
Other (Specify)	1	1.28	1.28
Loans	58	74.36	75.64
Grants	15	19.23	94.87
Insurance	1	1.28	96.15
Savings	3	3.00	100.00
Total	78	100.00	

Source: Study's Compilation (2013)

Figure 3: Pie chart represents credit information to farmers



Source: Study's Compilation (2013)

Table 4.2 shows the frequency of farmers responded on the question. Of 98 respondents 78 (75%) submitted that, they normally get assistance to be linked to the financial Institution for financial services by the contractor. 58 (79%) respondents clearly indicated that the contractor links them for credit access. Financial Institutions likewise responded by showing their interests to provide credit for contracted farmer saying that the risk is at least minimal and tolerable (calculated risks).

The figure of the findings shows that contracted farmers are aware that being in contract farming has many advantages credit access being among many. These findings are parallel with the practice TANSEED is doing of linking its contract farmers by the way of providing commitment letters to financier for credit extension to farmers. For the Financial Institution the condition is that the contract should be legally binding such

that every part to the contract performs his obligation. This finding is in agreement with AgFirms (2011) in the study results demonstrated that business owners are ready to use banking services at 62.4% after they properly channeled to financiers. Through contract farming organized farmers get the loan for their farming operations. NMB bank has lent to over 70 contract farmer groups a loan totaling TZS 200 Mil since the start of contract farming financing window. PASS has also over TZS 104 billion as a guarantee for farmers including contract growers. This finding resembles the study by MAFC (2006) which asserts that Mtibwa Outgrowers Association (MOA) is accessing credit finance from CRDB Bank in collaboration PASS's credit guarantee. Moreover the literature part of this review on advantages of contract farming shed the light to agreeing with these findings as documented by Martin Prowse (2012). Also see (Arthur & da Silva, 2005; IFAD, 2003; and Baumann 2000) under critical literature review of this study. Jain (2008) cited in Martin Prowse (2012) outlines how involving third-party financial institutions improve contract farming arrangements. For example, an Indian firm's collaboration with the State Bank of India and Union Bank of India allows farmers to receive one-year and longer-term loans for irrigation systems. In this model, the firm was liable for loan repayment, the amount of which was later deducted from farmers' payments. Gow and Swinnen (2001) (*ibid*) suggest that including third-party providers of credit can reduce the likelihood of firm holdup or breach of contract due to the greater reputation losses suffered by the firm (which cares more about how other urban-based firms view it than rural peasants). All the studies justify and meet the purpose of the objective that, when there is enabling environment for contract farm arrangements therefore rural farm household can overcome their financial capital constraints by the way of credits. This scheme is described as "*financial innovation out of contract farming that enhance rural farm households over come their financial capital constraints*". The study therefore stress formalization of contract farming scheme to be transparent that create win-win situation to parties evolved.

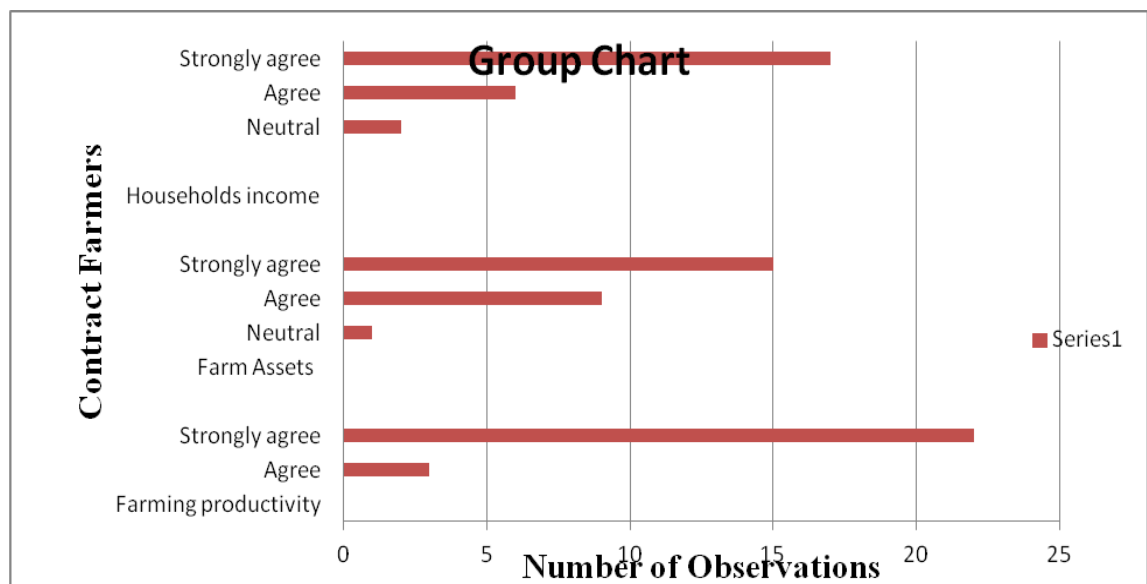
4.2.2 Contract Farming influence over input access

Descriptive statistics helped to answer research question two by establishing frequencies and percentages from the farmer's perspectives. The overall mean score for this variable was 5 for ranking. It fell in the "*strongly agree*" range. The overall contract farmers answered yes, meaning that they get inputs. The research accepts this finding since most seed companies provide seed as one of the input to the farming coupled with technical knowhow for farming husbandry. Contract farmers rather benefits for extension of inputs like Fertilizer linked to supplier companies from the contractor. For example there is evidence that Seed companies work closely with other input companies the fact that delivers the inputs for the farmers as package. It has been the practice of seed companies to linking farmers for other input access to other input companies. A vivid example is also rooted from TANSEED where the contractor is supporting contractee rice seed growers with input acquisition as advance payment for the seed to be purchased. The interview with the NMB Bank also concluded that the bank accepts such arrangements where it buys all inputs on behalf of the farmers and handles them. This finding is the same as one observed in AZMJ (2012) asserting that "contract farming partnership create a win-win situation as farmers are provided with fertilizers (at affordable price and quality), high quality seedlings, free empty fruit bunches, premium prices based on quality, express delivery channels, and technical support. Martin Prowse (2012) in his finding provides sufficient detail regarding the extent of resource provision and production management (in other words, the provision of seed, agrochemicals, credit and extension). Interestingly in the study is the presence of extension described as an input in all 28 cases studied, that suggesting the increased importance of production management and quality standards within contract farming initiatives.

4.2.3 Income comparisons between contact and non contract farmers

In answering this question under this objective the total numbers of 25 farmers were taken for the comparison. The comparison made over the contract and non contract farmers for the three ranking perception questions: Farming productivity increased, Investment in farm assets increased and Household income increased. The ranking was statically verified by Chi- square test to test the association that exists, results of the ranking are presented in a histogram and chi-square output table here under.

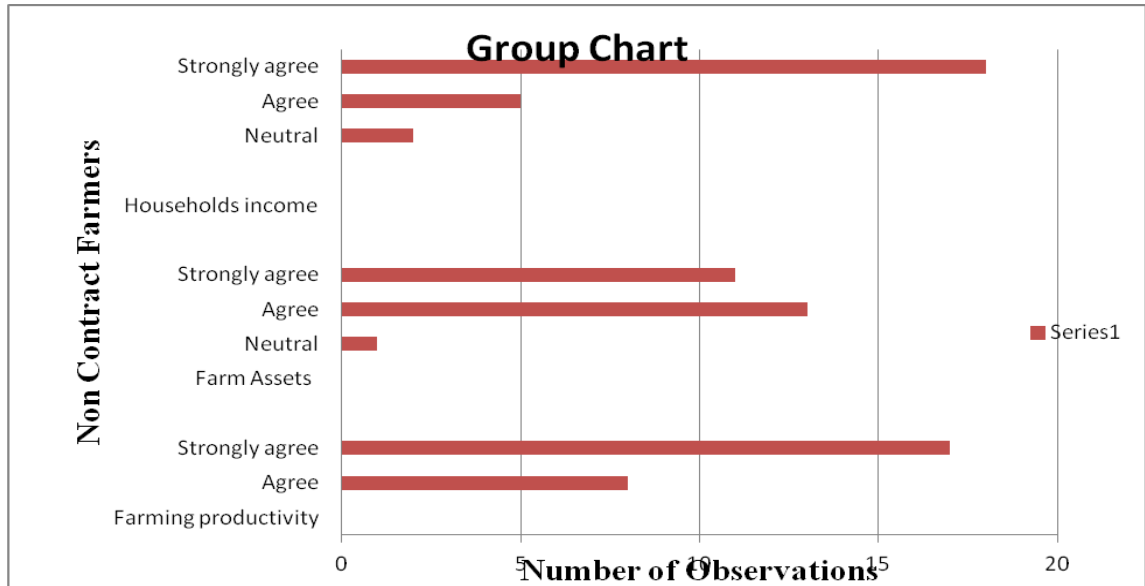
Figure 4: Histogram represents perception of contract farmers



Source: (Study's compilation 2013)

Statistical Chi-Square Test for this table is found at the Annex part of this work (P.47)

Figure 5: Histogram represents perception of non-contract farmers



Statistical Chi-Square Test for this table is found at the Annex part of this work (P.47)

4.3.3.1 Contract farmers

Table 4.3 in the annex shows the calculated is $p < 0.05$; the study rejects the null hypothesis (H_0), and concludes that some factor other than chance is operating for the deviation to be so great. From the table the calculated p value is 0.028 means that there is only a 2.8% chance that this deviation is due to chance alone. Therefore, other factors must be involved to be true that contracted farmers are better off in income compared to non contract farmers as a result of contract farming undertakings. Figure 4: submits that contracted farmers perceive positively with contract farming arrangements in that 18 (72%) farmers responded that they strongly agree with the benefits that they get out of contract farming subsequently their income generation. 6 (24%) also agree and 1(4%) is indifferent.

4.3.3.2 Non- Contract farmers

Table 4.4 in the annex the p value for the calculated data is $p < 0.05$, the study reject the null hypothesis (H_0) “there is no income difference between the contracted and non contracted farmers under contract farming. *Table 4.4* above, a p value of 0.039, means that there is a 3.9% probability that deviation from expected is due to chance only. Therefore it is statistically proven that contract farming has direct positive impacts of rural farm household in their income generation. Further *Fig 5*: depicts a total of 15 (60% non contract farmers “*strongly agreed*” and the rest 9 (36%) “*Agreed*” that if they were involved in the contract farming farm productivity, investment in farm, assets and generally household income could have increased significantly. The mean average ranking was found to be 4.5 which fall under ranking range 4-5 which is described by “*Agree*” perception.

From both tables’ calculated value of p above, the mean is 0.00335 that is 3.35% which is lower than the standard used 0.005 show only 3.35% of the findings can statistically be used to explain the effects of chance. Hereto say that, the findings reject the null hypothesis at 95% confidence level. These findings further suggests the, hypothesis of the study in that, farmers who are engaged in contract farming are more better off in income generation rather than non-contract farmers. Farmers contend: they are interested in contract farming for the price the contract offer which is always above spot market “in contract farming especially cereal crops, crops exhibits and command high price per kg. Nevertheless firms do offer split pricing method in which farmers upon delivery of the produces receives initial payments followed by premium latter when the commodity has been sold or the precise quality have been attained. Together with the assets a firm may decide to invest, the farmers seem to be comfortable in such arrangement taking into consideration that some services like extension are accrued for free. Through interview farmers submitted “Besides the seed inputs given, the production technology is offered for free to them the fact that has raised their product potential yield from 1.5mt of paddy/ acre to 3-4mt/acre, that has as well increased the

income from TZS 400/Kg of raw paddy to TZS 1000/Kg contract price enjoying a guarantee market for the price even if the spot prices fall down. Above all “if the spot prices rise up the firm also negotiates with the contract grower for increased premium”.

The support of these finding is also governed by the transaction costs theory explained above. Martin Prowse (2012) study which asserts “the impact of a contract-farming scheme on the distribution of income will depend on who participates in the scheme and the benefits they receive from participation”. This argument favor the study’s findings in that, contracted farmers are better of increasing their productivity, increasing their own farm investment and household income increased. The work of (BIRTHAL *et al.* 2008; BOLWIG *et al.* 2009; MIYATA *et al.* 2009; MINTEN *et al.* 2009; RAMASWAMI *et al.* 2005; SETBOONSARNG *et al.* (2008) cited in Martin Prowse (2012) shows significantly higher incomes for contract growers. The broader agribusiness literature supports these findings, with Reardon *et al.* (2009, p. 1722) (*ibid*) stating “that farmers participating in the modern food industry channels, compared to those only in the traditional channels, have greater net earnings per ha or per kg marketed”.

CHAPTER FIVE

CONCLUSION AND RECOMMEDATIONS

5.0 Introduction

This chapter presents the conclusions and recommendations and areas for further study. The conclusion of the study was taken on the view of the whole concept of contract farming.

5.1 Conclusion

Contract-farming initiatives can engage smallholders successfully, especially through producer organizations and when land-holding inequality is relatively low. Such initiatives can increase smallholders' incomes (as shown in the findings, objective 3). They can be used to produce standard, generic commodities (especially via centralized or intermediate models explained above under literature review). They can be entered into by small firms, although most initiatives usually involve large firms as firms submits that dealing with small farmers increases the costs of farm monitoring relative to farm sizes. Moreover, the various types of contract farming initiatives are each clearly suited to particular crops, firm sizes, types of input provision, contextual factors and contractual arrangements.

However, the main point this review wishes to convey is this: the explicit involvement of numerous third parties is a key factor in successful contract-farming arrangements, in addition to technical expertise by parties, an appropriate contract-farming model, and good contract design. Producer/farmers organizations have a vital bridging and negotiation role to play against a firm rather than being individual farmer. Government (regional and/or national) also has a role to play beyond providing conventional public goods and an enabling environment. Neutral third parties that are mutually agreeable to all, such as civil society organizations or non-governmental organizations, can also arbitrate contract design, implementation schedules, provide quality assurance of inputs,

and ensure that product characteristics, and payment schedules are appropriate. In essence, contract farming is a relationship that can be improved and enhanced through open, frank dialogue, and through advice, encouragement, and, in some cases, oversight by authorized third parties. Trust and goodwill in a relationship can easily be replaced by doubt and distrust (especially if either party has had negative prior experiences). Third, parties can provide services and support to make a breakdown in communication and co-operation less likely, can provide an outlet for tensions or misunderstandings to be aired, and can allow both firms and farms to benefit from long-term stable and mutually advantageous contracts. For seed companies the study argues to create financial partnership deal such that farm receives annual profit share as a dividend for sustainability of future farm operations.

5.2 Recommendations for policy Actions

From the findings of this study and the following recommendations were considered:

1. The government should embark on making fundamental changes and chart new commitment towards making it clear to the farming community the advantages of being a contract farmer.
2. There should be harmonized working environment for contract farming including but not limited to: enforcement regulatory and legal setting of the scheme.
3. Develop concessional agreement with private sector in investing to potential rural areas under contract farming
4. Formation of national agriculture risk management bureau, that monitor the conduit of contract farming activities

5.3 Recommendations for Further Study

The current study put forwards some further readings to enlightening much on the thematic areas of Contract Farming. It is envisaged that, future studies would enrich the understanding and offer investment certainty of both Contractor and Contractee. The following are the areas for further research presented:

5.3.1 Good Contract Against the benefits of the contracted Parties

The study didn't look on the evolving controversial around contract variations, however some highlighted have been incorporated in the study in the manner that, well perceived contract and agreed upon work best for the benefits of the both. The current study therefore call upon a though research on this areas to have one standard and acceptable contract across every sector/crop produced that take into account local specific variations.

5.3.2 Legal institutional Arrangement to Facilitate Contract Farming

While availability of a supportive legal environment is paramount for sustainable implementation of contract farming schemes, successful implementation of such schemes largely depends on moral will of the parties involved to comply with contractual terms of conditions. Therefore, beyond formulating relevant laws and regulations, one can look critically on how the idea of having legal institution staring at the district level can help compliance within contract farming arrangement.

5.3.3 Sustainability of Farmers organization can foster contract farming

The study has revealed that organized farmers are better off and have great possibility of benefiting out of contract farming arrangements. Future study is thought to tell in

details how these farmers organization can be fashioned structural wise and legally such that it become sustainably and no possibility of sustaining losses for contractor.

5.3.4 Extents Farm Income Supported by Contract Farming

The current study has dwelt to tell the views of contract farmers against contract farming arrangements. The results of the study are positive on the theme. However future studies should look critically by employing sophisticated statistical analysis that can directly tell to what extent farmer's income are supported by contract farming.

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ANNEXES

Annex 1: Chi -Squire Test Results

Table 4: Chi- Square output table for contract farmers

Contribution	Perception	Observed	Fitted	Residual
Farming Productivity	S.Agree	22.00	16.67	2.59
	Agree	3.00	5.56	-1.62
	Neutral	0.00	2.78	-3.01
Increase in farm assets	S.Agree	15.00	16.67	-0.87
	Agree	9.00	5.56	1.83
	Neutral	1.00	2.78	-1.57
Household Income	S.Agree	17.00	20.67	-1.83
	Agree	6.00	6.89	-0.50
	Neutral	8.00	3.44	2.82

Probability level under (null hypothesis) $p = 0.028$.

Table 5: Chi-squire output table for non-contract farmers

Contribution	Perception	Observed	Fitted	Residual
Farming Productivity	S.agree	17.00	15.54	0.73
	Agree	8.00	8.78	-0.41
	Neutral	0.00	0.68	-1.45
Increase in farm assets	S.agree	11.00	14.92	-2.11
	Agree	13.00	8.43	2.20
	Neutral	0.00	0.65	-1.40
Household Income	S.agree	18.00	15.54	1.22
	Agree	5.00	8.78	-2.12
	Neutral	2.00	0.68	1.62

Probability level (under null hypothesis) $p = 0.039$

Source: Studies compilation (2013)

Annex 2: Research Questionnaires

Dear Respondent,

My name is **Safiel Msovu, F**, (Master of Science –Accounting and Finance student) at Mzumbe University. I am undertaking research on “**Assessment of the Contributions of Contract Farming on Alleviating Financial Capital Constraints of Rural Farm Households in Tanzania**” towards fulfillment of the award of a Masters Degree in Accounting and Finance. The purpose of this research study is to explore contributions of contract farming on Agricultural Financing. This study is purely academic in nature. Be assured that there is no risk in participation because a high level of confidentiality will be maintained throughout the study. You have been carefully selected and I am asking you to willingly take part in the Contract Farming study. Your co-operation will be highly appreciated.

Some data may not be readily available from your accounts. Where this is the case, please provide careful estimates instead.

BIO DATA

Please fill the answers by ticking in the appropriate spaces provided:

Gender: Male [] Female []

Category: Farmer [] Financial Institution [] Agribusiness [] Other []

BUSINESS DATA

Which category line is your business engagement?

Agribusiness [] Financial Institution [] Farming []

Other (specify): _____

Respondent Categories

A: Farmers

1. For how long have you been hearing about contract farming?

Below 1 year [] 1-2 years [] 3-5 years [] 6-10 years [] above 10 years []

2. Which financing does the firm avail for you in contract farming?

Loans [] Grants [] Insurance [] Savings [] other []

3. Do contracting firms offer you inputs for your farming? Yes [] No []

4. Farmers perception on contracts farming and its contributions on agriculture financing:

Assuming that there contract farming facilitate financing on your farming business, inform of credit, inputs provisions, financial capital or any other form, do you think you would: strongly agree, agree, neutral, disagree or strongly disagree with the following statements?

Perceptions	Strong agree	Agree	Neutr al	Disagr ee	Strong disagree
	5	4	3	2	1
Farming productivity increased					
Investment in farm assets increased					
Increased incomes					
Non financial services provided					
Inputs provision					
Market risks covered					
Contract is guarantee for a loan					
Farming technology is provided					

Part B: Financial Institutions

5. Experience in lending to contracted farmers?

1 year [] > 2 years [] > 5 year [] more than 8 []

6. Do you take farming contract as collateral for a loan applied? YES [] NO []

7. If your institution is supporting agriculture financing through contract farming do you: strongly agree, agree, neutral, disagree or strongly disagree with the following statements.

Rankings	Strong agree	Agree	Neutral	Disagree	Strong disagree
	5	4	3	2	1
Transaction costs are reduced					
Information asymmetry reduced					
Production risks are minimal					
Easy to structure the loan					
Dealing with large farmers					
Market risks is guaranteed					
Farmers are formally organized					

Part C: General Questions

8. Do you think there is a difference being in contract farming versus normal farming?

Yes [] No []

If yes to what extent;

9. What are benefits do you get from being in contract farming?
- a. _____
- b. _____
10. Since your first engagement in contract farming to date, do you see any growth in your farming capacity? Yes [] No []
11. Who prepares the contract? Firm [] Farmer [] Both [] other []
12. Mention the type of contract? _____
13. If the answer is yes in 10 above, how do you explain such growth financially?
- a. _____
- b. _____
-

Section D: (Checklist for data collection from Institutions)

14. Can you estimate the number of potential out grower's scheme who benefitted from contract farmer scheme?
15. Does your institution offer non financial services such as extension services and facilitation to markets as incentives for farmers?
16. On your own view does contract farming enhance improvement?
17. In your own opinion what can be done in contract farming scheme to benefit more farmers?

THE END

88888888888888888888 Thank You. Be Blessed Abundantly 88888888888888888888