

Who Benefits in Contract Farming? A Perspective of Sunflower and Sorghum in Central Tanzania

Victor George

Department of Development Studies, University of Dodoma, School of Social Sciences,
P.O. Box 395, Dodoma - Tanzania

Abstract

The major aim of contract farming is to create ready market to farmers, provide agricultural inputs and agricultural extension services and improve productivity to farmers and contracting firms. Nevertheless, it is debatable as to whether smaller holder farmers or it is big companies that benefit from contract farming i.e benefit distribution in contract farming has not been well established. This study is an attempt to establish whether the benefits accrued under contract farming are fairly distributed among the farmers' categories and companies' central part of Tanzania. A cross sectional design was adopted for the study purposes. A total of 200 farmers were randomly sampled and surveyed at Kongwa District in Dodoma region. Multiple methods of data collection were used ranging from household survey, Focus Group Discussion (FGDs) and Key Informant Interviews. The study found positive contribution of contract farming in productivity and income. Nevertheless, pricing arrangement in contracts were questionable. Mistrust of who gets what in the contracts prevail in the study area. The study recommends improvement in governance of contracts for better performance.

Keywords: Agriculture, Contract Farming, Productivity and Agricultural markets

Introduction

Majority of the population in Sub-Saharan Africa live below poverty line (Chen and Martin, 2010), they depend on agriculture as their main source of livelihood. On the other-hand, agriculture in these countries is constrained by several factors including unreliable rainfall, lack of market, poor infrastructure and lack of improved agricultural inputs (Kaswamila and Masuruli, 2004). Tanzania is not excluded from such problems. Agriculture in Tanzania provides employment to over 80% of those who lives in rural area (World Bank, 2002, URT, 2001). Majority of the participants in agriculture are smallholder farmers depending heavily on rainfalls. As a result agriculture is stagnant and farmers continue to sink deeper into poverty (FAO, 2011). The problems facing small holder farmers in Tanzania do not differ significantly from other developing countries.

The Tanzanian government and other development partners are not silent on the stagnation and widening of poverty to its rural population. The government has been providing several incentives to agricultural investors so that their growth would emulate smallholder farmers. In line with that according to the United Republic of Tanzania (URT, 2006), the government of Tanzania has been advocating for Public-Private-Partnership (PPP) that would reverse the trend. In this case private sectors are encouraged to invest in agricultural sector as both producers and purchasers of the agricultural commodities from smallholder farmers (Gabagambi and George, 2012).

Private sector has joined the government effort in investing in agriculture, where by large companies have introduced the concept of contract farming with smallholder farmers. Contract farming refers to the practice where two or more parties enter the agreement, where by one part act as a producers and the other as a buyer (Setboonsarng, 2008). Normally the buyer will facilitate the producer and create good production environment with expectation of buying the produce from producers (Warning and Key, 2002).

The major aim of contract farming is to create ready market to farmers, provide agricultural inputs and agricultural extension services (Birthal *et al.*, 2008). With these services at hand it is expected that agriculture will improve and on the other-hand income poverty of farmers will be alleviated. It is argued that contract farming accounts for around 15% of agricultural output in developed countries (Rehber, 2007). Improved productivity is directly linked with alleviating income poverty, for example in central Tanzania which is semi-arid characterized by drought, and poverty, several initiatives have been undertaken to combat poverty. The initiatives includes promoting contract farming to sunflower and sorghum which are drought tolerant crops that are tolerant to the harsh condition and at the same time improve income to smallholder farmers. Nevertheless, it is debatable as to whether smaller holder farmers or it is big companies that benefit from contract farming. This study is an attempt to establish whether the benefits accrued under contract farming are fairly distributed among the farmers' categories and companies central part of Tanzania.

Theorizing Contract Farming

Contract farming is not a new phenomenon in agriculture. It has been practiced in different parts of the world. Since 1970s the contract farming became an agenda and topic of interest in developing countries (Morrisey, 1974; Glover, 1984; Minot, 1986, cited in Miyata *et al.*, 2007). According to Errapa (2006) contract farming can

be defined as an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under a forward agreement, generally at predetermined prices. Under the agreement the purchaser should offer a degree of supports to the farmer's through provision of production inputs, technical assistance and also purchases the farmer's products. While on the other side, farmers should commit themselves to produce agricultural produce according to the specifications in terms of quality, quantity and standards as stipulated by the purchasers and the supporting organization.

Contract farming can also be defined as active vertical coordination between growers of an agricultural product and buyers or processors of that product (Tschirley *et al.*, 2009). Usually characterized by a large firm with interest to enter into contracts with smallholder farmers either as individual, in groups or large farmers associations with the provision of inputs on credit and extension with the promise of delivering the produce. Also contract farming can be described as an agreement between one or more farmer(s) and a contractor for the production and supply of agricultural products under forward agreements, frequently at pre-determined prices (Eaton and Shepherd, 2001 cited in Bijman, 2008).

Theoretically, contract farming has some benefits to both smallholder farmers and supporting agent(s). It tends to offer improved incomes to producers and huge profits to sponsors, furthermore reducing some risks and uncertainties to both sides (Woodend, 2003). Moreover, the contract farming offers better access to extension services, technological supports, agro inputs and increased access to both local and international markets opportunities leading to improved food security and income earnings. However, the prospective benefits accrued from contract farming vary with the nature of the contract.

Although contract farming has a lot of notable merits, it is still subjected to criticism. It is argued that contract farming is not a universal solution in solving all problems faced by the smallholder farmers. Therefore, it has some contribution towards commercialization of smallholder farmers and its constraints should also be acknowledged. According to Woodend (2003) among of the critics of contract farming is involvement of the powerless smallholder farmers and powerful profit driven sponsors, hence imbalanced contract unless policies and other interventions to protect smallholder farmers are in place. Other critics include who is getting benefits from the contact whether the suppliers or the buyers. Studies by (Little and Watts, 1994; Singh, 2002 cited Miyata, *et al.*, 2007) indicated that large firms tend to use contracts as the way of getting cheap labour and as the agent of transferring risk to farmers. Also the studies by Little and Watts (1994), showed that contract farming had been found to have imbalance of power between two parties, intra-household tensions over the allocation of the revenues and increasing rural inequality as contract farmers being rich to hire farm labours. Furthermore, it has been found that smallholder farmers will be marginalized since the sponsoring companies' preferred to work with large and medium scale farmers resulting to rural inequality.

Following the review on contract farming in Africa, in 1990s, Porter and Phillips-Howard (1997) concluded that farmers become well off when they participated in the contract farming although there are number of social problems which occurred in the communities. According to BIRTHAL, Joshi, and Gulati (2005), the Gross Margin Analysis (GMA) and income accrued through contract farming for participants is found to be higher than the non-participants. For instance contract daily farmers in India the GMA and income generated were mostly double to those of independent dairy farmers, this is largely contributed by the presence of lower production and marketing costs for contract farmers than non-contract.

There are five models of contract farming these include; centralized model, nucleus estate model, the multipartite model, informal model and intermediary model (Bijman, 2008). Centralized model sometimes is also known as the classical contract farming model in which processor purchases produce from a population of smallholder farmers. This model has some strictness in the vertical coordination, thus the quality is strongly controlled and the quantity will be determined at the start of the season. The high degree of value addition is required for the products traded under this model, such as tea, sugar cane, poultry and vegetables.

The second model is the nucleus estate model in which the contractor plays as the source for independent farmers as well as the owner of the production facilities such as estate plantation which can be utilized as the processing unit and/or research and breeding centre. This model is mostly applicable in perennial crops though it can also be used in other crops (Eaton and Shepherd, 2001 cited in Bijman, 2008).

Third, is the multipartite model which is a joint venture involving a statutory body and a private company contracts with farmers. The public or private credit supporters, extension services and inputs provisions, might be the part of the deal. During liberalization in the 1980s and 1990s, majority of nations especially developing ones enthusiastically invested in contract farming via joint ventures with private firms (Little and Watts, 1994 cited in Bijman, 2008). This type of model can be found in China where there were joint ventures between government departments and domestic and foreign investors in establishment of the processing unit as well as entering a contract farming agreement with local farmers (Sonntag *et al.*, 2005, cited in Bijman, 2008). Carefully planned joint venture may offer appropriate control in its transactions with farmers and its vertical coordination might be strong. In the presence of public partner in the joint venture, the farmer-contractor relationship might be affected by the political affairs of the partner Bijman, 2008).

The fourth type is the informal model which involves individual entrepreneurs or small enterprises contracting with farmers informally basing on a seasonal especially for perishable products such as fresh fruits and vegetables. Perishable products usually require a small amount of processing such as sorting, grading and packaging. The success of the model depends on the presence of service providers, mostly offered by the government agencies (Eaton and Shepherd, 2001 cited in Bijman, 2008). This model also characterized by the provision of fewer options for vertical coordination compared with a more formal relationship.

Lastly, is the intermediary model which has at least three parties; a processors or major trader formally contracts with a collector or middlemen who then informally contracts with several farmers towards contract farming agreement. The model is characterized by the combination of both centralized and informal models, also has a direct relationship between contractors and farmers. Although is it is common practice in Southeast Asia it has some disadvantages for vertical coordination and for providing proper incentives.

Contract Farming in Sub-Saharan Africa

Small scale farmers in Sub-Saharan Africa (SSA) are characterized by the poorest people in the World (Tschirley *et al.*, 2009). The main contributing factors towards their poverty are the low level of production and limited market opportunities for their produce. Initiatives to reverse the trend are through emphasizing mass production of the agricultural produce under promising markets, and accessibility to credit (Tschirley *et al.*, 2009). Integration of stakeholders and introduction of contract farming in SSA might support governments and development partners to realize what role they should play to facilitate the promotion of contract farming throughout the region.

Contact farming has been practiced in SSA for a number of crops for several years. Table below depict some selected countries which exercising contract farming in East and Southern Africa (ESA).

Table 1: Selected examples of contract farming (CF) in East and Southern Africa

Country	Crops	Comments
Kenya	Tea, sugar, export horticulture	Tea and sugar have had very stable CF arrangements for many years. CF in export horticulture has been less stable, depending on the crop, conditions in the external market, policy and local factors
Malawi	Cotton	90% produced under CF with smallholder farmers.
Mozambique	Cotton, tobacco, paprika	CF has persisted for 20 years in cotton and over a decade in tobacco. ~100% of these crops are produced under CF with smallholder farmers. The paprika scheme has failed.
South Africa	Various	CF covers many commodities, and contracts tend to be more sophisticated. This is made possible by higher levels of education among farmers and more effective legal and regulatory systems in the country.
Zambia	Cotton, tobacco, paprika	Nearly all produced under CF.
Zimbabwe	Cotton	About 70% produced under CF. Prior to the prolonged economic crisis, the ability to purchase inputs reliably on the market allowed many farmers to produce cotton outside of CF arrangements.

Source: (Tschirley *et al.*, 2009)

In East Africa for example, countries such as Kenya had contract farmers who are able to produce 60% of tea and sugar. Also success of horticultural and flower export sectors in Kenya had been brought in to a large extent by the contract farming which comprised smallholders and large commercial farmers (Harris 1992; Dolan and Humphrey 2000). In South Africa, contract farming is extensive in various commodities and is more sophisticated as compared to contracts in other countries in SSA (Vermeulen *et al.*, 2006). In these contracts there are several transformations related with types of commodities, length of contract period and the proportions of smallholder and large scale commercial farmers. The desire to enter into the contract farming in SSA on the part of government and farmers were contributed much by the weakness and fragmentation of the markets.

The markets for farmers' products mostly are unstable and unreliable, resulting majority of the smallholder farmers failing to secure specialized inputs contributed by the absence of the credit markets. As a consequence smallholders farmers' fail to strengthen their production capacity in favour of the attractive market opportunities (Tschirley *et al.*, 2009). The capabilities of producing crops which requires some significant purchased inputs to increase the quantity as well as emphasize on the quality will be hindered under these situations. To counteract the circumstances, government and farmers considered contract farming as an alternative strategy to these problems, providing inputs on credit to farmers and assurance to purchase their produce.

Contract Farming in Tanzania

Tanzania is not excluded from practicing contract farming as a strategy to improve agricultural productivity and

marketing. A good example of contract farming in Tanzania is in cotton. Ideally, the contract farming in cotton, comprise private-companies in assisting farmers and ginners jointly investing in land, labour, credit, specific inputs, education and technology related with the produce in mutual benefit basis. In this case, ginners formulate a platform which helps Tanzanian rural farmers to secure various means of production to switch themselves to be productive cotton farmers. There are various private-company attracted with the contract farming in Tanzania such as Rural Livelihood Development Company (RLDC) and Bio-Sustain.

The challenges and success of contract farming in cotton has attracted other companies to invest in other cash-crops in Tanzania. For example, in Dodoma and Singida, various companies are now investing in sunflower and sorghum through contract farming. These companies provide inputs and technical supports to smallholder famers with a contract to purchase the produce from those farmers. Nevertheless a big challenge that exist is mistrust of the two parties, where as farmers are not comfortable with pricing of their produce. On the other hand companies are worried about dishonest farmers selling their produce to other buyers (side selling) (TNBC, 2010).

METHODOLOGY

Study Area and Justification for its Location

The study was carried out in Dodoma region in Tanzania. The region is located in semi-arid area characterized by inadequate rainfall and low agricultural productivity. Recently there had been a tremendous shift of the population in this region towards farming sorghum and sunflower. These crops are drought tolerant and survive harsh conditions. Proper utilization of the two cash crops in the region might help the initiatives to alleviate poverty. Farmers from Kongwa district who engaged in sorghum and sunflower farming under contractual and non-contractual agreements were involved in the study so that to draw the inference.

Research Design

This study was adopted a cross-sectional research design. This method allows data to be collected at one point in time and establishes relationships between variables for the purpose of testing the hypotheses (Bailey, 1998). The approach is convenient for studying large and diverse population such as famers involved in contract farming in the selected Dodoma region.

Sampling

The study adopted a multi-stage sampling technique, the technique is important because it allows multiple methods of sampling that yield a representative and convenient study sample with a purpose of addressing the sampling needs in the most effective and efficient ways (Trochim, 2006). Region and district was sampled purposively due to the potentiality in production of sorghum and sunflower at the central corridor. A list of participants and non-participant farmers in contract farming was generated in selected district and simple random sampling was employed to pick individual farmers, the actual sampling unit. Sorghum and sunflower farmers were sampled from Kongwa district. In addition to farmers, purposive sampling was also employed to pick key informants for in-depth interview. Two hundred (200) farmers were selected for the study purpose. The study sampled 100 farmers participating in contract farming and 100 farmers that are not engaged in contract farming. That means 50 farmers who are involved in sorghum contract farming and the other 50 who are not in any contractual arrangement were sampled. Likewise 50 farmers involved in sunflower contract farming and the remaining 50 who are not involved in sunflower contract farming were sampled.

Data Collection Methods

Both qualitative and quantitative methods of data collection were applied. The use of different methods of data collection helped to ensure the quality of the findings by triangulation and enable to make generalization of the findings. Qualitative data were collected through appropriate Focus Group Discussion (FGD) techniques with members of the community. Interview with stakeholders in the sunflower and sorghum contract farming provided another qualitative data set that was used to enrich the study. Quantitative data was collected through household survey with smallholder farmers in the study area. Furthermore, the research employed documentary review, using document analysis to complement interviews and questions.

Data Processing and Analysis

The field survey resulted into two forms of data set that is quantitative and qualitative data. The qualitative data which were mostly deduced from Focus Group Discussions were transcribed and content analysis was further employed to analyze them. Quantitative data from field survey was coded, processed and analyzed using the Statistical Package for Social Sciences (SPSS 16 version) computer software. Descriptive and inferential statistics was used in describing relationship between variables and testing for significance of the findings.

RESULTS AND DISCUSSION

Households Background Characteristics

A total of 200 households were surveyed. An average household size was found to be 5 members. The findings concur with HBS (2007) that an average household size in Tanzania had 5 members. Large household size in the surveyed districts serves as a source of labour. Average age for the surveyed households was found to be 36 years. The average age of respondents shows availability of high productive force in the study area. Majority of the respondents (75.5 %) in the surveyed area have had primary education. Low education level of the respondents could be linked with low level of income and development of the surveyed community. Table 4.1 shows the background characteristics of the surveyed households.

Table 1: Background Characteristics of Sample Survey

		Kongwa District						Total N=200
		Divisions						
		Kibaigwa N=34	Mlali N=95	Zoisa N=8	Kongwa N=59	Ngomani N=2	Nembo N=2	
Age of respondent	18-34	5	29	2	17	1	2	56
	35-54	21	55	4	33	1	0	114
	55-64	6	6	2	6	0	0	20
	>=65	2	5	0	3	0	0	10
Sex of respondents	Male	24	60	7	40	0	2	133
	Female	10	35	1	19	2	0	67
	Primary (1-7)	30	72	6	40	1	2	151
Education status of respondents		2	3	2	0	0	0	7
	O-level (S1-S4)							
	A-level(S5-S6)	1	0	0	0	0	0	1
	University	1	0	0	0	0	0	1
	No formal education	0	20	0	19	1	0	40

Contract farming Versus Agricultural Productivity

The study established productivity per acreage on the study area. Results showed positive contributions of contract farming in terms of yield (See Table 2). The average yield (in kgs) per acreage before and after contractual agreements in sunflower was 336.7 and 596.3 respectively, and for sorghum before and after contractual agreements was found to be 366.8 and 678.8 kgs per acreage. The increase could possibly be associated with availability of improved seeds and inputs that farmers get from companies under contract. In some other cases the companies also provide extension services to farmers they contract. Similar findings were reported by Young and Hobbs, (2002) who assert that contract farming accounted for 39% of the total value of US agricultural production in 2001. This implies that if well managed the contract farming is potential on boosting agricultural productivity of any nation.

Table 2: Average yield before and After Contract Farming

Type of Crops	Yields per acreage (Kgs)			
	Sunflower		Sorghum	
	Before CF	After CF	Before CF	After CF
Mean	336.70	596.30	366.80	678.80
Minimum	30.00	60.00	5.00	200.00
Maximum	1500.00	2500.00	1500.00	1150.00

Contract Farming on Smallholder Farmers' Income

Various studies appreciate the promotion of smallholder farmers through contract farming since it tend to improve technical efficiency in production and market assurance and potentially leading to improvement in farmers' incomes, hence contribute to the reduction of their income poverty (Eaton and Shepherd, 2001, BIRTHAL *et al* (2008). This is also a case in Tanzania particularly in Dodoma region in Kongwa district where this study was conducted. It has been found that, average income accrued by smallholder farmers under contractual agreements was TShs. 753, 560/= and non-contractual farmers is TShs.470, 543/= as displayed in Figure 1 below. It should be noted from figure one that, the maximum income for farmers under contract farming was also higher i.e TShs 10,000,000/= while that of non-contractual farmer was TShs 3,000,000/=. The difference in income could be attributed to many factors including availability of improved inputs and easy access to markets for contracted farmers as opposed to non-contracted farmers.

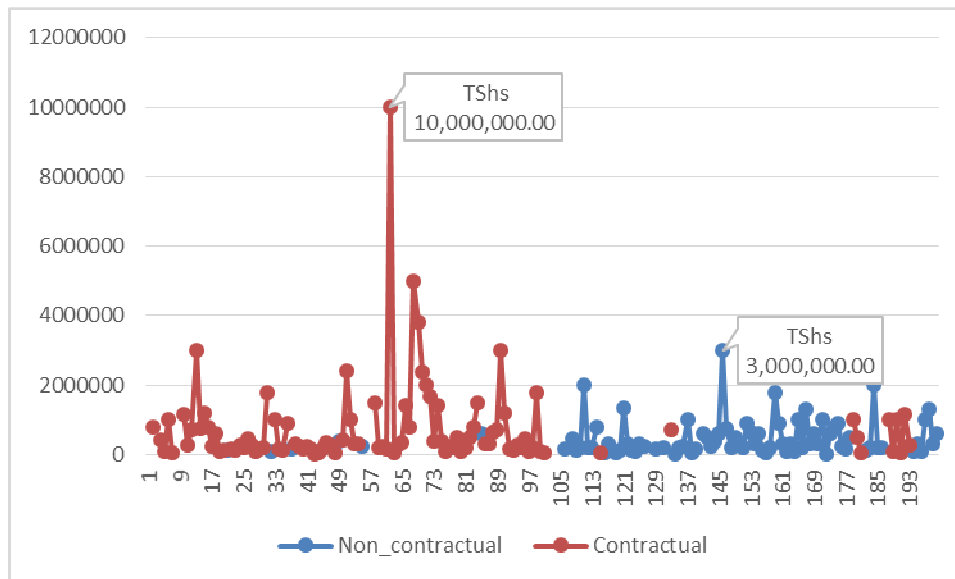


Figure 1: Income Distribution of Farmers

Performance of Contract Farming in Creating Agricultural Markets

Contract farming basically is a market driven service and both involved parties should eventually benefit from such market driven services (MMA, 2006). In Kongwa district, the study found that, there are five (5) companies involved in contract farming for sunflower and sorghum crops. Among of them include Kenya Breweries Limited (KBL), Kibaigwa Flour Suppliers (KFS), Uncle Millo, Angeloma and Mangos. Respondents admitted that their main selling point is the market principally created by the companies under contractual agreements. Although farmers under contractual agreements seems to access the market for their products easily, but their main problem remains on pricing. In most cases the contracts are presupposed to have a clause of price determinants, i.e market price, or pre-determined price. There has to be an agreement between farmers and the companies on the pricing determinants but this seems not to be the case in the study area. At one of the FGD, it was argued that;

“...Normally, we enter into agreement with companies on producing either sorghum or sunflower. Depending on the nature of a company. The pricing issue in most cases is determined by the companies themselves, we don't have much power to negotiate on the same, and otherwise we would lose the support...” (FGD, 2014)

From the discussion, one would note that, despite a crucial importance of contract in providing reliable markets, but the main challenge remains on ability of farmers to negotiate for better prices in the same.

Mode of Payments

The companies under contracts agree with smallholder famers on the payment modes which will be suitable to both parties. In many contracts, companies provides inputs to famers with agreement of deducting the cost of inputs and paying the remaining dues to farmers. The study noted a prevailing mistrust between the two parties. Farmers were arguing that, the cost of inputs were inflated so as to maximize companies' profits. In an interview with one farmer, he said;

“...After harvesting my sunflower, I take them to the xxx company that I have a contractual agreement with them. The first thing they do is to deduct the cost of inputs they have provided to me and then pay the balance to me. But honestly I am not satisfied with the costs of inputs, I think they tend to inflate them...” (Interview, 2014)

Further interviews with some companies reveal that, their cost for inputs are based on prevailing market prices of the same and no exaggerations are done. But this does not surpass opinions from farmers whom they think some exaggerations is done on costs to maximize companies' profit.

Governance of Contract Farming

This Agreements in contract are construed and enforced in accordance with the laws of the United Republic of Tanzania. In such case actors in the governance of contracts are farmers, companies and the Government of Tanzania. It should be borne in mind that companies and the government has skilled and professionals in legal aspects. On the other hands farmers are not much well acquainted with legal issues, worse enough is some other cases these farmers are not even able to read or write. For example in this study it was found that 19% of farmers

were not able to read and write (See Figure 2). In such cases they are just signing (thumb print) the contracts without actually knowing what exactly is in the contracts. Although no any legal measures has been noted during the survey but it is worth that contracts be reviewed by the governments through Local Government Authority (Legal department) to safe guard farmers interests. Additionally farmers could also take advantage of producer organizations (if the exists) to negotiate on their behalf and make contract farming a success

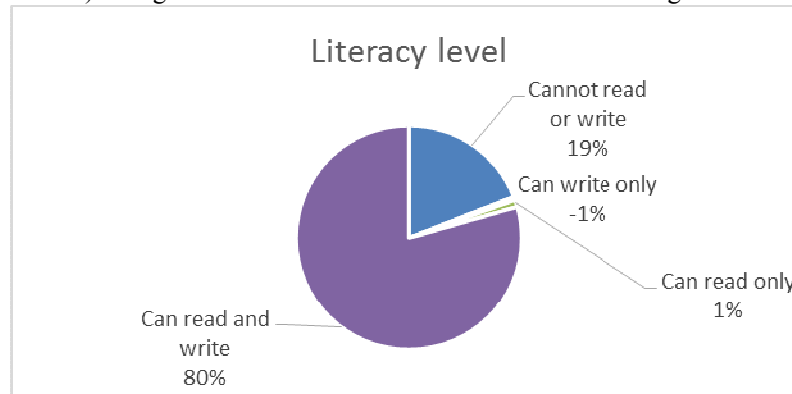


Figure 2: Farmers Literacy Level

Who Benefits in the Contract Farming

If benefits are treated in subjective terms then, conclusively we would say in contract farming both parties do benefit. Farmers benefit from increased productivity as a result of access to improved inputs, extension services and access to markets while companies benefit by being able to sustainably get the products from contracted farmers. Being objectively, we would draw other conclusion basing on who gets what in the agreements. The major aim of any company is to maximize profit. Such that in the contractual agreement they would do their best to maximize profit and reduce their transaction costs. These are done at the expenses of producers who are the farmers. In such cases farmers are at the cross-border of earning less in the contracts. What is to be done then? While we maintain the idea of improving agriculture practices, productivity, marketing and livelihood of farmers and also sustaining the contracting companies the following are imperative to be done; (i) Formation and strengthening of farmers groups that have voice in bargaining during contract design (this is highly missing, many contracts are designed by companies and farmers does not have strong bargaining power) (ii) Governance of contract farming is another area that has to be looked into very carefully. Currently there is lose governance of the same resulting into benefit skewing highly to one end, (iii) capacity building in area of basics of contractual management is very important especially to farmers who desire to engage in contract farming.

Acknowledgement

This work has been made possible through funding from Research on Poverty Alleviation (REPOA)

References

- Bailey, D. K. (1994). *Methods of social science research*. The Free Press Collier Macmillan Publisher, London.
- Bijman J (2008). *Contract Farming in Developing Countries; an overview*. Development Cooperation, Ministry of Foreign Affairs; Wageningen University and Research Centre; 6700 AB Wageningen, The Netherlands.
- Birthal, P. (2008), "Making Contract Farming Work in Smallholder Agriculture", in A. Gulat, P.K. Joshi and M. Landes (eds.), *Contract Farming in India: A Resource Book*.
- Birthal, P.S., Joshi, P.K., and Gulati, A. (2005). *Vertical Coordination in High Value Commodities: Implications for the Smallholders*. Markets, Trade, and Institutions Division Discussion Paper No. 85. Washington, D.C.: International Food Policy Research Institute.
- Chen, S., and Martin , M. (2010). "The Developing World is Poorer than we Thought, but no Less Successful in the Fight Against Poverty," *Quarterly Journal of Economics*. Vol. 125. Issue 4, pp. 1577-1625
- Dolan C and J Humphrey (2000). Governance and trade in fresh vegetables: the impact of UK supermarkets on African horticulture industry. *Journal of Development Studies* 37(2), 146-176.
- Eaton, C. and Shepherd, W. (2001), "Contract farming: partnerships for growth", *FAO Agricultural Services Bulletin*, No 145
- Erappa S (2006). *Contract Farming In Karnataka: A Boon Or A Bane?* Agricultural Development and Rural Transformation Centre. Institute for Social and Economic Change, Nagarbhavi, Bangalore-560 072: Research Report: IX/ADRT/113
- FAO, (2011). *The State of Food Insecurity in the World: How does international price volatility effect*

- domestic economies and food security?
- Gabagambi, D and George V (2012). *Tariff and Non-Tariff incentives to Agricultural Investors: Ministry of Agriculture, Food Security and Cooperatives (MAFSC)*.
- Kaswamila, A and Masuruli B (2004), *The Role of Traditional Irrigation Systems in Poverty Alleviation in Semi-Arid Areas: The case of Chamanzi in Lushoto District, Tanzania. Research on Poverty Alleviation (REPOA)*.
- Little, P.D. and M.J. Watts (eds). 1994. *Living Under Contract: Contract Farming and Agrarian Transformation in Sub-Saharan Africa*. The University of Wisconsin Press, Madison, USA.
- Minot, N.W. 1986. *Contract Farming and its Effect on Small Farmers in Less Developed Countries*. Working Paper No. 31. Department of Agricultural Economics, Michigan State University.
- Miyata s, Minot N, and Hu D (2007) *Impact of Contract Farming on Income: Linking Small Farmers, Packers, and Supermarkets in China*. International Food Policy Research Institute (IFPRI) Discussion Paper 00742. 2033 K Street, NW Washington, DC 20006-1002 USA
- Tanzania National Business Council (TNBC) (2010) 6th TNBC Meeting
- Tschirley D, Minde I and Boughton D (2009)., *Contract Farming in Sub-Saharan Africa: value chains & implications for Development Cooperation*.
- United Republic of Tanzania (URT) (2001). *Poverty Reduction Strategy Paper*, Dar es Salaam: Government Printer.
- United Republic of Tanzania (URT) (2006) *Dodoma Regional and District Projections; Volume XII*. National Bureau of Statistics, Ministry of Planning, Economy and Empowerment, Dar es Salaam
- Vermeulen H, J Kirsten and K Sartorius (2006). *Engagement with farmers from agro-processing companies in South Africa*. Department of Agricultural Economics, Extension and Rural Development, University of Pretoria, South Africa
- Warning M, Key N (2002). *The social performance and distributional consequences of contract farming: an equilibrium analysis of the Arachide de Bouche program in Senegal*. *World Development*,30(2):255-263.
- Woodend J.J (2003). *Potential of contract farming as a mechanism for the commercialization of smallholder agriculture: the Zimbabwe case study*. Food and Agriculture Organization (FAO)
- Young, L.M. and J.E. Hobbs (2002), "Vertical Linkages in Agri-Food Supply Chains: Changing Roles for Producers, Commodity Groups, and Government Policy", *Review of Agricultural Economics* , Vol. 24, No 2, pp. 428–441