Why transaction costs impede smallholder farmers' participation into export organic markets

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Abstract

There have been growing trends of exports from countries dominated by smallholder agriculture to many of developed world (Kledal and Kwai, 2010). This shows that smallholders farmers development perspectives have gained interests in global markets and Value chain Approaches. However, these smalholders are constrained to participate by transaction costs apart from standard constraints in economics. To understand transaction costs effects on smallholder farmers' participation in global value chains a study on governance of global value chains for organic ginger exports was conducted in Tanzania. The study employed a case study method, using transaction cost theory in a value chain approach. General characteristics that describe the smallholder farmers and the institutions they operate in were found to be the main reasons for high transaction costs, hence the main reason for failure of smallholders to participate in global markets.

Introduction

Integrating smallholder farmers into global economic systems especially in high value products chains has been a growing focus (World Bank, 2008). There are very few literatures that have elaborated why transaction costs impede smallholder farmers in high value chains if off-course they must be there! Many of developments in transaction costs have been on answering why firms choose the way they choose; for example, why they contract, why they employ an agent, why they vertically integrate, why does the firm exist (Coose, 1992) this article is focused on elements that smallholder farmers have which makes them more prone to impediments by transaction costs hence fail to participate in global value chains.

People confuse the meaning of smallholder farmers and subsistence farmers. A purely subsistence farmer is a smallholder farmer cultivating for the aim of consumption, while a smallholder farmer is not always a subsistent farmer. In this aticle smallholder farmers are those who make their lives from a relatively small size of agriculture investments. In India FAO (1990) defined Small-holder farmers as those marginal and sub-marginal farm households that own or/and cultivate less than 2.0 hectare of land – they constitute about 78 per cent of the total India farmers. Tanzania smallholders have average farm sizes of between 0.9 hecters and 3.0 hectares and There are so many facts about them there are some 500 million smallholder farms worldwide; more than 2 billion people depend on them for their livelihoods. They produce about 80 per cent of the food consumed in Asia and sub-Saharan Africa. In Tanzania they dominate the entire agriculture sector producing 95% of the food consumed in the country.

Such farmers need a distinct governance structures and economic organisations to enable them participate in high value chain. Their businesses need clear linkages along the value chain, from production through processing, and marketing, to consumption. This is to guarantee effectiveness and efficiency along the chain (Nwanze, 2010).

Apart from standard constraints in economics that impede the smallholder farmers, they are also constrained to participate in value chains by transaction costs; but why? In economics, a zero transaction cost assumption in any stage of value chain is not ideal (Coase, 1992; Williamson; 1991; and Gereffi *et al.*, 2005). Mimicking a zero transaction cost, perfectly competitive, markets along value chains for most of smallholders produce is and should be a principle target. Transaction costs occur whenever a product is transferred from a producer to a consumer. Ginger farmers in Mnazi and Mamba are amongst the farmers who have been struggling in export of organic ginger but are constrained by transaction costs; knowing what subject them to high transaction cost is important, as it spur robust value chain development initiatives.

Material and methods

This article is extracted form a case study, using the value chain approach and transaction costs theory, which was conducted to study the governance of the value chain exporting organic ginger from Tanzania.

Data used for this article were on land ownership and tenure systems, institutions, marketing systems and household's dependence on agriculture farming and topography. The data were collected using a questionnaire, checklist, observations and review of documents. We looked at each finding and how they contribute to high transaction cost proxies. Proxies used were, asset specificity, bounded rationality, frequency, uncertainty, and opportunism.

Results

- The farmers had a small acreage size (0.25-6 acres)
- Fragmented Land tenure, i.e. farmers own scattered plots of 0.25-1 acre
- Ginger plots are situated in high altitudes with rough topography and varying proximities to the important marketing structures.
- Inefficient institutions characterised by
  - Inefficient game players in the value chain (both farmers and their cooperative) with simple contract and trust as a means of its enforcement.
  - Lack of institutional barriers to entry. That is, there were no specific regulations for traders to follow in case they wanted to purchase directly from the farmers.
  - Unclear Marketing systems where Ginger is bought in different forms by different buyer. Presence of numerous smallholder farmers, local and regional buyers and high price fluctuations with long periods of very low prices

Discussion

Owning a small plot of land which is also fragmented causes large transaction costs to smallholder farmers and to other participants in the value chain. Frequency of transaction is high as it implies that a smallholder farmer is constrained to a certain economically rational maximum level of production of his land, often not enough to be supplied as a separate consignment. This probably calls for specific investments such as establishment of groups. If it is not possible to do the specific investments, then, dealing in a high standards-demanding value chain by numerous smallholder farmers is nearly impossible. High assert specificity occurs in certification. High frequency in inspection of small plots of land also is costly as it demands more time, more fuel, and even more considerations. For buyers dealing with numerous individual farmers will probably lead to high coordination monitoring costs, more inks and papers and high costs of frequent bank drawings. This would be amongst the reasons as to why on different studies most researchers have found positive correlation between access to land and household livelihood variables though not often mentioned (Jayne *et al.,* 2003).

Location and proximity are variables that have been studies especially in determining household livelihood variation as they change. Location of the ginger cultivation plots in places of high altitudes with a rough topography, makes abiding to organic standards costly especially on standards concerned with environmental conservation. Asset specificity is high as farmers prepare structures such as terraces to meet standards; topography makes mechanisation difficult. On the other hand collection of the produce for purchase by buyers is limited to transportation using labour which is in most cases is relatively expensive. When the issue of land location is associated with high proximities to roads and other value chin infrastructures we expect the transaction costs to be even higher.

Inefficiency in institutions makes performance of the value chain poor: When there are no institutional barriers to entry, it is very uncertain as to whether the farmers are guaranteed to sell to specific buyers. When this happens some buyers fail to enter into the value chain as they anticipate a high opportunism from the sellers, organic buyers probably holds back and hence farmers fail to deal in the global organic value chain.

When farmers' organisations are assuming very little roles in bringing about the trade then some transaction costs proxies of frequency, and limited rationality that would be minimised by the advantages of having the cooperative are unnecessarily high as the economic organisations are not doing what Mastern, (2000) said should, i.e. evolve or be formed to minimize transaction costs. High drawing costs by buyer; high follow-up costs by farmers for their payments, high delivery costs are all transaction costs that would probably be minimised.

High opportunism is spurred by; firstly presence of a simple long term contract between farmers and buyer with trust as the means of its enforcement. Secondly, the fact that ginger was bought in different forms by

different buyers; indicating a low-or-no need to standardise the products to a certain common level of standard by all the farmers at the same group. Therefore some farmers may join the chain and easily free ride. Lastly, presence of numerous local buyers, who buy from numerous farmers' without caring standards, thereby opening room for opportunistic buyers to sell whenever and to whoever they like; this therefore makes it difficult to deal with this farmers at the same level and similar governance structures.

Low price of produce and high price fluctuations is also a trigger to high transaction costs to farming to smallholder farmers with limited non-farm income. Farmers normally sell their produce with response to their family needs which cannot wait for the good price. Lack of buyers who can guarantee consistent buying of produce make the scenario even worse, a large market power would help to boost the farmers' prices high, but how while every one is tempted to achieve a family objective very soon.

Conclusion and Recommendations

Characteristics that describe smallholder farmers are principle components for high transaction costs that deter participation into export value chains.

When developing global value chain these characteristics of Smallholders should be taken care of apart from the other measures that describe the trading between countries and those which determines production and productivity.

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