CALLING FOR CHAINS TO CHANGE

HOW FARMER EMPOWERMENT CAN ADVANCE ECONOMIC DEVELOPMENT
THE CASE OF TANZANIA

Cashew farmers in training at MHQFP, Masasi, Tanzania

UNIVERSITY OF GRONINGEN
FACULTY OF ECONOMICS AND BUSINESS
MSC BUSINESS ADMINISTRATION
STRATEGIC INNOVATION MANAGEMENT

Author: Susanne Roelofsen
Student number: 1776398
Word count: 11 998

1st supervisor: Dr. B.J.W. Pennink
2nd supervisor: Dr. T.L.J. Broekhuizen

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ABSTRACT

This study looks at farmer empowerment in different collaborative structures in Tanzania. It compares nine human coordination initiatives in Tanzania's cashew nut industry by means of their contributions to farmer empowerment and local economic development (LED). Current state-cooperatives cost farmers a lot, but few invest in farmer empowerment. However, new forms of farmer organizations, accounting for only a small percentage of the cashew industry, significantly focus more on structural and strategic empowerment.

Some structures allow for (semi-)processing, thereby adding value for the farmer. The share of the value chain that each of these structures captures was therefore found to strengthen the farmer's position. The findings result in a call for Tanzania's cashew value chain to change, in order to help farmers attain a better position within the industry.

Key words: empowerment, human coordination, local economic development, global value chain, cashew nut industry, Tanzania

CONTENTS

INTRODUCTION

In developing countries, the agricultural sector is generally a large contributor to GDP, crucial to economic growth and a key building block to create a sustainable economy (Johnston & Mellor, 1961). Tiffin and Irz (2006) present strong evidence of the relationship between agricultural and economic growth, as agriculture employs many and gives a developing nation the ability to become economically independent (DeJanvry & Sadoulet, 2010). In Tanzania, 74% of the poor depend on agriculture since many Tanzanians are smallholder farmers, and there is a 38% poverty rate among households in rural areas, compared to 16% in Dar Es Salaam (Dixon et al., 2001). Human coordination can strengthen a farmer's position, as cooperation will create economic strength and advantages through organization, training and sharing of equipment (Orogo, 1994), leading to agricultural development and economic independence in the long run.

Cooperatives in Tanzania have played a vital role in rural and urban economic development of the country, but they have suffered much criticism in recent years. They are seen as 'stuck in the past and unable to cope with modern economic realities' and poor administration, corruption, poor business practice and poor leadership have led to unprofitable structures (Bibby, 2006). Even the Tanzania Federation for Cooperatives recognizes this: 'cooperatives have struggled to compete with the private sector and many have not been able to provide their members with the services they need' (TFC, 2006). Tanzania's government indicated the necessity for change when they introduced the Cooperative Reform and Modernisation Program (CRMP), stressing the importance of empowered membership to create strong cooperatives. "It is only when the grassroots membership is empowered that Tanzania will see a true emergence of democratic and economically viable cooperatives (CRMP, 2005)".

"Cashew nuts are a poor man's crop but a rich man's food."

In the cashew industry, one of Tanzania's main cash crops, farmers are bound to state cooperatives, as government regulation only allows the sale of cashews through the primary cooperative societies (PCS). However, the efforts to empower farmers are low in these structures, so little benefit can be derived from membership. There is little investment in training or education for farmers and profit is lost in the many layers of the cooperative structure (Navuri, 2013). With low yields due to this lack of education, high costs incurred, and low prices paid to farmers, PCS have not been able to significantly contribute to economic development.

Cashew farming has become unsustainable business, and the current situation creates unrest in the country with farmer riots in the southern regions of Tanzania, where most of the countries' cashew is grown. However, new initiatives have recently emerged, aiming for a better position for the farmer. They focus on empowerment in terms of training, but also incorporate processing into their activities in order for farmers to capture more value from their product; this vertical integration is called chain empowerment (KIT, 2006).

The undesirable influence of international markets, resulting from a large dependence on India as a buyer of raw nuts, is increasingly felt and the farmer's strategic position in the value chain is weak. Given that 90% of Tanzania's cashew production is exported as raw nuts (CBT, 2013) most processing, and therefore value capturing happens abroad, resulting in value chain envy within the industry. Tanzania is claimed to lose $110 million each year because of this low value addition, and processing could, apart from possible job creation, allow the sector to become a large driver for economic development again (Navuri, 2013). However, Orogo

(1994) stresses the importance of local communities and governments to work together in order to achieve this.

The goal of this study is therefore to understand the farmer's position in the cashew nut value chain, to determine in which way their collaborative structures can empower them and to see what improvements can be made. The research question for this study will be:

What is the current state of empowerment in collaborative structures in the cashew nut sector in Tanzania, what is the effect of this on local economic development and in which way can the farmer's strategic position be improved through value-addition activities?

Theoretical contributions of this research come from combining literature on empowerment, local economic development (LED) and the global value chain (GVC). Nine case studies in the cashew nut industry allow for comparison of the current situation to this literature and will further academic knowledge on these concepts by providing empirical data from Tanzania as a specific geographical area, as well as the cashew nut sector as a specific industry. From a managerial perspective, the findings highlight the importance of empowerment in collaborative structures in their contributions to LED and provide insights on how more could be gained from farmer's association in collaborative structures. As over 250,000 smallholder farmers in Tanzania grow cashew nuts, the economy can benefit significantly if the farmer's position is strengthened and this research might attract investments in processing in Tanzania's cashew nut industry.

In the following section, the literature on the concepts of empowerment, LED, and cooperatives is reviewed. Besides, an overview of the value chain and the organization and background of Tanzania's cashew industry is provided, propositions are formulated and a framework is developed to guide the research. The data collection is discussed in the methodology section, whereas the results section presents the findings from the case studies from Tanzania's cashew nut industry. In the discussion, all cases are compared and contrasted with findings from other sectors and the conclusion links the findings back to the literature and discusses limitations, implications and suggestions for further research.

LITERATURE REVIEW AND BACKGROUND

In order to understand the farmer's position in the system, the literature on cooperatives is reviewed and linked to economic development, stressing the importance of empowerment and global value chain (GVC) integration. Also, the background of agriculture in Tanzania and the development of the cashew nut industry need to be understood. Throughout this section propositions are developed, which result in a framework.

ECONOMIC DEVELOPMENT

Economic development needs to be evaluated on different levels in a country. As an example, collaborative structures can advance economic development on a local level and thereby contribute to the national economy, but they are influenced by (regional) governments and institutions and operate under national laws and regulations.

Stimson et al. (2009) name institutions as an endogenous variable which influences regional growth and development. However, they neglect the (inter)national and local levels, which are added by Pennink (2013). Government, universities and businesses play a role in economic development as they influence individuals or a group organized in a format like the cooperative. Human coordination can stimulate local economic development (LED), because collective organization of people allows them to do more than they could do on their own through bundled power, knowledge and resources. It provides farmers an advantage when taking their crops to the market (Bibby, 2006) and gives access to resources, like information (Han et al., 2012), enhancing a person's well-being. These networks can be seen as a resource for farmers, and contribute to LED, but only when there is empowerment of members (de Bruin, 2013).

These national, regional and local economic levels and the relevant actors for this research are depicted in figure 1. The institutions, consisting of universities, government and business, operate on all three economic levels and influence the human coordination initiatives, which serve the farmer on the local level.

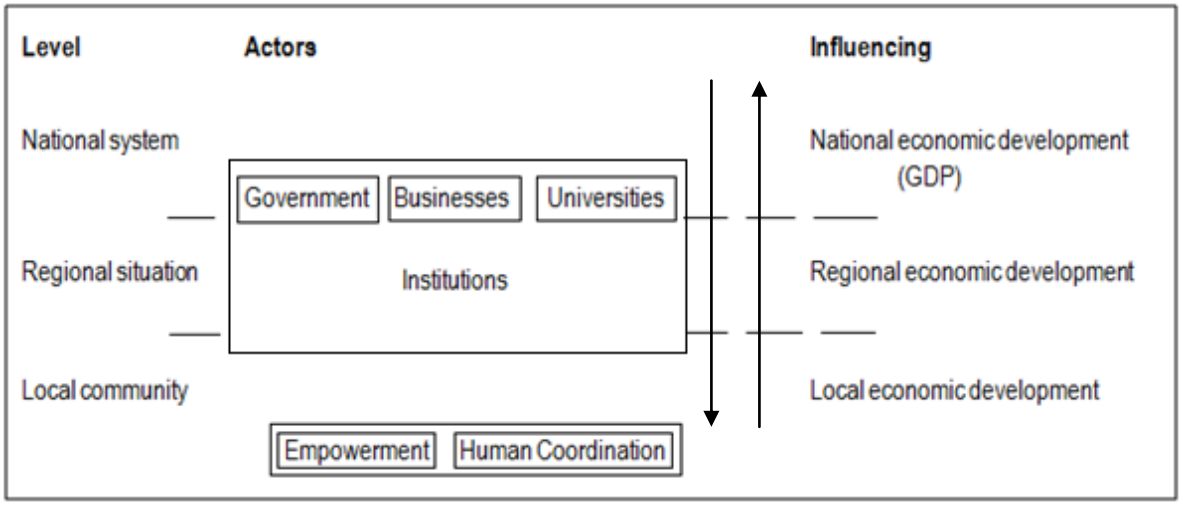


Figure 1: Model for economic development (adapted from Stimson et al., 2009; de Bruin, 2013, Pennink, 2013)

ECONOMIC DEVELOPMENT IN TANZANIA

On a national level, economic and political reforms, such as market liberalization and multiparty elections have made Tanzania a successful example of good governance reforms in Africa (Utz, 2007; Mitchell, 2004). The country is an example for other African nations with a 7% GDP growth per year between 2000 and 2008 and 6% per year in 2009-2011 (CIA Factbook). In developing countries, much of the economic development comes from agriculture and several studies have indicated that agricultural development effectively reduces poverty and accelerates economic growth (Amani, 2005; Dixon et al., 2001; Hammond, 2005; Mellor, 2000). Mnenwa and Maliti (2010) claim that 'the agricultural sector is the main provider of livelihoods for around 80% of the population in Tanzania' and agriculture attributed to 27.8% of Tanzania's total $67.9 billion GDP in 2011. This is mainly because of Tanzania's cash crops, which are largely export-based and therefore receive high government attention. One of the main cash crops is cashew, third after tobacco and coffee in foreign exchange earnings from 2009 to 2011 (CBT, 2013).

THE CASHEW INDUSTRY

Cashew trade did not develop in Tanzania until the 1930s, when Anacardium Occidentale, the cashew nut, was introduced. Tanzania has since then been an important producer of cashews and the sector recovered well after the agrarian crisis in the 1980s. This was due to the decision to start exporting raw nuts rather than local processing (Mitchell, 2004), so farmers got paid quicker and could therefore invest in inputs like sulfur and increase yields. This switch to exporting, however, also led to processing facilities in Tanzania operating at a loss, and 9 of Tanzania's 12 factories closing between 1985 and 1990. Today, almost 90% of Tanzania's raw cashews are exported, resulting in a large dependence on India as the main buyer and low value-addition in the industry. More processing could significantly enhance the farmer's position and the cashew sector's contribution to economic development, as in the 2011/12 season, 158000 tons were produced, making Tanzania the third in Africa by volume (Fitzpatrick, 2013).

Cashew is mainly produced in the South-Eastern coastal area of Tanzania and is the main contributor to this region's economic development. Land characteristics in the cashew-districts are low rainfall and low soil fertility (Mnenwa & Maliti, 2010), but the cashew nut tree tolerates drought, lowering crop failure, and is able to grow on poor soil. Besides, trees can be intercropped during the season and generally even give nuts without using inputs like sulfur. However, given that cashew is a high-value crop, Mnenwa and Maliti (2010) found it alarming that the incidence of poverty is so high in households in the industry. Low prices paid to cashew farmers and the inadequate processing industry are the cause of this lack of economic development in the region (Mitchell, 2004). Since 48% of cashew-growing households rely on the sale of crops as their main source of income, it is important to evaluate the performance of the sector to see what can be done differently.

Institutions

The cashew sector in Tanzania is the most regulated in the world (Fitzpatrick, 2013) and there are several institutions which need to be mentioned. Institutions include government, the public and private sector, NGOs and community actors and can have a powerful effect, both negative and positive, on economic development (Stimson et al., 2009). Swinburn et al. (2006) also identify the importance of different actors, namely public, business and non-governmental sector partners to work collectively to create better conditions for economic growth and employment generation.

Tanzania's cashew sales go through one main channel: the Warehouse Receipt System (WRS). It was introduced for cash crops in 2007, as part of the Agricultural Marketing Systems Development Program, with

the aim of improving the price for the farmer. Reasoning behind the system is that bigger quantities can be sold at once and quality control can be higher, resulting in a transparent system with a better bargaining position for the farmer. Other inititatives to help the farmer include state-funded research institutions like Naliendele, the countries' agricultural research institute, and CIDTF, the Cashew Nut Industry Development Trust Fund, which aim to improve yields and methods used in the sector.

Cashew collection is done by Primary Cooperative Societies (PCS), whereas Cooperative Unions (CUs) oversee these PCS and organize auctions to sell the cashew. These state cooperatives are audited annually by the Cooperative Audit and Supervision Corporation (COASCO). In some districts, other collaborative structures like farmer associations or private companies can be found.

The Cashew Nut Board of Tanzania (CBT) oversees and regulates all cashew activities on behalf of the Ministry of Agriculture, Food security and Cooperatives (MAFC), together with the Warehouse Licensing Board (TWLB). They distribute the buying and export licenses, but also set the indicative price for the auction. Regional governments decide which organizations are allowed to collect cashew from the farmers.

In short, these institutions can decide whether collaborative structures are able to collect, process and sell their member's cashews and will be included in this research in order to determine whether this interference has a positive or negative influence on the performance of these structures. Resulting from this is the first proposition:

P1 : High institutional interference will enhance, and low interference will decrease the performance of collaborative structures in the cashew nut industry, given that their regulation can allow or restrict them in performing their tasks.

High control is expected to enhance farmer empowerment, as structures are then obliged to adhere to the standards which were set in CRMP to help the farmer. Low control, in turn, will lead to corruption and lower investments in farmer empowerment. The institutions involved in the cashew-nut value chain are depicted in figure 3, after the different collaborative structures are discussed in the next section.

COLLABORATIVE STRUCTURES IN TANZANIA

Narayan and Pritchett (1997) researched economic performance in rural homes of Tanzania and found that participation in collective organizations resulted in higher levels of incomes as a result of better agricultural practices, because farmers knew more about chemicals, fertilizers and seeds. Cooperatives have a purpose to fulfil the economic and social needs of their members, who in turn, own and control the cooperative (Bibby, 2006) and the Tanzania Federation for Cooperatives, TFC (2013) defines a cooperative as 'an autonomous association of persons united voluntarily, to meet their common economic, social, and cultural needs through a jointly-owned and democratically-controlled enterprise'. These different collaborative structures are the marketing channels for farmers, so they have an impact on the local level. Participation in collective organizations is expected to produce benefits, which leads to proposition 2:

P2: Collaborative structures will strengthen the farmer's strategic position and thereby advance local economic development.

This proposition assumes that association in collaborative structures will help the farmer. In Tanzania, these structures occur in the form of the traditional state cooperative, and the more recent initiatives of farmer groups or associations.

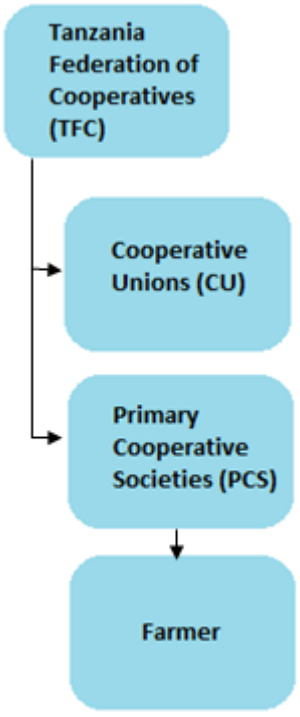
State cooperatives

State cooperatives in Tanzania have existed since the 1920's and their history with high government influence explains their poor performance. Cooperatives were set up in the colonial period to organize the countries' cash crops for export, and "by 1965, over 20 types of crops were being marketed through 1287 primary co-ops, which controlled over 80% of agricultural production and marketing" (Banturaki, 2000).

Rapid growth-rate led to many weak primary cooperative societies (PCS) with bad management and high degrees of corruption. Government involvement was high in management of the cooperatives, which discouraged member participation. The World bank, ICA, the UN and ILO called for new associative forms, a transformation of old cooperatives, laws which recognized cooperative autonomy, provided assistance to and ownership for members, as well as education, training and regular audits (Birchall & Simmons, 2010).

Recognizing the importance of the agricultural sector and the role of cooperatives in this, the Tanzanian government introduced the cooperative development policy in 2002 to help cooperatives regain their importance in the economic lives of people (TFC, 2006). Cooperative unions (CU) were introduced as a means to organize the agricultural sector and new cooperative policy was written in 2002, along with a cooperative societies act in 2003. The cooperative reform and modernization program objectified to "initiate a comprehensive transformation of cooperatives to become organizations which are member owned and controlled, competitive, viable, sustainable and with capability of fulfilling member's economic and social needs (CRMP 2004: IV)".

The structure of the state cooperative system in Tanzania, depicted in figure 2 is arranged as follows:



National level. Set up in 1994, TFC is the national cooperative organization which promotes, serves and coordinates the development and prosperity of all cooperative societies in Tanzania. It is an independent cooperative body, promoting cooperative autonomy and member empowerment.

District level. The operating cooperative unions for cashews are CORECU, ILULU, MAMCU, TANECU and TANCU. They assist PCS, coordinate their activities and organize auctions for cashew sale.

Village or ward level. PCS collect the cashew nuts from the farmers in their area and facilitate delivery to the warehouse. They also facilitate farmer payments, through loans with banks.

Local level. Farmers collect their cashew nuts and deliver them to the PCS. For most farmers, this is the only marketing channel.

Figure 2: State cooperative levels in Tanzania's cashew industry

Other structures

Still, the reputation of Tanzania's state cooperatives is poor, and some farmers decide not be a member as the added value is not always evident to farmers (De Bruin, 2013). CRMP identifies problems of poor management, inappropriate cooperative structures, corruption, a lack of cooperative democracy and education, weakness of supporting institutions and, in general, an inability to compete in a liberalized market economy' (Bibby, 2006). In some regions, farmer associations are being promoted instead (Birchall & Simmons, 2010), which were also encountered in the cashew nut sector. Most of these were initiated with international help in order to improve the farmer's position and occur in different structures; farmer associations and registered companies.

Figure 3 depicts the marketing channels for Tanzanian cashew nut farmers and includes relevant institutions:

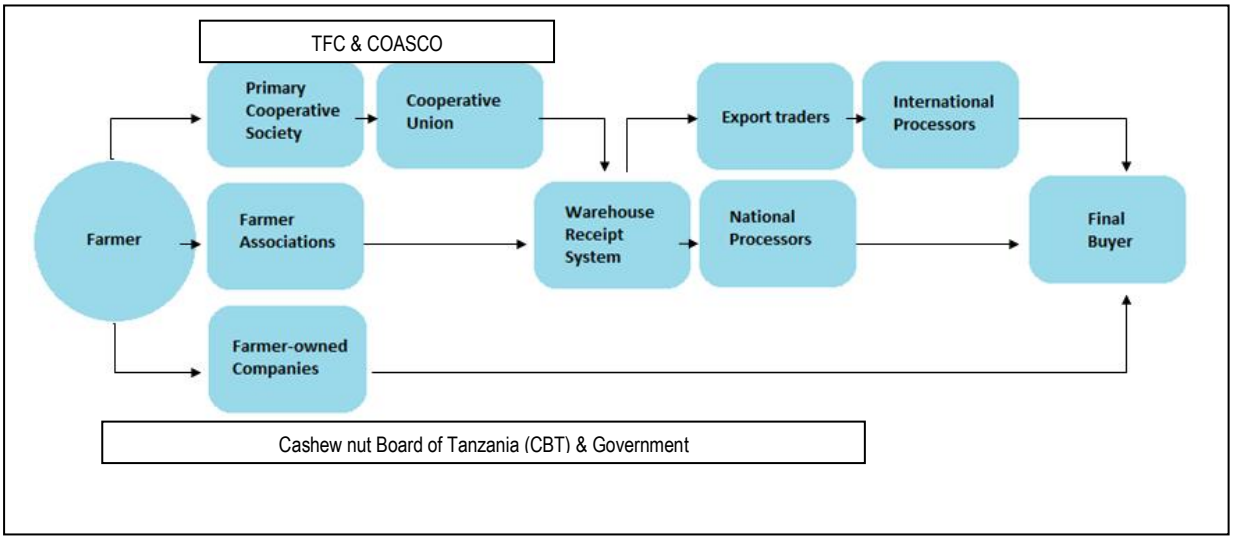


Figure 3: Tanzania's simplified cashew value chain[1]

EMPOWERMENT

These collaborative structures could make a region more developed and defend farmers against the major forces in the international market, but as said, empowerment of farmers is crucial to the functioning of any form of human coordination (De Bruin, 2013). Bibby (2006) also mentions the importance of member empowerment; a process of power-sharing with members, in order to build their confidence and their ability to manage their own economic affairs.

Empowerment refers to the expansion of freedom of choice and action; increasing one's authority and control over the resources and decisions that affect their life. The World Bank (2002) definition is: "the expansion of

[1] this figure depicts grade 1 nuts. When a farmer produces undergrade nuts, these are not accepted into the system

assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives".

EMPOWERMENT THROUGH STRATEGY

The World Bank (2002) identifies four key elements of empowerment; namely access to information, inclusion or participation, accountability and local organizational capacity. These can be explained in the following way:

1. **Access to information;** e.g. the availability of reports regarding financial and market information can empower the farmer and aid them in decision making. Information is an important benefit of cooperative structures and Baticados (2004) states that cooperatives should function as an information source. Transparency is very important, as a lack of information on the global cashew industry results in decisions being made which are not based on accurate perceptions (Fitzpatrick, 2013). TFC (2006) therefore requires cooperatives to present audit reports, budgets, business plans and performance reports.

   Besides reports, information can be provided through training and education, but currently there is a lack of education among cashew farmers (Bibby, 2006). Educating farmers on issues like when and how to prune trees could bring yields up (Fitzpatrick, 2013), which are currently low in Tanzania compared to countries with similar resource endowments and climatic conditions (Mnenwa & Maliti, 2010). However, education also helps for decision-making purposes (Pomeroy et al., 1998). Cooperatives are required to train members, representatives, managers, and employees, and training budgets are supposed to correspond to 10% of their income (CSA, 2003).

2. **Inclusion or participation** refers to the involvement of community members in the decision making process. Bibby (2006) claims there is a lack of cooperative democracy and Birchall and Simmons (2010) think that cooperatives are ill-prepared to respond to competitive markets because they are not member-owned. Develtere (1994) agrees: "members became to see them as quasi-governmental agencies that provided useful services but did not belong to them". The number of meetings held outside the required annual general meeting, as well as inclusion of farmers in the decision-making process are factors of inclusion, but also the possibility for farmers to share ideas for improvement and strategic planning.

3. **Accountability** is the ability of members to call officials to account. It is increased by holding regular elections and enforcing internal accountability mechanisms, like annual reports. Leaders must be elected democratically, be qualified and loyal to its members (TFC, 2006), but corruption and embezzlement are problems in Tanzania's cooperatives (Bibby, 2006).

4. **Local Organizational Capacity (LOC)** assesses the ability of people to work together, organize themselves, and mobilize resources, to solve problems of common interest. An organization's performance is a result of the possession of resources (Lin et al.,1999; Chen et al. 2007) and like informational and technological assets, a network can also be seen as an asset. The resources to which individuals or collectives have access, through their social relationships, can be called social capital (Portes, 1998; Putnam, 1995). Nahapiet and Ghoshal (1998) describe it as: "the sum of the actual and potential resources embedded within, available through and derived from the network of relationships possessed by an individual or social unit." LOC can create collective bargaining power with e.g. buyers and consists of assessing how inputs are distributed, how farmers interact with each other directly and indirectly, whether rewards are shared collectively (Bibby, 2006) and how much resources are shared within the network. If LOC is high, more benefits can be derived from membership of the network.

Figure 4 shows the four constructs for what I call strategic empowerment:

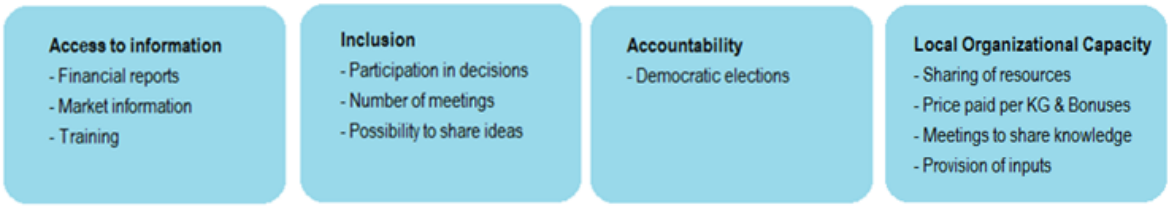


Figure 4: Constructs of strategic empowerment

This strategic empowerment can enhance LED, because when efforts are made to empower the farmer through these constructs, the farmer is benefitted. This is achieved by educating farmers, and sharing resources and information, allowing them to gain more knowledge in their field. As a result, yields and quality will go up, and better practices could result in a higher price. In turn, a better income means a better strategic position for the farmer and therefore a significant contribution to LED.

This results in proposition 3:

P3: Collaborative structures can empower farmers through their strategic actions in terms of information, inclusion, accountability and LOC. This will enhance the structure's performance, strengthen the farmer's position and increase contributions to local economic development.

Strategic empowerment, or horizontal integration, refers to the management responsibilities of a farmer and or the inclusion in the strategic activities, allowing farmers to move from a chain actor position to a chain partner position. However, besides strategic empowerment, farmers can be empowered when their collaborative structures capture a larger share of the value chain, making the farmer a chain activity integrator. Vertical integration is the addition of activities to the portfolio of the farmer, like grading or processing of nuts, which I will call structural empowerment. Both horizontal and vertical empowerment are depicted in figure 5.

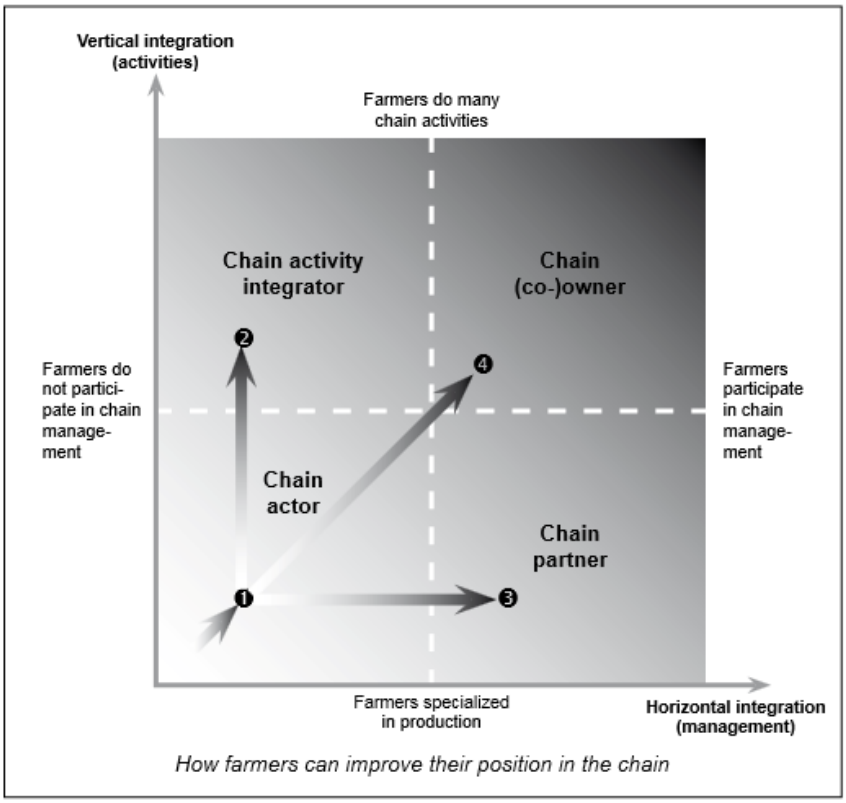


Figure 5, Vertical and horizontal integration for smallholder farmers (KIT,2006)

EMPOWERMENT THROUGH STRUCTURE

Vertical integration is called chain empowerment (KIT,2006). Mol et al. (2005) describe the vertical dimension of the value system as a constant 'tug-of-war' among vertically related actors, where value-chain envy motivates actors to integrate into stages where more value is captured than created. In Tanzania, the indicative price for raw nuts was 1200TSH per KG last season, and the farm gate price which was paid by the buyers was 1500 TSH. Prices in local supermarkets for processed cashews, prices are 20000 TSH per KG, putting the farmer, which only receives 6% of the total sales price, in a very unfortunate position. Farmers, as suppliers of primary input, feel that they get few returns compared to the actors in the processing stage, therefore envying these processors.

Some of Tanzania's collaborative structures export processed nuts, but most sell raw nuts through WRS. However, processing can enhance the farmer's position by allowing farmers to capture a larger share of the revenues in the value chain. This will increase their incomes and generate jobs in the area (KIT, 2006), allowing the structures engaged in processing to contribute more to LED. This results in proposition 4:

P4: Collaborative structures can empower farmers by vertically integrating into the value chain, as processing activities increase the added value. This will enhance the structure's performance, strengthen the farmer's position and increase contributions to local economic development.

FRAMEWORK

Based on these propositions, a research framework can be constructed. The dependent, or forecasted variable is the degree of economic development on the local level as in figure 1.

Collaborative structures can increase their performance through strategic and structural empowerment of farmers, as structures with a focus on empowerment will be more profitable (de Bruin, 2013). This profit will strengthen the farmer's position and thereby enhance LED. Institutional interference, whether on a national, regional or local level, can facilitate or restrict the profitability directly, by influencing their ability to perform their tasks. Figure 6 depicts the relations of these four propositions.

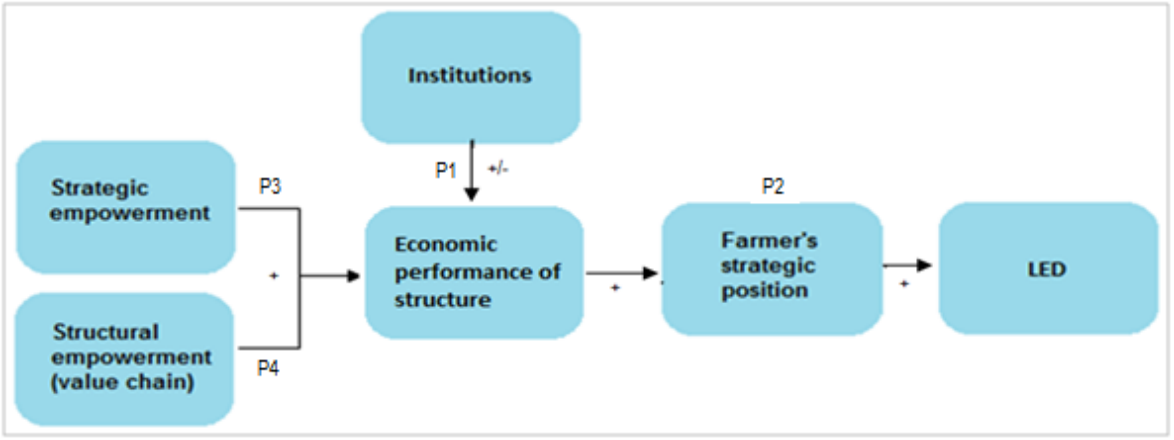


Figure 6, Research framework

Chapter 3 describes the methods, and the empirical results from Tanzania are shown in chapter 4.

METHODOLOGY

RESEARCH DESIGN

As stated, this qualitative study evaluates empowerment in collaborative structures, through nine case studies in Tanzania's cashew nut industry. These case studies are used to validate the theory (Yin, 2004) on empowerment and describe contributions to LED. Case study research is based on empirical, real-life data, and the resulting theory will therefore contain a higher degree of validity (Eisenhardt et al., 2007). Each structure empowers the farmer differently and therefore has a different influence on LED. Comparison of the case studies allows for an analysis of the relationships described in the framework and an identification of success factors for LED contributions.

RESPONDENTS

In previous research on value chains, Rouse and Daellenbach (1999) describe that clustering of strategic groups is necessary in order to conduct a detailed comparison of the actors. The strategic groups for this research were the PCS, the CUs and the different farmer groups, which are the farmer's possible marketing channels, as shown in figure 3. By using theoretical sampling (Eisenhardt, 2007), cases in this research cover all possible collaborative structures. This is needed to provide a full overview of the industry and contrast the different empowerment strategies. Figure 7 gives an overview of the 3 cooperative unions, 3 primary societies and 3 farmer groups which were visited.

Cooperative Unions (CU)	Primary Cooperative Societies (PCS)	Farmer Groups
• ILULU	• LUMANA	• KITAMA
• MAMCU	• MUUNGANO	• MHQFP
• TANECU	• KITUMIKI	• UWAKOTA

Figure 7, cases

Each of these initiatives was evaluated according to the constructs for strategic and structural empowerment, as described under P3 and P4. This is depicted in figure 8.

Strategic empowerment	
Access to information	
Financial reports	Not available ←----→ Available
Market information	Not available ←----→ Available
Training	Not available ←----→ Available
Inclusion	
Participation in decisions	Low ←----→ High
Number of meetings	Low ←----→ High
Possibility to share ideas	Low ←----→ High
Accountability	
Democratic elections	Not available ←----→ Available
Local organizational capacity	
Sharing of resources	Low ←----→ High
Price paid per KG	Low ←----→ High
Meetings to share knowledge	Not available ←----→ Available
Provision of inputs	Not available ←----→ Available
Structural empowerment	
Value chain integration	Low ←----→ High

Figure 8, case evaluation constructs

The farmer groups were selected with the help of sector experts and selection of the PCS was done after consulting the cooperative unions, who possessed information on their performance. The best-performing PCS in terms of output and profitability were chosen to visit, as they were expected to invest most in farmer empowerment. Besides, underperforming PCS were not willing to provide information and financial statements or simply claimed to not have time or information. Farmer groups were set up as the state cooperative system did not provide benefits to the farmers and are therefore expected to show higher levels of farmer empowerment and higher LED contributions.

INTERVIEWS

Interviews were conducted with board members of the organizations and answers were checked with farmers of the corresponding organizations where possible. Case interviews took between one and two hours, but interviews with experts could last up to three hours[2].

Interviews for the cases studies were semi-structured, because benefits of this are that open questions stimulate communication, probing is allowed and the researcher can navigate through questions easily (Blumberg, 2008). It means that any issue can be addressed when the need arises, while allowing for comparison of the cases, because a range of the same questions were asked to each respondent.

ANALYSIS

The information from the interviews resulted in nine case studies of the different collaborative strategies. These allow for cross-case analysis, comparing the different initiatives, their empowerment initiatives, the institutional interference and their contributions to LED.

The validity of the study is strengthened by data triangulation. The outcome of the case-study interviews was cross-checked with own observations and expert views of several other actors in all levels of Tanzania's cashew nut value chain. This creates a multi-sided overview of the industry with many different points of view, including universities, agricultural research institutes, government institutions, financial institutions, companies in the industry and NGOs.

Besides these case- and expert-interviews, secondary literature such as financial- and annual reports of the collaborative structures, government documents on policy and cooperative law and sector reviews provided information. The results can be found in the next chapter.

[2] All interviews took place from April to June 2013. All case studies were done in the Mtwara and Lindi regions in Southern Tanzania, as most of the countries' cashew nut production takes place here. A list of all interviewees can be found in the appendix.

RESULTS FROM THE CASHEW INDUSTRY IN TANZANIA

In this section, the results of the interviews in the cashew sector in Tanzania will be discussed. Efforts of farmer empowerment will be discussed through the constructs mentioned in figure 4: access to information, inclusion, accountability and local organizational capacity (LOC), as well as their level of integration into the value chain. Besides empowerment efforts, institutional interference and LED-contributions will be discussed for each group of cases, starting with the cooperative unions, then the primary cooperative societies and then the other collaborative structures.

1. COOPERATIVE UNIONS

Figure 9 depicts the characteristics of the three union cases.

	ILULU LTD	MAMCU LTD	TANECU LTD
Founded	1995	1995	1995
Districts	Lindi and Liwale	Masasi, Mtwara & Nanyumbu	Tandahimba & Newala
Board members	9	6	6
Number of PCS	80	88	111
Smallest/ largest PCS	<100 / 936	150 / 450	<100 / 700

Figure 9, Union characteristics

EMPOWERMENT, INSTITUTIONS AND LED CONTRIBUTIONS

Empowerment

Especially on the union level, little efforts are made for farmer empowerment. All three unions were in the process of being audited by COASCO for last year, but recent financial reports were hard to find[3]. As CUs are in close contact with CBT, their knowledge of the market was extensive, but due to limited contact with the PCS, this knowledge is not being shared with lower levels of the cooperative structures and does therefore not reach the farmer.

In terms of training, farmer's were not educated by CUs. ILULU was aware of the education regulations, but they admitted not to have spent any money on trainings in the past season. MAMCU did organize a training-seminar, but this was merely for board members and PCS representatives, who did not educate their farmers with that knowledge. MAMCU claimed to have coordinated training for farmers given by Naliendele and CBT, but these organizations stated that these activities would also have taken place without CU-involvement. TANECUs training was only for CU representatives on topics like: code of ethics, good governance, cashew nut storage and books and records management[4], so not directly of use to farmers.

[3] i.e. ILULU's latest available report covered the 2007/08 season

[4] Their financial report did report costs for training for the year 2010/11, but no training was given. This indicates corruption, as this money was spent elsewhere, but accounted for as training budget.

Inclusion of farmers is very low in the union level. There is no farmer input in the decision making-process, as CU members are PCS representatives. In all three unions, the only meeting with members last year was the AGM and again, because of limited contact, there are limited possibilities to share ideas. Looking at accountability, CU board members were chosen democratically at the CU AGMs, with two votes for each PCS, but without direct farmer input.

In terms of LOC, resources of the CU are not shared with lower levels; neither do they facilitate knowledge- or resource sharing on any other level. In the 2011/12 season, ILULU's PCS paid 1200 on average, and some provided a bonus. TANECU's PCS paid 1400 on average[5], so for both CUs all farmers received the indicative price as set by CBT. For MAMCU, however, some PCS only managed to pay 1000 per KG. Reasons given were low prices at the auction due to late sales in the season and high costs of the PCS and CU. Besides, CU's do not have influence on the payments to farmers, but do take part of the PCS profits to cover their costs. All three unions channeled government subsidies to the PCS in order to provide the farmers cheaper sulphur inputs.

Whereas ILULU and MAMCU do not engage in any sort of value chain integration, a positive development is TANECU's plan to invest in a processing facility at their warehouse in Tandahimba. This will allow for the sale of processed nuts at the auction and therefore value-addition for the farmer, which might be beneficial for the farmers in this region in the future.

Institutional interference

As CUs are government institutions, they operate under the cooperative societies act (CSA), regulating their actions. It determines e.g. election procedures, training budgets, board member requirements, etc. It sets out a code of conduct for cooperative management on all levels; board members need to have at least a secondary education, need to be active members for at least three years, need to be elected by members and cannot serve more than three periods of three years. However, proof exists that CSA rules are not always adhered to, e.g. ILULU has not spent any money on training, where CSA dictates this should be 10% of their budget, so the institutional interference is low, resulting in low enforcement of empowerment.

LED contributions

As depicted in the research framework, collaborative structures can make contributions to the farmer's strategic position through empowerment, resulting in LED contributions. However, for CUs, this LED has not happened through farmer empowerment, as there are several examples of farmers who have not yet received their second or third payment for this season.

CUs have been able to make community contributions, e.g. ILULU and TANECU contributed to their communities' education sector[6]. Besides this, CUs provide work for the board members and staff, who in turn can support their families with this income. However, the money used for this was thus made on the farmer's behalf. It does advance LED, but not through the strengthening of the farmer's position.

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[5] For the current season, some PCS have only paid farmers 600TSH

[6] ILULU donated to a secondary school and TANECU provided books and desks for secondary schools

EVALUATION

In short, no efforts are made for strategic empowerment of farmers at CU level. Looking at structural empowerment, MAMCU and ILULU have shown no interest in processing activities. However, there could be significant improvements once TANECU builds the planned factory for processing, which could significantly increase the value-addition and the price received by farmers.

So, farmers do indirectly pay for CU operations, but receive little benefit. During interviews, several purposes of the unions to aid farmers were mentioned, but these tasks are not performed well by CUs, or were performed by PCS. First, financial facilitation for farmers was mentioned, but PCS arrange loans with the banks directly[7]. A second purpose is cashew collection, but PCS collect from their farmers and facilitate delivery to the warehouse, so there is also no CU interference here. Also, supply of inputs was seen as a task, but in practice the CU only channel government subsidies and PCS do the distribution and sales. Fourth, the information which the unions receive from CBT and other institutions is in no way shared with farmers and educational efforts only reach PCS level. Lastly, the task of coordination of their PCS is not performed well, as CUs have little contact with PCS and little information available on their operations and performance. The only CU task useful to the farmer is that they organize the auctions for the sale of their cashews.

2. PRIMARY COOPERATIVE SOCIETIES (PCS)

Figure 10 depicts the characteristics of the three PCS cases.

	KITUMIKI AMCOS	LUMANA AMCOS	MUUNGANO AMCOS
Founded	1988	1993	1982
Municipality (CU)	Lindi (ILULU)	Newala (TANECU)	Mikindani (MAMCU)
Board members	11	9	6
Members	180	459	330
Price paid last season (bonus)	1200 (none)	1200 (60)	1200 (131)

Figure 10, PCS characteristics

EMPOWERMENT, INSTITUTIONS AND LED CONTRIBUTIONS

Empowerment

Efforts to empower the farmer are also low on the PCS level. Financial information was not available to them and while PCS could provide some data about past seasons, there were no official reports. When asked about market information, KITUMIKI did know about market trends in their area, but MUUNGANO knew little about what happened outside their municipality. LUMANA did know about the countries' market trends, but no information was shared with farmers in any of the PCS.

The only PCS which provided farmer training was LUMANA, which had a budget of 1.000.000TSH. Training was given in 10 villages on the use of inputs and preparing their farm and they saw that this increased yields for this season, as 903022KG was collected with a target of 500000KG. Both MUUNGANO and KITUMIKI failed to provide training due to their weak financial position and limited funds.

[7] This was confirmed by the National Microfinance Bank (NMB)

In terms of accountability, all PCS have democratic board elections, like the CUs, to elect their board and each member gets one vote. The board is then accountable for all decisions for the following three years and operational decisions are made during board meetings, without presence of members. Farmer inclusion, however, is low, as there are no meetings outside the AGM in any of the PCS, so farmers have little influence in decisions. However, at KITUMIKI board members occasionally visit villages before board meetings, which are held 4 times a year. MUUNGANO stated that additional meetings were only held for emergency issues and that they have a suggestion box for all other matters, which has not resulted in much farmer input so far.

Looking at LOC, none of the PCS facilitate the sharing of resources. Blowers, used to spray trees with sulphur are owned by individual farmers and rented out to others[8]. All PCS did, however, provide discounted inputs with the subsidies they received from the government, but they admitted that there was not always enough supply and not all farmers were able to pay for it. There were no reported cases of farmers meeting individually to share knowledge, ideas or discuss current events, and this is also not stimulated by the PCS.

These three PCS have all been able to pay the farmers the indicative price in the 2011/12 season. However, LUMANA, which was able to provide a bonus last year, has only paid their farmers half of the indicative price this season, meaning 600TSH of the 1200TSH indicative price. This is also the case for MUUNGANO, who has not been able to make a second payment yet. They blame this on the market trends, CBT's indicative price and high transportation costs to the warehouse. Communication to farmers regarding the payments is bad, as PCS informed me that all cashew has been sold from the warehouse, while the farmers are being told that their second payment is still coming, after the sale of the cashews. In terms of structural empowerment, none of these PCS are involved in processing activities.

Insitutional Interference

Just as for the CUs, the Cooperative Societies Act (CSA, 2003) regulates PCS management activities as well, regarding budgets for training, board elections, etc. Board requirements are the same, but also on this level, the adherence to these rules is not regulated very well. CSA clearly states that 10% should be spent on training, but two out of three PCS failed to provide any training to members. So, rules are in place, but not adhered to.

Other institutions influencing the PCS are banks, like NMB and CRDB. They facilitate the payments to farmers, as 70% of the indicative price is paid as a loan when they bring in their cashews. Buyers pay the corresponding banks after the auction, and costs for WRS, PCS and banks are deducted from this before second payments are made to farmers. However, as these second payments have not always been made in past seasons, banks can now only guarantee 50% of the indicative price, meaning 600 TSH, lowering farmer trust in PCS. PCS blame CBT for setting this indicative price, as it creates farmer expectations, while it cannot always be paid.

[8] KITUMIKI has about 20 farmers which own a blower, LUMANA stated that at least one farmer owns a blower in each village and also MUUNGANO has farmers which own blowers.

LED contributions

Besides providing work for board members, also PCS have made community donations, e.g. KITUMIKI contributed to water provision in the community and LUMANA has contributed to a secondary school. MUUNGANO has not made contributions to the community due to a lack of funds, and none of the PCS expect to have a budget for it in the current season. However, as discussed for the CUs, this money could better flow directly to the farmers, as they have not received their payments yet.

Strategic empowerment, e.g. providing training and information has increased performance in LUMANA and enhanced the farmer's position. Increasing their knowledge and yields allows farmers to earn more money in following seasons. This is a sustainable LED contribution, but unfortunately only happened in one PCS. Also, as PCS struggle to pay farmers the indicative price, resulting in unrest, low trust in the PCS and financial problems for farmers, as they e.g. cannot pay school fees in time. The financial position of the PCS, especially this season, results in a weak farmer position and therefore low LED-contribution.

None of these three PCS have reached vertical integration, but an example of structural empowerment is JIPANGE AMCOS under MAMCU. They have a group of women in Mtwara who process and sell part of their farmer's production. This initiative was started by Naliendele in 2006, and it provides these women with work and the farmers with higher income. If more PCS would follow this example, it would enhance the farmer's position, income and the structure's LED contributions.

EVALUATION

There has been a recent increase in PCS members, but this growth is stagnating. Looking at overall farmer engagement, low membership levels were encountered[9]. Reasons mentioned for this are that some farmers only produce small quantities each season and cashew is not their main source of income, so they therefore see no need to become a PCS-member. MUUNGANO stated that farmers are not being educated about the benefits of a PCS, or are not able to pay the shares. However, as the only direct contact besides the AGM is when farmers visit the PCS to bring their crops or buy inputs, little benefits are derived from PCS membership, which is the main reason for these low membership levels.

Even non-members must sell their cashews through the PCS, and inputs, subsidized by the government, are the same price for members and non-members[10]. Besides, the sharing of resources and knowledge is not facilitated by the cooperatives, apart from the training given by LUMANA. When asked about member loyalty, MUUNGANO management explained that finance was a problem, and that farmers complain about board members using money for personal gains. Besides farmers mentioning corruption, they find that PCS charges too high costs for their work. The lack of strategic and structural empowerment in PCS results in little contributions to the farmer's position and LED.

[9] To illustrate; only 180 out of 1500 farmers in KITUMIKI's area, for LUMANA 459 out of approximately 2000 in their area and MUUNGANO only 330 of more than 800 farmers.

[10] Given that inputs are available when needed, because government subsidies are provided in the spraying season, when demand, and therefore the price is high

3. OTHER INITIATIVES

Figure 11 depicts the characteristics of the three new initiatives.

	KITAMA	UWAKOTA	MHQFP
Founded	2008	2009	2008
Municipality	Tandahimba	Tandahimba	Masasi
Board members	6	11	9
Members	252	784	1589
Price paid last season	1500	1880	1500 -1750

Figure 11, Farmer group characteristics

EMPOWERMENT, INSTITUTIONS AND LED CONTRIBUTIONS

Empowerment

In terms of empowerment, the biggest difference with state cooperatives is that both KITAMA and MHQFP add value by processing their cashews and this structural empowerment allows them to pay their farmers a higher price. KITAMA started processing in their Tandahimba factory in the 2011/12 season and sells to local factories like Rivervalley Foods, OLAM and MCC. MHQFP has processing plants in Maugura and Chakama and besides selling to local processors, their export quality kernels are sold directly to Intersnack (NL). They add extra value by producing fair-trade and organic nuts, the first two containers of which were exported in 2012. UWAKOTA does not process, but aims to improve the farmer's position by collecting the raw cashew from their members and sell directly at the auction trough the WRS. This eliminates the costly CU level, creating significant benefits for farmers. These new structures recognize the network as a potential resource and this awareness that network benefits will decrease with a larger structure was not encountered in state cooperatives. KITAMA focuses on facilitation of current members and also MHQFP stated to have a member limit, to keep their network strong.

Looking at strategic empowerment, there are also differences with the state cooperatives. In KITAMA and UWAKOTA, there were no official financial documents, but both were aware of market conditions, knew how their approach differed from PCS and had a lot of market information. MHQFP has annual reports, clearly depicting market and financial information as well as company structure and board members are all aware of world market trends. All three structures shared this information with farmers through their AGMs and both UWAKOTA and MHQFP have meetings at the village and ward levels besides the AGM. This higher farmer inclusion allows for the sharing of information, ideas and knowledge. UWAKOTA, who call themselves an "institution built by farmers' was even recognized as a strong farmer group by national institutions like the Tanzania Warehouse Licensing Board (TWLB).

All three of these initiatives provide training at least once a year. KITAMA trained farmers on cashew growing and processing with help of Naliendele, CBT and NGOs like UNIDO and UWAKOTA provided training as well. However, MHQFP is an innovative player as they provide the most extensive training in the industry. They have farmer field schools (FFS), which are groups of 20-25 farmers, studying cashews for an entire cropping cycle, managing one plot together year-round. Participating farmers can serve as trainers in the following season, resulting in a pool of expert farmers which train fellow farmers on topics of sustainable production. So far, 822 members have completed FFS and both quantity and quality of their cashews have increased. Besides FFS, farmers are trained in record keeping, organic farming and sustainable production and field

officers advise and inspect other farmers so they comply with organic standards, adding even more value to their product.

In terms of accountability, both KITAMA and MHQFP farmers own shares and elect board members during the AGM. For UWAKOTA, farmers do not own shares, but pay a membership fee. However, in all three structures, board members are elected at the AGM, like in the PCS, and each farmer gets one vote. An important remark is that in MHQFP, board members produce an annual report to validate their actions towards the farmers, which does not happen in any other structure.

Looking at LOC, resource sharing for all three structures is the same as in the PCS, where farmers rent out their blowers to others. For input provision, UWAKOTA also follows the PCS-strategy by using government subsidies and KITAMA's does not provide inputs because there is no capital for this yet, but they aim to do this in the future. However, inputs in MHQFP are bought in bulk throughout the year, in order to distribute to farmers at the right time at a discounted price. This means that they do not rely on government subsidies and are self-sufficient in the supply of inputs.

Institutional interference

Institutional interference for these new structures is high as national and local government influence their operations. Both UWAKOTA and MHQFP have been denied the license to collect cashew from their farmers by the regional government this season, as a result of government protection of the PCS. They were therefore restricted in their business, and not able to make profit to pay their farmers.

For KITAMA, buyer influence is also of great importance. They have the licenses to collect and process, but no channels to sell their semi-processed nuts. As they have not built a proper buyer-network yet, their processing stopped in February 2013, because prices dropped to 1000TSH per KG. They aim to sell the remaining nuts to a new buyer, with whom they are now negotiating. As there are few buyers in Tanzania, they have large bargaining power, which is an issue for processors and farmer groups.

LED contributions

Looking at prices paid to farmers, these are significantly higher in these new structures than in the PCS. This strengthens the farmer's position and contributes to LED. UWAKOTA does not have bank loans[11] or a CU level, so less organizational costs than the state cooperatives and KITAMA and MHQFP add value through processing and MHQFP also increases prices with of fair-trade and organic certifications[12].

UWAKOTA invests in the local schools, and all three structures provide work for board members. However, MHQFP and KITAMA provide employment opportunities for the local communities in their processing factories, which results in large contributions to the region's economy.

[11] They collect the cashew nuts right before the auction and pay the farmer directly, without paying interest fees to banks

[12] The different certifications explain the different prices of 1500-1750 paid to farmers.

EVALUATION

There are substantial differences in efforts for farmer empowerment in these structures, when compared to the state cooperatives. These new structures were all recently established out of unhappiness with PCS and both KITAMA and MHQFP received international aid from e.g. UNIDO and AECF, as these NGOs see the importance of properly functioning collaborative structures.

All three stressed the importance of farmer empowerment and an MHQFP representative stated that 'empowerment does not exist without ownership'. This does not only refer to company ownership, but also the share of the value chain. In KITAMA and MHQFP, farmers 'own' the cashew until it is semi-processed and therefore receive a higher price. This structural empowerment has strengthened the position of the farmer.

For all three initiatives a steep member increase was seen[13], as their efforts in strategic and structural empowerment allowed them to make profits, which strengthen the farmer's position and make substantial contributions to LED.

In the next chapter, the three groups of cases will be compared on the basis of the four propositions.

[13] 252 members joined KITAMA, UWAKOTA grew from 241 to 784 members and MHQFP grew from 840 members to 1589 farmers, with prospects of 2200 farmers in September 2013.

DISCUSSION

In this section, the case studies will be compared according to the four propositions and an answer to the research question is provided, ending with the call for the value chain to change.

INSTITUTIONAL INTERFERENCE

P1 : High institutional interference will enhance, and low interference will decrease the performance of collaborative structures in the cashew nut industry, given that their regulation can allow or restrict them in performing their tasks.

National system

Government interference in the cashew nut industry is high, as there are many regulations. For the sales process, government intervention has a significant impact. With the mandatory nature of WRS, there is only one channel for farmers to market their products, but this actually reduces farmer empowerment. In the old system, farmers or their collaborative structures could build relationships with buyers, e.g. negotiating terms for quality and fair-trade or organic standards. However, as all cashews are currently sold through the auction, with an exception of structures like MHQFP and KITAMA, there is no longer a reward for better quality. Besides, cashew sold through WRS must be grade 1, with corresponding quality expectations[14], and some farmers are now stuck with undergrade cashews, which they were previously allowed to sell.

All interviewed parties indicated that WRS has potential benefits for farmers, but besides limiting marketing channels, there are problems with the execution of the initiative by the warehouse officers. LUMANA stated that lesser amounts were being documented than actually brought in[15], reducing the profit and position of the farmer. These corruptions in the system call for better monitoring of assessing weight and quality and if the system is continued, it should have a voluntary set-up in order to allow collaborative structures to establish their own buyer relations if they want to.

State cooperatives

For PCS, the indicative price as set by CBT poses a problem. As it is based on the global cashew price in the previous seasons plus estimated production costs per KG, it fails to take current global market trends into account. As a result, prices paid to farmers are sometimes below this indicative price. Also, the minimum price at the auction has reduced the number of buyers, leaving cashew in the warehouse and the farmers without pay.

Besides, government enforcement of the cooperative societies act is low. This lack of government regulation has resulted in a low focus on strategic empowerment in the state cooperatives, i.e. most PCS do not provide training as required and there are no financial reports available. This allows for corruption and weakens the

[14] Moisture should be between 7% and 10% and the nut count approximately 172 per KG (CBT).

[15] e.g. when 10KGs are brought in, only 9.6KG is documented.

farmer's position. More government enforcement of PCS and WRS rules would increase these structures' profit through higher yields and thereby ensure more income for the farmer, strengthening their position.

New structures

For the new initiatives, too much regulation from regional governments has had a significant negative impact. The inability to obtain the license to collect produce from their members has limited UWAKOTA and MHQFP in their business, because without these permits their profitability is reduced, weakening the farmer's position and inhibiting LED contributions.

In short, institutional interference inhibits performance of both state cooperatives and the new initiatives, but in different ways. Government regulation binds farmers to the state cooperative system in which empowerment is not enforced and restricts the new initiatives from performing their tasks at the same time. Institutional interference is therefore split up in:
1) government enforcement of empowerment in PCS, which will have a positive effect on the performance of the state cooperatives, their enhancement of the farmer's strategic position and LED.
2) government regulation of new structures, which has a negative effect on the performance of these structures, their enhancement of the farmer's strategic position and LED[16].

CONTRIBUTION TO LED

P2: Collaborative structures will strengthen the farmer's strategic position and thereby advance local economic development.

In order for collaborative structures to contribute to LED, they must be profitable first. As many of the state cooperatives fail to make a profit, their contributions to the farmer's position and therefore LED are low. However, community donations as seen in CUs, PCS and UWAKOTA do enhance LED, but ideally, this money should flow back to the farmers, because this money was made on their behalf. Besides donations, collaborative structures provide work to local people in the form of board positions and processing jobs as in KITAMA and MHQFP. The income from this is also seen as a contribution to economic development and is much more sustainable than donations to local institutions. However, these LED contributions are not a result of strengthening the farmer's strategic position, as depicted in the original research framework, but a direct influence from the structure to the community.

In contrast, the profitability of new structures results in direct economic benefits for the farmer. They keep costs low, invested money in training to increase yields and distribute their profits among members. Besides training given, the set-up of processing facilities and the efforts to produce organic and fair-trade cashews provide farmers long-term solutions which enhance profitability, strengthen their position and allow for larger LED contributions. Institutions do have an influence, as proposed in P2, although collaborative structures' LED contributions sometimes flow differently than was originally thought.

[16] Modifications and findings for all propositions will be shown in figure 7.

EMPOWERMENT

Looking at efforts in strategic and structural empowerment, differences can be seen between the state cooperatives and the newer initiatives of human coordination.

Strategic empowerment

P3: Collaborative structures can empower farmers through their strategic actions in terms of information, inclusion, accountability and LOC. This will enhance the structure's performance, strengthen the farmer's position and increase contributions to local economic development.

Access to information and inclusion of farmers were found to be higher in the new structures as compared to the state cooperatives. However, the lack of financial reports in all structures besides MHQFP and the lack of market knowledge in PCS is alarming. The structures which provided training, being new initiatives and LUMANA, have seen a yield increase, and this higher production led to better income for the farmer. Accountability was found to be similar in all structures, as board members were elected at an AGM and serve for three-year periods. However, the MHQFP board presented annual reports, whereas other structures do not, increasing accountability through transparency. In terms of LOC, similarities were encountered in the input provision strategies, but even though subsidized by the government, sulphur is not always available at the necessary time. A solution could be to buy inputs year-round to have sufficient stock in May, like MHQFP does. Sharing of resources like blowers happened the same way for all structures.

As shown, prices paid to farmers are substantially higher in the new initiatives. For UWAKOTA, this is because their costs are significantly lower that the PCS and CU costs, allowing them to pay 1880TSH in comparison to 1200TSH paid by PCS in the same season. Trust of the farmer in state cooperatives is therefore very low, as much of their profit is lost in these structures. On the other hand, these higher prices paid by new structures can be explained by the focus on strategic empowerment. Training and information increased yields, and production enhances performance and farmer income. Besides, MHQFP farmers received a higher price because of better quality, which was achieved through their FFS's. So, in line with proposition 3, the structures which focus more on strategic empowerment within the attributes defined did perform better and were therefore able to pay the farmer a higher price, strengthening their position and making higher LED contributions.

Other sectors in Tanzania have also seen the rise of initiatives which focus on strategic farmer empowerment. In the coffee sector, the MEMCOOP project provided training to over 60000 cooperative members. Results showed that farmers felt they had more ownership over their cooperatives, resulting in higher inclusion. Besides, prices obtained by participating cooperatives were higher than of those not in the study, which enhances the farmer position and LED contributions. In the milk-sector, TangaFresh set up a model farm to educate their farmers and increase yields, as this enhances performance. These initiatives once more underline the importance of strategic empowerment.

Structural empowerment

P4: Collaborative structures can empower farmers by vertically integrating into the value chain, as processing activities increase the added value. This will enhance the structure's performance, strengthen the farmer's position and increase contributions to local economic development.

Looking at the MHQFP and KITAMA, their engagement in (semi-) processing allows them to capture a larger share of the value chain. This structural empowerment increased their profitability and allowed them to pay

their farmers 1500 to 1750TSH, compared to the 1200TSH indicative price for raw cashews, showing that higher focus on structural empowerment does enhance the farmer's position, as proposed in P4, as the structures which engage in vertical integration are more profitable. This makes them able to pay their farmer a higher price, strengthening their position, and therefore contribute to LED in a sustainable way.

CALLING FOR CHAINS TO CHANGE

What is the current state of empowerment in collaborative structures in the cashew nut sector in Tanzania, what is the effect of this on local economic development and how could the farmer's strategic position be improved through value-addition activities?

More could be gained from farmer's association in collaborative structures. This research shows the importance of empowerment in collaborative structures, but most state cooperatives in Tanzania fail to empower farmers both structurally and strategically. Farmer associations can offer an alternative to PCS (Fitzpatrick, 2013), but the institutional interference discourages them. A lack of empowerment, low yields, little value-addition and a lack of bargaining power due to WRS have weakened the farmer's strategic position. Profit from their crop is low, and a shift towards cultivating maize and cassava can be seen in the region, lowering the LED contributions and the competitiveness of the cashew sector in general.

As demand for cashews is likely to grow (Fitzpatrick, 2013) it is key for Tanzania to follow the lead of new initiatives in order to increase production and processing through strategic, but mostly structural empowerment. . This will result in a chain 'characterized by value addition and information' (Fitzpatrick, 2013). Given that (semi-) processing is a form of empowerment which can significantly strengthen the farmer's position, vertical integration is the way forward for Tanzania.

In other industries in Tanzania, vertical integration has also shown benefits. An example is the sugar-industry, where a large outgrower program allows farmers to deliver their crop to a processing plant in Bagamoyo and thereby gain more from their product. This has significantly strengthened the farmer's position and LED contribution of their industry. Across borders, the cashew industry in Mozambique is another successful example, as farmers have successfully integrated into the processing-part of the value chain in Mozambique (KIT, 2006).

However, processing in Tanzania currently only happens in 4 factories (CBT, 2013) and on a smaller scale by collaborative structures. Only MHQFP and KITAMA have yet been able to establish vertical integration, but there is interest from TANECU as a cooperative union to follow this example, which could benefit many farmers in the region. Besides creating a long-term profit potential for farmers, processing will reduce Tanzania's dependence on large buyers of raw nuts. Besides, the added value from processing and the job creation will aid the economic development of the region.

CONCLUSION

This last chapter relates the findings to theory, modifies the models presented in the literature review accordingly and provides theoretical and managerial implications. Last, the limitations and possibilities for further research are discussed.

Findings

First, the importance of both types of empowerment in human coordination initiatives was demonstrated by the case studies. Comparison shows that strategic empowerment can increase yields and that structural empowerment raises value captured from the product. Empowerment of farmers therefore improves the collaborative structure's performance, which enhances the farmer's position, and increases contributions to LED. Second, collaborative structures were found to also make direct contributions to economic development, through donations to communities and job creation in processing and management. Third, the lack of government enforcement in Tanzania's cashew nut sector lowers empowerment efforts and the performance of state cooperatives, whereas government regulation of new collaborative structures lowers these structures' performance. To depict the actual situation, modifications to the original model must be made, as shown in figure 12.

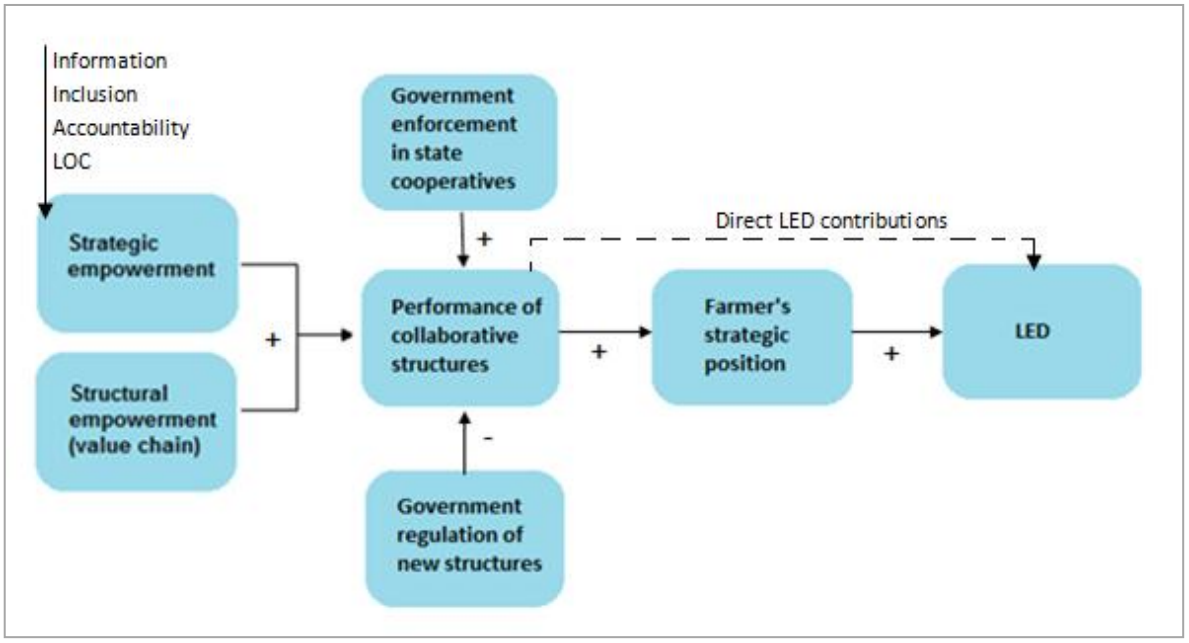

Figure 12, modified research framework

Economic development

As argued, strategic empowerment increases yields and income of the individual farmer, and therefore has an impact on a local level, whereas structural empowerment can also have a regional influence by providing processing jobs in the area. By allowing farmers to reach a chain activity integrator position, as depicted in figure 5, the farmer's position in the value chain is strengthened, and the cashew sector could make much larger economic contributions. Structural empowerment is therefore positioned in the regional level.

Institutional interference was found to be present on all levels of the national system and include universities, business and government. Figure 13 shows the adaptions made to the model for economic development.

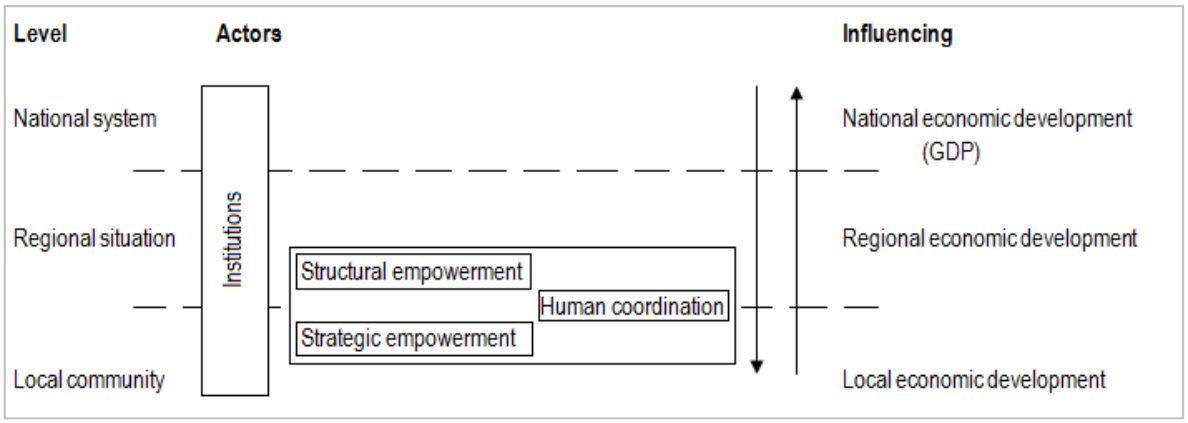

Figure 13, modified model for economic development

Implications

To conclude, this study shows that empowerment in human coordination as defined in the literature advances economic development as both strategic and structural empowerment can increase collaborative structure's performance, thereby strengthen the farmer's position and raise contributions to economic development. However, the current literature shows that collaborative structures influence economic development on a local level, but structural empowerment could also make regional contributions. This was shown by the case studies in Tanzania's cashew nut industry.

Practical implications are that collaborative structures could advance Tanzania's economic development if they increase focus on strategic and structural empowerment. However, investments in processing are needed and it should be stimulated by the government in more convincing ways[17]. Furthermore, government should allow any structure to collect from their farmers and negotiate their own terms with buyers, make the auction more transparent[18] and WRS optional. This can make cashew a cash crop, not only for government purposes, but also for the farmer, and increase contributions to the economic development of the cashew-producing regions in Tanzania.

With a value chain-approach, focus of this research would have been on vertical business links. However, as businesses do not operate in isolation, the understanding of local institutions is of key importance. GVC and LED literature therefore complement each other, and by combining these, this paper provides an integral view on empowerment, with a solution which is owned by local populations and adapted to local context.

[17] The only encouragement now is that processed cashews can be exported at a 0% levy, whereas raw cashews are exported at 15%.

[18] The auction discourages processing, as there is no guarantee of supply. Bids are silent, winning bids are not announced and licenses are needed, so some processors ended up without cashews. An example of this is MCC, who has not processed any cashew this season, because they were not granted a buying license for the auction.

LIMITATIONS AND FURTHER RESEARCH

First of all, the adapted model for economic development, figure 13, is not complete. This research looks at farmer empowerment and its influence on economic development, but there are many other factors besides empowerment, as explained by Stimson et al. (2009). These are not covered by this research, and as many households in developing countries depend on agriculture as their main source of income, further research could be conducted on endogenous factors which influence all levels of economic development.

Looking at research methods, the level of education and language barriers had an impact on interviews. For some interviews, e.g. PCS and farmer visits, a translator was present, because not all respondents spoke English. However, questions were simplified as much as possible in order to avoid confusion and misinterpretation.

Besides this, criticism on the case-study method exists. A lack of internal validity can be caused by the investigator bias, as he/she can influence what is observed. This study uses triangulation of data to strengthen the validity, so besides the cases; interviews, observations and annual (financial) reports provided insights. Another point of critique is that case studies have limited external validity, since it is impossible to generalize from a single case. This was solved by selecting several cases on multiple levels of the state cooperative system in Tanzania and by comparing these to other initiatives in the industry. However, geographical limitations do exist, as this study was performed in one sector in the South-East of Tanzania. This limits generalizability, so other research could examine the influence of strategic and structural empowerment on the economic development in other regions, sectors and nations.

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APPENDIX: INTERVIEWS

Stakeholder interviews:

Institution	Person interviewed
Cashewnut Board of Tanzania (CBT) – Dar Es Salaam	Quality control officer
Mohammed Enterprises (exporter and processor of cashews)	Trade officer
Africa Enterprise Challenge Fund (AECF) – NGO	Communications Manager
Tanzania Warehouse Licensing Board (TWLB)	Planning and promotion manager
RMI Services (outgrower programs in the sugar industry)	Director
Ministry of Agriculture, Food Security and Cooperatives (MAFC)	Principal Economist I
Co-op department DSM (MAFC)	Principle cooperative officer
Cashewnut Board of Tanzania (CBT) – Mtwara	Director of Agriculture and Processing
Institute of Finance Management (IFM)	Professor
Cooperative Audit and Supervision Corporation (COASCO)	Accountant
National Microfinance Bank Tanzania (NMB)	Relationship officer Agribusiness
Cashew Nut Industry Development Trust Fund (CIDTF)	Agricultural Officer
OLAM (processor and exporter of cashews)	Factory Manager
MCC Ltd (processing and training facility)	Management Trainee
Mtwara District Council	Cooperative Officer

Case studies:

Institution		Location	Function interviewed
Cooperative Unions	ILULU	Lindi & Liwale	Operating officer
	MAMCU	Mtwara & Masasi	Marketing manager
	TANECU	Newala & Tandahimba	General Manager
Primary Cooperative Societies	LUMANA	Newala	Secretary
	MUUNGANO	Mikindani	Secretary
	KITUMIKI	Lindi	Chairman
Farmer Groups	KITAMA	Tandahimba	Secretary
	MHQFP	Masasi	General Manager
	UWAKOTA	Tandahimba	Secretary