

The impacts of agricultural cooperatives in Tanzanian farmers' livelihoods

The Case of Tobacco Agricultural Cooperative in the Tabora Region

Joshua Kiungai



The impacts of agricultural cooperatives in Tanzanian famors` livelihoods: A Case of Tobacco Agricultural Cooperative in the Tabora Region

Joshua Kiungai

Supervisor: Karin Hakelius, Swedish University of Agricultural Sciences,

Department of Economy

Examiner: Richard Ferguson, Swedish University of Agricultural Sciences,

Department of Economics

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challenges, Cooperative roles.

Swedish University of Agricultural Sciences

Faculty of Natural Resources and Agricultural Sciences Department of Economics

Abstract

Agricultural cooperatives aim to have controlled effort for agricultural products and find market to sell those products at a reasonable price. Farmers' products are sold at a better price leading to a higher income which improve farmers' livelihood. The study on the impact of agricultural cooperatives in enhancing farmers' livelihood in Tanzania was conducted at the Usinde agricultural cooperative society in the Tabora Region. The study adopts the transaction cost theory and uses content data analysis approach to analyse the collected interview and focus group discussion data. The study found that the agricultural cooperative society is responsible of ensuring farmers access to inputs such as fertilizers, seeds and pesticides, cash credits for farm management, extension services and acting as marketing channel for their farmers produce. The services improved the farmers' income, however they have been encountering a number of limitations like misuse of funding by farmers and limited number of staff which has led to poor performance. This implies that there is more to be done in order to improve farmers' livelihood.

Keywords: Tobacco production, Transaction cost theory, Marketing, Cooperative challenges, Cooperative roles

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Abbreviations

AMCOS Agricultural Marketing Cooperative Society

COASCO Cooperative Audit and Supervision Corporation

ICA International Co-operative Alliance

SLU Swedish University of Agricultural Sciences

1. Introduction

The background of the study on agricultural cooperatives is presented in this section, along with a general introduction to agricultural cooperatives and detailed focus on agricultural cooperatives in Tanzania and Tanzania's privatization policy. Additionally, the aim and research question, the delimitation of the study, and the outline will be provided.

1.1 Background information

Agricultural cooperatives or farmers' cooperatives involve individual farmers pooling their resources together in order to achieve a common objective or address a certain challenge. Farmers do this in order to increase revenues, reduce costs or share risks and strengthen their market power. Agricultural cooperative differ from marketing cooperative since it also supplies members with required inputs, e.g. seeds, fertilizers, fuel, credit and machinery services. Other services include transportation, packaging, distribution and marketing of farm products (Dictionary, 2022). Farmer cooperatives are owned by farmers, controlled democratically and benefits are shared equally to all members (Valentinov, 2014). Agricultural cooperatives play a significant role in improving farmers' livelihoods by ensuring farmers receive inputs and advice needed to improve quality of their products. It also helps to ensure that farmers' products meet local and international markets standards (Poppe and Hagedorn, 2012). Agricultural cooperatives give farmers bargaining power due to the economy of scale and their large number. Also, their large number enable farmers to reduce transaction cost such as information costs, e.g. searching for prices, inputs and buyers, negotiation costs which could have involved hiring lawyers or paying a broker and monitoring costs that involve monitoring quality of goods as well as buyers' efforts to ensure compliance (Poppe and Hagedorn, 2012).

Similarly, agricultural cooperatives in Africa were established originally to distribute farm inputs and market agricultural commodities produced by small scale farmers in inaccessible rural areas hence ensure effective production (Chambo, 2009). Farmers were able to increase quality of their agricultural products, processing capacity, easily transport commodities and marketing as the result of

agricultural cooperatives (Anania and Rwekaza, 2018). Agricultural cooperatives have a long history in Tanzania and were established in different parts of the country (see Figure 1) involved in cash crops production such as in the north and north-west where coffee is produced, the lake zone where cotton is the major crop, and the central and southern highlands among tobacco farmers (Sumelius *et al.*, 2013). Cooperatives went through various stages of evolution in Tanzania which led to decline in their performance as the result of shift in policies from state-controlled economy to market-oriented. The policy shift caused failure of agricultural cooperatives since most of them were not prepared to compete with multinational companies that were operating in the country (Sumelius *et al.*, 2013). Cooperatives were unable to provide adequate services such as loans, farm inputs supply and markets to their respective farmers compared to private traders (Tanzania, 2015).



Figure 1. Tanzanian map showing cash crops producing regions (red colour) where agricultural cooperatives were established in 1950s and 1960s (source: Anania et al., 2020)

1.2 Privatization policy and agricultural cooperatives in Tanzania

Privatization policy in Tanzania brought private actors along various points of the cash crops value chains (Kimaro, 2020). Private companies competed with already weak agricultural cooperatives since they were able to buy farmers' produce in cash compared to agricultural cooperatives which bought commodities on loan and did not pay on time. However, private companies did not provide any supporting services to the smallholder farmers, e.g. farming inputs, loans, transportation, packaging, new technologies and extension services (Kimaro, 2020). Other limitations of private companies are lower commodity price, price fluctuation and market uncertainty. Therefore, farmers who are not members of agricultural cooperatives have poor livelihood due to lack of access to advices, incentives and lack bargaining power for their products (Anania and Rwekaza, (2018). Strengthening agricultural cooperatives could address all of these challenges and enable farmers to improve their livelihoods.

Cooperatives should operate under principle adopted by International Cooperatives Alliance (ICA) whereby efforts are put forward to address different farmers' needs (Munster, 2015). Principally, cooperatives should be open, membership is voluntarily and democratically controlled by the respective farmers who participate in making decisions and setting policies (Munster, 2015). Cooperatives should also facilitate education and training of elected staffs and members which could help them improve services, boost local economies, and deal more effectively with social and community needs. Cooperatives which lack these principles become weak and are susceptible to abuse of power and corruption which lead to their demise. Most smallholder farmers who are part of cooperatives in Africa do not have formal or specialised education for effective management of their cooperatives. This led to poor management because elected leaders lack managerial skills while farmers lacked full ownership and control of agricultural cooperatives. Most cooperatives were selling their products to the government and farmers did not have control on matters related to price or other benefits obtained from the cooperatives (Tanzania, 2015). There is still a need for agricultural cooperatives in the modern market economy in the country since smallholder farmers are still the major producers of cash crops such as tobacco and their condition is poor despite an increase in productivity, export and price of tobacco. The current study aimed to investigate the contribution of Tanzanians tobacco agricultural cooperatives on farmers' livelihood using the transaction cost theory. The theory takes into consideration the costs of searching for liable information, negotiation and monitoring costs since such costs have direct impact on income or profit from tobacco sale. It is expected that findings from this study could contribute

to the existing literature on cooperatives and help decision makers to develop strategies which could help to address various challenges facing cooperatives in Africa.

1.3 Aim and research questions

The current study aimed to assess the impact of agricultural cooperatives in enhancing farmers' livelihood in Tanzania using the tobacco cooperative in the Tabora Region as a case study. Specifically, the study aimed to identify challenges facing agricultural cooperatives in enhancing famers' livelihood through transaction cost theory.

The following research questions were constructed and addressed in the current study.

- i. What roles do agricultural cooperative have in enhancing famers` livelihood?
- ii. What challenges do agricultural cooperatives have in enhancing famers` livelihood?

1.4 Delimitations

The research intended to assess the impact of an agricultural cooperative in enhancing famers' livelihood in Tanzania. The study was limited to one tobacco agricultural cooperative in the Tabora region, Central Tanzania. The cooperative was selected because tobacco is the main cash crop in the region which employed about 60,000 farmers and contributed to 64% of tobacco exported in the country. The study could be useful to other agricultural cooperatives in Tanzania aiming to improve farmers' livelihood until proven otherwise.

1.5 Outline

The thesis begins in chapter one with detailed background on agricultural cooperative and its role in enhancing farmers' livelihood. The chapter described the research problem, aim and research questions, and study delimitation. Chapter two reviewed literature broadly on the contribution of agricultural cooperative on farmers' livelihood in Tanzania and Africa context. Theoretical and empirical problems were also discussed in order to identify knowledge gap, appropriate theory/ theories and conceptual framework upon which the study was built. Chapter three followed which explained methods, techniques, and procedures that were applied during data collection. Chapter four provided detailed understanding of collected data and analysis techniques. Chapter five reported key findings from the study and what was Usinde's cooperative contribution to transaction costs. Chapter six discussed relationship between current study findings, and theoretical and empirical evidence reported by other researchers. Finally, Chapter seven conclude and make recommendations regarding the Usinde agricultural cooperative and Tanzania cooperatives in general.

Literature review and theoretical framework

In this chapter, the literature review on agricultural cooperatives and farmers' livelihood in Africa will be presented as well as the challenges facing agricultural cooperatives in Africa. The chapter also highlights a brief overview of Tobacco production and cooperatives in Tanzania. The chapter ends with a discussion of the transaction cost theory upon which this research is anchored.

2.1 Agricultural cooperatives and farmers' livelihoods in Africa

Majority of African smallholder farmers operate in remote areas with limited access to extension services, inputs and markets. Farmers grow both cash and food crops, they have indigenous knowledge collected through long experience they have when cultivating food crops, e.g. maize, cassava, sorghum and millet. It is in cash crops where most farmers have challenges since the crops were introduced in the continent during colonial period and farmers do not have sufficient experience to manage these crops or produce quality products. Also, there are limited industrial base in the continent capable of processing and producing finishing products based on the locally produced cash crops e.g. coffee, tea, sisal, cotton and tobacco. Agricultural cooperatives were thought to address these challenges by training farmers on how to produce quality products and help them overcome other production challenges (Nsingize, 2013). Cooperatives offered agricultural extension services and enable farmers to gain access to national and international markets which improved their income and livelihoods.

Studies on impacts of cooperatives in Ethiopia showed that they had positive impact on the wellbeing of smallholder through provision of farming inputs like fertilizers, credit services, market information and help farmers improve the technologies in production. Farmers have also gained stronger bargaining power and have reduced production, distribution and market risks. (Ahmed & Mesfin, 2017). Cooperatives were also reported to improve smallholder famers' livelihood in rural areas in Nigeria by enhancing agricultural and community development, strengthening of rural-based industries, mobilization of participation in rural projects, financing of rural projects, and employment creation (Ogu, (2014). Other roles included

fostering unity in community, training leaders who manage other rural institutions, poverty reduction and promotion of gender equality. Similarly, in Tanzania when cooperatives were established they were able to support smallholder farmers to access markets for their products, supply farm inputs at lower costs and offer low interest loans. These supports enabled farmers to invest in their enterprises so as to increase their productivity with the guaranteed return for their investments. There were observed boom in coffee, cotton, tobacco and cashew nuts production in the country between 1950s and 1960s as the results of agricultural cooperatives (Maghimbi, 2010).

2.2 Challenges facing agricultural cooperatives in Africa

The cooperatives primary purpose is to protect members' interests and they could mature enough to the point of influencing national agricultural policies (Ortmann and King, 2017). However, there are several challenges limiting cooperatives development in the world. These challenges included poor agricultural cooperatives policy, weak government support and lack of trust among farmers as was reported by Nekrasov *et al.*, (2019) in Russia. Similarly, failure of cooperatives in developing countries is attributed to lack of-management experience and knowledge, capital resources and poor government policies. Government policies are critical since they can constrain or enhance independent cooperative development (Ortmann and King, 2017).

Moreover, globalised market economy, environmental and global political changes are bringing new challenges to farmers' cooperatives in Africa. The challenges include limited extension services, access to farming inputs, transportation, credit and low value addition like grading, packaging, processing quality control and standards (Tomspon, *et al.*, 2019). Cooperatives in Tanzania face the following challenges: farmers do not receive inputs at the right quantity and time, poor products quality and market uncertainties both in local and foreign markets. Others are late payments for their products, price fluctuations, and inadequate training and education provided to members (Anania & Rwekaza, 2018b)

2.3 Tobacco production and cooperatives in Tanzania

Tobacco is produced mostly in the Tabora region in central Tanzania, however, farmers face production challenges related to farm inputs access, loans, transports, storage, processing, grading and markets for their products (Roula Abi Habib-Khoury, 2016). Farmers voluntarily joined together and established primary agricultural cooperatives to address the inputs, processing and marketing challenges (Maghimbi, 2010). These cooperatives were Katunguru Primary Agricultural Cooperative (KPAC) and Mwenge Primary Agricultural Cooperative (MPAC) (Roula Abi Habib-Khoury, 2016). The cooperatives were registered in the country and were operating as per ICA guidelines (Valentinov, 2014). The KPAC was the oldest and it was established in 1992 in Urambo district and targeted farmers engaged in tobacco and palm trees production. Most farmers were men with women making up 5% of the cooperatives members, and farmers benefit through access to inputs, loans, purchasing of farmers produce and social support during off-season (ibid).

2.4 Theoretical Framework

In order to have a clear picture of the study, theoretical framework will be described into three parts as follows;

2.4.1 Understanding of how farm businesses support farmers' livelihoods.

Agricultural cooperatives have done a lot to improve the farmers' livelihood by; training farmers to produce quality products, offering agriculture extension services and enabling them to gain access to markets for their products which resulted in farmers selling their products on time and getting income to solve their social-economic problems (Nsingize, 2013). Additionally, agricultural cooperatives offer; farming inputs and credit services that help farmers to reduce production risk, market information which causes farmers to have strong bargaining power and reduce distribution and market risk, and improvement of technologies in production to produce quality products which resulted in farmers to have quality products that can sell to the market and obtain income which improves their livelihoods (Ahmed & Mesfin, 2017).

Since most of agricultural activities are conducted in rural areas, agricultural cooperatives have managed to; finance rural projects that have a direct impact on the whole community, enhance community growth, provide employment

opportunities to farmers' family members, and poverty reduction that manages farmers from low income to higher income (Ogu, 2014).

"More than 70% of Tanzanians depend on agriculture for their livelihoods" (Snyder et al. 2020). According to Maghimbi (2010), agricultural cooperatives in Tanzania were established purposely for; enabling farmers to meet their social-economic needs, enabling farmers to produce; both quality and quantity products that will meet the market criteria and contribute to the farmers' efforts of poverty reduction and livelihoods improvement. Those agricultural cooperatives' efforts are conducted by; presenting farmers in price negotiations meetings, facilitating the operation of farmers' cooperatives, promoting, encouraging and identifying education needs, and representing farmers in the tobacco market by a competent representative (ibid).

2.4.2 The three categories of transaction costs that farmers face in their business practices.

Transaction costs have been argued as the reason farmers failed to improve their agricultural products, access market information, meet right buyers and failed to monitor contracts (Tefera *et al.*, 2017). The transaction costs theory was adopted in this study and it refers to the costs of carrying out any exchange between firms or transfer of resources (Poppe and Hagedorn, 2012). The theory recognizes that transactions do not occur without friction and there are interactions between and within firms. Transaction costs are divided into information, negotiation, and monitoring (or enforcement) costs as shown in figure (Figure 2). Firms and individuals incur costs when searching for information about products, prices, inputs and buyers or sellers. Negotiation costs arise when conducting transactions such as negotiating and writing contracts (managerial expertise, hiring of lawyers etc.) or paying for the middleperson services (auctioneer or a broker). Monitoring or enforcement costs are to monitor products quality or ensure compliance among different actors. It should be noted that relaxation of neoclassical assumption of perfect and costless information gives rise to all three types of transaction cost.

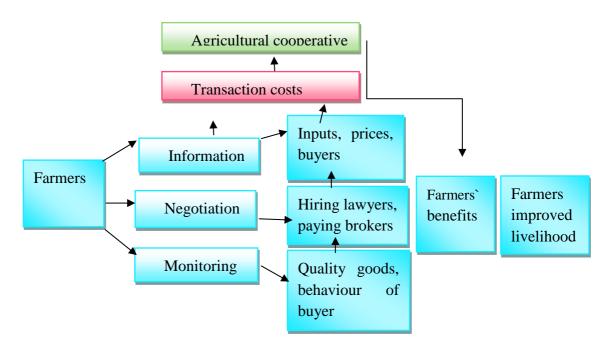


Figure 2. Conceptual Framework on the Impact of Agricultural Cooperative for Enhancing Farmers Livelihood (Derived from Poppe and Hagedorn, 2012)

2.4.3 How in principle cooperatives can support farmers with their transaction costs.

The cooperative principles are rules which give direction to members and the organization on what to do for each other. The cooperatives principle have divided into three parts which are; the user-owner principle describes the person who owns and finances the cooperatives are the one who uses them, the user-control principle describes the control of the cooperatives done by those who use the cooperatives, the user-benefits principle describes the benefit of the cooperatives issued to its users based on their use (Nilsson, 1996). The agricultural cooperative has both social and economic aspects. The social aspect consists of relationships among members, while the economic aspect consists of the relationship between the member and the business. From both aspects, the cooperative has managed to reduce transaction costs since both aspects serve the interest of members who do the business together than the independent partner. The market information cost is reduced for the member of the cooperative when they trade together due to a good relationship among them than when trading with a private partner. Also, it shows before members joined cooperatives where experiencing market failure while trading with private partners because the market information where hidden from another partner; which resulted in transaction costs. Since the cooperative principle enables members not to behave opportunistically, then monitoring costs are reduced among members because members will act accordingly (ibid).

Kariyasa and Dewi (2011) argue that individual farmers with small hectares of farms and small size of animals face difficulties selling their products which raises transaction costs, and specialization is expensive for them to manage with quality inputs like fertilizers and medicine not possible for them to acquire individually; by joining the cooperative those problems collectively can be solved because they get assured with inputs supplies(fertilizer, credits, medicine) and market for their products. However, apart from initiatives by cooperatives to reduce transactions cost, some external factors hinder the cooperatives in reducing transactions costs; legal infrastructure that consists of not independent courts hindering enforcement of property rights and oppose contracts that increase the uncertainty of transactions cost, physical infrastructure that comprise of telecommunications and roads facilities that enlarge communication and transport cost to both farmers and traders. The external factors can only be controlled by the government so that the cooperatives can work effectively, otherwise cooperatives will not reduce the transaction costs to farmers.

The theoretical implication is farmers who are cooperative members gain more profits since transaction costs are shared in the cooperative. The costs carried by the cooperatives are turned into farmers' profits from the produce and thus enhance their livelihood. It is expected that farmers in cooperatives are sharing these transactions costs which lead to improved livelihood (Tefera *et al.*, 2017). The conceptual framework showed that for the tobacco farmers to gain benefits, transaction burden should be carried out by their cooperative. The conceptual framework guided the researcher in this study to develop data collection instruments. The instruments were developed based on existing independent (agricultural cooperative) and dependent variables (farmers' livelihood)

3. Research methodology

The chapter presents the techniques, methods, and procedures used to gather the data. Research design, the study area, method selection, sampling technique, sample size, data collection method, and data analysis are all described in detail. Information on ethical considerations, quality assurance, and data presentation is also provided in this chapter.

3.1 Research Design and Approach

Research design is the master plan determined by a researcher with account of the research objectives as inductive of the research questions (Saunders *et al.*, 2019). As addressed by Rowley (2002), case studies can be qualitative or quantitative. The case selection can be influenced by the study aims, problems, theory and conceptual meaning. However, there are other factors to consider, such as data availability from individual cases or institutions, time accessibility and enough fund to enable data handling and explanation.

Basically, the researcher used the exploratory case study design over other qualitative research design like; narrative design, phenomenology design, grounded theory and ethnography because the study is interested in a specific cooperative or a case, and the aim is to get a better knowledge of how the outcome from the cooperative is used by the member to enhance their livelihoods and access the subjective experience of farmers. Also, for the research to be called case study the design should have some features such as the following. Identifying a "case" for the study and in this study the Usinde agricultural cooperative was the one. A "case" should be a bounded system and in this study the research is bounded by time for data collection which is six (6) months and bounded by place which is located on Usinde agricultural cooperative in Tabora region (Creswell et al., 2007). This was an intensive study because interviewed a single case cooperative and a group of members (farmers) of a single cooperative. A case study does not aim to explore a whole entity, but instead a particular problem or unit of analysis. The researcher wants to understand a specific issue or situation in detail. Therefore, such case study is useful for the research (Rowley, 2000). Creswell et al., (2007) said that, "you would use the case study method because you deliberately wanted to cover the

contextual conditions-believing that they might be highly pertinent to your phenomenon of study". The statement above convinced the researcher to use the case study design over other qualitative design because is best suited to obtain indepth understanding of a case and focus to expanding in-depth description and analysis of a case. Also, the case study design is suitable for multiple choices such as interviews, observations and documents during data collection compared to other qualitative research design (ibid).

However, despite of their benefits, case study have been criticized. To begin with, the case study are punished for the deficiency of rigor when the case study examiner get careless and allowing vague facts or pessimistic aspects to control the observations and conclusions. Secondly, case study has no ground for scientific generalization because they are limited with number of subjects. Lastly but not least, case study are characterized for creating a large number of data, difficult to perform and being too prolonged. The problem arises where data failed to be controlled and measured systematically (*Creswell et al.*, 2007). By the quality of assurance explained, the researcher effort to tackle those criticism is assured.

Research approach refers to the objectives and the techniques for research which includes the steps from extensive hypothesis to methods of data collection, analysis and interpretation (Lincoln & Guba, 2011). By considering the nature of the research problem, the researcher in this study used a qualitative research approach. Qualitative research is an approach to investigating and understanding the significance of groups or individuals assigned to a social or human problem. The research process requires emerging procedures and questions, generally, data collected in the human subjects setting, analysis of data rationally building from specific to general themes, and the researcher producing clarifications to the meaning of the data (Sargeant, 2012).

Qualitative methods, namely interviews (semi-structured interviews) and documents were used to collect information on impacts of the Usinde cooperative on tobacco farmers' livelihoods. According to Larsson & Lindahl (2017), it is generally helpful for qualitative research while exploring human behaviours and actions. Additionally, the methods were used due to their flexibility and ability to collect large volume of data over short amount of time and from various sources, also enable the researcher to obtain a greater understanding from the informant's social attributes along with their opinions, compared to when using the quantitative research, hence increase its legitimacy due to consideration of human language and accompany the informant's interests and attitudes which is difficult to achieve with quantitative research (Reich, 1994). For this study, the researcher chose the qualitative methods based on the number of respondent targeted.

3.2 Study Area and Justification

The study was conducted in Urambo district in Tabora region which is located in the central part of Tanzania. It is located in 5° 04' 0.01" S and 32° 02' 60.00" E (Figure 3). The area receives rainfall ranging from 900 mm to 1200 mm falling between November and April with minimum and maximum temperature of 16°C and 33°C, respectively (Maghimbi 2010). The area has an altitude of 1110-1200m above sea level and a well-drained medium texture soil. Agriculture is the main economic activity in the district which includes livestock keeping and cultivation of different food and cash crops such as maize, rice, cassava, sweet potatoes, groundnuts, sunflower and tobacco (Roula Abi Habib-Khoury 2016). Tobacco is the most dominant cash crop in terms of economic contribution and is produced mostly in the Tabora region in central Tanzania especially in Urambo district. The sampled population in the study area comprised of tobacco farmers, cooperative staff and tobacco cooperative manager in Urambo district, Tabora. The Usinde Cooperative was selected as the case study because it is among the oldest cooperatives in the area established in 1990s and could provide deep insight into understand of how agricultural cooperatives affect farmers' livelihoods in Tanzania (Karakas 2019).



Figure 3. Map of Tabora region showing location of Urambo District in Tanzania.

Source: (Maghimbi 2010)

3.3 Sampling technique and Sample size.

A sample imply a set of respondents (people), group, subgroup of population chosen as individuals representative from a given population (Mohamed *et al.*, 2016). When the features of the elements chosen are alike to those of the whole target population, a sample is said to be representative. According to Saunders *et al.*, (2019), it is impossible to evaluate every single element in the population in the time of managing investigative research, because of the limited group of population that serves as representatives is chosen for assessment. When the sample of population is more representative; will lead to more accurate and logical deductions, and the better results for generalization to the targeted population (ibid).

This study adopted the purposeful sampling. Purposeful sampling is a sampling technique where a researcher picks individuals and locations for study because they can purposefully tell an understanding of the research problem and central aspect of the study (*Creswell et al.*, 2007). Also, purposeful sampling was applied by researchers because to choose a sample from a particular population, a researcher doesn't look for informants in the study at random but instead in a planned way to make sure that the chosen sample is acceptable and fit for questions to be asked (Bryman et al.,2018). Additionally, purposeful sampling has advantages which motivate a research to use it. Those advantages includes; it is time saving, enables a researcher to obtain required information from small population of interest and come up with useful end results, enables researcher to collect qualitative feedbacks which insure more awareness and accurate research results (Bryman *et al.*,2018).

Lead farmers from the study site were selected to present the other famers from this study. Lead farmers are those famers who considered tobacco as their only source of income and they sell their tobacco only to Usinde agricultural cooperative. They also lead by example by practising what they are taught by Usinde agricultural cooperative through their agricultural extension and cooperative officers, also the other farmers are taking them as experienced and technology adopter. Identification of respondents was done by cooperative manager, agricultural extension and cooperative officers within the selected study area in the Urambo district in the Tabora region. From Usinde tobacco agricultural cooperative, 1 cooperative manager, 4 cooperative staff and 10 tobacco farmers who are lead farmers were selected to participate in this study, where they lead to a total of 15 respondents.

3.4 Data Collection Methods and Instruments

Validity and reliability in research are used to evaluate the quality of research methods, techniques and instruments used in research. In quantitative research; validity is the extent to which an instrument measures what it is supposed to measure while reliability refers to the stability of the measuring instrument used and its consistency over time (Surucu & Maslakci, 2020). A valid instrument produces accurate results and reliability is about the consistency of a result. Qualitative research differ with quantitative research in terms of meaning for validity and reliability, because in quantitative research those two terms are considered to bestow credibility to research, while in qualitative research the credibility depends on the effort and ability of the researcher. Also, in quantitative research these terms are treated separately which differ with qualitative research because in qualitative research the term validity and reliability are not considered individually (ibid). In this research both secondary and primary data will be collected in order to increase the credibility of data collection.

Secondary data was collected through documentary reviews, both from published and unpublished books, journal articles, Usinde agricultural cooperatives reports, e-resources, conference proceedings, and bulletins. From these documents, the researcher in this study was interested to explore the farmers' concerns about the agricultural cooperatives to their livelihoods. This data provided deep insights to the researcher about what has been discovered and is yet to be discovered in this study and thus establish a useful focus. The motives for using this method are; more cost-effective than social surveys and it's a good source of background information (Ahmed, 2010).

Primary data is a first-hand information that has not yet been interpreted. It is the data collected specifically for the purpose of the research project. An advantage of primary data is that it is specifically tailored to your research needs (Creswell, 2013). In this study, primary data were collected by using semi-structured interviews. The researcher used semi-structured interview because; it takes human expression into consideration, it is flexible, it gives permission to researcher to add more questions all along the interview when necessary and is appropriate for studies that are following qualitative research design because such interviews stick to the outcomes and interests of the participant (Creswell, 2013). With a provident interview guide in advance semi-structured interviews are considered to be a flexible and fluent form of an interview in collecting qualitative data. Also, to make easy the process, a researcher needs to have good interview technique (Larsson & Lindah, 2017). To accompany the whole process, the researcher formulated the interview guide in advance (see Appendix 1). However, to attain more intuition, the researcher asked additional questions and details at any time the participants initiated some anonymous matters to get more understanding. An interview guide

was arranged and used as a tool for data collection during the interview session. This enables a researcher in expanding semi-structured interview questions, in which is focused in one aspect of the topic (Yusof *et al.*, 2013). The interview guide involved a list of questions used to data collection from key respondents. During interviews data were recorded in mobile phones and note book. This instrument was used to collect data from all fifteen (15) individuals of the Usinde tobacco agricultural cooperatives in Tabora region.

An interview method is a set of questions that a researcher asks during the interview (Keesing *et al.*, 2011). This method helped the research to obtain detailed information from key respondents (farmers). Based on their skills, knowledge and experience these group of respondents connected to useful information of the subject matter. By applying face-to-face interview, the researcher had a greater chance to explore informants and generate aims for a deep discussion on the topic.

Face- to face- interviews were employed for the semi-structured interviews to obtain information from 4 tobacco cooperative staffs, 1 tobacco cooperative manager and 10 tobacco farmers who are members of the Usinde tobacco agricultural cooperatives. The researcher used face-to face interviews because; it saves time between question and answer, both interviewer and interviewee can immediately act to what is said by each other, it makes smooth to design a satisfying and enjoyable (good) interview environment and lastly but not least with the approval of the respondents, face-to-face interview can be recorded, helping the researcher to have more precise data than easily taking notes. The researcher used all techniques in this study to assure that both of the questions were responded and the data was precisely recorded. Additionally, the method is productive for obtaining context and insight into a topic, enables informants to discuss what is important to them and is useful for collecting quotes and stories. Moreover, this method enables the researcher to gather other information about the informant's personal features and environment which is of greater value in clarifying results. It has resilience since the interviewer has a chance to reshuffle the questions if necessary as supported by Mathiyazhagan, (2010).

The researcher managed a pilot test of the interview process with classmate, colleague and relatives to attain a better understanding of the interview process and undergo the application of interview techniques. As a results, the basic interview guide was adjusted to better suit the study. A checklist which included open-ended questions was prepared for both farmers and key informants (Usinde tobacco agricultural cooperatives staff). The prepared checklist was in the local language (Swahili) and was tested in similar population as the targeted one before commencement of the study (Larsson & Lindah, 2017). A total of 10 farmers

(member of the Usinde tobacco agricultural cooperative) were invited in the interview which involved different age groups and gender to ensure there was no bias or underrepresentation of any social group. Tobacco farmers were asked questions on their perception, attitudes and feelings towards agricultural cooperatives and their livelihoods. Additionally, one cooperative manager and four cooperative staffs were interviewed as the key informants. Key informants were asked questions on Usinde's cooperative management, structure and challenges faced during its operations. Although the selected sample size was small in the current study to warrant a meaningful inference, it is believed that it was well justified due to the homogenous nature of the sampled population and small numbers of members (456) in the Usinde Cooperatives (Vera, 2015).

From the basic data collection practise, the following themes were identified; Background information, tobacco cooperative marketing system, roles of tobacco agricultural cooperatives and agricultural cooperatives challenges. All these have to show how the cooperative has reduced farmer's transaction costs; where the cooperative has added transaction costs?; and finally how the cooperatives have impacted farmer's livelihoods? The background information was intended at observing the respondents in terms of their age, gender, level of education, experiences as farmers and the sources of livelihoods in their families or households. Also, the background information described the organizational structure and the operation of Usinde tobacco agricultural cooperative. This empowered the researcher to find out the various details and likeness among the elected respondents.

The themes on agricultural cooperatives pursued a better understanding of the transaction costs the farmers face in their agricultural production processes and marketing system, along with how they manage these costs. The theme of the agricultural cooperative also supported the researcher in understanding how the cooperative has reduced farmers` transaction costs, where the cooperatives have added transaction costs, along with how the cooperative has impacted farmers` livelihoods. The question concerning how agricultural cooperatives reduce farmers` transactions cost allowed the researcher to determine whether respondents were willing to engage in agricultural cooperatives. The themes also assisted the researcher in determining whether respondents associate the transaction costs they face in the production process and the marketing system with the impact on their livelihoods. The researcher compassed the question based on how and why farmers` joined the agricultural cooperative. The theme of where the cooperative has added transaction costs; was adapted to learn whether farmers face challenges while

engaged in the agricultural cooperative and whether the cooperative face challenge while serving the farmers.

In this study, a researcher selected (15) fifteen participants, including; (5) key informants who are (1) one cooperative manager, (2) two agricultural extensions and (2) two cooperative officers, also, ten (10) respondents who are farmers (member of Usinde tobacco agricultural cooperatives). The researcher conducted face-to-face interviews that took the time of 30 to 35 minutes, as shown in the tables below.

Table 1: listing of Key Informants with time ranked of interviews

Source					
	Cooperative	Cooperative			
	manager	Extension1	Extension2	officer 1	officer 2
Date	2022-05-04	2022-05-04	2022-05-04	2022-05-04	2022-05-04
Time	35 minutes	35minutes	35 minutes	35 minutes	35 minutes
Gender	Female	Male	Male	Male	Female

Table 2: listing of Respondents with time ranked of interviews

Source	Respondents									
	Farmer									
	1	2	3	4	5	6	7	8	9	10
Date	2022- 05-04									
Time	30 min									
Gender	Male	Male	Male	Female	Male	Female	Male	Male	Female	Male

Table 3: listing of secondary data collection

Sources	Documents					
	Books	Journal articles	Usinde cooperative reports	E-sources		
Date	2022-05-05	2022-05-05	2022-05-05	2022-05-05		

3.5 Quality assurance and ethical consideration

There was no research ethics clearance or permit given for the current study but good research conducts and ethics were observed and maintained throughout the study. Data quality control was used to ensure correctness, accurateness of the data which was obtained from respondents. This was achieved through pre-testing of research instruments, rigorousness and ethical issues (Bryman & Bell, 2015).

The respondents' participation was voluntarily and they were allowed to refuse to answer any question they did not like or stop their participation at a moment notice without any repercussions. Only participants who gave their verbal consent were involved in the current study (Kyale & Brinkman, 2014). Respondents in interview took turn to answer questions and voice their opinions to avoid one person to dominate the conversation. Also, Swahili which is the national language was used during data collection so as to remove the language barrier between the researcher and the respondents (Cope, 2014). The researcher did not collect any personal information or biometric data that could facilitate easy identification of the participants. Confidentiality was guaranteed whereby collected data were not shared with any other person or institution outside the research team and were used purely for academic purposes and are presented in this thesis (Cope, 2014).

Cope (2012) refers to credibility in qualitative research as the respondent viewpoints, researcher's knowledge and descriptions. The researcher's credibility is confirmed, by how he or she describes his study experience and confirmation of results towards the respondents. Showing commitment, observation techniques and data coherence will enable validity when presenting qualitative analysis. Credibility has been ensured in this study since the researcher explained the proper process to be accompanied by data collection and analysis.

Cypress (2017) refers to confirmability as the researcher's ability to reveal the study precisely. It reflects the respondent's views more than the researcher's ideas. By

describing how conclusions and observations were achieved, the researcher may disclose that results were obtained directly from the evidence. The researcher has revealed this qualitative study reports by employing reach quotes from respondents that act for developing trends. Additionally, dependability has been shown in this study whereby it refers to the compatibility of data under the same occurrences. Dependability can be practised when a different researcher accepts the prudence test at every point of the examining process (Cypress 2017). A researcher conducted this study by ensuing a full profile from the introduction, literature review and the methodology used.

Cope (2012) refers to the term transferability as the research discoveries that are applied to a diversity of settings or classes. The simple three transferability alternatives include; analytic, case-to-case and sample to the population. Transferability has been applied in this study since the findings affect the people who are not interested by the study, and scholars can associate the findings with their own lives. Researchers should issue adequate information about the informants and the research conditions for the reader to form an enlightened decision about the findings. In this study of agricultural cooperatives for enhancing farmers' livelihood, the researcher does not conclude the data findings to other agricultural cooperatives. However, for agricultural cooperatives with a similar system of practice as shown by tobacco cooperatives in Tabora, such findings and conclusions can be applicable.

3.6 Data Analysis

The unit of analysis for this study was the individual farmers (member) of Usinde tobacco agricultural cooperative in Urambo district in Tabora region, Tanzania. The data collected through semi-structured interviews were recorded with assent of the farmers, interpreted, transcribed and coded for final analysis. The data was analysed qualitatively in which thematic analysis was used to get a clear insight on the topic under study and is more "interpretative", where data is analysed using more general "themes." Thematic analysis analyse the data as the research questions comprised of background information of the respondents, their understanding on the impact of the agricultural cooperative in their livelihood. Thematic analysis was used to analyse collected data so as to provide clear insights on the questions under study from both key informants and farmers' perspectives. This in relation to Transaction cost theory so as to assess the potential of Usinde Cooperatives in reducing information, negotiation and monitoring cost as was described in the theoretical framework (Figure 2). Results in the current study were presented as the statement or figure describing operation and management of the Usinde Cooperatives (Braun

& Clarke, 2013). Inductive thematic analysis with reflexive approach, was used for this study. This method is an application to a qualitative data analysis that is produced in the advancement of themes reflective of the data. The method is appropriate to broad range of research interest and theoretical outlook; because it deals with a broad range of research questions that concern about people exposure or understandings to the one represent and construct of appropriate phenomena in precise contexts, and can be used to analyse various types of data from secondary sources like media to translations of interviews, and can be applied to a large or small data-sets to produce data-driven or theory driven analyses (Braun & Clarke, 2013). The researcher coded the data according to Braun & Clarke (2013) recommended methods, where the researcher found appropriate to use them since they are flexible in a way that are not in a linear mode that one can continue to the next stage without conclude the previous stage properly, instead the analysis is a repetitive process. The approach contained the familiarization with the data, coding, producing initial themes, developing and reviewing themes, defining and naming themes and lastly writing up (ibid).

4. Results and Analysis

This section presents the empirical findings and data analysis collected through semi-structured interviews with members (farmers) and cooperative staff of the Usinde Agricultural Cooperative located in the Urambo District in the Tabora region. This includes the information about respondents` background, as well as the structure of the cooperative under study is presented. Themes used in this study includes how the cooperative has reduced farmers` transaction cost, where the cooperative has added transaction cost, as well as how the cooperative has impacted farmers` livelihoods, which are established on the responses to the study guide questions.

4.1 Empirical background

Usinde Agricultural cooperative society is one of the oldest cooperative societies in the Kailua District of the Tabora Region. It was established in 1992 with 97 total member farmers majoring in the cultivation of Tobacco as the only cash crop before the introduction of palm trees.

Currently, Usinde has a total of 456 members (farmers), and only five per cent are women. The number of men is greater than that of women because traditionally in most societies of the Tabora region, the father is the head of the family. In the case of the Usinde cooperative, the father is responsible for representing the family membership in the cooperative. The respondents in Usinde tobacco agricultural cooperatives range in age from 30 to 70 years old. A large number of the respondents are under the age of 65. The research investigated the respondents' years of experience in the Usinde agricultural cooperative to see how long farmers had involved in tobacco agricultural production and how long ago they joined the Usinde agricultural cooperative. The respondents showed farming experience in tobacco production ranges from 6 to 30 years, and the responses showed most farmers have experience of 5 to 25 years in the cooperative.

The study pursued; to consider the respondents' educational level, which the researcher saw as essential to understanding if farmers in the cooperative know how

to read and write. All respondents in the Usinde agricultural cooperative know how to read and write since they have completed primary and secondary school, while few of them; have completed agriculture college based on the Tanzania educational system. According to the respondents` responses, most of the farmers who engaged in the Usinde agricultural cooperative depend on tobacco production as their only source of income for their living.

The cooperative's organizational structure (Figure 4) as was detailed in the Cooperative's reports and key informant's interviews in the current study, showed there is a board of directors at the top. The board is composed of six board members elected for one term of three years. The board is responsible for overseeing Cooperative decisions, making plans and employing a managing director working under it. The board has direct contact with their respective farmers, which simplifies communication and feedback. There is a chairman who, elected by the board of directors, is responsible for the daily activities of the cooperatives. The chairman is responsible for supervising the managing director working under them as per board directives. Additionally, there is a secretary between the chairman and the managing director who is responsible for executing and documenting all matters discussed in the board meeting. Also, the secretary is responsible for assisting the chairman in; monitoring daily activities in the Cooperative and can sometimes act as the deputy chairman in the board meetings in its absence. The managing director of the cooperative is responsible for daily operations in the cooperatives such as monitoring contracts, loans and other services. Also, it is responsible for signing and monitoring contracts that had been signed between the Cooperatives and other actors such as input suppliers and banks. Surprisingly, the managing director worked in all departments as an accountant, administrator and procurement officer.

It was further explained in the interviews that, the cooperative consisted of members belonging to one district named Urambo who are engaged in tobacco and palm tree cultivation. These members joined Usinde agricultural cooperative voluntarily and has the right to elect and to be elected. There was a principle of one member, one vote in the cooperative, and members were the owner of this cooperative. Members were actively involved in decision-making, and there was a democratic saying in all matters concerning cooperation.

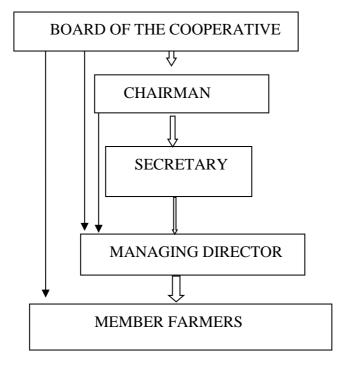


Figure 4. Organization structure of the tobacco agricultural cooperative in Tabora, Tanzania

4.1.1 Tobacco marketing system

Key informants mentioned that Tanzania Tobacco Board (TTB) was responsible for regulating the tobacco industry and setting a minimum tobacco price, while cooperatives sell it by entering into agreements with investors/traders, negotiating aggregated tobacco collected from farmers. The cooperatives' role during marketing is to ensure quality standards are maintained by grading and weighing aggregated tobacco, as shown in Figure 5. The interview participants mentioned receiving payments through their bank account within 14 days after the sale. Moreover, farmers were organised into units of ten people to facilitate easy support and follow-ups on various issues. These groups play a crucial role during resource disbursement, their recovery, and reducing operational costs for the cooperative and individual farmers.

Key informants and participants claimed that; farmers get informed about various issues related to tobacco marketing standards, price, inputs and credits. Furthermore, there were price information and inputs distribution calendars advertised on the notice board as per researcher observation which was disseminated during member farmers' meetings according to key informants. The cooperative obtained its income from sale commissions and was required to report the expenditure to the farmers regularly.



Figure 5. Usinde Farmers selling tobacco through their cooperative

4.2 How the cooperative has reduced farmers' transaction costs

From the transaction cost theory used by researchers in the conceptual framework, three costs are mentioned and described; information cost, negotiation cost and monitoring cost. These three costs have shown to be reduced by the cooperative as follows: in information cost, the Usinde tobacco agricultural cooperative has led to a positive trend whereby the information cost was shown to decrease as compared to before farmers joined the cooperative; through Usinde tobacco cooperative farmers were able to access market information pertaining tobacco markets price, inputs availability, credits, price information, inputs distribution as well as selling their produced without cognitive efforts. All ten (10) respondents (farmers) said, "..... It was difficult to get the information concerning tobacco prices as well as market information before we joined the Usinde cooperative....." Also, they added that "... before joining to Usinde we were travelling to the market ourselves to get the tobacco price which was difficult and costly..." Tobacco farmers (respondents) in the interviews claimed to join the Cooperatives due to the potential of accessing market information and selling their products without cognitive efforts. Farmer 1 said ".... It was difficult for me to access market information, especially the prices;

because my farm area and home place are far away from town; but due to the Usinde cooperative, price information is easy to get without costs...." All ten farmers said, "... before joining the Usinde cooperative, it was difficult and costly selling our tobacco product in the market, and when we got to those markets, tobacco products; were sold at a low price..." Key informants mentioned that the Usinde Cooperative society was responsible for providing support services to the farmers including; information on marketing standards, financial support to purchase inputs, post-harvest handling and grading, extension services on agronomic practices and family aid during the off-season. A cooperative manager said, "... I usually make a follow-up to ensure our members are enjoying our services and make them feel more relieved than before joining the Usinde cooperative, especially in reducing their costs..." the two cooperative officers said, "...We are responsible for ensuring our members' products are in good standards to meet the market criteria whereby we handle the post-harvest and grading of tobacco products.." the two agricultural officers said, "...We are responsible for providing extension services to our members whenever needed to ensure their products are of good quality to meet the standards and market criteria..."They added that the cooperative was working closely with other Cooperatives in Urambo, the district agricultural extension and cooperative officers to access various services and training; this is due to it transparency to their members, collective decision making, and prevention of unethical behaviour from some of staffs and farmers during loan access. The cooperatives disseminated information using its notice board, and all members had access to required information such as current tobacco price per kilogram and grade (see Figure 6).

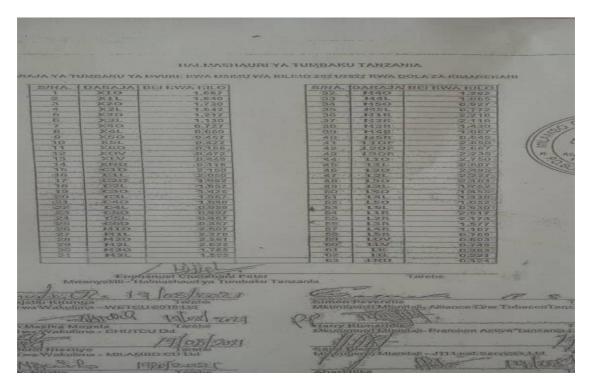


Figure 6. Price notes board for market season 2021/2021 at Usinde Cooperative

Additionally, during interviews participants urged that not all of them were capable of saving their income to buy inputs, whereby 100% of Member (farmers) of the Usinde agricultural cooperative society depends on inputs credits and they relied on the Cooperative for that. All ten members (farmers) said, "...the high cost of inputs, especially fertilizer, was difficult for us to afford, which made us decide to join the cooperative because they sell their inputs on credit..." The Usinde tobacco agricultural cooperative has managed to reduce the negotiation cost to farmers (members) whereby; according to key informants, the cooperatives have been entering into agreements (contracts) with input suppliers or lenders to supply farmers with the required inputs or funds during cultivation seasons. A cooperative manager said, "...we usually enter into a contract with the supplier of the inputs on behalf of our members, especially fertilizer, to ensure our members get their inputs; at affordable prices and reduce their costs..." The cooperatives would supply the lent money or inputs into groups of 10 farmers who will act as each other guarantor to facilitate easy follow-ups and recovery. These groups play great role in following their colleagues' during recovery time, hence reduces operational costs for the Cooperative and lenders as well, which resulted to reduce the monitoring cost to the farmers. A cooperative manager said, "... Our members know each other, so we decided to group them into ten people during the loan grant to make an easy followup with each other during the loan recovery; we made that decision to reduce the monitoring costs..."

4.3 Where the cooperative has added transaction costs

It was urged by the key informants that; the Cooperatives did not have sufficient funds to purchase inputs, offer credits to their members, process final products or provide agricultural extension services and relied on third parties. Moreover, they were not strong enough to influence tobacco prices, which have fluctuated over the years. The participants claimed that the loan offered by their cooperative had high interest, was insufficient, and there were limited available of funds to meet all member farmer's applications. All ten members (farmers) said, "...the fertilizer prices are very high compared to the tobacco prices, which make we cannot get many benefits when selling our tobacco, so we don't have any options to do since we cannot buy the fertilizer on a cash basis because the fertilizer price is \$48 per bag and tobacco price cannot even reach to \$10 per kg..."

Both key informants and participants mentioned that 20% of farmers failed to repay their credits since they used their loans for other purposes such as; family needs instead of intended farm management. Also, there were reports of farmers selling inputs borrowed from the Cooperatives to other non-member farmers to obtain cash to address their needs on time. A cooperative manager said, "... Sometimes is hard to control all members' behaviours; to not make diversion of their loans because they need some cash for their family needs and make the cooperative incur the monitoring cost for making the follow-up on recovering the loans to our members..." Farmers thought that the cooperatives have not been able to significantly influence the prices of inputs and tobacco or even take measures to lower credit interest from lenders. The bank interest was 24% which was thought to be higher, and the inability to bargain for farm inputs has led to farmers buying inputs such as; fertilisers, pesticides and seeds at a high cost. All of these reduced the profit earned and it affected farmers' livelihoods. A cooperative manager insisted that and she said, "... We buy all of our members (farmers) inputs on credit; by entering into a contract with the supplier of the inputs since our cooperative does not have enough funds to buy those inputs` on a cash basis, and those prices are controlled by the lenders, and cause our members to complain on those prices because they affect their output price during the marketing period..."



Figure 7. One of the banks that provide loan to Usinde agricultural cooperative

It was observed during data collection that; the managing director was responsible for all of the daily activities in the cooperatives, which included bargaining, accounting, procurement and coordination of various activities. It was revealed by key informants that there was a shortage of staff with specialised management skills, even though the director possessed some required skills but did not have enough bargaining, negotiation or procurement skills. Therefore, the cooperative had a poor performance per a report written by Cooperative Audit and Supervision Corporation (COASCO) government agency responsible for auditing cooperatives in Tanzania. This was supported by a cooperative manager whereby she said, "...To minimize the operational costs to the cooperatives'; most of the work is done by me because the cooperative has not employed many professional workers, and there seems to be cost-cutting but not worth because I don't effectively do all the services...."

However, due to incompetent staff from Usinde tobacco cooperative, negotiation and monitoring cost seems to increase and led to a negative effect on farmers (members) of Usinde tobacco cooperative whereby, most of the services to their members are done by non-cash. They entered a contract with other investors to support input supply, credits facilities, extension services and processing. Through this, they are not capable of controlling the price of inputs, and the price of tobacco and even not taking responsibility for interest for credits from lenders. Also, Usinde cooperatives have not taken much attention to the benefits of employing qualified staff in essential sections like negotiation and monitoring teams, leading to poor performance in providing services to their members. Failure to negotiate, and monitor various contracts have led to taking high-interest rates and high costs of inputs and even becoming price takers during tobacco selling.

4.4 How the cooperatives have impacted farmers' livelihoods

Most participants with support from the findings show that 80% of farmers' households under the Usinde Agricultural Cooperative society have improved their income due to sales of tobacco. Indeed, their tobacco production has increased from previously 200 to 600 kg/hectare. All respondents supported that, their production was increased whereby they said, "...We managed to increase our tobacco production after joining the Usinde cooperative and our output has increased their quality more than before because now we are using quality inputs to produce. Also, we managed to buy more agricultural instruments like tractors to facilitate our production." These led to improved livelihoods after they joined the cooperative, and they managed to construct modern houses, buy a motorcycle, buy farm implements and support their children's education. This was supported by Farmer 3 whereby he said, "...After I joined the Usinde cooperative, I managed to buy the land and construct a modern house in town whereby, before joining the cooperatives` I was living in the local house in the farm area..." also farmer 4

supported the same whereby he said, "...I have more benefits than before joining the cooperative because the cooperative helped to improve my income whereby I managed to buy two motor vehicles, which helped me to use them as another source of income by making them as Uber, also by joining the cooperatives`, I managed to buy the television with a satellite- dish and start a small business for showing the football match whereby people are paying to watch the football match from a different league, especially European league..." Since education is expensive in Tanzania, farmers who are members of the cooperative have managed to send their children to a good school which is different from those of non-members. Farmer 5 supported that cooperative has improved her livelihoods whereby she said, "...Since I joined the cooperative, I sent my children to medium schools, where I pay the school fees from the income I obtained from selling tobacco to the cooperative, but before joining the cooperative my children; were not able to study in those schools since the fees are expensive..." when the researcher asked the respondents if they will continue selling their tobacco to Usinde cooperative all farmers said, "... We will continue selling our tobacco to the cooperative due to the benefits we are obtaining that were very difficult to get before joining the cooperative. Also, the cooperative has impacted our livelihoods, specifically has contributed to the development of our community through different programs like water and education."

5. Discussion

This chapter discusses empirical findings that were collected through interviews and focus group discussions and relates them with existing literature reviews. The two research questions were analysed and compared with what has been said by existing literature.

5.1 Agricultural cooperative and famers' livelihood

Tobacco production is an important economic activity which is supporting farmers' livelihoods in the Urambo district. As it was reported in the focus group discussion, the Usinde Cooperatives facilitated this by providing a marketing platform and supplying inputs. Moreover, farmers joined the cooperative voluntarily to access agricultural support services such as marketing information, credits and inputs that are limited among smallholder farmers in rural areas, as it was also reported by Roula Abi Habib-Khoury, (2016) and Maghimbi, (2010). It was mentioned by key informants that; the cooperatives organised farmers in groups of ten people, which is a common practice in administering credits among smallholder farmers in developing countries (Schurmann and Johnston 2009; Chandio et al. 2017). Also, it is essential in reducing credit default, operational costs and relying on social capital as collateral. However, this is not without challenges as there could be a chance that individuals default on their loans and a group fail to punish it, as was the case in this study, where some used credits for other unintended activities which were also noted by Sabin and Reed-Tsochas (2020), due to lack of group cohesion. There are also chances that individual lenders could abuse the terms of the agreement and institutionalise collective punishment, whereby others could be penalised by personal failure to repay the loan (Duggan 2016; Pereira and Van Prooijen 2018). Therefore, is advised that credit evaluation among cooperatives members should be thorough to avoid default and ensure compliance.

Nonetheless, the Usinde cooperative in the current study had characteristics of a good cooperative, such as being a collective owned by farmers, have democratic control and benefits sharing among members as was described by Munster (2015). Farmers have access to extension services from the cooperative, enabling them to

increase their quantity from 200kg/ha to 600kg/ha and the quality of their outputs. Moreover, farmers had more access to inputs and outputs market information than before they joined the agricultural cooperative. This is in agreement with Nsingize, (2013) who reported that agricultural cooperatives have helped farmers to access market information which enabled farmers to make informed decisions regarding their farm management. As observed in the current study; farmers received cash during the off-season that facilitated them to meet their needs. These acted as insurance mainly when no production activities and other sources of income are limited (Ahmed & Mesfin, 2017).

Generally, the agricultural cooperative had lowered negotiation and monitoring costs which caused farmers to operate for profit. These contribute to the rural economy and smallholder farmers' livelihood through improved agricultural development, community growth and poverty reduction (Ogu, 2014). In this study, key informants and respondents claimed that The Usinde agricultural cooperative played many roles in enhancing farmers' livelihoods; credits and training enabled farmers to build modern houses, buy a motorcycle and send their children to school for better education. This was proven by all respondents whereby they said, "... We will continue selling our tobacco to the cooperative due to the benefits we are obtaining that were very difficult to get before joining the cooperative also, the cooperative has impacted our livelihoods, specifically has contributed to the development of our community through different programs like water and education...". Current findings revealed that the cooperative play an important role; in ensuring access to market information, providing credit in terms of inputs and loans, providing training for agricultural development, providing extension services, providing market services like grading and improving the quality of products. However, all of these are not without challenges as discussed below.

5.2 Where the cooperative has added transaction costs

The Usinde Cooperative lacked bargaining power; to influence the tobacco price in the country, as mentioned by the key informant. These is contrary to the core aim of farmers joining the cooperative that is supposed to give them economies of scale and bargaining power. The inability of cooperatives to influence tobacco market prices in the current study is due to government control through TTB and the possible decline in tobacco demand due to, changes in lifestyle and the success of anti-smoking campaigns (Achia 2015). Therefore, farmers are susceptible to price fluctuation that could undo the social and economic development made by an

individual. These could be resolved by, encouraging cooperatives to not only aggregate tobacco from the farmers but to participate in value addition by selling semi-processed products as it has been done elsewhere in developing countries (Wedig and Wiegratz 2018; Rudahindwa & Huellen 2021).

However, there is a need to invest heavily in cooperatives for them to be able to compete effectively with private companies. There is not the case as was mentioned in the current study, where lack of government support and policy led to poor performance of Usinde Cooperatives, which is similar to the findings reported by Nekrasov *et al.*, (2019). Additionally, the managing director was responsible and performing almost all activities in the cooperative, for example, accounting, procurement and marketing. These lead to poor performance since if an individual is conversant and possess skills in all these areas, it has not enough time to perform all the roles in the cooperative (Ortmann and King, 2017). Poor management skills could be one of the reasons the cooperative received a poor performance certificate from the Cooperative Audit and Supervision Corporation (COASCO). The Cooperatives should prioritize investment in the managerial/human capital to enable proper management of the available resources. The human capital could be improved through proper vetting and hiring of labour with required skills or training the existing labour force, as was argued by Francesconi and Wouterse (2019).

Another challenge faced by the cooperative was the lack of sufficient funds to buy inputs, hence relying on loans from commercial banks with a high-interest rate of up to 24%. The government has been working actively to lower the interest to single digits in the country and improve credit access to cooperatives and individual farmers (Tanzania Agriculture Development Bank, TADB 2022). Misuse of funds or credits by farmers as was mentioned in the current study, caused the cooperative to pay the loan by using savings which led to further losses and burden to other members. The free rider or individual who failed to repay their credits pull back the group efforts. Perhaps, there should be much closer scrutiny of the individual seeking loans to avoid default or misuse of fund (Chandio *et al.* 2017; Sabin and Reed-Tsochas 2020). Moreover, there could be an introduction of financial penalties for credit default in the cooperatives, banning to participate in other activities or suspended privileges for some time. Generally, African governments have to actively support agricultural cooperatives by setting enabling policies which could improve the sector and national economy.

5.3 How the cooperative has reduced farmers' transaction costs

Generally, the cooperatives aim to serve members' interests over individual ones; it reduces transaction costs by enabling members to trade themselves rather than the independent partner. From cooperatives, information costs had reduced; since the members have good relationships among themselves and the information cannot be hidden when trading themselves as compared to a private partner. Also, the cooperative has managed farmers who are members of the cooperative; to access market and price information for their products without cognitive effort that managed members to reduce their information cost obtained before joining the cooperative (Nilsson, 1996). This was supported by drawing from the interviews, whereby all ten (10) respondents (farmers) agreed that cooperatives have managed to reduce their transaction costs during the time of tobacco production and marketing their tobacco products; they added that by joining the Usinde agricultural cooperative their products and price information was obtained with less cognitive effort than before they joined the Usinde cooperative. All ten respondents said, "..... It was difficult to get the information concerning tobacco prices as well as market information before we joined the Usinde cooperative....." Also, they added that "... before joining to Usinde we were travelling to the market ourselves to get the tobacco price which was difficult and costly". Poppe and Hagedorn (2012) argue that also, their large number enables farmers to reduce transaction costs such as information costs, e.g. searching for prices, inputs and buyers. Which was also supported by all respondents during interviews, whereby all they said, ".... It was difficult for us to access market information, especially the prices, inputs and buyers; because our farms areas and home places are far away from town; but due to the Usinde cooperative, price, inputs and buyers information are easy to get without costs..."

Negotiation costs are also one of the reasons why farmers join the cooperative, which involves hiring lawyers or paying a broker during negotiating the price of inputs, the price of outputs and buyers of products in the market (Chambo, 2009). Since most farmers are small-scale farmers located in rural areas, the cooperative has managed to distribute farm inputs and market agricultural commodities; to ensure efficient production, increase the quality of their agricultural products and processing capacity, and easily transport outputs and marketing as the result of reducing the transaction cost (Anania and Rwekaza, 2018). Kariyasa and Dewi (2011) suggest that individual farmers with small hectares of farms face difficulties selling their products which raises transaction costs, and specialization is expensive for them to manage with quality inputs like fertilizers and medicine not possible for them to acquire individually; by joining the cooperative those problems collectively can be solved because they get assured with inputs supplies (fertilizer, credits,

medicine) and market for their products. Drawing from interviews supported that, whereby all ten respondent agreed the Usinde agricultural cooperative has managed to reduce their negotiation cost by said, "...the high cost of inputs, especially fertilizer, was difficult for us to afford, which made us decide to join the cooperative because they sell their inputs on credit..." Also, Usinde tobacco agricultural cooperative has managed to reduce the negotiation cost to farmers (members) whereby; according to key informants, the cooperatives have been entering into agreements (contracts) with input suppliers or lenders to supply farmers with the required inputs or funds, these was supported by key informants whereby a cooperative manager said, "...we usually enter into a contract with the supplier of the inputs on behalf of our members, especially fertilizer, to ensure our members get their inputs; at affordable prices and reduce their costs..." It was suggested by Nilsson (1996) and Poppe and Hagedorn (2012) that since the cooperative principle enables members not to behave opportunistically, then monitoring costs are reduced among members because members will act accordingly, these was also supported by key informants whereby a cooperative manager she said, "... Our members know each other, so we decided to group them into ten people during the loan grant to make an easy follow-up with each other during the loan recovery; we made that decision to reduce the monitoring costs..."

What was interesting to find is that; all ten respondents agreed that the Usinde agricultural cooperative has managed to reduce their transaction costs in terms of information, negotiations and monitoring. All respondents agreed that before joining the Usinde cooperatives`; their transaction costs were very high compared to now, and when the researcher asked if they would like to continue trading with the cooperative, all ten respondents replied continuing trading with the Usinde cooperative due to the services and benefit they obtain.

Summary, Conclusion and Recommendations

This last chapter of the thesis present the summary of the findings, conclusions and recommendations as well as further research opportunities.

6.1 Summary

This study looked at the roles played by agricultural cooperatives and the challenges facing agricultural cooperatives in enhancing farmers' livelihoods based on the responses from respondents. It has been shown that before Usinde agricultural cooperative, transactions cost such as information, inputs access, ensuring quality outputs and negotiation costs were incurred by the individual farmer, according to Chambo (2009). These costs are inevitable and lead to low income based on the theoretical framework presented. Therefore, farmers joined the agricultural cooperative to ensure easy access to market information and negotiation on contracts and price (ibid). Additionally, from a theoretical framework perspective, the Usinde agricultural cooperative has managed to handle transactions cost in the cooperative and improved the farmer's livelihood compared to before farmers joined the cooperative. However, apart from having a good impact on farmers' livelihood, there were some challenges such as; inadequate funds, high inputs cost, misuse of the funds, and the unlimited number of competent staff for inputs supply. This was also highlighted by Anania & Rwekaza, (2018b). These challenges need to be solved by the Usinde agricultural cooperative to improve farmers' livelihood.

6.2 Conclusion

This study analysed how Usinde agricultural cooperatives contributed to the improved livelihoods of tobacco farmers in the Urambo district. According to the findings, the Usinde Agricultural Cooperative has as primary aim to provide support services to its members (Farmers). Reflecting on the transactions cost theory as applied in this research, information cost, negotiation cost, and monitoring cost has shown to affect the impact of Usinde agricultural cooperatives in enhancing

farmers' livelihood. In conclusion, the study revealed that the cooperative provided marketing platforms and reduced farmer's transaction costs. It has been noticed that most member farmers' livelihoods have been improved, and shown by the construction of modern houses, buying a motorcycle and providing better education to their children. However, the cooperative faced several challenges such as inadequate funds for operation and high-interest rates when lending money. Other challenges included limited or unskilled staff in technical areas like accounting, procurement and bargaining, thus reducing the cooperative performance and leading to poor audit scores. These challenges could be addressed through investment in human capital to improve cooperatives' performance and farmers' compliance with rules and regulations.

6.3 Recommendations

The results from this study place the need for comprehensive policy responses to enhance further support to embrace the successful style, rules and regulations for cooperatives. In addition, to enable flexibility to appeal the local needs and upgrade several activities needed for improving farmers' livelihoods. Tanzania is a developing country dependent on agriculture for livelihood security and tobacco is the main export product, one of the most dominant cash crops, on which 64 per cent of households depend for their livelihood (Kimaro, 2020). For the Usinde agricultural cooperative to ensure safe agricultural practices for its members, it should provide regular training and extension services. Additionally, training for the staff in the cooperatives on various management skills should be encouraged to enable effective management of cooperatives in the country.

Since cooperatives cannot control the tobacco price in Tanzania, they could alternatively establish and maintain a price-stabilizing fund to provide relief during lower prices so that the farmers could manage to produce in the subsequent season. The fund could operate on both a cash and input basis to provide farmers with the options and resources they need most. Due to the high cost of inputs, a certain amount of money may be deducted from every kg of tobacco to facilitate purchasing of input during the coming season, which will help farmers from not incurring interest from banks during input purchase which it is a major burden to a cooperative.

Farmers should comply with existing rules and regulations by paying their membership fee on time which is essential for effective operation and management. To ensure efficiency and effectiveness, Usinde cooperative should employ skilled

staff in every technical area. These will improve performance and increase chances of enhancing its member's (farmer's) livelihood. There is also a need for farmers to receive regular training on farm management to avoid credit default and for proper credit management.

6.4 Further research

This research focused on the impact of agricultural cooperatives in enhancing farmers' livelihoods. Additionally, the researcher was limited to one tobacco cooperative under one district selected, under one region in Tanzania. It will be interesting to see if the findings apply to other tobacco cooperatives or even other agricultural cooperatives in Tanzania. Apart from presenting several fascinating results, the study has some limitations which are convenient for formulating future supplements.

A qualitative approach with semi-structured interviews and focus group discussion was conducted in this study with a total of 15 respondents, which assisted in enough data collection for the study. The quantitative study, alternatively, would consider a large number of respondents and make it easier to scrutinize the findings to a large population. Therefore, a quantitative study for assessing the impact of agricultural cooperatives in enhancing farmers' livelihoods with a large sample size, to correlate to the results of the qualitative approach would be fascinating.

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Popular science summary

The thesis presents the impact of the Usinde agricultural cooperative in Tanzania farmer's livelihood. The Usinde agricultural cooperatives aim to have controlling effort for agricultural products and find market to sell those products at a reasonable price. Farmers' products are sold at a higher price leading to a better income which improve farmers' livelihood. Moreover, the Usinde agricultural cooperative is responsible of ensuring farmers access to inputs such as fertilizers, seeds and pesticides, cash credits for farm management, extension services and acting as marketing channel for their famers produce. It was revealed in the current study that despite positive contributions of the Usinde agricultural cooperatives in farmers' livelihoods some challenges still exist. These challenges include limited fund, lack of managerial skills and credit defaults by farmers. It is recommended that efforts should be directed to improve the cooperative managerial capital to ensure continuation of cooperative and improve farmers' livelihoods.

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Appendix I: Cover letter

SLU

Sveriges lantbruksuniversitet Swedish University of Agricultural Sciences

Department of Economics

Dear Respondents,

My name is Joshua Kiungai, currently a student from the Swedish University of Agricultural Sciences, Uppsala, Sweden, in the field of Agricultural Economics and Management. I am conducting a research study on Assessing the Impact of Agricultural Cooperatives in Enhancing Famers livelihood in Tanzania A case of Tobacco Agricultural Cooperative in the Tabora Region. Kindly respond to my interview questions as accurately as possible. You are assured that the information you provide is strictly confidential and will be used for academic purposes only.

Thankyou in advance for your co-operation.

Joshua Kiungai

Appendix II: Interview guide - Tobacco farmers

- 1. What is your gender?
- 2. What is your age?
- 3. What is the level of your education?
- 4. Do you have a farm?
- 5. If yes, what is the size of your farm?
- 6. What the types of cash crops do you grow?
- 7. Among the cash crops you grow, which cash crop do you most depend as source of your income?
- 8. Are you a member of tobacco agricultural cooperative? And why? Why not?
- 9. What do you think about the relationship between the cooperative and members?
- 10. What types of supports and services do you get from your cooperative?
- 11. Are you satisfied with the supports and services provided to you by the cooperative? And why? Why not?
- 12. What benefits do you get from being a member of cooperative? If not, why?
- 13. Where do you get various market information's?
- 14. What type of market information do you get? Is it useful?
- 15. Do the benefits you get from the cooperative have helped you to improve your livelihood? And how? Why not?
- 16. Do you sell your tobacco to the agricultural cooperative? And why? Why not?
- 17. Are you satisfied with the prices given to your products? Why?
- 18. Will you keep the business relationship with the cooperative when its purchase price would be lower than the market price? Why?
- 19. Do you sell your tobacco to someone else other than the cooperative? And why? Why not?

- 20. What are the challenges facing you from being a member of agricultural cooperative?
- 21. What strategies can be done to improve the agricultural cooperative for enhancing your livelihood?

Appendix III: Interview guide - Cooperative manager

- 1. How many members do you have in your cooperative?
- 2. What types of supports and services do you provide to tobacco farmers?
- 3. Do the supports and services given to farmers help to improve their livelihood? And how? Why not?
- 4. Do the farmers satisfied with the supports and services given to them by the cooperative?
- 5. Do the farmers sell their tobacco to someone else other than the cooperative? And why?
- 6. Do you face any challenges in providing supports and services to farmers? If yes, what are they?
- 7. What can be done for agricultural cooperative to improve tobacco farmers' livelihood?

Appendix IV: Interview guide - Cooperative staff

- 1) Do the tobacco farmers come to sell their products to your cooperative? And why? Why not?
- 2) What do you think about the current relationship between the cooperative and tobacco farmers?
- 3) Do the farmers satisfied with the supports and services given to them by the cooperative? And why? Why not?
- 4) What benefits do the farmers get from being members of cooperative?
- 5) Do these benefits help them to improve their livelihood? Why not?
- 6) Do you face any challenges in providing supports and services to farmers? If yes, what are they?
- 7) What can be done to agricultural cooperative to improve tobacco farmers' livelihood?

Appendix V: Photos from the field

Warehouse owned by Usinde Cooperative used for Tobacco aggregation



Tobacco from farmers is graded and weighed using digital weighing balance



Tanzania Tobacco Processing Factory in Morogoro



 $To bacco\ farmer\ with\ the\ motorcycle\ bought\ from\ to bacco\ income$



Students of Usinde Primary school whose parent's income depends on Tobacco sales



Oxen and ox carts bought from tobacco income



Usinde cooperative manager in a recent harvested tobacco farm.



Farmers working in tobacco field



Tobacco farmer house with satellite dish



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