

RESEARCH ARTICLE

DOI: <https://doi.org/10.26524/jms.14.25>**Marketing channels and sustainability of agricultural cooperatives: A Study of small-scale coffee and cashew nut farmers in Tanzania**Prosper J Kimaro^{a*}, Elisifa E. Nnko^b**Abstract**

This study aimed at analysing marketing channels and sustainability of agricultural cooperatives: A study of small-scale coffee and cashew nut farmers in Tanzania. Specifically, the study intended to examine the available marketing channels and determine the effect of marketing channel choices to agricultural marketing co-operative societies (AMCOS). However, little is known about the effects of marketing channel choices by farmers to the sustainability of co-operatives. The study collected both quantitative and qualitative data from the primary and secondary sources. The data collection methods included a survey, focus group discussion, key informant interview and documentary review. Content and descriptive statistics analysis were used to analyse the data and finally, the information obtained presented using tables and figures. The findings revealed that socio-demographic information have a great influence on coffee and cashew nuts production among small scale farmers and do determine substantially the amount of the produce sold to AMCOS which later determine the sustainability of AMCOS. In addition, market availability for both coffee and cashew nuts are better today than some years in the past. Small-scale coffee farmers have varieties of marketing channels contrary to the cashew nuts farmers who have only one marketing channel i.e. AMCOS. The study recommends deliberate efforts to be taken by the government through the Ministry of Agriculture in collaboration with Local Government Authorities to ensure the timely availability of agricultural farming inputs at a subsidized price and timely availability of money in co-operatives at the starting of the harvesting season so that smallholder farmers cannot be compelled to sell their produce elsewhere apart from AMCOS. Furthermore, to ensure the sustainability of AMCOS, youth sensitization at all levels starting from the village, ward, district, region and nation-level must be conducted by the Ministry of Agriculture in collaboration with the Local Government Authorities.

Keywords: Agriculture, Marketing, Channels, Sustainability, Coffee, Cashew nuts and AMCOS.**Author Affiliation:** ^a Department of Community Development and Gender, Moshi Co-operative Universit, Tanzania.^b Department of Human Capital Management, Moshi Co-operative Universit, Tanzania.**Corresponding Author:** Prosper J Kimaro. Department of Community Development and Gender, Moshi Co-operative Universit, Tanzania.**Email:** pjkimaro@gmail.com**How to cite this article:** Prosper J Kimaro, Elisifa E. Nnko. Marketing Channels and Sustainability of Agricultural Cooperatives: A Study of Small-Scale Coffee and Cashew Nut Farmers in Tanzania, Journal of Management and Science, 14(3) 34-46. Retrieved from <https://jmseleyon.com/index.php/jms/article/view/749>**Received:** 15 June 2024 **Revised:** 16 July 2024 **Accepted:** 8 August 2024**1. Introduction**

The agricultural sector in Tanzania encompasses crop production, livestock keeping, hunting and gathering, fisheries and forests. Between 2010 to 2015, the sector contributed to nearly 28% of the total Gross Domestic Product (GDP) and approximately 24% of the country's foreign export earnings, (Mwijarubi, 2015). The sector is the mainstay of the Tanzanian economy, and it employs more than 70% of the total population, (MAF/NAP, 2015). According to the report, the agricultural cash crops which contribute greatly to the national economy from the historical perspective includes coffee, tobacco, tea, cashew nuts and sisal. These form the so called "big five cash crops" in Tanzania. Agbongiarhuoyi et al., (2020) analyzed farmers' cashew nuts marketing channels and information frequency.

The study identified six marketing channels whereby, village buying traders was the most frequent channel farmers used in selling cashew nuts. Others were cash crop buyers, licensed buying agents, village market, processors and exporters. The study further found out

that poor purchasing price offered by buyers does not promote agribusiness for cashew nuts production and thus discourages the producers and investors in the enterprise. This in turn affects the sustainability of cashew nuts negatively. The study recommended that farmers should market their produce through formidable co-operative groups in addition to the common channels used by them. This will help create some price differentials that will enable them sell cashew nuts to buyers at better prices.

With respect to Tanzania, Ntimba and Akyoo (2017) in their study on factors influencing choice decision for marketing channels by coffee farmers in Karagwe District, identified three main marketing channels namely: selling to registered private coffee buyers' posts (PCBs) or through their commission agents who collect coffee from farmers' households (homesteads), selling to the rural primary co-operative societies (RPSs) and selling to un-registered Village buyers (Abayeki) who buy coffee at farmers' homesteads then re-sale it either to the registered

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private coffee buyers (PCBs) or to rural primary co-operative societies at higher prices.

According to Rwekaza and Muhihi, (2016) the philosophy of co-operative society is to serve the common man and to liberate him from the oppression of economically strong people and organizations. A co-operative (also known as co-operative, co-op, or coop) is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned enterprise. A co-operative society is a voluntary association that started with the aim of service of its members. It is a form of business where individuals belonging to the same class join hands for the promotion of their common goals. These are generally formed by poor people or weaker sections of people in society. It reflects the desire of the poor people to stand on their legs or own merit. Its philosophy of the formation of a co-operative society is "all for each and each for all". Co-operation work with the feeling of helping others.

In Tanzania, coffee is the top ranked agricultural export product providing direct income to more than 0.4 million households which support the livelihoods of some 2.5 million individuals and generate between USD 150 and 225 million per year of foreign exchange earnings, (Tanzania Coffee Board-TCB, 2019 and 2017). It accounts for nearly one-fifth of Tanzania's foreign exchange earning followed by cotton, cashew nuts, tobacco, tea and sisal in that order. Coffee has played a significant role in improving the livelihood of smallholder farmers' households (TCB, 2017; ICO, 2015). Cashew nut on the other hand, is among the important cash crops in Tanzania. According to Cashew nut Board of Tanzania (2013), Tanzania is the Africa's fourth largest producer of cashew nut after Nigeria, Ivory Coast and Guinea Bissau. It is estimated that half a million of Tanzanians population are engaged in smallholder cashew nut farming particularly in the southeastern part of the country (Kilama, 2010). Mtwara region is the biggest producer of cashew nut within the country contributing more than 50% of raw cashew nut sold between 2003 and 2012, (CBT, 2013). Like in other countries, cashew nuts production in African countries face many challenges including high transaction costs, limited access to better-paying markets, lack of credit facilities and limited value addition. However, the magnitudes and types of challenges vary from one country to another, (Mensalhi et al., 2012).

As pointed out in the specific crops (coffee and cashew nut), agricultural production in Tanzania has encountered different problems both locally and internationally. These problems are assumed to have affected the livelihood of smallholder farmers and the performance of agricultural marketing co-operatives (AMCOS) in the respective areas due to the close linkage

between livelihoods of smallholder farmers, cash crop production and AMCOS, (Lienert and Burger, 2015; Kana, 2012; Ludi, 2006). According to Mhando et al., (2013), the introduction of economic liberalization policy in the late 1980s went hand in hand with the removal of subsidies in the agricultural sector. Consequently, since then, some smallholder farmers could not afford to acquire adequate and quality crop production inputs using their own income sources. The economic liberalization reforms did not only negatively impact farmers but also co-operatives were equally affected, the dwindling of co-operatives in Tanzania increased even though Tanzania had the largest agricultural co-operative movement in Anglophone Africa, (Rwekaza and Muhihi, 2016).

So far, the government of Tanzania has taken several initiatives to improve agricultural production, ensuring the sustainability of AMCOS and improving the livelihoods of smallholder farmers. Among other efforts include establishment of policies and programmes such as the Agricultural Sector Development Programme in 2003, establishment of the Tanzania Coffee Research Institute in 2000, Tanzania Agricultural Policy, 1997 and Co-operative Development Policy, 2002. These efforts were envisaged to help improve farm production, sustainability of AMCOS and the livelihood of smallholder farmers, (URT, 2008). Unfortunately, these government efforts have not performed well as farmers still face several challenges including climate change, lack of a well-defined market, low prices, lack of subsidies and inadequate access to farm inputs.

Despite the recent surge in research on cash crops marketing channels, the majority of existing studies examine farmers' decisions on marketing channels by focusing on factors influencing their choice, (Xaba and Masuku, 2013; Ntimbaa and Akyoo, 2017; Mrema, 2017; Dlamini-Mazibuko et al., 2019), crops marketing, challenges among smallholder farmers inputs and extension services (Mwamakamba et al, 2017; Mhando and Mbeyala 2010; Ntimba, 2017; Kimaro et al, 2018). However, little is known about the effects of marketing channel choices by farmers to the sustainability of co-operatives as very few empirical studies have examined how marketing channel choices affect the farming business and farmers organizations.

Therefore, this study assessed the effects of marketing channels choices by farmers to the sustainability of Agricultural Marketing Co-operative Societies for two selected cash crops (coffee and cashew nuts). The overall objective of the study was to analyse marketing channel choices by smallholder farmers on the sustainability of Agricultural Marketing Co-operative Societies in cashew nut and coffee growing regions. Specifically, the study examined the available marketing channels for coffee and cashew

nut AMCOS and determine the effect of the availability of different marketing channels for coffee and cashew nut on the sustainability of AMCOS. To attain the above specific objectives, the study was guided by the following research questions i.e. What are the available marketing channels for coffee and cashew nut in the growing regions? and, what are the effect of the presence of different marketing channels on the sustainability of AMCOS? The findings from this study will be of imponderable importance to agricultural marking co-operative societies dealing with coffee and cashew nuts in putting in place favourable policies and regulatory mechanisms required for uplifting not only agricultural crops' production and co-operative sustainability but also the livelihoods of smallholder farmers. On the other hand, the study is in line with the Sustainable Development Goals aiming at improving the wellbeing of the Tanzanians, Tanzanian's Development Vision 2025 and Co-operative Development Strategy of 2013 aiming at establishing, reviving and improving the performance of co-operatives in Tanzania to improve the livelihoods of co-operative members (smallholder farmers) hence ensuring the sustainability of AMCOS. This study will also be very crucial among smallholder farmers to understand the available marketing channels for their produce. This is so because smallholder farmers in Tanzania are still receiving lower prices for their products compared to most of other countries producing similar crops, (Ntimba, 2017; World Bank, 2010). Above all, the findings to be generated from this research will also be of great importance to researchers and academicians with interest in co-operatives and the sustainability of co-operatives, the prosperity and wellbeing among smallholder farmers.

2.0 Literature Review

2.1 Theoretical Literature Review

This study was guided by the Farm Household Production theory (FHPT) by Schultz (1964). The theory tries to examine the policy implications on production among smallholder farmers and different interventions that seek to increase the outputs of the agricultural sector. This is done by raising farm output prices or by lowering the cost of variable inputs and hence predicting profit to be generated to a given production activity among smallholder farmers which then ensures the sustainability of AMCOS in this case. The theory explains that smallholder farmers produce under a high level of uncertainty induced by natural hazards and man-made factors.

According to Schultz (1964), Taylor and Adelman (2003), there is a general perception that smallholder farmers in developing countries are very poor and inefficient in economic production. As a result, for them to produce better and improve their general livelihoods,

they must be motivated in different dimensions. Evidence from different countries such as Ethiopia and Zambia, show that most of smallholder farmers have limited knowledge, inadequate capital, poor assets endowment and limited formal protection which limit their capacity to be selective as to where to sale their produce, to invest, produce better, generate more profits and improve their general wellbeing. At the end of the day their co-operative organizations are affected in one way or the other, (Taylor and Adelman, 2003).

The FHPT has proved to be useful in analysing production, perceptions among farmers, market channels, profitability, price and general sustainability among smallholder farmers in different developing countries such as Ethiopia, Tanzania, Zambia, Lesotho and Zimbabwe, (Kana, 2012; Proctor and Lucchesi, 2012; Hooton and Omore, 2007). In this respect, the theory is useful in assessing the effects of marketing channels on the sustainability of agriculture marketing co-operative societies in Tanzania with a focus on coffee and cashew nuts. Low income from cash crop production (coffee and cashew nuts) among smallholder farmers is attributed to low production, inability to acquire the right market, low price accrued after the sales, loss of interest in cash crop production, rising in cost of living and general deterioration in the livelihood conditions among smallholder cash crop farmers.

2.2 Conceptual Framework

The anticipated conceptual framework is expected to show the following relations: the influence of background variables on the independent variables which results into the dependent variables. In this case, the background variables will be socio-demographic characteristics (age, sex, marital status, education level and employment), crop price, crop output, distance to selling centres and institutional framework. The Independent variables is Marketing channels with the following indicators namely: co-operative societies, private buyers, village buyers-local contracts while the dependent variable was sustainability of AMCOS with the following indicators namely: increased crop prices, increased volume of collection, increased input distribution, increased education and extension services to members, assurance of timely payment to farmers, reduced marketing operation costs, increased number of members and presence of conducive terms and certainty of the selling duration (Fig.1).

3.0 METHODOLOGY

A cross-sectional research design was used in this study to collect data from different groups of respondents at a time. The design ensured a high degree of precision, reliability and validity on the data to be collected and at the same time, the method saved

time and other resources required to accomplish the study. The study was conducted in Kyerwa, District in Kagera Region and Masasi District in Mtwara, Region Tanzania. The major economic activity in the study area is agriculture, mainly coffee in Kyerwa and cashew nut in Masasi. The reason for selecting these areas is the importance of these crops (coffee and cashew nut) to the livelihood of the smallholder farmers in the two districts whereby, more than 50% of the population depends on these crops for their survival and other socio-economic developments. The other reason for the selection of these districts has been necessitated by the poor performance of AMCOS in the whole production chains of these two crops.

The study population comprised of all AMCOS in the study district of Kyerwa and Masasi which gave us a total of 197 AMCOS, (TCDC, 2021). According to the Rule of the Thumb formula by Sapiro (1998), if the sample size $n = 30$ observations, it is recommended in many studies and even books in the Life Science discipline as adequate for analysis. There are several accounts of where this "magical" number comes from, but that is a long debate. Usually, for small populations larger samples intensities must be taken relative to large populations. In this case, the AMCOS to be considered were 20 which is 10% of the entire population and in each AMCOS eight (8) members were interviewed which gave us a total of 160 respondents for two districts. Therefore, in each district, 10 AMCOS were visited. The Key Informant Interview (KIIs) included co-operative officers, AMCOS leaders and extension officers. The unit of analysis was AMCOS in the respective districts and the unit of observation was co-operatives and farmers. The essence of ensuring farmers participation in this study was to capture opinions, perceptions and their motive behind in participating in different marketing channels. After the determination of the sample size, a simple random sampling technique was employed to select the unit of observations, (Co-operatives and smallholder farmers). Purposive sampling also used to get the key informants and focus group discussion participants. Both qualitative and quantitative data were collected from secondary and primary sources.

Data collection methods included a survey, focus group discussions (FGDs), key informant interviews and documentary review. Data were mainly collected from managers and/or chairpersons of AMCOS and smallholder farmers for coffee and cashew nuts. To concretize the findings, key informants like extension officers, village leadership officials, district agricultural officers and leaders of co-operative unions' officials were interviewed. The study also used secondary data to analyse the trends in the two cash crop production (coffee and cashew nut) and the amount sold in the co-operatives (AMCOS) and their implications on

sustainability of AMCOS among smallholder cash crop farmers' livelihoods. In data analysis, data from each questionnaire was cleaned, coded and entered in the Statistical Package for Social Sciences (SPSS). Graphic analysis and descriptive statistics were used to analyse the data to show the production trends over different periods of time, marketing channels, price offered, and income obtained among smallholder farmers and their implications to households' livelihood and sustainability of AMCOS.

Descriptive statistics such as percentages, mean and frequencies were the anticipated outcomes of the analysed data. Finally, presentation of the findings was done using tables. To ensure the validity of the data collected, the pre-testing of the questionnaire was administered to 10 respondents from one district outside the study area but with similar characteristics. The pre-testing was done to test the data collection instruments, assess time for data collection, check availability of the study population, assess how research teams work together, test procedures for data collection, processing and analysis and check if the findings were sensible.

About the limitations of the study: In the process of conducting this study, researchers encountered some limitations such as inability of the respondents to express themselves in Kiswahili, some of the co-operative leaders trying to hide some sensitive information and failure to find respondents (small-scale farmers) at home during morning hours. To overcome them, researchers requested special permission from the regional co-operative officers to be allowed to access sensitive documents. Further, researchers re-scheduled their timetable and visiting respondents in the evening hours. In addition, researchers looked for an interpreter who could translate from vernacular to English and otherwise to do away with communication-related problem.

4.0 FINDINGS AND DISCUSSION

In the first place, the researchers gathered information on the socio-demographic issues of the respondents such as marital status, sex, type of family, age, education level and family size of the respondents, (Table 1).

Regarding the type of respondents for coffee farmers, there were three categories namely cash crop producers, spouses of the cash crop producers and elders of the cash crop producers respectively. In this regard, 72% were cash crop producers and 22% were spouses of the cash crop producers while 5.1% were the eldest son of the cash crop producers. Comparatively, with cashew nuts, there was only one category of individuals who participated in this study, and this was the cash crop producers (farmers).

Therefore, it was good wherever possible to involve different types of family members to get diverse information regarding cash crop marketing and sustainability of AMCOS in their respective districts. Though for cash nuts, the story was a bit different because only producers/farmers were interviewed due to their culture and traditions which the researchers were obliged to respect. Furthermore, the findings show both men and women in the two districts (Masasi and Kyerwa) were interviewed. In Kyerwa District, where the researchers' focus was on coffee AMCOS, 64.2% of all respondents were men and 35.8% were female. In Masasi District where cashew nuts AMCOS were the focus, 84.5% of all respondents were men and 15.8% were women.

It was important to involve both men and women in this study to obtain their opinions with respect to coffee and cashew nut marketing and sustainability. But further, it was good to involve men and women in this study because the benefits or losses accrued from marketing and sustainability of AMCOS affect both as family members. Another aspect considered under socio-demographic information was the type of the family whether nuclear, extended or single-parent family. Based on the findings, most of the family members for both coffee and cashew nuts farmers were living in a nucleated family which accounted for 75.7% of Kyerwa District and 69% of Masasi District respectively.

It was also noted that a significant number of respondents are living in extended families which accounted for 22% of coffee farmers and 26% of cashew nuts farmers. A very insignificant number of respondents were found living in a single-parent family type. The findings revealed that there were only 3% of the respondents among the coffee farmers and 3.6% of cashew nuts farmers were found living in a single-parent family type. So, it was good to determine the types of families among cashew nuts and coffee farmers because in one way or the other has an impact on the amount of cash crop produced, farm labor force, family income and sustainability of AMCOS. In addition, the study involved farmers of different age categories starting from 21 to above 60 years old. In this respect, among the coffee farmers, the age group between 21-40 years accounted for 53% while the same age among the cashew nut farmers accounted for 15.5% of all respondents.

The age group between 41-60 years accounted for 27.2% of the coffee farmers and 57.1% of the cashew nuts farmers respectively. From 60 years and above coffee farmers accounted for 19.8% and cashew nuts farmers accounted for 27.4%. As it can be visualized from the above findings, almost all grown-up people in different categories were involved in this study. This enables the researchers to capture different views, opinions and suggestions regarding the marketing of

either coffee or cashew nuts and the sustainability of AMCOS. Community members in both coffee growing areas and cashew nuts growing areas were found to possess different levels of education starting with informal, primary, secondary and tertiary education levels. Among the coffee farmers, 4.9% had informal education while among the cashew nuts farmers it was 4.8% of respondents who had informal education. But most of the respondents were found to possess primary education.

The findings revealed that among the coffee farmers, 45.7% had primary education while among the cashew nuts farmers it was 82.1% who had this level of education. The number of coffee farmers educated to a secondary level was found to be 32.1% which was more than three times of the cashew nuts farmers which were only 9.5% of all respondents. Again, coming to tertiary levels, among the coffee farmers it was found to be 17.3% while that of cash nuts farmers was found to be 3.6% of all respondents. This signifies that community members in coffee production are more educated than those in cashew nuts farming. At the same time, the education level among the cooperative members can substantially determine the prosperity and sustainability of the AMCOS concern. With respect to the marital status of respondents, there were five (5) classifications namely married, single, divorced, widow and widower.

According to the findings, most of the respondents were married. Among the coffee farmers, 78.5% were married while among the cash nuts farmers the number was a bit on the higher side whereby, 84.5% were married. The rest of the marital status categories are composed of smaller insignificant percentages. This implies, under normal circumstances, cash crop production is a family business that usually depends on the family labor of the father, mother and possibly children. As a result, that's why most of the farmers in Kyerwa District for Coffee and in the Masasi District for cashew nuts were found to be married. Family size was another aspect considered among the socio-demographic characteristics of the respondents. The family size was determined based on the number of individuals living in one household as father, mother, children, or relative(s).

Based on the above findings, it was revealed that some coffee farmers, families had a size between 1-4, 5-7, 8-10 and others had more than 10 members respectively. Families with 1-4 members composed of 23% of the total respondents, 5-7 members accounted for 37% and 8-10 members accounted for 18.5% while more than 10 members accounted for 18.5% of the total respondents. Among the cashew nuts farmers, the situation was a bit different. Families with 1-4 members accounted for 23.8%, 5-7 members

accounted for 56%, 8-10 members accounted for 14% and there was no single coffee farmer who mentioned to have more than 10 members in his/her household. The size of the family is a good determinant for AMCOS development and sustainability. One of the determinants for the growth of AMCOS/co-operative society is the increase in membership. But the more family members, the less land for cash crop production in future simply because of too much fragmentation of land to the family members and different land uses. Hence understanding family size is very important in determining the growth and sustainability of co-operatives not only in Tanzania but elsewhere in the world. The market for different agricultural crops is among the critical aspects which may ensure the sustainability of the Agricultural Marketing Co-operative Societies (AMCOS). Unfortunately, enough, in most cases marketing for different agricultural crops such as coffee and cashew nuts is unreliable, (Table 2).

Regarding the market availability among small-scale coffee and cashew nuts farmers; respondents pointed out that currently market is not very much reliable. There are times markets are available and other times markets are uncertain and buyers are not serious i.e. not known and when they show up, they tend to offer small prices which to small scale farmers can be described as an exploitative price. Therefore, small-scale coffee farmers (74.7%) pointed out that they rarely miss market for their produce while to small-scale cashew nut farmers it was 50% of the total respondents. During the FGDs with small-scale cashew nuts farmers in Masasi District, one of the discussants stated as follow:

".....it is true that there are several challenges facing cashew nuts production in our district including among others marketing related issues.....despite the government's efforts in ensuring market availability among small scale farmers' crops but still there is no clear, reliable and reasonable market for cashew nuts...." Discussants, FGDs, Masasi District, 24th April 2022.

The above explanation from the FGDs was also seconded by the key informant interview in Kyerwa District that:

"Generally, in a narrow-minded manor one may think there is no market-related problem for coffee.... but indeed, we still facing critical market related challenges. Most of our buyers are after exploiting the small-scale coffee farmers by offering them low prices for their products which do not reflect to the current monetary value...." KIIs, Kyerwa District, 27/04/2022.

During the key informants' interview with AMCOS managers, ward counselors and village leadership in Kyerwa and Masasi District respectively, it was explained that sometimes AMCOS' members are not selling their crops to the co-operative societies because of unreliable market or low prices offered compared to the other marketing channels like private buyers, farm

gate market or middlemen.

Though, during yes/no responses among the small-scale coffee farmers, 88.9% and 96.4% agreed to be selling their produce to the AMCOS. This trend if given more emphasis, there are great possibilities for the sustainability of AMCOS for coffee and cashew nuts because the more the crop collections the more the strength of the AMCOS, other factors remain constant. As pointed out earlier in the previous paragraph, small-scale farmers for coffee have different market channels where they do sell their coffee including on-farm market, co-operative societies, farmers groups, village marketing boards and contract farming, (Table 3).

The findings in Table 3 indicate different marketing channels for coffee and cashew nuts small-scale farmers. Of all respondents, 28.4% of small-scale coffee farmers narrated that they are selling their coffee on the on-farm market, 46.2% are selling their coffee in the co-operatives (AMCOS) and 20.7% are selling their coffee through contract farming. As it can be depicted from the above findings, there is a significant number of respondents who sell their coffee through different channels apart from the AMCOS mainly due to better prices offered in these other channels or availability of timely payment after the harvest while another category of small-scale coffee farmers is selling their produce to other channels like contract farming due pre-arrangement with the crop buyers.

Under contract farming, small-scale coffee farmers enter a contract with buyers who offer them some money to facilitate their day-to-day farming requirement such as paying for casual labourers buying for farming inputs. In return after the harvest small-scale coffee farmers are supposed to sell their produce to the one who advanced him or her with some money during production. The worse enough with this practice, the buyer is the one who determine the price, and in most cases, farmers are offered low price. With respect to cashew nuts, all the respondents interviewed pointed out that whatever produced is sold to the AMCOS. In this case, they have only a single market for their produce (cashew nuts). This was also cemented by one of the discussants during FGDs:

"...the government is struggling to solicit the market for cashew nuts and therefore, we should not let down our leaders by selling our crops to private buyers who are always after profit maximization ...instead we have to unify our efforts by selling our crops to the AMCOS which will not only strengthen our co-operatives but also ensure their sustainability....." Discussants, FGD, Masasi District, 25th December, 2022.

Small-scale farmers had different views on current marketing availability today comparing to 20

years ago, (Table 4).

Small-scale farmers for coffee (40%) contended that currently, markets for their produce are easily available than the previous time. At the same times, majority (68.3%) of cashew nuts small-scale farmers had almost the same idea relating to that of small-scale coffee farmers. In this case, they all pointed out that in the past getting market for these crops (coffee and cashew nuts) was a bit tedious than today. During socialism and self-reliance policy in Tanzania, small-scale farmers for variety of cash crops had no choice in terms of market. But after the adoption of Structural Adjustment Programs (SAPs) which paved way to the economic liberalization and creation of a free market economy; availability of markets in general is no longer a big deal. These findings are in line with those of Gilbert and Adam (2017) when they were analyzing about cash crop channels in Tanzania. What is a problem currently is the nature of market in terms of its reliability and price being offered. The same findings were seconded by one of the discussants during a FGDs in Kyerwa District that:

"... market as a market for coffee is not a problem in our district for the contemporary time...the critical challenge which majority of us are encountering is the nature of the market we are getting as well as the price we are receiving on different crops sold to the market..... there are lots of marketing channels particularly for coffee but most of them if not all are exploitative to small-scale farmers..." Discussants, FGDs, Kyerwa District, 25th April 2022.

Under normal circumstances, a good and reputable market should generate benefits to both sellers and buyers. Even in a situation whereby, crops are sold to the AMCOS, it should offer good and competitive price to benefit small-scale farmers on one hand but on the other hand, ensuring the sustainability of the respective AMCOS. Small scale farmers for coffee and cashew nuts contended that they have different sources of market information, (Table 5).

The findings revealed that farmers get various market information. The small-scale farmers acknowledged receiving information from different sources, but the most used one is a cooperative notes board which accounts for 46.7% coffee and 53.1% cashew nut respectively. This could be because first, it is cheap to use, it is durable which means the information can stay for a long time without being distorted and finally, there is a room to seek clarification from the cooperative management in case there is anything that is not clear. Apart from the cooperative notes board, other means through which cooperative members get market information is extension officers.

A good number of coffee farmers (20.4%) get information from extension officers different from cashew nut farmers who only 3.7% get information from

extension officers. A significant number (35.80%) of cashew nut farmers get market information from radio, Newspapers, and Television while 14.5 % of the coffee farmers get information from the same sources. Nearly eighteen percent (17.8%) of coffee farmers receive information from religious leaders while for cashew nuts is only 7.4%. This implies that farmers are informed of what is going on in the market particularly in the crop auction that enables them to make informed decisions regarding their produce which strengthens the sustainability of cooperatives because even the cooperative management can govern smoothly because there is transparency.

The above findings are in line with those of Msangi (2016) when he was discussing on the factors limiting cashew nut business in Tanzania. But also, during key informants' interview in Masasi District, it was pointed out that:

"It is true that AMCOS' members are getting information on different issues pertaining production and marketing of their produce.....but a big challenge is on the implementation of what one has been informed. For example, sometimes, we are informed that one kilogram of cashew nuts will be sold at 2000/=TZS but when the season comes you are given let say 1 500/=TZS without prior explanation...." KIIs, Masasi District, 30/04/2022.

Apart from general challenges facing small scale coffee farmers, there are also some environmental challenges, (Table 6).

The findings revealed that the most pressing challenge that farmers of coffee and cashew nut are facing is low prices which accounted for 23.8% and 46.2% respectively. On the other hand, high transportation costs have equal significant effect on coffee farmers and cashew nut farmers by 17% and 17.4% respectively. This is because of the rise in the price of oil in the world market due to the Ukraine and Russia wars which affected the production and transportation of petroleum gas and as a result, increasing the cost of agricultural farming inputs as observed by Mwamakamba, (2017). In addition, late payment after selling has been another significant challenge to coffee farmers compared to cashew nut farmers by 19.3% and 6.8% respectively. It is very common for coffee farmers to receive the first and second payments which sometimes, second payment comes very late after the sale because it is from it where all the deductions for various charges and taxes are done. Poor infrastructure is also a pressing factor which significantly affect small-scale coffee farmers compared to cashew nut farmers by 19% by 9.1% respectively.

This implies that cost of production increases because of the increase in the cost of transport

across the poor roads. It also affects the sustainability of AMCOS because the private buyers who are ready to incur the cost of transport to collect crops from the farm will make the cooperatives collect less crops from farmers and disturb their business sustainability. Furthermore, another challenge which faces farmers is insufficient market information. 19.3% of coffee farmers find it to be a significant problem compared to 6.85 of cashew nut farmers who find it to be less significant. This is because coffee is sold directly to the world market and cooperatives or unions participate in the bidding competition and they wait for prices to rise without giving detailed information to the farmers something which leave farmers stranded for a long time. If the situation continues, small-scale farmers may be compelled to sell their produce to private buyers in the next season which then empies the sustainability of AMCOS.

5.0 Conclusion and Recommendations

5.1 Conclusion

Based on the tittle, objectives and findings, the following can be concluded: Socio-demographic factors in terms of type of respondents, sex, marital status, education levels, type of the family and family size play an important role in the entire process of production, marketing and sustainability of the Agricultural Marketing Co-operative Societies among the small-scale coffee and cashew nuts farmers not only in the study area but also in Tanzania at large. It should be noted that marketing for different agricultural crops is among the critical aspect which limits the sustainability of most of AMCOS in Tanzania. In a broader perspective, marketing for different crops such as coffee and cashew nuts is unreliable particularly during the harvesting season.

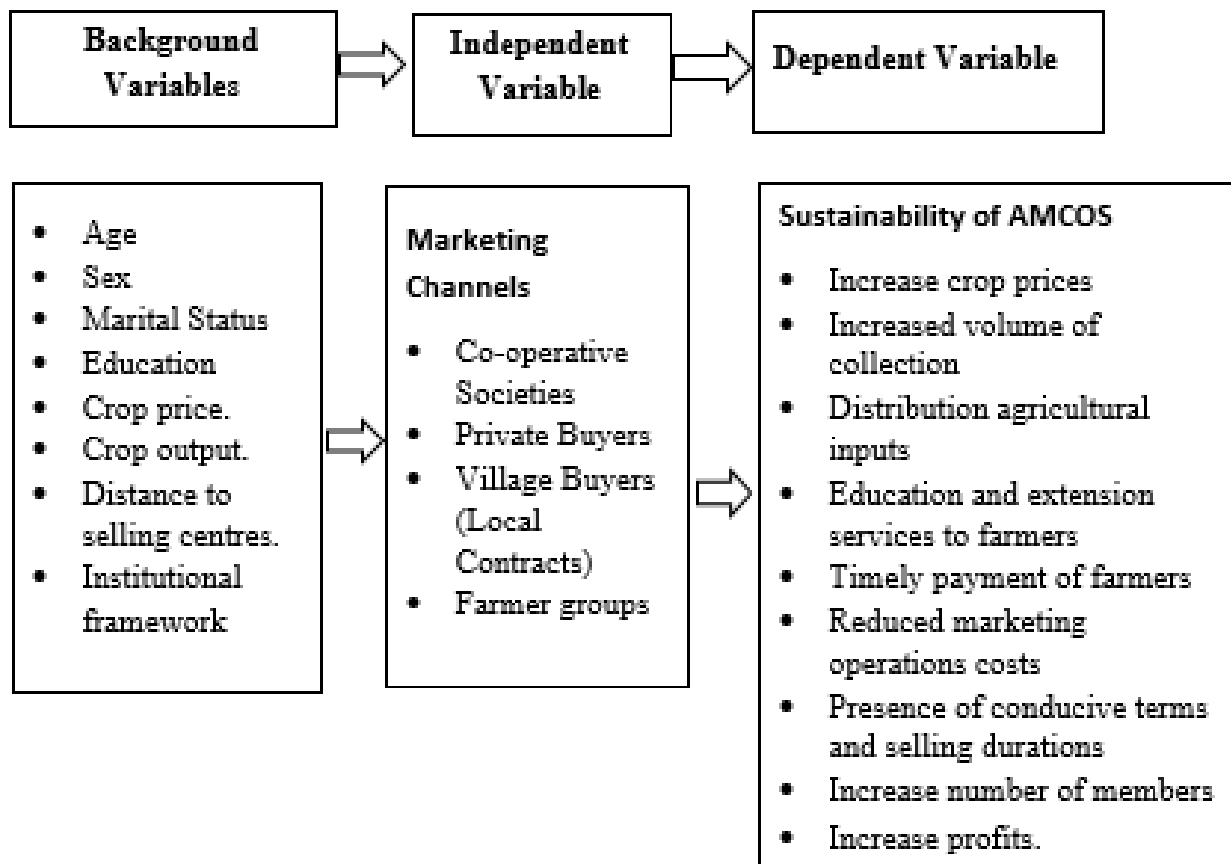


Figure 1. Conceptual framework on the effect of marketing channels on the sustainability of AMCOS

Source: Researchers’ Own Construction, (2022).

Table 1: Socio-demographic characteristics of the respondents

Type of respondents	Coffee Farmers		Cashew nut Farmers	
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)
Cash crops producer	57	72.2	All respondents were cashew nut farmers	
Spouse of cash crops producer	18	22.8		
Eldest son of a cash crops Producer	4	5.1		
Total	79	100		
Missing system	2	2.5		
Sex of respondents				
Male	52	64.2	71	84.5
Female	29	35.8	13	15.5
Type of Family				
Nuclear type of family	56	75.7	58	69
Extended type of family	10	13.5	22	26.2
Single-parent type of family	8	10.8	3	3.6
Missing System	7	8.6	1	1.2
Age of respondents				
21-40	43	53.1	13	15.5
41-60	22	27.2	48	57.1
60 and above	16	19.8	23	27.4
Education level of respondents				
Informal education	4	4.9	4	4.8
Primary education	37	45.7	69	82.1
Secondary education	26	32.1	8	9.5
Tertiary education	14	17.3	3	3.6
Marital status				
Married	62	78.5	71	84.5
Single	4	5.1	10	11.9
Divorced	4	5.1	2	2.4
Widow	8	10.1	1	1.2
Widower	1	1.3		
Total	79	100		
Missing System	2	2.5		
Family size				
1-4	19	23.5	20	23.8
5-7	30	37	47	56
8-10	15	18.5	12	14.3
1 and above	15	18.5	5	6
Total	79	97.5		
Missing System	2	2.5		
Total	81	100	84	100

Table 2: Markets for small-scale cash crops farmers' produces

Markets	Coffee Farmers		Cashew nut Farmers	
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)
Rarely missed	59	74.7	42	50
Every Season	1	1.3		
I don't remember if I missed	19	24.1	2	2.4
Total	79	100	44	100
Missing System	2	2.5	40	47.6
Total	81	100	84	100

Table 3: Marketing channels used for coffee

Marketing used for Coffee	Coffee Farmers		Cashew nuts Farmers	
	(n)	Percent (%)	(n)	Percent (%)
On farm selling	48	28.4	All respondents said that they sell their cashew nut to co-operatives	
Co-operative	78	46.2		
Through farmers' group	5	3.0		
Through village marketing boards	3	1.8		
Farming contract	35	20.7		
Total	169	100		

Table 4: Farmers' views on current marketing availability comparing to 20 years ago

Farmers' views	Coffee Farmers		Cashew nut Farmers	
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)
Currently it is difficult to find markets	22	28.6	14	17.1
The access to market has no changes	24	31.2	12	14.6
Currently markets are more easily accessible	31	40.3	56	68.3
Total	77	100		
Missing System	4	4.9		
Total	81	100	82	100

Table 5: The sources of market information.

The sources of market information	Coffee Farmers		Cashew nut Farmers	
	n	Percent (%)	n	Percent (%)
Radio, Newspapers, and Television	22	14.50	29	35.80
Through Co-operative noticeboard	71	46.70	43	53.10
Through extension officers	31	20.40	3	3.70
Through NGOs	1	0.70		
Religious leaders	27	17.80	6	7.40
Total	152	100.00	81	100.00

Table 6: The environmental challenges facing farmers in the process of finding markets

The environmental challenges facing farmers in the process of finding markets	Coffee Farmers		Cashew nut Farmers	
	n	Percent (%)	n	Percent (%)
Poor road infrastructure	59	19.00	12	9.10
High transportation costs	53	17.00	23	17.40
Low price	74	23.80	61	46.20
Low demand	2	0.60	1	0.80
Poor conservation	25	8.00	5	3.80
Absence of market information	38	12.20	9	6.80
Post-harvest losses			12	9.10
Late payments after selling	60	19.30%	9	6.80
Total	311	100.00%	132	100

But availability varies from time to time, and despite the government efforts/initiatives Still there are unclear, unreliable and unreasonable markets. This has enabled most of the buyers continuing exploiting stallholders' farmers. But smallholder farmers have no option because sometimes there are no money in the co-operatives (AMCOS). By selling crops to private buyers reduces the collections in the co-operatives (AMCOS) and therefore affecting their sustainability. Currently among the small-scale cashew nuts farmers, there is only one marketing channel for their produce while coffee small-scale farmers have multiple marketing channels for their products. For example, among small-scale coffee farmers, there is on-farm selling of produce, co-operative selling of the produce, contract farming, villages marketing boards or sometimes called farmers groups. Each of the above category offer different prices to small-scale-coffee farmers. The presence of many marketing channels endangers the sustainability of AMCOS because it lowers the amount of produce to be sold to the co-operatives. Small-scale farmers for coffee and cashew nuts' opinions, differs greatly in terms of marketing channels for their produce. Under normal circumstances, coffee stallholders' farmers have more marketing channels than cashew nut smallholder farmers. For cashew nuts, the story is different, they are naturally compelled by the existing policy and market framework to sell all the produce to the co-operatives (AMCOS).

5.2 Recommendations

Based on the objectives, findings and conclusions the following can be recommended:

a) Late payment of the AMCOS members is one among the factors compelling them to solicit market

elsewhere, reducing collections in the AMCOS and endangering the sustainability of their co-operatives. It is recommended to AMCOS in collaboration with the financial institutions around to ensure money are available at the starting of the harvesting season. It should be noted that farmers always need ready market for instant payment to cater for their household needs. If price will be timely and reasonably offered in co-operatives (AMCOS), then smallholder farmers will sell their produce to co-operatives, and this will ensure the AMCOS sustainability.

b) For ensuring sustainability of AMCOS and cash crop production (cashew nuts and coffee), there is a need to have deliberate nation-wide campaigns aiming at sensitizing youth to take an active part in the production process. The campaign and sensitization must start from the nation-level downward to regions, districts, wards and villages. Therefore, the Ministry of Agriculture in collaboration with Local Government Authorities should put in place incentives to attract youth. This will increase not only cash crop production but also ensuring the sustainability of AMCOS.

c) There had been too much government interferences on AMCOS without thorough analysis. These interferences have been affecting not only production and marketing but also the sustainability of AMCOS. For coffee, the government is prohibiting small-scale farmers to sell their produce in the market which may give them more profits though during production process, the government is totally silent. It is therefore, recommended that the government and politicians should avoid interfering small-scale farmers. Instead, it should be in the frontline guiding them throughout from production to selling of the produce. Wherever possible, it should assist farmers in soliciting market for their produces.

5.3 Areas for Further Studies

This study was conducted to analyze the current marketing channels among small-scale coffee and cashew nut farmers' cooperatives in Tanzania. Basically, the focus was only on two regions in Tanzania i.e. Kagera Region for coffee and Lindi Region for cashew nuts. But Tanzania has several agricultural cooperatives for several crops in all regions dealing with different crops. Therefore, to have a holistic conclusion and recommendations regarding markets, prices offered and challenges which small-scale farmers are encountering in day-to-day economic life, this study suggest further study to be conducted in other crops such as tea and cotton in other regions.

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References

1. Agbongiarhuoyi, A. E., Uwagboe, E. O., Agbeniyi, S. O., Famuyiwa, B. S., Shittu, T.R., Analysis of Farmers' Cashew Nuts Marketing Channels and Information Frequency: Implication for Cashew Sustainability in Nigeria. *World Rural Observ* 2020, 12(3).
2. Karagwe District, Channels by Coffee Farmers in Karagwe District, Tanzania. *Global Institute of Research and Education* 2022, 6(2) 1-10.
3. Creswell, J., Research Designs: Qualitative, Quantitative and Mixed Methods Approaches. SAGE Publications, California, 2014.
4. Gilbert, J., Adam, M., Factors Influencing Choice Decision for Marketing Channels by Coffee Farmers in Karagwe District, Tanzania. *Global Journal of Biology Agriculture and Health Sciences* 2017, 6(2), 1-10.
5. ICO., Coffee Production Statistics Committee 2015/2016. 11Th Meeting London, United Kingdom, 2015.
6. Kana A., Coffee as a Livelihood Support for Small Scale Farmers. A Case Study of Hamsapur Village in Nepal. CIA, Inc. The Brand Architect Group, 2012.
7. Kimaro, P, Bee, F., Towo, E., Farming Input Availability, Accessibility and Affordability Among Small Scale Coffee Farmers in Hai and Arumeru Districts, Tanzania. *International Journal of Economics, Commerce and Management* 2018, 6(12), 180-195.
8. Ludi, E., Sustainable Livelihood for Coffee Producers. Washington, DC, 2006.
9. Maghimbi, S., The decline of coffee and rise of maize and rice. *African Study Monographs*, 2007. 35: 73-83.
10. Mhando, D., Mbeyale G., Analysis of the coffee value chain in the Kilimanjaro region Tanzania. NCCR North South Dialogue No. 27. London, Overseas Development Institute, 2010.
11. Mhando, D., Mbeyale G., Analysis of the Coffee Value Chain in the Kilimanjaro Region Tanzania. NCCR North South Dialogue No. 27. London, Overseas Development Institute, 2010.
12. Mhando, D., Haller, T., Mbeyale, G., Ludi, E., Adaptation to changes in the coffee value chain and the price of coffee among coffee producers in two villages in Kilimanjaro, Tanzania. *African Study Monographs* 2013, 34(1), 27-56.
13. Msangi, A., Factors Limiting Contribution of Cashew Nuts Production to Improvement of Livelihood of Small-Scale Farmers in Mtwara rural district, Tanzania. Masters Dissertation, University of Dodoma. 2016.
14. Mwamakamba, S.N., Sibanda, L.M., Pittock, J., Stirzaker, R., Bjornlund, H., van Rooyen, A., Kashaigili, J.J., Irrigating Africa: Policy barriers and opportunities for enhanced productivity of smallholder farmers. *International Journal of Water Resources Development* 2017, 33(5), 824-838.
15. Mwijarubi, J., Contribution of Cash Crops to the Tanzania's Economic Development. Research Report. National Agriculture Policy-Ministry of Agriculture, Food Security and Co-operatives, Dar es Salaam, 2015.
16. Ntimbaa, G., Akyoob, A., Factors Influencing Choice Decision for Marketing, Operative, Dar es Salaam, Tanzania, 2017.
17. Proctor, F, Lucchesi, V., Small-Scale Farming and Youth in an Era of Rapid Rural Change. International Institute for Environment and Development-IIED/HIVOS, London/The Hague, 2012.
18. Schultz, T., Transforming Traditional Agriculture, Chicago: University of Chicago Press, 1964.
19. Tanzania Coffee Market, International Food Policy Research Institute. Washington DC, USA, 2019.
20. Taylor, J., Adelman, W., Agricultural household models: Genesis, evolution and extensions: Review of the economies of the households. *Economic Review* 2003, 1(1), 33-58.
21. TCB. Tanzania Coffee Industry Development Strategy. Tanzania Coffee Board, 2012.
22. TCB. National-wide Coffee Production Trends from 2008/2009 to 2016/2017. Moshi, 2017.
23. TCB. Coffee Production, Export and Price Offered from 2008/9 -2016/17 Crop Season. Moshi, Tanzania, 2019.
24. TCB. Nation-wide Coffee Production, Price Offered and Income Obtained for Twenty years (1998/99-2018/19 Crop Season. Moshi, Tanzania, 2019.

25. URT. National Agriculture Policy-Ministry of Agriculture, Food Security, 2013.
26. World Bank. Kagera-Rakai (Tanzania and Uganda). Parallel Value Chain Analysis of Coffee and Maize. The world Bank Working Paper; Washington DC, 2010.
27. World Bank. World Development Indicators. Washington, DC, 2014.