

**ASSESSING SERVICE QUALITY AND FARMERS' SATISFACTION WITH SERVICE
PROVIDED BY AGRICULTURAL MARKETING COOPERATIVE SOCIETIES IN
MVOMERO AND KILOMBERO DISTRICTS, TANZANIA**

ID: GJDS-UBIDS-102301

Anderson G. Rwela

andersonrwela@gmail.com

ORCID: [0009-0004-2309-481X](https://orcid.org/0009-0004-2309-481X)

Department of Economics and Social Studies (ESS),
School of Spatial Planning and Social Sciences (SPSS)
Ardhi University

Doi//https://dx.doi.org/10.4314/gjds.v20i2.4

ABSTRACT

Providing quality service has become an important aspect in the business and public service sectors. Agricultural Marketing Cooperative Societies (AMCOS), as public enterprises, are supposed to offer quality services to their members. This study sought to assess service quality and farmer satisfaction with the service provided by AMCOS in Kilombero and Mvomero districts, Tanzania. The study specifically determined the quality of services offered by AMCOS in relation to member satisfaction. Lastly, the study determined the level of members' satisfaction with the services offered by AMCOS. The study adopted a cross-sectional research design whereby 189 members of AMCOS were interviewed. Data processing and analysis were guided by the servqual Model. Through the model, five dimensions (tangible, reliability, responsiveness assurance, and empathy) were tested to find the gap that exists between perception and expectation of the service offered by AMCOS. The findings showed that Tangible was the most deficient dimension of service quality offered by AMCOS, and the overall service quality or customer satisfaction index was 54%, indicating that more needs to be done to improve the quality of services. On the level of satisfaction, the majority of the members were less satisfied with the services offered. Conclusively; AMCOS in the study area offered a range of services, but social services were inadequate. The difference between expectation and perception is negative, implying that members of AMCOS expected more than what was offered by their organisation. The study recommends that AMCOS leaders work on the deficiencies to improve service qualities for their members so as to raise the customer satisfaction index.

Keywords: Service quality, Satisfactio, servqual model

INTRODUCTION

Agriculture remains the backbone of the economy and the largest source of employment in most developing countries. Tanzania depends mainly on an agrarian economy. The agricultural sector is the main source of employment and livelihood for more than two-thirds of the Tanzanian population (Leyaro and Morrissey, 2013; Mayala, 2021). It accounts for about 46% of the GDP and about 82% of the country's labour force. However, the labour-intensive character of the sector reduces its contribution to the gross domestic product, but its contribution nevertheless ranges from 20 to 60% in most developing countries (Tilahun, 2007; Lyatuu et al., 2015). The majority of farmers are rural smallholder farmers who operate between 0.2 and 20 hectares (Chambo et al., 2009). For smallholder farmers to survive in this increasingly complex world, they need to become more competitive, be aware of their rights, and have a voice. One of the most effective ways of doing this is by combining their efforts and establishing their own democratic organisations. Cooperatives represent one viable form of a member-owned and controlled organisation that can help the poor compete in the market and bring significant social benefits and voice (ILO, 2012; Liu et al., 2019). Based on their role in development, cooperatives have been defined as organisations whereby a group of people come together to achieve a particular economic goal for all members of the group (Mhando, 2014; Jin et al., 2021). These organisations achieve their objectives through a democratic process in which every member has an equal voice. Thus, members not only participate in discussions regarding economic interests, but they also engage in and nurture a democratic process for doing so. The primary goal of any cooperative is to meet the needs of its members in a cost-effective manner (Lyimo, 2012 and Lal, 2019).

Although there are many kinds of cooperatives, this paper deals with only Agricultural Marketing Cooperative Societies (AMCOS), which are common in agricultural areas in Tanzania. In other countries, this type of cooperative is known as an agricultural cooperative. According to Chambo (2009), AMCOS are owned by farmers and oversee agriculture-related activities such as the transformation, packaging, distribution, and marketing of farm products (both crops and livestock). One motivation for the creation of agricultural cooperatives is "overcoming the curse of smallness" As an association comprising a large number of small-scale farmers, a cooperative act as a large business in the marketplace, reaping the significant advantages of economies of scale that are not available to its members on an individual basis (Kimario, 1992 and Lin *et al*, 2020). Agricultural cooperatives in Tanzania have three basic structures: primary, secondary, and tertiary. Primary cooperatives are the smallest individual units located primarily in villages and are known as "rural cooperative societies" (RCS) in Tanzania. Primary cooperatives consist of households made up of individual farmers. At the secondary level, membership or shareholding is held by several primary cooperatives (e.g., a cooperative union). Thus, secondary cooperatives consist of several rural primary cooperatives. Moreover, primary cooperatives are used by cooperative unions as agents for the collection of crops from farmers. Finally, tertiary cooperatives are organised at the national level (Mhando 2014; Seimu 2015).

The AMCOS in Tanzania deal with the production, processing, transporting, and marketing of various crops. The changes in the economic and business environment around the world have created both benefits and severe challenges for the AMCOS in dealing with member expectations and satisfaction (Anania and Rwekaza, 2018). Following the Arusha Declaration, AMCOS became the main tool for building a spirit of self-reliance during the Ujamaa era. However, with the introduction of free markets, AMCOS struggled to compete with the private sector, and many were unable to provide their members with the quality services they needed (TFC, 2006). Some farmers withdrew their membership from AMCOS due to poor performance and declining quality of services. As market liberalisation set in, members had many grievances that included delayed payments, poor input delivery systems, and the monopolistic nature of Cooperative Unions towards primary societies (Kalindi and Tiruhungwa, 2012). Apparently, some AMCOS began serving the interests of non-members and other outside bureaucratic forces instead of serving the interests of their members. The trend caused members and local beneficiaries to lose interest in AMCOS organisations (Banturaki, 2012; Kgosinyane, 2019). The foregoing situation raised questions as to whether these cooperatives were still viable in providing the required and quality services to their members.

The provision of quality services has become an important aspect, particularly in the business services sector. Service quality has become a prerequisite for customer satisfaction and delight. The debate on the importance of service quality in service provision began in 1985 in the literature of marketing when Parasuraman et al. (1985) opined that service quality is a function of customers' expectations and service providers' performance. The concept of service quality was defined as a form of attitude, related to satisfaction that results from a comparison of expectations with perceptions of performance. Expectations are viewed as desires or wants of consumers, in other words, what customers feel a service provider should offer rather than what the service provider would offer (Felix, 2017, Velmurugan & Gopinathan, 2017, Kanta & Jaiswal, 2017). Service quality is directly related to customer or member satisfaction. This means that the influence of service quality dimensions and subdimensions on members Satisfaction will depend on the nature of the gap between the member's expectations and the actual perceived service quality (Kalambo, 2015).

Agricultural cooperatives, as public enterprises, are supposed to offer quality services to their members, and in return, members should be satisfied with the services offered. Studies on cooperative service quality and member satisfaction provide mixed results. Ngeywo's (2014) study done in Kenya argues that agricultural cooperatives provide quality services to members, and members are satisfied with the services offered. Also, a study conducted by Bernard et al. (2008) in Ethiopia revealed that many agricultural cooperatives in Ethiopia that deal with the marketing of agricultural inputs and produce were providing better and more quality marketing services to their members as they received higher prices for their agricultural produce as opposed to non-members of agricultural cooperatives. Conversely, Studies by scholars such as Gopinathan and Velmurugan (2016) and Lotfy and Adeb (2016) on their studies done in India and Egypt, respectively, showed that the

organisations offer services that are poorer than what members expected, leading to members' dissatisfaction. In another study conducted in Ethiopia, Eman (2009) found that the extent to which the quality of services offered by Agricultural cooperatives varies on a case-by-case basis in meeting the demands and needs of the members. Some Agricultural cooperatives managed to provide quality services, while others did not manage to provide the services demanded by their members at the expected quality. Another study by Dung (2011) in Vietnam found that the quality of services by agricultural cooperatives was reported by many farmers as worse than the quality of services by individuals (private companies) in terms of land preparation, supply of fertilisers, marketing services, payment methods, selling price, and general service quality. Studies conducted in Tanzania showed that there are few examples of AMCOS that provide quality services to members. These include Kilimanjaro Native Cooperative Union (KNCU), Kagera Cooperative Union (KCU), and Karagwe District Cooperative Union (KDCU). All these AMCOS deal with coffee production. Despite the good examples, the territorial picture is not encouraging in the areas where AMCOS is operating. For instance, in the past thirty years, coffee output has been falling or, at best, stagnating because of inadequate organisational support in marketing and the supply of inputs at competitive prices (Ikeno, 2007). There are inadequate studies in Tanzania and in the study area on the quality of services provided by AMCOS, which necessitated this study as the empirical findings show mixed views on whether AMCOS provides quality services or not. Therefore, this study specifically aimed to determine the quality of services offered by AMCOS in relation to member satisfaction. Also, the study determined the level of members' satisfaction with the services offered by AMCOS.

METHODOLOGY

Model reviews

The Agricultural Marketing Cooperatives Society's level of customer service was evaluated in this study using the SERVQUAL model. The model, created by Parasuraman (Parasuraman et al., 1985, 1988), was used because it is widely used to assess the calibre of services offered by organisations such as non-governmental organisations (NGO), cooperative societies, farmer organisations, and for-profit businesses (Rana et al., 2013; Meesala & Paul, 2018). The model was therefore selected since it is a reliable way to gauge how satisfied members or consumers are with the service provider.

The gap between a customer's opinions of the service they received and the expectations they had for the service as a whole is how the model defines service quality. As a result, it may be considered an attitude measure. According to Kilambo (2015), this model aims to assess consumers' perceptions of the quality of the services they receive, which are based on the difference between what they anticipate and what they receive. This method of gauging service quality considers both the client's assessment of the method used to offer the service and the final result. When a service meets or surpasses a customer's expectations, it is said to have high service quality. At the time of the model's creation, there were 10 dimensions of service quality, but afterwards, were reduced to five (Parasuraman et al., 1988). These consist of (i) tangibles—physical facilities, furnishings, personnel

CC-BY License

presentation, and support services; (ii) reliability —the capacity to deliver the promised service consistently and precisely; and (iii) responsiveness—the capacity to assist clients and render timely assistance. Other factors include (iv) assurance—the staff's expertise and civility, as well as their capacity to foster confidence and trust—and (v) empathy—the considerate, one-on-one service the company offers its clients (Parasuraman et al., 1991). These characteristics primarily concentrate on the tangibles of service and the human elements of service delivery (responsiveness, dependability, assurance, and empathy). This study specifically aims at identifying the services offered by AMCOS to members, assessing the quality of the services offered by AMCOS to members, and determining the level of member satisfaction with the services offered by AMCOS. Service quality dimensions and subdimension items for members had a direct influence on members or customers' Satisfaction. This depends on the nature of the gap between the member's expectations and the actual perceived service quality.

Conceptual Framework

The conceptual framework (Figure 1) explains the underlying process, which is applied to guide and monitor the study. In this study, the SERVQUAL model was deemed suitable for measuring service quality and member satisfaction with AMCOS using five service quality dimensions. The study used the same dimensions to measure members expectations and the perceived quality of services. About 22 items (generated questions to capture information on dimensions) of the SERVQUAL model were included to measure the perceived service quality and customer satisfaction with the AMCOS service offered by AMCOS, with the assumption that both are related. In view of the conceptual framework of the study, the influence of service quality dimensions on member satisfaction will depend on the services delivered by AMCOS in relation to meeting members' expectations. This means that service quality and satisfaction will depend on the nature of the gap between the member's expectations and the actual perceived service quality. The positive gap score ($P-E = +$) will signify that the perceived service quality by the member is satisfactory. In addition, if the gap is neutral or zero ($P-E = 0$), the members are satisfied or indifferent. On the other hand, if the gap is negative ($P-E = -$), this will mean that expectations were not met, hence the perceived service quality is low, and thus members are dissatisfied.

Independent Variables

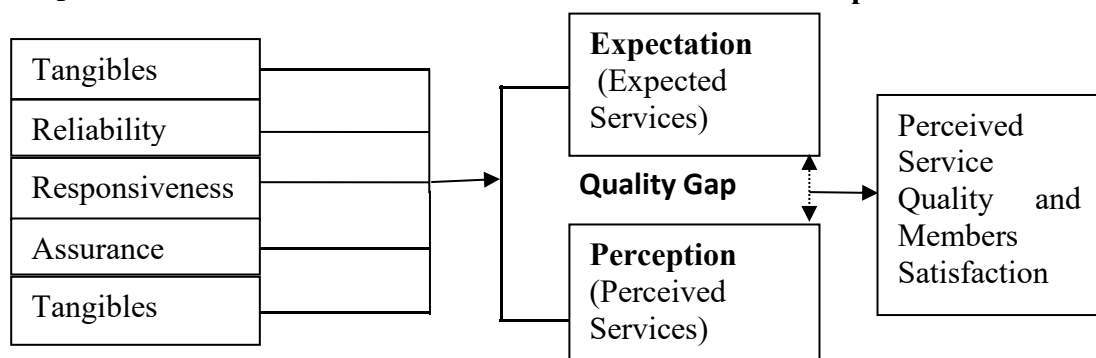


Figure 1: Conceptual model

Source: adapted from Kumar et al. (2009)

Study area

This study was conducted in Mvomero and Kilombero Districts. The rationale for selecting these study areas was based on three key reasons. The two districts had more active agricultural marketing cooperative societies compared to other districts in Morogoro Region (Researcher baseline survey data, 2017). Secondly, AMCOS in these two districts had been in operation for more than seven years and, therefore, had a long experience. Being more experienced in running this organization, the researcher expected to access rich data concerning AMCOS. Thirdly, the selected study areas had AMCOS dealing with sugarcane and cocoa cash crops. Given the fact that these were not part of the crops previously covered by AMCOS, they, therefore, presented a new and perhaps, unique context for research on this topic to come up with new insights.

Study methods

The study approach adopted by this study was mixed approach. The Approach was selected because it allows the collection of both qualitative and quantitative data. The study adopted multi-stage sampling, whereby, the first stage was the selection of the study area, whereby two districts out of the six districts found in Morogoro Region were purposefully selected. Second, six out of 17 active AMCOS were selected through a systematically random technique; the third stage was the selection of wards. Thereby, Mhonda, Lungo, and Kadoli wards in Mvomero District and Kidatu A, Kidatu B, and Mang'ula wards in Kilombero District were selected based on the selected AMCOS in the study area. Lastly, the respondents were selected from the list of members of AMCOS in the study area. As indicated in Table 1, only 189 members of AMCOS were available for the study.

Table 1: Sampling Frame for Active AMCOS

Name of AMCOS	Members in AMCOS	Ratio	Sample size	Percentage
Mvomero AMCOS	402	402/6000* 218	15	6.9
TUCO PRICOS-AMCOS	2998	2998/6000*218	109	50
		8		
Mhonda AMCOS	303	303/6000*218	11	5.04
Kidatu AMCOS	497	497/6000*218	18	8.25
Mangu'la AMCOS	700	700/6000*218	25	11.47
KCG AMCOS	1100	1100/6000*218	40	18.35
		8		
Total	6000		218	100

For qualitative data, four focus group discussions (FGDs) were conducted; two from each district for members and non-members of AMCOS, and six key informants were interviewed: two cooperative managers from each district and one cooperative officer from each district. Self-administered questionnaire (quantitative method),

CC-BY License

focus group discussions and in-depth interview (qualitative methods) methods were used for collecting data. Questionnaire tool was used to collect quantitative data on the perceptions and expectations of service quality offered by AMCOS, the level of satisfaction, and the services offered by AMCOS. Check list tool used to collect qualitative data on Focus group discussions (FGDs) and from key informants. Qualitative data collected was particularly on the AMCOS service quality, and farmer's perception on the nature of quality of services offered by AMCOS. Quantitative analysis involved descriptive statistics which involves calculating percentage and frequencies and gap score analysis, whereby descriptive statistics were applied to summarise the means of perceptions and expectations of members of AMCOS. Perception minus expectation scores for each item and dimension were calculated in order to identify the service quality gaps. The overall perceived service quality is hereby calculated quantitatively as follows: $OSQ = \frac{\sum (X_1W + X_2W + X_3W + \dots + X_iW)}{N}$(1)

Whereas;

OSQ/CSI= Overall Service Quality/Customer Satisfaction Index..... (2)

X1, X2... Xi= dimensions unweighted or (average gap score) (3)

W = importance dimension weighted score from (100marks) (4)

N= Number of dimensions used (5)

Analysis was done through SPSS version 16 and Microsoft Excel 2007 software. Qualitative data was coded, categorised, and analysed through content analysis, then grouped according to the themes.

RESULTS AND DISCUSSION

Table 2 shows demographic characteristics of the respondents in the study area for both members and non-members of (AMCOS). These characteristics included sex, age, marital status, and education level attained by the respondents. Out of the 189 respondents, 122 (65.0%) were males and 67 (35.0%) were females; marital status of the respondent's showed majority of were married which count 86%. Again, age groups variable was observed during the study, and it was as follows: majority of the respondents were between 51-60 years old (41.0%) followed by the age group between 41-50 who counted 27%. Education was the last demographic information captured in this study. Table 2 shows that majority of the respondents attained primary education who counted 82% of all respondents and the remaining respondents had either not attended any formal school or had attained secondary school education, vocation training or tertiary education.

Table 2: Respondents' Demographic Information

Demographic Information	Member of AMCOS	
Respondent Sex	(n)	(%)
Male	122	65.0
Female	67	35.0
Marital Status		
Single	4	2.0
Married	163	86.0

divorced	13	7.0
Widow	9	5.0
Age Groups		
18 - 30	4	2.0
31 - 40	32	17.0
41 - 50	51	27.0
51 - 60	77	41.0
> 60	25	13.0
Respondent Education		
No formal schooling	13	7.0
Primary	155	82.0
Vocational	1	1.0
Secondary	19	10.0
Tertiary Education	1	1.0
Total	189	100

Members of AMCOS response on services accessed

As explained in the introduction, the first specific objective of this paper was to identify services accessed by members of AMCOS. Findings in Table 3 reveal that about 90% of the respondents indicated that they had accessed crop harvest and transportation services, and about 10% indicated that they had not accessed such services. Since the study was conducted in two districts, Mvomero and Kilombero, where the majority of the sampled members deal with cane growing and a few deals with Cocoa production in Mhonda, crop harvesting and transportation were very important services based on the nature of the crop (cane). AMCOS arranged with farmers who owned sugarcane farms for the harvesting and transportation of the sugar from the factories. Harvesting and transportation services were made available to non-members of AMCOS through associations such as the Mvomero Out Grower Association (MOA). Associations differ from AMCOS in terms of values, principles, and modes of registration. AMCOS are registered with the Tanzania Commission of Cooperatives, which is under the ministry responsible for agriculture; associations, on the other hand, are registered with the Ministry of Home Affairs.

Table 3: Members Response on Service Accessed from AMCOS (n=189)

Services	Responses	Frequency	Percentage
Crop Harvest and transportation services	Yes	171	90
	No	18	10
Credit grantee and facilitation	Yes	110	58
	No	79	42
Farm input (improved seeds, fertilizer and pesticides) facilitation	Yes	110	59
	No	79	41
Extension services	Yes	79	41

	No	110	59
Social services	Yes	30	16
	No	159	84
Marketing services (price setting, quality control, weighting)	Yes	100	53
	No	89	47

Farming inputs (improved seeds, fertiliser, and pesticides) were another type of service acknowledged by the majority of respondents. Ninety percent (90%) of the respondents reported having accessed farming inputs. The inputs were provided during the season, and farmers were required to pay them back through sales of their sugarcane and cocoa. The cost of farming inputs was deducted directly from the payment. During an in-depth interview with AMCOS managers of TUCO PRICOS AND KCG AMCOS, they reported having special agreements with industries and importers of farm inputs to supply the inputs at cheaper prices, hence making it easier for members to access them at affordable prices, unlike the prices paid by non-members who purchase the inputs directly from agents and local suppliers at rather higher prices. Ten percent (10%) of the members of AMCOS reported not having accessed farm inputs from their AMCOS, and most of them were from Muhonda AMCOS, which is dealing with cocoa production. During FGDs with members of Mhonda AMCOS, they reported that their AMCOS had not yet started facilitating them to access farm input, and so they still depended on local stores for the supply of the inputs.

Credit facilitation, marketing services, and extension services were other services that were reported by members as being accessed through AMCOS. About 58%, 53%, and 41% of the respondents reported having accessed credit facilitation, marketing services, and extension services, respectively. About 42% of the respondents indicated that they had been dissatisfied with the credit facilitation arrangement, as they were supposed to pay it back after the crop season regardless of whether they had a good or poor harvest. Therefore, some respondents decided not to take credit facilitated by their AMCOS. Extension services were reportedly accessed by members of AMCOS in Kilombero District. This is because the government employed extension officers and cooperatives officers for the AMCOS dealing with sugarcane. Thus, there were regular visits by extension officers and cooperative officers. Their counterpart respondents in Mvomero District depended on government-employed Ward and district extension officers who did not visit farmers frequently. During FGDs with members of Kidatu and Mang'ula AMCOS in Kilombero District, it was reported that normally, when farmers were required to use new technologies in crop production or new improved seeds, their organisation would pay Extension Officers from the District Office Facilitation Services. The study findings are consistent with the findings by Anania and Towo (2016) and Blekking *et al* (2021) studies who found that cooperatives facilitates members with credits for purchasing inputs such as fertilisers, farm equipment, agrochemicals, and coffee storage and drying facilities for coffee growers in Moshi District. However, these findings differ from those in Moshi District in the sense that credits were provided to coffee farmers in Moshi District without interest, so it was affordable to payback. In Mvomero and Kilombero, members were supposed to pay back the loan plus interest since AMCOS were only

guarantors and not creditors like SACCOS and the Banks. The study findings are also similar to the findings in a study by Dung (2011) and Carelsen, (2020) who indicated that members of agricultural cooperatives were not only using or accessing extension services from cooperatives but were also accessing extension services from other sources, such as government-employed extension officers.

Lastly, the study investigated the extent to which AMCOS provided social services to its members. Table 2 shows low members' responses to the service offered by the organisation. Thirty (30%) of the respondents reported having accessed social services from their AMCOS to pay for their children's school fees. However, seventy percent (70%) reported not having accessed social services from their AMCOS. It was not clear as to why AMCOS did not provide social services, as was the case with other AMCOS from other regions, despite being in operation for 3 to 20 years. During FGDs with members of Mvomero AMCOS and TUCO PRICOS, one member said that our AMCOS (TUCO PRICOS) had not done anything on social services as we sometimes had problems paying school fees for our children without assistance from our AMCOS. This is despite the fact that social service provision is one of the members' constitutional rights under the organisation. On the other hand, during an in-depth interview with cooperative managers, it was reported that due to the economic status of the AMCOS, they were not in a position to provide social services, such as paying school fees for members children and building schools and hospitals, as demanded by the constitution of the AMCOS. However, in the future, they will be able to do so. The study's findings are in contrast with study by IFAD (2013) and, Borzaga, (2020) which indicated that agricultural cooperatives are essentially economic organisations that provide social services to their members when financing their projects. Another study by CICOPA (2014) and Wollmann (2018) revealed that cooperatives help in providing community services of general interest, such as health services, education, and water supply. The difference in the findings might be in the study area, in the sense that AMCOS have no viable economic stability to enable them to provide social services; hence, they fail to fulfil the social aspect of AMCOS.

Members' perception on service quality offered by AMCOS

The findings in Table 4 show the total score of the members' perceived and expected service quality obtained from the five-level Likert scale. Tangible was the dimension with the highest negative gap score (-20.5), followed by Responsiveness (-17.25), Empathy (-12.8), Reliability (-9.2), and Assurance with the least gap score (-6.25). In addition, the average gap score across all dimensions was -13.3. A one-way ANOVA test was done to determine whether there is statistical significance in the average gap score of all five dimensions. The results show that the average gap score across all dimensions was statistically significant ($p \leq 0.05$). Another Duncan Multiple Range Test was conducted to determine if there is a significant difference among the average gap scores in all five dimensions. The test results showed that the tangible and Responsiveness dimensions with letter (b) in Table 4 where more deficient dimensions as their average gap score was high and far from zero (0), which is a reference point of the model. Assurance (a) was the least deficient dimension compared to other dimensions. The results imply that the tangible and responsiveness dimensions were more deficient and needed more attention by

management of AMCOS compared to other dimensions, and Assurance was the least deficient as it was near zero. This means that members of AMCOS were expecting more than what AMCOS offered them. During FGDs in both districts, farmers (members of AMCOS) reported that even though their AMCOS provided farming inputs such as fertilisers, improved seeds, and pesticides, those inputs were not delivered on time. For example, fertilisers for planting were sometimes delivered when the crops had already passed the stage of fertiliser application. In addition, farmers who were members of TUCOPRICOS AMCOS in Mvomero District pointed out that despite their AMCOS arrangement for harvesting their cane, the process sometimes delayed and was not on time. For example, after burning sugarcane on the farm, the canes were not supposed to stay on the farm for more than seven days before reaching the factory. However, sometimes AMCOS delay harvesting their sugarcane, sustaining losses. This was raised by TUCOPRICOS AMCOS and Mang'ula AMCOS members.

Table 4: Service Quality Dimension and Average Perception Gap Scores (n=189)

Dimension	Statement	Perceptions score	Expectations score	Quality Gap (P-E)	Mean for dimension
Tangible	AMCOS provision farm input, Transportation harvesting and Marketing services	563	599	-36	-20.5(b)
	Communication services from AMCOS to members	590	603	-13	
	AMCOS staff's appearances(smartness)	609	619	-10	
	AMCOS build and furniture (Modernity)	592	615	-23	
Reliability	AMCOS providing services to members' as per the constitution.	581	595	-14	-9.2(ab)
	Dependability on services provision by AMCOS	500	510	-10	
	Providing services at agree time by AMCOS	591	607	-16	
	Keeping member informed by AMCOS	579	582	-3	
	Professionalism services provision by AMCOS	496	501	-3	
Responsive ness	AMCOS personnel inform farmers(members) when services to offered	575	594	-19	-17.25(b)
	Readiness of AMCOS Personnel to provide services to members.	598	609	-11	
	Willingness of AMCOS personnel to assist members	579	592	-5	
	Redness of AMCOS to respond	568	602	-34	

	to members' needs.				
Assurance	AMCOS' leaders' confidence	570	574	-4	-6.75 (a)
	Making members' safe during farming services delivery	559	574	-15	
	Consistence services delivery	605	610	-5	
	AMCOS workers knowledge on service delivery	568	571	-3	
Empathy	AMCOS have enough staffs to meet the demand of member services	596	611	-15	-12.8 (ab)
	AMCOS workers' customer care to members	584	601	-17	
	AMCOS workers understanding on the needs of members.	589	598	-9	
	AMCOS workers' paying attention to member's needs for service's	587	601	-14	
	AMCOS ability to take emergence response to member when it occurs	593	602	-9	
Average Gap Score					-13.3

* Average (means) gap scores with different superscript are significant at $p \leq 0.05$.

Table 5 shows that members allocated more marks or points to the tangible 23%, responsiveness, and Empathy dimensions indicated by 23%, 21%, and 20% of the respondents, respectively, while Reliability and Assurance received 19% and 17%, respectively. This was done for triangulation purposes, as the respondents were required to allocate points for a total of 100 among the five dimensions. The tangible dimension seemed to be more deficient, as indicated in Table 4. The finding implies that the dimension needs more attention by the leaders of AMCOS, as the majority of farmers complained about it.

Table 5: Percentage Allocation for the Dimensions by Members of AMCOS (n=189)

SERVQUAL Dimensions	Dimension Importance Weight score %
Tangible	23.0
Responsiveness	21.0
Empathy	20.0
Reliability	19.0
Assurance	17.0
Total	100

A more direct measure for service quality evaluation is provided by an overall perceived service quality or satisfaction index when expressed in percentage. This is often called the "Customer Satisfaction Index" (CSI), which can be defined as the overall evaluation of a firm's post-purchase performance or utilisation of a service. CSI represents a measure of service quality based on the user's or consumer's perceptions of the service aspects expressed in terms of importance rates, vis-à-vis

the user's or consumer's expectations expressed in terms of satisfaction rates. CSI plugs the gap left by SERVQUAL because it is based on judgements expressed according to a numerical scale. SERVQUAL provides an index calculated through the difference between perception and expectation rates expressed in the items, weighted as a function of the five service quality dimensions, which make SERVIQUAL dimensions (five items), and the value is expressed in percentage based on the 5-point Likert scale used in this study. The study used a scale that ranges from 1 to 5 (strongly disagree to strongly agree), so the overall AMCOS service quality/member satisfaction index, or the voice of AMCOS members on satisfaction with the service quality offered by their organisation, was calculated based on the general formula of OSQ= $\Sigma ((X1W+X2W+X3W+..... XiW) /N) \dots\dots\dots (1)$.

Table 5: Summary of Overall Service Quality Weights (n=189).

Dimensions	Average score (A)	Weight (B)	Weighted (A*B)	score
Tangible	-20.2	0.23	-4.646	
Reliability	-9.2	0.19	-1.748	
Responsiveness	-17.25	0.20	-3.45	
Assurance	-6.75	0.21	-1.4175	
Empathy	-12.8	0.17	-2.176	
Total WEIGHTED SERVQUAL SCORE			- 13.4375	
Average	(= Total / 5)	Weighted	Servqual	Score
- 2.6875				

According to Table 6, the overall perceived service quality or customer satisfaction index of AMCOS members is $-2.6875/5$ (level of Likert scale) $100 = 53.75\%$. The values of the overall perceived service quality or customer satisfaction index (54%) show that AMCOS provides average service quality to members. This implies that the service qualities of AMCOS are satisfactory, which means they are of an average level and need to be improved. Similar findings were reported in a study by Ashish et al. (2013) in Himachal Pradesh State, India, which showed that the service qualities of the private sector are better than those of the public sector (AMCOS). In addition, studies by Osei et al. (2012), Machimu (2016) and Kassem *et al* (2021) which assessed the extent to which farmers were satisfied with the quality of services provided by farmers' organisations, studies showed that the services were of unacceptable quality, which ranged from poor to average quality. Contrary the study by Manik et al (2020) showed that the services offered by their cooperative were well and organised meaning that they were satisfied with the service offered by their cooperatives.

Level of satisfaction on services offered by AMCOS

The findings in Table 3.6 indicate that 55.6% of the members of AMCOS were less satisfied with the services offered by their organisation, 30.3% were not satisfied at all, and only 14.1% were satisfied with the services offered. Social services offered were reportedly poor, as 70% of the members were not satisfied with them, 20% were less satisfied, and only 1% were satisfied. Price negotiation, control, and weighing at factories for cane growers or AMCOS warehouses for cocoa growers

were other services with which members of AMCOS were either less satisfied or not satisfied at all.

Table 6: Member's Level of Satisfaction on Services Offered by AMCOS

Types of services	Levels of members' satisfaction %		
	Satisfied	Less satisfied	Not satisfied at all
Price negotiation and control	6.7	73.6	19.7
Quality control	10.9	51.7	37.4
Credit facilitation	26.0	42.0	32.0
Farm inputs facilitation	10.0	60.0	30.0
Social services	1.0	20.0	79.0
Extension services	26.0	57.0	17.0
Harvesting and transportation	25.0	63.8	11.2
Weighting at factory	2.0	79.3	18.7
Payments	18.7	53.3	28.0
Average percentage	14.1	55.6	30.3

The findings in Table 6 indicate that the majority of the members of AMCOS were less satisfied with the quality of services offered by their organisation. The findings are in alignment with the earlier findings in Table 3.5, which show that the quality of services from AMCOS was average. This implies that there is a great relationship between the quality of services and member satisfaction. When the services are good, obviously, members (customers) would be satisfied with the services, and if the quality of service were compromised, the level of member satisfaction would be low. The finding is consistent with the findings in a study by Mustapha et al. (2017), who found a high positive relationship between service quality dimensions and the levels of satisfaction of the members of the cooperative society. The findings show further that any movement or increment in the identified variables (service quality dimensions) also causes movement in the same direction in the level of satisfaction of members of a cooperative society.

During FGDs with farmers from the study areas on how they perceive services offered or facilitated to them by AMCOS, they all indicated that they had been less satisfied with the services. Farmers in Mvomero who were members of TUCOPRICOSS and MVOMERO AMCOS pointed out that they were dissatisfied with the price of sugarcane offered by Mtibwa Sugar Estate Ltd. They cited some of the discrepancies in the price of sugarcane sold to the factories; for example, they said one tone of sugarcane is sold at Tshs 52 000, while their counterparts in Kilombero, who produce the same, are selling it at Tshs 9 2000. Based on this reality, farmers questioned the effectiveness of their AMCOS in price negotiations. In response during the interview, the Cooperative manager pointed out that price decisions are made by various actors such as AMCOS, farmers associations, the Sugar Board of Tanzania, and the factory owner. Therefore, it is not something that is decided by AMCOS alone. The Cooperative managers in Mvomero District of TUCO-PRICOS

AMCOS and Mvomero AMCOS agreed on the fact that AMCOS, as farmers' representatives, should do something to minimise members' grievances. Members of KCG and Mangu'la AMCOS in Kilombero also showed their dissatisfaction with AMCOS in terms of weighing at the factory. Even though their price was Tshs 92000, which is higher than the price of their counterparts in Mvomero. Such a price was determined by sucrose (the measure of sweetness of sugarcane), as they reported that in most cases, the factory owner, through the Laboratory Department, offers farmers low sucrose, which lowers their price. The farmers who are supposed to get Tshs 92 000 per tonne were supposed to maintain sucrose (sugarcane sweetness) at 14%, but in most cases, farmers were allocated 7.99% to 11.94%, which lowers the price from Tshs 92 000 to Tshs 29 680 or Tshs 66 994, respectively. In response to this claim, the Cooperative manager of Mang'ula AMCOS said

"Listen to me carefully, researcher. The amount of sucrose depends on the number of days the sugarcane spent before reaching the factory, which should not exceed seven days. Therefore, in most cases, farmers do not observe the timing for sending their sugarcane to the factory, which lowers their sucrose (sugar sweetness), hence the low payment".

Generally, the findings from qualitative and quantitative analysis showed that AMCOS were not offering or facilitating quality services to the members, and members were less satisfied with the services from their AMCOS. Similar findings are reported in a study by Tilahun (2007) and Rosyad et al (2019) who found that cooperatives were inefficient both in their business management and in member handling, which led to member dissatisfaction as customers. Though the findings by Wang et al (2021) study in China showed positive of Cooperatives services to the members

CONCLUSION AND RECOMMENDATIONS

AMCOS in the study area offered a range of services, but social services were inadequate. The difference between expectation and perception is negative, implying that members of AMCOS expected more than what was offered by their organisation. The tangible and Responsiveness dimensions seem to be more deficient, as the results from the ANOVA TEST showed statistical significance, and both dimensions are very important since they relate directly to service delivery and AMCOS personnel's readiness to serve members. The assurance dimension had the least deficiency in all dimensions, implying members were confident in their leader and AMCOS staff despite deficient service delivery. The overall quality of services, or customer satisfaction index (CSI), was at an average level. The study recommends that AMCOS should strive to improve social services to members as it was inadequate. Additionally, the study recommends to leaders of AMCOS to evaluate their service provision to member as it will gives them feedback for improvement. District Cooperative officers should play their role of supervising cooperative and making sure that they fulfil their obligation to members. Lastly it was recommended that AMCOS leaders work on the deficiencies to improve service qualities for their members so as to raise the customer satisfaction index.

REFERENCES

- Anania, P. F. and Towo, P. E. (2016). The contribution of agricultural marketing co-operatives in service provision to members in Tanzania a Case of Moshi District. *Tengeru Community Development Journal* 3(2): 87 – 117.
- Ashish, M. J. and Sankaranarayanan, K. G. (2013). Service quality and customer satisfaction among selected state cooperative and Multi-State Cooperative Banks in Goa - A Study. *International Journal of Science and Research* 30(8): 739 – 743.
- Banturaki, J. A. (2012). *Tanzania Cooperatives: Their Role in Socio-economic Development*. Perspectives for Cooperatives in East Africa, Kampala, Uganda. 96pp.
- Bernard, T., Taffesse, A. S. and Gabre_Madhin E. Z. (2008). Impact of cooperatives on smallholders' commercialization behavior: Evidence from Ethiopia. *Agricultural Economics* 39: 1 – 15.
- Blekking, J., Gatti, N., Waldman, K., Evans, T., & Baylis, K. (2021). The benefits and limitations of agricultural input cooperatives in Zambia. *World Development*, 146, 105616.
- Borzaga, C., Galera, G., Franchini, B., Chiomento, S., Nogales, R., & Carini, C. (2020). Social enterprises and their ecosystems in Europe. Comparative synthesis report.
- Carelsen, C. P. R. (2020). Roles and impacts of extension services on the livelihoods of smallholder farmers during drought periods in the Western Cape, South Africa (Doctoral dissertation, Cape Peninsula University of Technology).
- Chambo, S. A. (2009). *Agricultural Co-operatives: Role in Food Security and Rural Development Paper Presented to Expert Group Meeting on Co-operatives*. New York, USA, 28 - 30 April, 2009. 13pp.
- CICOPA (2014). Co-operatives as builders of sustainable development: Applied to industrial, artisanal and service producers' cooperatives. [http://www.cecop.coop/IMG/pdf/cooperatives_as_builders_of_sustainable_development_en.pdf]site visited on 20/12/2017.
- Dung, N. M., (2011). Characteristics of Agricultural Cooperatives and it service performance in Back Ninh Province, Vietnam [<http://agris.fao.org/agris-search/search.do?RecordID=PH2013000237>] site visited on 10/7/2017.
- Emana, B. (2009). *Cooperatives: A Path to Economic and Social Empowerment in Ethiopia*. International Labour Organization, Geneva.
- Felix, R. (2017). Service quality and customer satisfaction in selected banks in Rwanda. *Journal of Business Financial Affairs* 6: 246 – 256.
- Gopinathan, V. and Velmurugan, R. (2016). Customer satisfaction of primary agricultural co-operative societies. *International Journal of Management Research and Review* 2: 1554 – 1560.
- Gopinathan, V. and Velmurugan, R. (2017). Customers Perception on Primary Agricultural Credit Co-Operative Societies Service Quality, Volume 3, World Wide Journal of Multidisciplinary Research and Development.[<https://www>].

- researchgate.net/publication/321491610CustomersPerception_On_PrimaryAgricultural_Credit_Co-Operative_Societies_Service_Quality] site visited on 12/12/2018.
- Ikeno, J. (2007). The declining coffee economy and low population growth in Mwanga
- ILO (2012). Co-operative enterprises build a better world: Coop^{AFRICA}'s contribution to the revival of African cooperative enterprises and their roles in fostering equity, empowerment, decent work, and secure livelihoods. [http://library.uniteddiversity.coop/Cooperatives/CoopAFRICA/Cooperative_Enterprises_Build_A_Better_World.pdf] site visited on 2/12/2017.
- International Fund for Agricultural Development (IFAD). (2013). IFAD's Engagement with Cooperatives; Evaluation Synthesis, Independent Office of Evaluation. Albay, Philippines. 69pp.
- Kalindi, A. M. and Tiruhungwa, R. M. (2012). The impact of member-initiated reforms in agricultural marketing on members' social and economic well-being: the case of mamsera and nshara rural co-operative societies. *Research Report Series* 1(12): 23 – 49.
- Kant, R. and Jaiswal, D. (2017). The impact of perceived service quality dimensions on customer satisfaction: An empirical study on public sector banks in India. *International Journal of Bank Mark* 35: 411 – 430.
- Kgosinyane, P. G. (2019). Democratic governance in a selection of cooperatives in Tshwane Metropolitan area (Doctoral dissertation, University of the Witwatersrand, Johannesburg).
- Kilambo, S. R. (2015). An Assessment of members' satisfaction with the credit services offered by employee based SACCOS in Tanzania. A Case of Ruangwa Teachers SACCOS. Dissertation for Award of MSc Degree at Mzumbe University, Morogoro, Tanzania.
- Kimario, A. (1992). *Marketing Cooperatives in Tanzania: Problems and Prospects*. Dar es Salaam University Press, Dar es Salaam. 15PP
- Lal, T. (2019). "Measuring impact of financial inclusion on rural development through cooperatives", *International Journal of Social Economics*, Vol. 46 No. 3, pp. 352-376. <https://doi.org/10.1108/IJSE-02-2018-0057>.
- Leyaro, V. and Morrissey, O. (2013). Expanding agricultural production in Tanzania: Scoping Study for IGC Tanzania on the National Panel Surveys. *London School of Economics* 5: 1 – 33.
- Lin, P., Song, Q., Song, J., Jamalipour, A., & Yu, F. R. (2020). Cooperative caching and transmission in CoMP-integrated cellular networks using reinforcement learning. *IEEE Transactions on Vehicular Technology*, 69(5), 5508-5520.
- Liu, Y.Y.; Zhang, S.M.; Fu, X.H (2019). Can farmers' professional cooperatives increase the income of their members? —An investigation based on the participation model. *Rural. Econ.*, 71–79
- Lotfy, A. and Adeeb, N. (2016). *Measuring Farmers' Satisfaction with the Services of Agricultural Service Providers in Minya and BeniSuef Governorates*. CARE International, Egypt. 50pp.
- Lyatuu, T. E., Fengying, N., and Fang, C, (2015). The Role of Agriculture in the Economic Growth and Poverty Reduction in Tanzania. *Journal of Economics and Sustainable Development* 6(14):154-165.

- Lyimo, F. F. (2012). *Rural Cooperation in the Cooperative Movement in Tanzania*. Mkuki Na Nyota Publishers, Dar es Salaam.
- Machimu, M. M. and Kayunze, K. A. (2016). Sugarcane outgrowers on contract farming service quality in Kilombero Valley, Tanzania.
- Mayala, N. M (2021). The Role of Agriculture in Tanzania: Unpacking Industrialization Prospects and Constraints [<https://www.igi-global.com/chapter/the-role-of-agriculture-in-tanzania/266991>] accessed in site visited on 20/3/2022
- Meesala, A.; Paul, J. (2018). Service quality, consumer satisfaction and loyalty in hospitals: Thinking for the future. *J. Retail. Consum. Serv.*, 40, 261–269.
- Mhando, D.G, (2014). Conflict as motivation for change: The Case of Coffee Farmers' Cooperatives in Moshi, Tanzania. *African Study Monographs* 50: 137 – 154.
- Ngeywo, J. (2014). Effect of advance payment of coffee delivered to farmers' cooperative societies on farmers' satisfaction a case of GUSII Cooperative Societies, Kenya. *International Journal of Innovative Research and Development* 3:239 – 244.
- Osei, M. J., Owasu, D. E. and Aido, R. (2012). Assessing farmers' satisfaction of agronomic services received in Ghana using the SERVQUAL Model: A case of Kumasi metropolis. *International Journal of Business and Social Science* 3(19): 51 – 60.
- Parasuraman, A., Berry, L. L. and Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing* 67(4): 420.
- Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing* 49(4): 1 – 10.
- Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing* 64(1): 1 – 12.
- Rana, A. S., Reddy. G. P. and Sontakki, B. S. (2013). Perceived service quality of agricultural organizations comparative analysis of public and private sector. *International Journal of Advanced Research in Management and Social Sciences* 1(2):287 – 295.
- Rosyad, A., Satriani, R., & Astuti, T. Y. (2019). Farmer satisfaction to dairy cattle cooperative business in Banyumas District, Central Java. In IOP Conference Series: Earth and Environmental Science (Vol. 250, No. 1, p. 012075). IOP Publishing.
- Rwekaza, G. C. and Anania, P. (2018). Co-operative decision making structure and its effectiveness in promoting sustainable co-operative organizations in Tanzania: A Case of Selected Agricultural Marketing Co-operatives in Shinyanga Region. *Arts Social Science Journal* 9: 1 – 5.
- Seimu, S. M. L. (2015). The growth and development of coffee and cotton marketing Co-operatives in Tanzania, c.1932-1982. Thesis for Award of PhD Degree at University of Central Lancashire, UK, 391pp.
- TFC (2006). A simplified guide to the cooperative development policy and the cooperative societies act of Tanzania mainland prepared by the Tanzanian Federation of Cooperatives in Collaboration with the

Cooperative Development Department.
[<http://www.hakikazi.org/papers/Cooperatives.pdf>] site visited on
20/3/2022.

- Tilahun, D. (2007). Performance of coffee marketing co-operatives and members' satisfaction in dale district, southern Ethiopia. Dissertation for Award of MSc Degree at Haramaya University, Ethiopia, 100p
- Wang, M.; He, B.; Zhang, J.; Jin, Y. (2021). Analysis of the Effect of Cooperatives on Increasing Farmers' Income from the Perspective of Industry Prosperity Based on the PSM Empirical Study in Shennongjia Region. *Sustainability* 13:1-18.
- Wollmann, H. (2018). Public and personal social services in European countries from public/municipal to private—and back to municipal and “third sector” provision. *International Public Management Journal*, 21(3), 413-431.
- Kassem, H. S., Alotaibi, B. A., Muddassir, M., & Herab, A. (2021). Factors influencing farmers' satisfaction with the quality of agricultural extension services. *Evaluation and Program Planning*, 85, 101912.