

Enhancing Service Quality in Agricultural Marketing Cooperative Societies: A Case Study of two Districts, Tanzania

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Abstract

In both the corporate and public service sectors, offering high-quality services has grown in importance. Agricultural Marketing Cooperative Societies (AMCOS), as public companies, are required to give excellent services to its members. This research aims to examine service quality and farmer satisfaction with the service offered by AMCOS in Kilombero and Mvomero districts, Tanzania. The research particularly examined the quality of services given by AMCOS in relation to member satisfaction. Lastly, the research examined the degree of members' satisfaction with the services given by AMCOS. The study utilised a cross-sectional research strategy wherein 189 members of AMCOS were interviewed. Data processing and analysis were guided by the servqual Model. Through the approach, five aspects (tangible, dependability, responsiveness assurance, and empathy) were examined to determine the gap that exists between perception and expectation of the service supplied by AMCOS. The results indicated that Tangible was the most inadequate dimension of service quality supplied by AMCOS, and the total service quality or customer satisfaction score was 54%, suggesting that more needs to be done to enhance the quality of services. On the degree of satisfaction, the majority of the members were less happy with the services supplied. Conclusively; AMCOS in the research region provided a variety of services, but social services were lacking. The discrepancy between expectation and perception is negative, meaning that members of AMCOS anticipated more than what was given by their organisation. The report advises that AMCOS executives focus on the weaknesses to enhance service quality for their members so as to boost the customer satisfaction index.

Keywords: Service quality, Satisfactio, servqual model

Introduction

Agriculture is the backbone of the economy and the primary source of employment in most developing nations. Tanzania relies heavily on an agricultural economy. The agriculture industry is the major source of employment and livelihood for more than two-thirds of the Tanzanian people (Leyaro and Morrissey, 2013; Mayala, 2021). It contributes for roughly 46% of the GDP and about 82% of the country's work force. However, the labour-intensive nature of the industry decreases its contribution to the gross domestic product, but its contribution still varies from 20 to 60% in most developing nations (Tilahun, 2007; Lyatuu et al., 2015). The bulk of farmers are rural smallholder farmers that operate between 0.2 and 20 hectares (Chambo et al., 2009). For smallholder farmers to thrive in an increasingly complicated environment, they need to become more competitive, be aware of their rights, and have a voice. One of the most efficient methods of achieving this is by uniting their efforts and building their own democratic groups. Cooperatives provide one possible type of a member-owned and managed organisation that may assist the disadvantaged participate in the market and deliver major social benefits and voice (ILO, 2012; Liu et al., 2019). Based on their function in development, cooperatives have been characterised as organisations wherein a group of individuals work together to pursue a certain economic aim for all members of the

group (Mhando, 2014; Jin et al., 2021). These groups accomplish their aims via a democratic process in which every member has an equal say. Thus, members not only participate in conversations addressing economic concerns, but they also engage in and cultivate a democratic process for doing so. The major purpose of any cooperative is to address the demands of its members in a cost-effective way (Lyimo, 2012 and Lal, 2019).

Although there are various types of cooperatives, this study works with just Agricultural Marketing Cooperative Societies (AMCOS), which are widespread in agricultural regions in Tanzania. In other countries, this sort of cooperative is known as an agricultural cooperative. According to Chambo (2009), AMCOS are owned by farmers and handle agriculture-related operations such as the transformation, packing, distribution, and selling of agricultural goods (both crops and animals). One incentive for the development of agricultural cooperatives is "overcoming the curse of smallness" As an organisation including a large number of small-scale farmers, a cooperative behave as a major corporation in the marketplace, enjoying the enormous benefits of economies of scale that are not accessible to its members on an individual basis (Kimario, 1992 and Lin et al, 2020). Agricultural cooperatives in Tanzania have three fundamental structures: primary, secondary, and tertiary. Primary cooperatives are the smallest individual entities found largely in villages and are known as "rural cooperative societies" (RCS) in Tanzania. Primary cooperatives consist of homes made up of individual farmers. At the secondary level, membership or ownership is held by many main cooperatives (e.g., a cooperative union). Thus, secondary cooperatives consist of multiple rural primary cooperatives. Moreover, primary cooperatives are employed by cooperative unions as intermediaries for the collecting of crops from farmers. Finally, tertiary cooperatives are formed at the national level (Mhando 2014; Seimu 2015).

The AMCOS in Tanzania deal with the cultivation, processing, shipping, and selling of different crops. The developments in the economic and commercial climate throughout the globe have brought both advantages and significant obstacles for the AMCOS in dealing with member expectations and satisfaction (Anania and Rwekaza, 2018). Following the Arusha Declaration, AMCOS became the key vehicle for creating a sense of self-reliance throughout the Ujamaa period. However, with the advent of free markets, AMCOS struggled to compete with the private sector, and many were unable to offer their members with the quality services they required (TFC, 2006). Some farmers resigned their membership with AMCOS owing to poor performance and diminishing quality of services. As market liberalisation came in, members had several issues that included delayed payments, inefficient input delivery systems, and the monopolistic attitude of Cooperative Unions towards primary societies (Kalindi and Tiruhungwa, 2012). Apparently, some AMCOS started serving the interests of non-members and other outside bureaucratic forces instead of serving the interests of their members. The tendency prompted members and local beneficiaries to lose interest in AMCOS groups (Banturaki, 2012; Kgosinyane, 2019). The aforementioned circumstance generated doubts as to whether these cooperatives were still sustainable in delivering the essential and quality services to its members.

The provision of excellent services has become a significant feature, especially in the business services industry. Service quality has become a criterion for client pleasure and enjoyment. The argument on the relevance of service quality in service supply started in 1985

in the literature of marketing when Parasuraman et al. (1985) stated that service quality is a function of customers' expectations and service providers' performance. The idea of service quality was described as a sort of attitude, connected to satisfaction that arises from a comparison of expectations with perceptions of performance. Expectations are considered as needs or wants of consumers, in other words, what customers believe a service provider should supply rather than what the service provider would deliver (Felix, 2017, Velmurugan & Gopinathan, 2017, Kanta & Jaiswal, 2017). Service quality is closely tied to customer or member satisfaction. This suggests that the effect of service quality dimensions and subdimensions on members Satisfaction will rely on the extent of the gap between the member's expectations and the actual perceived service quality (Kalambo, 2015).

Agricultural cooperatives, as public companies, are intended to give excellent services to its members, and in exchange, members should be happy with the services supplied. Studies on cooperative service quality and member satisfaction yield conflicting outcomes. Ngeywo's (2014) research done in Kenya suggests that agricultural cooperatives give excellent services to members, and members are happy with the services supplied. 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 academics such as Gopinathan and Velmurugan (2016) and Lotfy and Adeeb (2016) on their studies done in India and Egypt, respectively, demonstrated that the organisations deliver services that are inferior than what members anticipated, resulting to members' unhappiness. In another research done in Ethiopia, Emanu (2009) revealed that the degree to which the quality of services supplied by Agricultural cooperatives differs on a case-by-case basis in satisfying the requests and requirements of the members. Some Agricultural cooperatives succeeded to deliver great services, while others did not able to provide the services needed by their members at the desired 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 performed in Tanzania indicated that there are few instances of AMCOS that offer excellent 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 exceptional instances, the territorial picture is not favourable in the places where AMCOS is working. For instance, in the last thirty years, coffee production has been dropping or, at best, stagnant because of poor organisational support in marketing and the supply of inputs at competitive rates (Ikeno, 2007). There are insufficient research in Tanzania and in the study region on the quality of services offered by AMCOS, which required this study since the empirical data reflect varied perspectives on whether AMCOS delivers quality services or not. Therefore, this research primarily attempted to establish the quality of services given by AMCOS in connection to member satisfaction. Also, the survey examined the degree of members' satisfaction with the services given by AMCOS.

Conceptual Framework

The conceptual framework (Figure 1) illustrates the underlying procedure, which is employed to guide and monitor the investigation. In this research, the SERVQUAL model was considered adequate for assessing service quality and member satisfaction using AMCOS utilising five service quality criteria. The research employed the same measures to assess members expectations and the perceived quality of services. About 22 items (generated questions to collect information on dimensions) of the SERVQUAL model were incorporated to assess the perceived service quality and customer satisfaction with the AMCOS service given by AMCOS, with the premise that both are connected. In light of the conceptual framework of the research, the effect of service quality characteristics on member satisfaction will rely on the services supplied by AMCOS in regard to satisfying members' expectations. This indicates that service quality and satisfaction will rely on the extent of the gap between the member's expectations and the actual perceived service quality. The positive gap score ($P-E = +$) will imply that the perceived service quality by the member is adequate. In addition, if the gap is small or zero ($P-E = 0$), the members are pleased or indifferent. On the other side, if the gap is negative ($P-E = -$), this would suggest that expectations were not fulfilled, consequently the perceived service quality is poor, and hence members are unsatisfied.

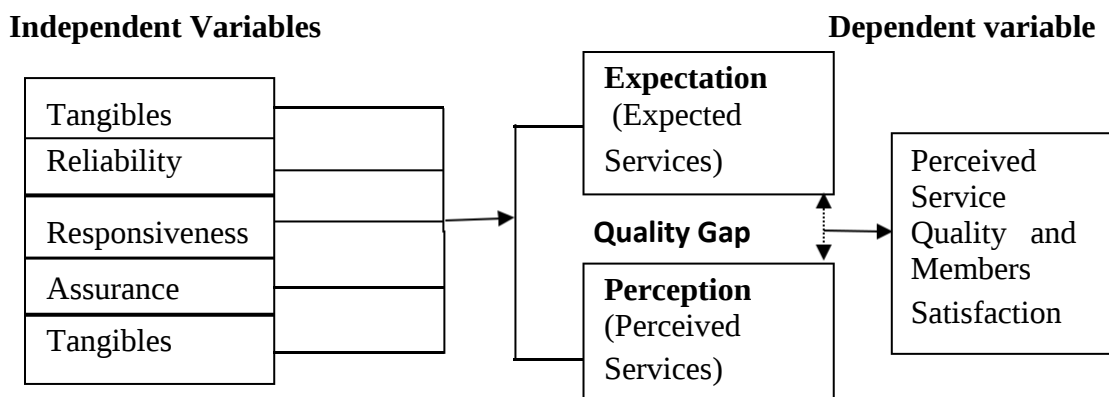


Figure 1: Conceptual model

Source: adapted from Kumar et al. (2009)

Model reviews

The Agricultural Marketing Cooperatives Society's degree of customer service was assessed in this research using the SERVQUAL methodology. 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 consequently picked as it is a solid approach to evaluate how happy members or customers are with the service provider.

The difference between a customer's thoughts of the service they got and the expectations they had for the service as a whole is how the model defines service quality. As a consequence, it may be regarded an attitude measure. According to Kilambo (2015), this model tries to examine customers' opinions of the quality of the services they get, which are

based on the difference between what they expect and what they receive. This approach of measuring service quality involves both the client's judgement of the method employed to give the service and the ultimate product. When a service meets or above a customer's expectations, it is considered to have excellent service quality. At the time of the model's conception, there were 10 aspects of service quality, but thereafter, were reduced to five (Parasuraman et al., 1988). These consist of (i) tangibles—physical facilities, furnishings, staff presentation, and support services; (ii) dependability—the capability to perform the promised service consistently and accurately; and (iii) responsiveness—the capacity to help customers and give prompt assistance. Other aspects include (iv) assurance—the staff's experience and politeness, as well as their potential to create confidence and trust—and (v) empathy—the attentive, one-on-one service the firm delivers its customers (Parasuraman et al., 1991). These qualities largely focus on the tangibles of service and the human parts of service delivery (responsiveness, reliability, certainty, and empathy). This research especially aims at identifying the services supplied by AMCOS to members, rating the quality of the services offered by AMCOS to members, and establishing the degree of member satisfaction with the services offered by AMCOS. Service quality dimensions and subdimension items for members have a direct impact on members or customers' Satisfaction. This relies on the nature of the difference between the member's expectations and the actual perceived service quality.

Methodology

This investigation was undertaken in Mvomero and Kilombero Districts. The reasoning for picking these research regions was based on three fundamental criteria. The two districts have more active agricultural marketing cooperative societies compared to other districts in Morogoro Region (Researcher baseline survey data, 2017). Secondly, AMCOS in these two areas had been in existence for more than seven years and, thus, had a considerable experience. Being more experienced in administering this company, the researcher anticipated to obtain extensive data about AMCOS. Thirdly, the chosen research regions contained AMCOS operating with sugarcane and cocoa cash crops. Given the fact that they were not part of the crops previously covered by AMCOS, they, therefore, gave a fresh and potentially, unique background for study on this issue to come up with new insights.

The study technique employed by this research was mixed approach. The Approach was picked because it permits the gathering of both qualitative and quantitative data. The research employed multi-stage sampling, wherein, the first step was the selection of the study region, whereby two districts out of the six districts discovered in Morogoro Region were purposely picked. Second, six out of 17 active AMCOS were picked by a deliberately random process; the third step 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 chosen based on the specified AMCOS in the research region. Lastly, the respondents were picked from the list of members of AMCOS in the research region. As noted in Table 1, only 189 members of AMCOS were available for the investigation.

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 performed; 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 technique), focus group discussions and in-depth interview (qualitative methods) approaches were utilised for gathering data. Questionnaire tool was used to obtain quantitative data on the perceptions and expectations of service quality supplied by AMCOS, the degree of satisfaction, and the services offered by AMCOS. Check list tool used to gather qualitative data on Focus group discussions (FGDs) and from key informants. Qualitative data obtained was focused on the AMCOS service quality, and farmer's perspective on the nature of quality of services supplied by AMCOS. Quantitative analysis includes descriptive statistics which involves calculating percentage and frequencies and gap score analysis, wherein descriptive statistics were utilised to summarise the means of perceptions and expectations of members of AMCOS. Perception minus expectation ratings for each item and dimension were computed in order to detect the service quality gaps. The overall perceived service quality is hereby calculated quantitatively as follows: $OSQ = \sum ((X1W + X2W + X3W + \dots + XiW) / N) \dots \dots (1)$

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 with SPSS version 16 and Microsoft Excel 2007 software. Qualitative data was coded, classified, and examined by content analysis, then organised according to the themes.

Results and Discussion

Table 2 presents demographic characteristics of the respondents in the research region for both members and non-members of (AMCOS). These factors included sex, age, marital

status, and education level reached by the respondents. Out of the 189 respondents, 122 (65.0%) were men and 67 (35.0%) were females; marital status of the respondent's indicated most of were married which constituted 86%. Again, age groupings variable was discovered throughout the survey, and it was as follows: most of the respondents were between 51-60 years old (41.0%) followed by the age group between 41-50 who totaled 27%. Education was the final demographic information obtained in this investigation. Table 2 reveals the most of the respondents acquired elementary education who represented 82% of all respondents and the remainder respondents had either not attended any formal school or had attained secondary school education, vocation training or university 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 indicated in the introduction, the first explicit purpose of this work was to identify services utilised by members of AMCOS. Findings in Table 3 suggest that nearly 90% of the respondents reported that they had utilised agricultural harvest and transportation services, while around 10% indicated that they had not obtained such services. Since the research was done in two districts, Mvomero and Kilombero, where the majority of the sampled members deal with cane growing and a minority deals with Cocoa production in Mhonda, crop harvesting and transportation were particularly significant services based on the nature of the

crop (cane). AMCOS arranged with farmers who owned sugarcane plantations for the harvesting and transportation of the sugar from the mills. Harvesting and transportation services were made accessible to non-members of AMCOS via groups like as the Mvomero Out Grower Association (MOA). Associations vary from AMCOS in terms of ideals, principles, and forms 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 (better seeds, fertiliser, and pesticides) were another form of assistance recognised by the majority of respondents. Ninety percent (90%) of the respondents reported having obtained agricultural inputs. The inputs were supplied throughout the season, and farmers were forced to pay them back via sales of their sugarcane and cocoa. The cost of agricultural inputs was subtracted straight from the payout. In an extensive interview, the AMCOS managers of TUCO PRICOS AND KCG AMCOS disclosed that they had special agreements with farmers and importers of agricultural inputs to supply the inputs at lower prices. This makes it easier for members to access the inputs at reasonable prices, as opposed to the prices paid by non-members who buy the inputs directly from agents and local suppliers at somewhat higher prices. Ten percent (10%) of the members of AMCOS reported not having gotten agricultural inputs from their AMCOS, and most of them were from Muhonda AMCOS, which is engaged with cocoa production. During FGDs with members of Mhonda AMCOS, they noted that their AMCOS had not yet begun helping them to acquire agricultural input, and therefore they still relied on local retailers for the delivery of the inputs.

Credit facilitation, marketing services, and extension services were among services that were reported by members as being available via AMCOS. About 58%, 53%, and 41% of the respondents reported having utilised credit facilitation, marketing services, and extension services, respectively. About 42% of the respondents reported that they had been disappointed with the credit facilitation arrangement, since they were obliged to pay it back after the crop season regardless of whether they had a good or bad harvest. Therefore, some respondents elected not to accept credit enabled by their AMCOS. Extension services were

allegedly utilised by members of AMCOS in Kilombero District. This is because the government hired extension staff and cooperatives officials for the AMCOS working with sugarcane. Thus, there were frequent visits by extension officers and cooperative officers. Their equivalent respondents in Mvomero District rely on government-employed Ward and district extension agents who did not visit farms regularly. During FGDs with members of Kidatu and Mang'ula AMCOS in Kilombero District, it was revealed that generally, when farmers were needed to employ 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 results contrast from those in Moshi District in the sense that credits were granted to coffee producers in Moshi District without interest, thus it was cheap to repay. In Mvomero and Kilombero, members were meant to pay back the loan with interest as AMCOS were merely 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 research assessed the degree to which AMCOS offered social services to its members. Table 2 illustrates low members' reactions regarding the service supplied by the group. Thirty (30%) of the respondents reported having obtained social assistance from their AMCOS to pay for their children's school expenses. However, seventy percent (70%) reported not having sought social assistance from their AMCOS. It was not obvious as to why AMCOS did not offer social services, as was the case with other AMCOS from other locations, despite being in existence for 3 to 20 years. During FGDs with members of Mvomero AMCOS and TUCO PRICOS, one member mentioned that our AMCOS (TUCO PRICOS) had not done much on social services since we sometimes had issues paying school fees for our children without support from our AMCOS. This is despite the fact that social service providing is one of the members' fundamental 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 allowed to do so. The research's conclusions are in contrast with studies by IFAD (2013) and, Borzaga, (2020) which suggested that agricultural cooperatives are basically economic organisations that offer social benefits to their members while funding their projects. Another research by CICOPA (2014) and Wollmann (2018) indicated that cooperatives aid in delivering community services of popular interest, such as health care, education, and water supply. The discrepancy in the results could be in the research region, in the sense that AMCOS have no feasible economic stability to allow them to deliver social services; consequently, they fail to meet the social part of AMCOS.

Members' perception on service quality offered by AMCOS

The results in Table 4 reflect the overall score of the members' perceived and anticipated service quality derived from the five-level Likert scale. Tangible was the component with the biggest negative gap score (-20.5), followed by Responsiveness (-17.25), Empathy (-12.8), Reliability (-9.2), and Assurance with the least gap value (-6.25). In addition, the average gap score across all dimensions was -13.3. A one-way ANOVA test was done to assess if there is statistical significance in the average gap score of all five dimensions. The findings demonstrate that the average gap score across all dimensions was statistically significant ($p < 0.05$). Another Duncan Multiple Range Test was administered to evaluate whether there is a significant difference among the average gap scores in all five dimensions. The test findings revealed that the tangible and Responsiveness dimensions with letter (b) in Table 4 were more deficient dimensions as their average gap score was large and distant from zero (0), which is a reference point of the model. Assurance (a) was the least lacking dimension compared to other dimensions. The findings suggest that the tangible and responsiveness dimensions were more inadequate and required more attention by management of AMCOS compared to other dimensions, while Assurance was the least deficient as it was near zero.

This suggests that members of AMCOS were anticipating more than what AMCOS delivered them. During FGDs in both districts, farmers (members of AMCOS) noted that although though their AMCOS supplied agricultural inputs such as fertilisers, better seeds, and pesticides, such inputs were not delivered on time. For example, fertilisers for planting were often provided after 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 agreement for harvesting their cane, the procedure occasionally lagged and was not on time. For example, after burning sugarcane on the field, the canes were not supposed to linger on the farm for more than seven days before reaching the factory. However, occasionally AMCOS delay harvesting their sugarcane, incurring 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	
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 demonstrates that members assigned higher marks or points to the tangible 23%, responsiveness, and Empathy characteristics represented by 23%, 21%, and 20% of the respondents, respectively, while Reliability and Assurance earned 19% and 17%, respectively. This was done for triangulation reasons, since the respondents were asked to distribute points for a total of 100 among the five dimensions. The physical component appears to be more insufficient, as illustrated in Table 4. The result shows that the issue requires greater attention by the leaders of AMCOS, given 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 metric for service quality assessment is offered by an overall perceived service quality or satisfaction index when stated in percentage. This is commonly dubbed the "Customer Satisfaction Index" (CSI), which may be defined as the total assessment of a firm's post-purchase performance or utilisation of a service. CSI is a measure of service quality based on the user's or consumer's perceptions of the service elements represented in terms of importance rates, vis-à-vis the user's or consumer's expectations expressed in terms of satisfaction rates. CSI bridges the gap created by SERVQUAL since it is based on assessments presented 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 SERVQUAL dimensions (five items), and the value is expressed in percentage based on the 5-point Likert scale used in this study. The survey employed a scale that goes from 1 to 5 (strongly disagree to strongly agree), therefore the total AMCOS service quality/member satisfaction index, or the voice of AMCOS members on satisfaction with the service quality supplied by their organisation, was determined based on the general formula of:

$$OSQ = \frac{\sum (X1W + X2W + X3W + \dots + XiW)}{N} \dots \dots \dots (1).$$

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				

Table 6 shows that AMCOS members' total perceived customer satisfaction or service quality index is -2.6875/5 (level of Likert scale) 100 = 53.75%. The results of the overall perceived service quality or customer satisfaction index (54%) demonstrate that AMCOS delivers average service quality to members. This suggests that the service characteristics of AMCOS are adequate, which means they are of an average level and need to be improved. Similar results were revealed in a research by Ashish et al. (2013) in Himachal Pradesh State, India, which demonstrated that the service quality of the private sector are superior than those of the public sector (AMCOS). Furthermore, surveys conducted by Osei et al. (2012),

Machimu (2016), and Kassem et al. (2021) evaluating farmers' satisfaction with the calibre of services rendered by farmers' organisations revealed that the services fell into the poor to average quality range, which was unacceptable. Contrary the research by Manik et al (2020) found that the services supplied by their cooperative were well and arranged implying that they were happy with the service offered by their cooperatives.

Level of satisfaction on services offered by AMCOS

The data in Table 3.6 suggest that 55.6% of the members of AMCOS were less happy with the services supplied by their organisation, 30.3% were not satisfied at all, and just 14.1% were satisfied with the services offered. Social services supplied were apparently unsatisfactory, as 70% of the members were not happy with them, 20% were less satisfied, and just 1% were satisfied. Price negotiation, control, and weighing at factories for cane producers or AMCOS warehouses for cocoa growers were additional services with which members of AMCOS were either less happy 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 data in Table 6 reveal that the majority of the members of AMCOS were less happy with the level of services supplied by their organisation. The results are in accord with the preceding findings in Table 3.5, which reveal that the quality of services from AMCOS was average. This means that there is a substantial association between the quality of services and member satisfaction. When the services are excellent, clearly, members (customers) would be happy with the services, and if the quality of service were compromised, the degree of member satisfaction would be poor. The conclusion is congruent with the findings of a research by Mustapha et al. (2017), who showed a strong positive link between service quality parameters and the levels of satisfaction of the members of the cooperative society. The results reveal further that any movement or increase in the defined variables (service quality dimensions) also affects movement in the same direction in the degree of satisfaction of members of a cooperative society.

During FGDs with farmers from the research regions on how they see services supplied or facilitated to them by AMCOS, they all stated that they had been less happy with the services. Farmers in Mvomero who were members of TUCOPRICOSS and MVOMERO

AMCOS pointed out that they were unsatisfied with the price of sugarcane supplied by Mtibwa Sugar Estate Ltd. They noted some of the inconsistencies in the price of sugarcane supplied to the manufacturers; for example, they stated one tone of sugarcane is sold for Tshs 52 000, but their rivals in Kilombero, who produce the same, are selling it at Tshs 9 2000.

Based on this fact, farmers questioned the efficiency of their AMCOS in pricing negotiations. In response to the interview, the Cooperative manager pointed out that pricing choices are determined by many players such as AMCOS, farmers groups, the Sugar Board of Tanzania, and the plant owner. Therefore, it is not something that is determined by AMCOS alone. The Cooperative managers in Mvomero District of TUCO-PRICOS AMCOS and Mvomero AMCOS agreed on the notion that AMCOS, as farmers' representatives, should do something to decrease members' problems. Members of KCG and Mangu'la AMCOS in Kilombero also indicated their unhappiness with AMCOS in terms of weighing at the plant. Even if their price was Tshs 92000, which is greater than the price of their contemporaries in Mvomero. Such a price was established by sucrose (the measure of sweetness of sugarcane), as they indicated that in most instances, the factory owner, via the Laboratory Department, provides farmers low sucrose, which reduces their price. The farmers who are expected to obtain Tshs 92 000 per tonne were intended to keep sucrose (sugarcane sweetness) at 14%, but in most instances, farmers were awarded 7.99% to 11.94%, which decreases the price from Tshs 92 000 to Tshs 29 680 or Tshs 66 994, respectively. In response to this accusation, the Cooperative manager of Mang'ula AMCOS claimed;

"Listen to me attentively, researcher. The quantity of sucrose relies on the number of days the sugarcane spent before reaching the facility, which should not exceed seven days. Therefore, in most situations, farmers do not respect the schedule for bringing their sugarcane to the factory, which decreases their sucrose (sugar sweetness), therefore the poor payment". Generally, the results from qualitative and quantitative research suggested that AMCOS were not giving or enabling excellent services to the members, and members were less happy with the services from their AMCOS. Similar results are documented in a research by Tilahun (2007) and Rosyad et al (2019) who found that cooperatives were inefficient both in their business administration and in member handling, which led to member unhappiness as consumers. Though the results of Wang et al (2021) research in China revealed favourable of Cooperatives services to the members

Conclusion and Recommendations

AMCOS in the research region provided a variety of services, however social services were lacking. The discrepancy between expectation and perception is negative, meaning that members of AMCOS anticipated more than what was given by their organisation. The tangible and Responsiveness dimensions appear to be more lacking, as the results from the ANOVA TEST revealed statistical significance, and both dimensions are highly significant as they connect directly to service delivery and AMCOS personnel's preparedness to serve members. The assurance dimension showed the least inadequacy in all dimensions, showing members were confidence in their leader and AMCOS personnel despite weak service performance.

The total quality of services, or customer satisfaction index (CSI), was at an average level. The report indicates that AMCOS should endeavour to enhance social services to

members since it was insufficient. Additionally, the research encourages to leaders of AMCOS to analyse their service provided to member as it will provides them feedback for development. District Cooperative officials should perform their function of overseeing cooperative and making sure that they complete their responsibility to members. Lastly it was advised that AMCOS leaders focus on the weaknesses to enhance service quality for their members so as to boost the customer satisfaction index.

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