

Factors Affecting Agricultural Output Marketing Performance: (A Case of Damota Farmers' Cooperative Union, Wolaita Zone, Ethiopia)

Zena Menbereleul Chernet, Genet Gebre Tirfe (ph.D)

Management department, Hawassa University

This study assesses Factors Affecting Agricultural Output Marketing Performance: A Case of Damota Farmers' Cooperative Union. Both primary and secondary data were used in the study. The required data were collected from 218 cooperative members selected by using systematic sampling technique. Both qualitative and quantitative methods were used. The data collected through questionnaire were analyzed using SPSS software version 20. Descriptive statistics such as frequency, percentage, mean and standard deviation were applied. Furthermore, inferential statistics like correlation and multiple linear regressions were used to identify major factors that affect agricultural cooperatives output marketing performance. The findings of the study revealed that cooperative governance, members' value, marketing, finance and infrastructure are found to be significant determinants of agricultural output marketing performance. The study therefore recommends that the stakeholders in the agricultural cooperative sector should ensure the cooperative members to have access to adequate and relevant technical training. They care to give due attention to improve the services of the cooperatives through technical and material support, access to credit, transportation, storage, and communication, and electricity services.

Key words: Factors, Agricultural output, Marketing performance, Damota farmers' cooperatives

Date of Submission: 04-04-2019

Date of acceptance: 19-04-2019

I. Introduction

A cooperative is an autonomous association of persons united voluntarily to meet their economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. Cooperatives, as economic enterprises as self-help organizations, play a meaningful role in up lifting the socio-economic conditions of their members, and their local communities (ATA, 2014). Collective actions of cooperatives are more effective than separate actions of individuals. The use of cooperatives in fostering community development and local economic development has received great attention and emphasis with much work focused on the use of different types of cooperatives as a means for local economic development. Through cooperatives, individual households and communities can create opportunities for themselves, find a productive work that not only facilitate their wellbeing and stability but also give them the support they need to improve their lives and remain active in civil rights and political aspects (Destahun, 2007).

In Africa, Cooperatives are omnipresent and represent a significant part of the private sector in most African countries. During colonial period, cooperatives in Africa were used by the colonial powers as a strategic tool to group rural producers into clusters, so that essential export commodities such as coffee, cocoa and cotton, could be collected more cost-effectively. After independence, the governments of the now sovereign States accorded an essential role to cooperatives, in particular for the development of rural areas (ILO, 2008).

In Ethiopia, cooperatives have a long history particularly in the form of traditional collective action organizations, such as work groups (*jiges*, *wonfels*, *debos*), rotating savings and credit associations (*iqubs*), and burial societies (*idirs*), which are still very much present in different areas (Bernard *et al.*, 2010). It was not until the early 1950s that a formal cooperative movement began in the country, and only in 1961 did the imperial government introduce the first formal proclamation on cooperatives that gave rise to the institution in its modern sense (Kodama, 2007). The SNNPR also has a long history of cooperative movement in Ethiopia, which has been characterized by strong growth, thus making a significant contribution to the overall economy of the region and the country as well. Like the federal government, regional government is also recognized cooperatives as a major contributor to the rural and agricultural development. Different types of cooperatives are established in every corner of the region. From the total population of the region 17 million, nearly 30.3% of the people participated and benefited directly or indirectly from cooperatives type of business (Nuredin & Byeong, 2015).

The annual abstract of Wolaita Zone cooperative department reveals that primary Cooperatives are Multipurpose Cooperative Societies (MPCSSs) having 22 types of cooperatives, in number 1,527 cooperatives and totally 137,358 members which 98,184 are male 38,212 are female members and holding a total capital of 87,176,612.88 birr. According to Wolaita Zone annual report of 2016, there are 7 cooperatives unions and 190 primary cooperatives. In these unions totally 43,748 members, out of which 32,838 are male 10,910 are female members and holding a capital of 19,818,354.26 birr. From this, 76 multipurpose farmers' cooperatives with total members, 43,777 which are male 32,280 are female members 12,507 and with holding a total capital of 31,304,160 birr (WZCOPD, 2016). According to Damote Gale Woreda Cooperative Promotion Office report, there are 54 multipurpose cooperatives with a total member 6,439, out of which 4,829 are male 1,610 are female members and with holding a total capital of 4,604,415.25 birr (Damote Gale Woreda Cooperative Promotional Office, 2015)

In line with these realities, this study attempts to assess the factors affecting agricultural cooperatives outputs marketing by evaluating their marketing performances, and by identifying factors such as cooperative governance, members' value, marketing, finance, and infrastructure factors of agricultural cooperatives

1.1 Statement of the Problem

In Ethiopia, the number of agricultural cooperatives has been increasing rapidly and they play a major role in providing farmers with inputs while ensuring members' social cohesion and economic empowerment (MoA, 2012). However, according to Emanu (2009) the functionality of cooperatives was constrained by shortages of skilled human resources (especially in cooperative business development), due to high staff turnover and repeated structural adjustment of the cooperative promotion agencies. In addition, cooperatives also encounter technical skills constraints and capital shortages, which hinder the attainment of objectives. Lack of skills in cooperative development is also attributed to the allocation of cooperative professionals to other sectors and replacing them with people who have no cooperative background which affect the performance of cooperatives. Moreover, According to Jemal (2008), stiff competition, hangover the past and lack of commitment, globalization, and government attitude towards subsidy are the major challenges of cooperative societies in Ethiopia. Furthermore, Yemane (2010) pointed out that embezzlement, limitation in the capacity of Management Committee or Board of Directors, lack of capital, unhealthy competition from private traders, absence of education, training, and lack of physical resources are the main challenges of the performance of agricultural cooperatives

According to Damota Farmers Union Office (DFUO, 2017), agricultural Cooperatives Societies are incompetent to collect and to sale members' products well during harvesting season with fair price and down payment, then members' sale their product to venders. Therefore, members are not benefited from their produce and affected by market fluctuation. Cooperative members do not trust the cooperative societies due to lack of monitoring activities of cooperative governance/boards members. Most members are not voluntary to serve their cooperative as members of management committee. In addition, Management committee uses the resource out of the objectives rules and regulations of cooperatives. They do not know about ownership right of members. In general, agricultural cooperative societies are incapable to give expected service to their members and the surrounding communities. The service rendered by cooperatives is seasonal and it is limited to somehow on input distribution (Adisu, 2011). In addition to this some of the critical problems facing Agricultural Cooperative Societies in the study area are lack of financial resources, lack of market information, poor members' participation and the above mentioned problems place the farmers as usually price takers due to the fact that they have poor marketing skill and limited bargaining power. The purpose of this research is to assess the effect of cooperative governance factors, members' value factors, marketing factors, financial, and infrastructural factors on the agricultural output marketing performance.

1.2. Objectives of the Study

The general objective of the study is to assess factors affecting Agricultural Cooperatives Output Marketing Performance, a case of Damota Farmers' Cooperative Union, Wolaita Zone.

1.2.2. Specific objectives

The specific objectives of the study are

1. To investigate the effect of cooperative governance factor affecting agricultural cooperatives output marketing performance.
2. To examine the effect of members' value factor affecting agricultural cooperatives output marketing performance.
3. To assess the effect of marketing factor affecting agricultural cooperatives output marketing performance.
4. To identify the effect of financial factor on the output marketing performance of agricultural cooperatives
5. To evaluate the effect of infrastructural factors on the output marketing performance of agricultural cooperatives

1.3. Research Hypothesis

Based on the above objectives, the following hypotheses are developed

Ho1 Cooperative governance factor has no significant effect on the performance of agricultural output marketing.

Ho2 Members' value factor has no significant effect on the performance of agricultural output marketing.

Ho3: Marketing factor has no significant effect on the performance of agricultural output marketing.

Ho4: Financial factor has no significant effect on the performance of agricultural output marketing

Ho5: Infrastructure factor has no significant effect on the performance of agricultural output marketing

1.4. Significance of the Study

The findings of the study benefits different stakeholders and unions regarding on factors that are currently affecting performance of agricultural cooperative societies. Hence, studying agricultural cooperatives output marketing performance in the district has paramount significance as it helps in realizing the extent to which they are performing in the improvement of the living standard of members and the community as a whole. The finding of the study may help policy makers and implementers to understand issues related to cooperatives agricultural development, values, principles and their challenges as well. Institutions and individuals who are interested to know agricultural cooperatives in the district can use this research material as a reference. As well, it could be used as a reference for researchers who are interested to study in similar topic.

II. Literature Review

Agricultural cooperatives: opportunities, performances and challenges were studied by Birhanu (2011), using sample from primary cooperatives in Adigudom agricultural cooperative union in South Eastern Zone of Tigray. The study result indicated that, lack of equal opportunity in passing decisions, inadequate finance, limited capacity of Board of directors, unhealthy competition of private traders, limited physical resources, lack of education and training were factors which hampered successful performance of the union. Organizational constraints in rural development and causes of different performance among Ugandan cooperatives were studied by Persson (2010), using two sampled cooperatives from

Uganda. The study result showed that, leadership skills and channels for member participation were the most important organizational constraints explaining differences in performance.

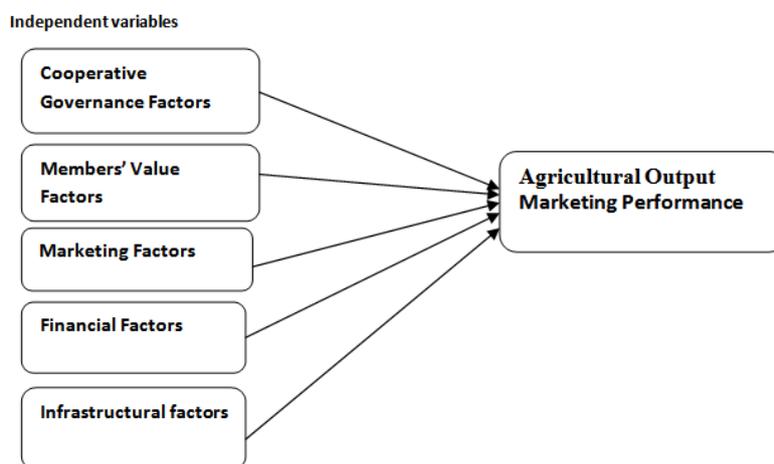
Performances and challenges of cooperatives in Ethiopia were studied by Yemane (2010). The study was undertaken by taking sample from primary member cooperative societies in Werie multipurpose cooperative union, and non-members from the residents of the town of Edaga-Arbi, in central Zone of Tigray. The study result pointed out that, embezzlement, limitations in the capacity of management committee, lack of capital, unhealthy competition from private traders, absence of education and training and lack of physical resources are the main constraints of the performance of the Union. Haileselassie (2003), found that, the management committee members and focus groups participants were suggested, inadequate capital, unskilled management committee, illiterate membership, unwillingness to serve as committee member, low commitment and disloyalty of members, low level of infrastructure development, and the unhappiness of members with the cooperative services prevented the cooperatives from fully achieving their objectives.

Prakash (2003) identified as the main problems faced by agricultural cooperatives are lack of professional and qualified managers; lack of communication/interaction between the managers and committees; lack of communication with the basic members; lack of interaction with and support of national; lack of business linkage; inconsistent government policies and rigid regulations; very low level of flow of market intelligence; low level of appreciation of value addition through agro-processing. Moreover, Admasu (1998) analyzed the performance of coffee marketing system with the aim of evaluating the overall performance of coffee marketing and concluded that there was marketing inefficiencies prevailing in the system. In the study summary, the price inefficiencies, lack of appropriate information system, lack of standardization in rural market centers, abnormal profits in marketing, and lack of short run integration between central and local prices are the causes of marketing inefficiencies.

Moses, Peter, and Jeremiah (2013) used descriptive statistics to explore the roles of Cooperative Movement in Rural Development in Kenya. The findings indicate that, agricultural cooperatives have played significant roles in reducing unemployment problem in the study area by providing credit and grant based financial support to unemployed people. They also added that, cooperatives have also considerable contribution in empowering poor women by actively participated in minimizing traditional beliefs against women, enshrined principle in gender equity in their bylaws to develop positive outlook on the local people and on the adoption of affirmative initiatives (especial privilege in credit access, training and financial support) in favor of women. The overall conclusion of previous studies of cooperatives have focused on the performance of agricultural cooperatives and determinants of members' decision, performance of agricultural cooperatives in Input and Output agricultural marketing. There is no empirical study that has been conducted on agricultural cooperatives output marketing performance in the study area. This study, therefore, try to address information gap on the factors affecting agricultural cooperatives output marketing in Damota farmers union, Wolaita Zone, Damote Gale District of SNNPR, Ethiopia.

2.1 Conceptual frame work of the study

Agricultural output marketing performance through cooperative is influenced by Cooperative Governance, Members Value, Marketing, Financial and Infrastructural factors. Therefore, this study, tries to analyze the influence of independent variables on the dependent variable, and the study also tries to identify the influential factors on agricultural cooperatives output marketing performance in the area under study. The following diagram shows the relationship between independent variables (cooperative governance, members' value, marketing, finance, and infrastructure) and dependent variable (agricultural output marketing performance) in Figure 2.1.



III. Research Methodology

3.1. Research Design and Strategy

This study employed descriptive and explanatory research design. The study describes and critically assesses factors that affect agricultural cooperatives output marketing performance in *Damota* farmers' cooperative union. The study also used quantitative research approach. Quantitative aspects which focused upon the data with numeric nature was selected to address the research objective that aimed to assess the existing factors and collected from cooperative members through structured questionnaire.

3.2 Types and Source of Data

Primary data was obtained from respondent with structured questionnaires. Secondary data for this study were collected from *Woreda* cooperative promotion office, zone farmers' cooperatives union, and zone cooperative promotional department. To achieve the objective, relevant documents and information from published and unpublished documents: journals, books, and reports, related literature and previous research findings were also reviewed.

3.3 Sample Size and Sampling Technique

According to Damote Gale District of Cooperative Office (2017), about 477 multi-purpose agricultural cooperative members were in the selected four Kebeles. Therefore, this data were used as a benchmark to calculate the sample size. Accordingly, the representative sample size was determined by using the formula developed by Yamane as cited in Amsalu and Wondimu (2014) purposively based on its appropriateness for the study as follows

$$n = \frac{N}{1 + N(e^2)}$$

Where, Where, n = Sample size

N = Total Population

e = Sampling Error

$$n = \frac{477}{1 + 477(.05^2)}$$

n=218

In order to get representative number of agricultural cooperative members, a multi-stage sampling technique was used to generate the required primary data. At the first stage, *Damote Gale* district is selected from twelve rural and three urban districts purposively because, the largest numbers of multipurpose cooperatives which are working on agricultural outputs marketing services were found in this district. In the second stage, out of 54 multipurpose cooperatives in *Damote Gale* district, four multipurpose cooperatives are selected by using simple random sampling technique (lottery methods). In the third stage, Probability Proportional to Size (PPS) method was applied to get the proportional size of respondents from each selected agricultural cooperatives. Accordingly 117 members from *Ade Charake* cooperative, 35 members from *Fate* cooperative, 34 members from *Buge* cooperative and 32 members from *Gacheno* cooperative, finally individual respondents were selected by using systematic sampling technique

3.4 Data Collection Method

The primary data are collected from sample respondents by using person administered questionnaires. Four data enumerators were recruited from the study *Woreda*. Training was given to these enumerators on the methods of data collection and interviewing techniques. The questionnaire is prepared in English and translated in to local language Wolaytegnna to make ease communication during primary data collection. The contents of the questionnaire were refined on the basis of the result obtained from the pilot-test. Trained enumerators collect the data from sample farmers by using questionnaire. Close ended questions were scheduled by five point likert scale type questions. The scale consists: 5= strongly agree, 4=Agree, 3= Neutral, 2= Disagree and 1=strongly disagree. While, secondary data were collected from different sources such as Wolaita zone cooperative promotional department, Journals, and Central Statistical Authority (CSA) publications, published and unpublished documents, etc

3.5. Reliability and Validity Test

Zikmund (2003) stated that the researcher should conduct the pre-testing to ensure the questionnaire's reliability and to make sure that measures are free from error and therefore yield consistent result. George and Mallery (2003) also stated that a reliability score of greater than 0.9 is excellent, greater than 0.8 is good, greater than 0.7 is acceptable, greater than 0.6 questionable, greater than 0.5 is poor and less than 0.5 is unacceptable. In this research, Cronbach's alpha model was used with six scales (cooperative governance, members' value, market, finance, infrastructure and marketing performance) as follows

Table 3.1: Reliability of the Survey Questionnaire

Variables	Cronbach's Alpha	Number of Items	Leveled as to George and Mallery
Cooperative governance	.791	5	Acceptable
Members Value	.859	5	Good
Market	.916	5	Excellent
Finance	.909	5	Excellent
Infrastructure	.827	4	Good
Marketing performance	.864	4	Good
Overall reliability	.873	28	Good

The reliability for each scale is measured using Cronbach's alpha and the table shows inter-item correlation and the possible changes on reliability if an item is deleted from the scale. Therefore, it can be said from Table 3.1 that the measurement instruments of this study are reliable.

Validity refers to the extent to which a measure adequately represents the underlying construct that it is supposed to measure (Bhattacharjee, 2012). Content validity was checked through getting the questionnaire reviewed by experts. Moreover, content validity of the questionnaire is conducted by selecting 20 cooperative members and made some wording adjustment mainly under the scale items of cooperative governance factor and marketing factor.

3.6 Method of Data Processing and Analysis

According to Mugenda & Mugenda (2003), data analysis is the process of bringing order, structure and meaning to the mass of information collected. The data collected through questionnaire was edited, coded, and entered into a computer software using SPSS version 20. The analysis was performed using descriptive statistics like frequencies, percentages, Mean and Standard Deviation etc. Furthermore, inferential statistics such as correlation and multiple linear regression analysis were used to find out factors that affect agricultural cooperatives output marketing performance in the study area

3.6.1. Model Specification

The study examined the level of significance for factors that affect agricultural cooperatives output marketing performance using multiple linear regression model. Besides this, to test the influence of independent variables on the dependent variable, the model specification is as follows

$$Y = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_n X_{ni} + \epsilon_i$$

Where:

Y = is the value of the dependent variable

β_0 = the intercept

$\beta_1, \beta_2 \dots \beta_n$ are the regression coefficients of parameters

i = the ith observation,

ϵ = the total error of prediction (residual)

X1, X2, X3...Xn are the independent variables

IV. Results And Discussions

Table 4.1 Demographic Characteristics of Respondents

Variables	Categories	Frequency(n)	Percent (%)
Sex	Male	205	94.0
	Female	13	6.0
Age	19-25	18	8.2
	26-35	76	34.9
	36-45	56	25.7
	46-55	55	25.2
	56 and above	13	6.0
Educational level	Did not attend formal education	63	28.9
	Primary first cycle(1-4)	70	32.1
	Primary second cycle (5-8)	61	28.0
	Secondary and above	24	11.0
Main Occupation	Farmer	178	81.7
	Trader	28	12.9
	Private employee	08	3.7
	Government employee	04	1.8

4.2 Descriptive Analysis

Under this sub-topic, data that were collected using five points Likert Scale are analyzed. Five independent variables such as cooperative governance, members' value, market, finance and infrastructure were identified then cooperative members' were required to indicate their level of agreements on the five scales. To make the analysis easy, the researcher used Al-Sayaad, Rabea and Samrah (2006) proposed techniques of mean score ranges and summarized in Table 4.1

Table 4.2 Mean Score Range for Five Scale Likert's Response

Mean	Response
[1.00, 1.80)	Strongly Disagree
[1.80, 2.60)	Disagree
[2.60, 3.40)	Neutral
[3.40, 4.20)	Agree
[4.20, 5.00]	Strongly Agree

Source: (Al-Sayaad et al., 2006).

Table 4.3 Response on factors

Independent variables	mean	S.D
Governance factors	3.15	1.103
Members value	3.05	1.275
Marketing Factors	2.99	0.934
Financial Factors	3.10	0.988
Infrastructure Factors	3.02	0.969
Dependent variable		
Marketing performance	3.08	0.975

Table 4.2 illustrates summary of overall mean and standard deviation of governance factors, members' value, marketing, financial, and Infrastructure factors. The result showed that the most important factor is governance factors with relative high mean score (3.15) and standard deviation (1.103) followed by financial factors, members value, infrastructure factors, and marketing factors with a mean score of (3.10) and standard deviation (0.988) and (3.05) standard deviation (1.275),(3.02) and(0.969), (2.99) and(0.934). The result also implied that respondents are neutral for the mentioned factors above

Table 4.2 above summarizes the dependent variable marketing performance. The grand mean value (3.08) and standard deviation of (0.975) is within the range of (2.60 and 3.40). This shows that respondents are neutral for the items discussed under marketing performance.

4.3 Inferential analysis

Inferential statistics helps to conclude on the population characteristics based on the result found on sample. In this section of the statistical techniques of correlation, regression and hypothesis test are used in order to analyze the determinants of agricultural cooperatives marketing performance.

4.3.1 Correlation Analysis

Correlation analysis measures how variables or rank orders are related. Correlation coefficients range in value from -1 (a perfect negative relationship) which indicates an inverse relationship between variables to +1 (a perfect positive relationship) or a direct relationship between two variables. A value of 0 indicates no linear relationship between two variables (kothari, 2004). In this section, the independent variables were analyzed by using correlation analysis in order to identify their individual relation with the dependent variable. To know the strength and type of correlation between variables, the following table set as a rule of thumb for discussion of variables

Table 4.4 Rule of Thumb for about the strength of correlation of coefficient

Range of Coefficient	Description of Strength
±.81 to ±1.00	Very strong
±.61 to ±.80	Strong
±.41 to ±.60	Moderate
±.21 to ±.40	Weak
±.00 to ±.20	None

Source: Bhattacharjee (2012)

The following table shows correlation between independent variables (cooperative governance, members value, market, finance, and infrastructure) dependent variable (marketing performance)

Table 4.5 correlation analysis result

Variables	Cooperative governance	Members value	Market	Finance	Infrastructure	Marketing performance
Cooperative governance	1					
Members Value	.569**	1				
Market	.461**	.567**	1			
Finance	.589**	.523**	.440**	1		
Infrastructure	.548**	.324**	.587**	.558**	1	
Marketing performance	.656**	.597**	.652**	.628**	.603**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Regarding the relationship between cooperative governance and marketing performance, the correlation analysis shows that cooperative governance has positive and statistically significant association with marketing performance (r = 0.656, p<0.01). Members value has positive and statistically significant relationship with marketing performance (r = 0.597, p<0.01). In the same manner, market has positive and statistically significant relationship with marketing performance (r = 0.652, p<0.01). Finance has positive and statistically significant relationship with marketing performance (r =0.628, p<0.01), infrastructure has positive and statistically significant relationship with marketing performance (r =0.603, p<0.01). This result implies that all the independent variables have strong relationship to the dependent variable.

4.3.2 Regression Analysis

In this study multiple linear regression analysis is applied since it facilitates the evaluation of the level of effect that multiple independent variables that cause on a particular dependent variable (Kothari, 2004). Before applying regression analysis, normality and multi co linearity tests are made for identifying misspecification of data if any so as to fulfill research quality (see appendix)

Table 4.6 Multi co linearity assumption

Independent variables	Collinearity statistics	
	Tolerance	VIF
Cooperative governance factor	.415	2.410
Members value factor	.496	2.016
Marketing factor	.372	2.690
Financial factor	.471	2.121
Infrastructure factor	.580	1.725

One of the information included in Table 4.6 is co linearity statistics which is associated with the extent of correlation between independent variables. The problem is checked by tolerance and Variance Inflation Factor (VIF). A tolerance of >.10 and a VIF < 10 are considered as good enough to minimize the effect of multi-co linearity (Miller and Whicker, 1999). Thus, the result implies that the regression model is not affected by higher correlation between two independent variables

Table 4.7 Results of multiple linear regression analysis

Model		Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. Error	Beta		
1	(constant)	.082	.165		.500	.618
	Cooperative governance	.144	.058	.137	2.466	.014
	Members value	.137	.048	.146	2.876	.004
	Marketing	.342	.061	.332	5.650	.000
	Financial	.253	.045	.292	5.598	.000
	Infrastructure	.115	.051	.106	2.250	.025

Note: B= regression coefficient (estimate), Std. Error = Standard Error, Dependent Variable = Marketing Performance

The results of Table 4.15 revealed that cooperative governance ($\beta = 0.137$, $p < 0.05$), members value ($\beta = 0.146$, $p < 0.01$), marketing ($\beta = 0.332$, $p < 0.01$), finance ($\beta = 0.292$, $p < 0.01$), and infrastructure ($\beta = 0.106$, $p < 0.05$) have significant positive effect at p-value of less than 0.01 and 0.05. Multiple regression estimates the coefficient of the linear equation involving one or more independent variables that best predict the value of the dependent variable and the regression equation is presented as follows.

Regression equation

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5$$

Where:

B_0 = point of intercept

Y = Marketing Performance (MP)

X_1 = Cooperative Governance (CG)

X_2 = Members Value (MV)

X_3 = Market (MA)

X_4 = Finance (FI)

X_5 = Infrastructure (In)

$$MP = 0.082 + 0.144*CG + 0.137*MV + 0.342*MA + 0.253*FI + 0.115*IN$$

The equation reveals that marketing performance will be 0.082 units if all independent variables are zero. Similarly, keeping other independent variables constant, marketing performance will be increased by 0.137 units for a unit increase on cooperative governance. In the same manner, for one unit increase in members' value, marketing, finance and infrastructure brings a 0.146, 0.332, 0.292 and 0.106 unit increase in the marketing performance level of cooperatives respectively.

4.3.3 Hypothesis testing

The hypotheses proposed in this thesis are analyzed as follows

H₀₁: Cooperative governance has no significant effect on marketing performance

Concerning this variable, Table 4.7 shows that it has positive effect having the standardized coefficient of 0.137 and its effect is approved to be significant at p-value of 0.014 which is less than 0.05 significant levels. Therefore, this leads to

reject the null hypothesis and accept the alternative hypothesis which states that cooperative governance has significant effect on marketing performance

Ho2: Members' value has no significant effect on marketing performance

Table 4.7 shows that members' value has a positive effect on marketing performance at 0.05 significant levels since the p-value is 0.004 which is less than 0.01. A beta coefficient indicated that a unit increases in members' value increases a 0.146 unit increase in marketing performance. Therefore, the null hypothesis is rejected and instead the alternative hypothesis is accepted. This implies that members' value has significant effect on marketing performance.

Ho3: Marketing has no significant effect on marketing performance

In this regard Table 4.7 demonstrates that marketing has positive effect on marketing performance at 0.001 significant levels. The regression coefficient which is 0.332 indicated that a one unit increase in the marketing resulted in a 0.332 unit increase in marketing performance. Therefore, the null hypothesis which states marketing have no significant effect on marketing performance is rejected and the alternative hypothesis is accepted. This implies that the cooperatives marketing performance affected by market factors.

Ho4: Financial factor has no significant effect on marketing performance

Table 4.7 shows that finance has a positive effect on marketing performance. Its effect is highly significant since the p-value is 0.000 which is less than 0.01. The values of regression coefficient indicated that a one unit increase in finance of the member leads to a 0.292 unit increase in market performance. Therefore, the null hypothesis is rejected and instead alternative hypothesis is accepted. This implies that finance factor has a significant effect on members' market performance.

Ho5: Infrastructure has no significant effect on marketing performance

Table 4.7 demonstrates that infrastructure has positive effect on marketing performance and which is significant at p-value of 0.025 which is less than 0.05. Therefore, the null hypothesis which states infrastructure has no significant effect on marketing performance is rejected and the alternative hypothesis Infrastructure has significant effect on marketing performance is accepted.

V. Conclusion

The objective of this study was to assess factors that affect agricultural output marketing performance. Cooperative governance, members' value, market, finance, and infrastructure were the major factors that affect marketing performance of agricultural cooperatives output in Damota farmers' cooperative union.

Cooperative governance factors such as members' commitment, awareness, knowledge and skill, transparency and accountability, a clear division of duties and responsibilities and decision-making techniques are significant factors that affect agricultural marketing performance. Likewise, members' value factors such as members' value participation, members' awareness, members' loyalty, decision-making ability and members voluntary are also found to be significant determinants of agricultural cooperative marketing performance. In addition, marketing factors such as market information, market access, linkage with unions and other cooperatives offer clear and competitive price for members' supply and utilize appropriate media to promote its services are significant factors that affect agricultural cooperative marketing performance. Financial factors such as access to loan, credit service, proper network with financial institutions, utilize working capital efficiency and good record keeping and documentation system are significant determinants of agricultural cooperative marketing performance. Moreover, infrastructural factors such as storage facilities, transportation services, access to electricity, and access to communication service significantly affect agricultural cooperative marketing performance.

5.1 Recommendation

- Based on the major findings, the study suggested the following recommendations to improve the agricultural output marketing performance *Damota* farmers' cooperative union
- *Woreda* cooperative promotion office should give attention to upgrade the conceptual, technical, and managerial skills of management committees and employees through short term and long term training program.
- To improve members participation, members awareness and members decision making ability, the cooperative promotion office, primary cooperative, unions and other concerned stakeholders should give attention to empower cooperative members awareness and members decision making ability through open discussion and training.
- Agricultural cooperatives in the study area need to involve effectively in the marketing of farmers output by offering competitive prices to farmers produce. To search market and to sell their product at a better price, cooperatives should create linkage with unions, other primary cooperatives and private and government organization. Moreover, cooperative promotion office, NGOs, and cooperatives unions should give due attention to give technical and material support to strengthen their capacity. This in turn helps to engage in value addition activities.
- To increase equity capital, cooperatives, *Woreda* cooperative promotion office, unions and other concerned stakeholders should involve in designing a mechanism to promote members' saving and to buy additional shares. Moreover, working capital management, record keeping, and documentation system weakness can be improved by giving training and education to employees and management committees and control committee members. In addition, agricultural cooperatives should also arrange agricultural input credit access to their members.
- The regional government and others stakeholders should give support by improving marketing infrastructures such as transportation facility, storage facility, communication facilities and electricity services.

Suggestion for future research

Other researchers are invited to carry out on the determinants of marketing performance of agricultural cooperatives in other *Woredas/region/* of the country. It is suggested that future research can also be conducted on the role of agricultural cooperatives for cooperative members' welfare

References

- [1]. Addis, W. (2011). The Role of Multipurpose Cooperatives in the Supply Chain of Wheat in Gedeb-Hasasa Wereda, Oromia Regional state, Ethiopia. Unpublished MA Thesis.
- [2]. Admasu, S. (1998). Performance Evaluation of coffee Marketing in Sidama Zone. Unpublished MA Thesis, *Haremaya University, Haremaya*
- [3]. Al-Sayaad, J., Rabea, A., and Samrah, A. (2006). *Statistics for Economics and Administration Studies*. Dar Hafez, Jeddah, Kingdom of Saudi Arabia
- [4]. Bhattacharjee, A. (2012). *Social Science Research: Principles, Methods, and Practices*. University of South Florida: Scholar Commons
- [5]. Birhanu T. (2011). Agricultural cooperatives: opportunities, performances and challenges, the case of Adigudom agricultural cooperative union in South Eastern Zone of Tigray. Unpublished MA Thesis, Development Studies, Addis Ababa University, Ethiopia
- [6]. Damota Farmers' Cooperative Union Office. (2017). *Annual Report 2016/17*.
- [7]. Damote Gale district of Cooperative Promotion office. (2014). *Audit Report, 2012-13 and 2013-14*.
- [8]. Dawit Alemu (2005). *The status and challenges of agricultural marketing in Ethiopia, Melkassa Agricultural Research Center, EARO*. Paper presented at a panel discussion organized by the Ethiopian Association of Agricultural Professionals (EAAP), Addis Ababa Ethiopia
- [9]. Emanu B., (2009). *Cooperatives: a path to economic and social empowerment in Ethiopia*. (ILO working papers no 9). Dare salaam: ILO
- [10]. George, D., & Mallery, P. (2003). *SPSS for Windows Step By Step: A Simple Guide and Reference*. 11.0 Update (4th Ed.). Boston: Allyn & Bacon.
- [11]. Haileselassie Girmay (2003). The benefits of cooperative membership: a cooperative study in Saesie Tsaeda Emba District, Tigray region, Ethiopia. MSc.thesis, submitted to department of Food Business and Development, National University of Ireland, Cork.
- [12]. Jemal, M. (2008). Analysis of the Role of Cooperatives in Agricultural Input and Output Marketing in Eastern Zone, Tigray Region. Unpublished, 17.
- [13]. Kodama, Y. (2007). New role of cooperatives in Ethiopia: the case of Ethiopian coffee farmers' cooperatives. *African Study Monographs*, 35: 87-108.
- [14]. **Kothari,C.R.** (2004).*Research Methodology, Methods and Techniques* (2nd revised edition), New Delhi: New Age International PLtd.
- [15]. Ministry of Agriculture. (2012). *Agricultural cooperatives sector development strategy 2012-2016*.
- [16]. Mugenda, M.O., & Mugenda, G.A. (2003). *Research Methods*. Nairobi: Acts Press
- [17]. Nuredin Mohammed and Byeong Wan Lee. (2015). Role of Cooperatives in Rural Development, the Case of South Nations Nationalities and People Region, Ethiopia. *Science Journal of Business and Management*, 3(4), 102-108. doi: 10.11648/j.sjbm.20150304.12
- [18]. Prakash, D. (2003). Development of Agricultural Cooperatives-Relevance of Japanese Experiences to Developing Countries. *Rural Development and Management Centre*, 6 & 25.
- [19]. Yemane Teweldemedhin. (2010). Performances and challenges of cooperatives in Ethiopia: the case of Werie multipurpose cooperative union in Central Zone of Tigray. M.A. thesis, Development Studies, Addis Ababa University, Ethiopia
- [20]. Zikmund, W.G. (2003). *Business Research Methods* (5th ed.). Mason OH: The Dryden Press

Appendix

