

# A Study on Factors Affecting Farmers' Cooperative Membership Increment in Bench Maji Zone, Southwestern Ethiopia

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## Abstract

The main objective of the study was to assess the factors that affect farmers' Cooperative Membership increment in Bench Maji Zone, Southwestern Ethiopia. Bench Maji Zone is selected purposively, because of the availability of required data in agricultural cooperatives for the study. In the study area there are a total of 134 agricultural cooperatives. From the total agricultural cooperatives found in the Zone, 18 cooperatives having a life span of 8 years and above from their time of establishment were selected as sample frame of the study, because considering longer life span cooperatives as a sample frame enables to assess factors that affect farmers' Cooperative Membership increment. In order to conduct the study in a representative way that increases its reliability and validity, a two staged random sampling technique was employed in selecting 135 samples using proportionate simple random sampling method. Both primary and secondary data were collected for this study. Semi-structured interview schedule was used to generate primary data from sample respondents. Data were analyzed by using descriptive statistics such as mean, frequency and percentage, and tested by using chi-square and T- test. Moreover, Binary Logistic regression model was also used for the analysis of the data. The result of the study confirmed that farmers' cooperative Membership growth in agricultural cooperatives has been constrained by lack of cooperative extension service, awareness problem, and embezzlement of cooperative assets, inaccessibility of transport and problem of access to media. The logistic regression analysis result also shows that age, awareness level of respondents on cooperatives, promoters support, access to credit facility, attitude of respondents towards cooperatives, training and education were found statistically significant in influencing the farmers' Cooperative Membership in the study area. As a recommendation, the concerned bodies should give emphasis on farmers Cooperative Membership in the study area.

**Keywords:** Farmers, Cooperative Membership and Agricultural cooperatives.

## Back ground of the study

Based on the fundamental principle of "the future belongs to the organized" expanding and strengthening cooperatives is the underlying approach of the government in improving the production system. Policy makers and community developers are keen to develop cooperatives as business alternative which could address local needs and promote local economic growth. Indeed cooperatives have been considered to be one of the good channels of organizing rural people in order to overcome poverty, improve living standards and foster development (Gasana Grace, 2011).

According to the United Nations (2009) cooperatives continue to play significant social economic roles in many countries'. For example they create employment and provide income; they produce and supply safe and quality food and services to their members; they promote solidarity and tolerance and promote the rights of each individual (ibid).

As rural development policy and strategies of Ethiopia (RPSE, 2002) indicated that rural development means nothing but the transition from subsistence to market oriented agricultural economy. Hence the need to promote cooperatives, because agriculture is; (i) the main occupation for many people and is a source of food and (ii) the fact that many people live in the rural areas and agriculture is the main source of income and (iii) the need for market for the agricultural produce also explains the need for cooperative development.

Moreover, the present Ethiopian government gives due emphasis for the development of the sector and has enacted Cooperatives Proclamation. Also the required human resource has been assigned starting from the woreda to federal level.

The government believes that to reduce poverty people's participation is essential. Hence cooperatives are considered as a good tool for people's participation in the sense that ownership of the cooperative is exclusively of the members, for the members and by the members and also potential members (ibid).

But in the Ethiopian context, farmers' cooperative membership is generally very low. According to Spielman (2009), only 9 percent of smallholders are members of agricultural cooperatives and only 40 percent of rural households have access to cooperatives within their tabia (kebele).

## Statement of the Problem

Ethiopian economic growth strategy formally set forth in 1995; as the Agricultural Development Led Industrialization (ADLI) gives significant emphasis on Agriculture and Rural Development as an engine of pro-poor growth (FDRE, 2005 and 2007). This strategy is one mechanism of poverty reduction which includes the

Sustainable Development and Poverty Reduction Program (SDPRP) approved in 2002 and 2004. Both Food Security Strategy (FSS) and the 2006 plan for Accelerated and Sustained Development to End Poverty (PASDEP) more recently the Growth Transformational Plan (GTP) (FDRE, 2008; 2012). To implement this strategy, cooperatives are one of the vital actors that the government has assigned agricultural cooperatives with the responsibility of improving small holder productivity and commercialization.

In Ethiopia studies have shown that cooperatives were taken as a threat, a source of insecurity and burden. For example, Dessalegn (1992) revealed that only a few weeks after the Ethiopian government announced the mixed economic policy, the majority of cooperatives were dissolved by their own members. Of course, the rapid expansion of cooperatives, without adequate preparations and full consideration of their basic principles and potential for economic viability led to many problems and failures (Hussien; et al, 1993).

Following the collapse of socialism in Ethiopia, many people distrusted cooperative societies. They considered cooperatives as manifestation of socialism. As a result of this, the cooperative movement was among those bearing the scars from wounds inflicted in earlier times. They were perceived as communist institutions that had no place in the free market economy and their members had lost faith in the cooperative idea which had been discredited by the former governments.

Even though there is government and NGOs support for cooperative promotion, some farmers are still reluctant to join cooperatives. This is especially true for the agricultural cooperatives which are the focus of this study.

Tesfaye (1995) revealed that producers' cooperatives failed in continuity membership in the past because of failure inherent in the collective management, because of forced membership without the interest of the farmers and formation of the cooperatives in hurry without any sufficient preparation and feasibility study.

Also there are important structural features that ensure that existing members do not have an incentive to close membership (for instance by setting extraordinarily high membership share and fees). One such example is that the monetary rewards for membership do not depend on profitability of participation (Derek. 2009).

In addition the farmers who join the cooperatives claim to benefit but it's not clear if this cuts across all members. It is also not clear why some farmers don't join the agricultural cooperatives yet it's assumed that cooperatives are beneficial to members. And, whereas agricultural cooperatives have been reported to be good tools for promoting community development, they have also been reported to be inefficient, ineffective and implicated in corruption scandals. It is not clear if mismanagement of cooperative resources could be one of the reasons for not joining the cooperatives. This study investigated the factors affecting farmers' cooperative membership in Bench Maji Zone, Southwestern Ethiopia

## **Objectives of the study**

### **General Objective of the study**

The main objective of the study was to assess the factors affecting farmers' cooperative membership increment in Bench Maji Zone, Southwestern Ethiopia

### **Specific Objectives of the study**

- To assess the perception of farmers on cooperative membership increment of agricultural cooperatives.
- To identify the factors that affect farmers to join or not to join agricultural cooperatives.
- To provide policy makers with a proposal for more support strategies which will enhance performance of cooperatives and increase benefits to members.

### **Research questions**

- Why do some farmers join agricultural cooperatives while others decline to join or drop out?
- How do farmers perceive about membership of agricultural cooperatives?
- What are the major factors that affect farmers' cooperative membership in agricultural cooperatives?

### **Significance of the study**

Problems in rural areas are not easily tackled only by individuals or single farmer's resources, but needs an integration of individuals who have common interest and problems by establishing their own organizations to pool their resources, knowledge and wise utilization of opportunities. This can bring sustainable benefit for individual members in particular and for cooperatives in general.

Based on this, the study have generated information on diverse set of issues related to why some farmers join while others do not join cooperatives in the study area. To this end, it can provide information to farmers, administrators, cooperative promoters, and other development agents. Moreover, the finding of the research can be used as a benchmark for doing further research in the same line by other researchers in the future.

### **Scope and limitations of the study**

The study was limited to 18 primary agricultural cooperatives located in Bench Maji Zone, South western Ethiopia.

### **Empirical Studies**

Gasana Grace (2011) conducted a study on exploring the determinants of joining dairy farmers Cooperatives in Rwanda, and the result shows that farmers join cooperatives because of various reasons. Among the prominent reasons are; the need to access markets and agro-vet services and access training opportunities and the need to work with others. The study established that some farmers have not yet joined because; they could not afford membership fees and because of the poor performance of the cooperatives and lack of awareness about the cooperatives.

There are few studies conducted in the area of factors affecting farmers' cooperative membership in the study area in particular and in Ethiopian context in general. Therefore, this research was conducted to bridge this knowledge gap.

### **Research Methodology**

#### **Description of the Study Area**

##### **An Overview of Bench Maji Zone**

Based on the 2007 Census conducted by the central statistics authority, this Zone has a total population of 652,531, of whom 323,348 are men and 329,183 women; with an area of 19,252.00 square kilometers, Bench Maji has a population density of 33.89. While 75,241 or 11.53% are urban inhabitants, a further 398 or 0.06% are pastoralists. A total of 157,598 households were counted in this Zone, which results in an average of 4.14 persons to a household, and 151,940 housing units.

The six largest ethnic groups reported in this Zone were the Bench (42.04%), the Me'en (15.6%), the Kafficho (7.92%), the Amhara (6.95%), the Dizi (6.46%), and the Suri (6%); all other ethnic groups made up 15.03% of the population. Bench is spoken as a first language by 42.1%, 15.55% spoke Me'en, 11.52% Amharic, 6.3% Dizin, 6% Suri, and 5.93% spoke Kafa; the remaining 12.6% spoke all other primary languages.

#### **Research Approach**

Mixed method studies are those that combine the qualitative and quantitative approaches in to the research methodologies of a single study or multiphase studies' (Tashakkori and Teddlie, 1998). Tashakkori further asserts that combination of qualitative and quantitative techniques can enrich one another and there is a synergy between them and these methods can cancel out some of the limitations of certain methods : since both qualitative and quantitative methods have their own inherent weaknesses.

Mixing different methods can reinforce a study. The trustworthiness of a study can be ensured if the finding of one methods are substantiated by the other (Creswell; et al 2003, cited in Degefa, 2005). Hence, in this study the researchers employed both quantitative and qualitative method of analysis to triangulate the data collected.

#### **Sampling Technique**

The research was conducted in Bench Maji Zone. Bench Maji Zone is selected purposively, because of the availability of required data in agricultural cooperatives for the study.

#### **Sample Frame**

The study focused on agricultural cooperatives. In the study area there are a total of 134 agricultural cooperatives. From the total agricultural cooperatives found in the Zone, 18 cooperatives having a life span of 8 years and above from their time of establishment were selected as sample frame of the study, because considering longer life span cooperatives as a sample frame enables to assess factors affecting farmers' cooperative membership cooperatives

**Table 1: Profiles of sample primary agricultural cooperative**

S. No	Name of agricultural cooperatives	Total current number of members
1	Kitie agricultural cooperatives	121
2	Aman agricultural cooperatives	514
3	Ginchie agricultural cooperatives	775
4	Morta Meka agricultural cooperatives	40
5	Shashaka agricultural cooperatives	15
6	Mehal sheko agricultural cooperatives	538
7	Bajika agricultural cooperatives	20
8	Sanka agricultural cooperatives	22
9	Etaka agricultural cooperatives	111
10	Jenjeka agricultural cooperatives	10
11	Zutua agricultural cooperatives	72
12	Selam agricultural cooperatives	82
13	Derartu agricultural cooperatives	501
14	Yegizmeret agricultural cooperatives	338
15	Dizu agricultural cooperatives	644
16	Kosokol agricultural cooperatives	156
17	Muya Kella agricultural cooperatives	572
18	Biftu agricultural cooperatives	26
	<b>Total</b>	<b>4413</b>

Source: Bench Maji Zone Marketing and Cooperative Promotion Office, 2014/15

#### Sample selection of the study

In order to conduct the study in a representative way that increases its reliability and validity, a two staged random sampling technique was employed in selecting the samples.

In the first stage, from the total sample frame 134 primary agricultural cooperatives, 18 cooperatives of the sample frame were selected based on year of establishment.

In the second stage, because of huge financial outlay and more time requirements, taking all the members of 18 agricultural cooperative is impossible and also unmanageable. To elucidate this, sample size of the study was determined by using Kothari (2004) sampling design formula.

$$n = \frac{z^2 p q N}{e^2 (N-1) + z^2 p q}$$

Where:

n= sample size=135

N=total population (4413)

Z=95%confidence interval under normal curve (1.96)

e= acceptable error term (0.05) and

Therefore, for this study, 135 sample respondents were taken. Finally, sample respondents were selected using proportionate simple random sampling method.

#### Data Types, Source and Methods of collection

Data was collected from both primary and secondary sources. Primary and secondary data was collected to answer the objectives of the study. Semi-structured interview schedule was used to collect primary data from sample respondents. For the sake of triangulating, data was collected from management committee members of sample cooperatives by conducting focus group discussions (FGD). Eight focus group discussions were conducted with management committee members of sample cooperatives. Moreover, key informants interview (KII) was employed with woreda and zonal cooperative promoters through interview guide check list. Pre-testing of semi- structured interview schedule was done before formal data collection. To make the communication easier during data collection from the respondents, semi-structured interview schedule was translated into Amharic. Three enumerators were recruited and trained about the techniques of data collection; and pre-testing of semi-structured interview schedule. Continuous supervision was made by the researchers during data collection for maintaining the validity and reliability of the data. Secondary data was collected from sample cooperatives records. Moreover, data was collected from woreda and zonal cooperative promotion offices.

### Methods of Data Analysis

Following the completion of the data collection, the data were coded and entered in to Statistical Package for Social Science (SPSS version 20) computer program for analysis.

### Qualitative data analysis

Qualitative data was analyzed using different qualitative statistical procedures and methods. Descriptive tools were supplemented by qualitative analytical methods (mainly for those data acquired through the participatory/ qualitative methods) like interpretation and explanation of various opinions, views and concepts; and summarizing, categorizing, and presentation of these in convenient forms.

### Descriptive statistical tools

It was used to analyze the quantitative data. The important statistical measures that were used to summarize and categorize the data were means, percentages, frequencies and graphs

### Binary logistic regression model

A binary logistic regression model which best fits the analysis for factors that affect farmers' cooperative membership in the study area was employed.

The dependent variable in this case is a dummy variable (binary), which takes a value zero or one depending on whether there is farmers' cooperative membership or not. However, the explanatory variables are either continuous or binary. A logit procedure was employed to identify factors influencing farmers' cooperative membership. The logit model is simpler in estimation than the probit model. Therefore, a binary logistic regression model was preferred to study factors that affect farmers' cooperative membership in the study area.

The farmers' cooperative membership model used to examine farmers' cooperative membership  
 $P_i = F(Z_i)$  \_\_\_\_\_ 1

$$Z_i = B_0 + \sum_{j=1}^n B_j X_{ji} = \left\{ \log \left( \frac{P}{1-P} \right) \right\} = Z_i = \alpha + B_1 X_{i1} + \dots + B_n X_{in}$$
 \_\_\_\_\_ 2

(Engleman, 1981 and Gujarati, 1988)

Where,  $P_i$  = the probability that there is a farmers' cooperative membership, the binary variable,  $P_i = 1$  for farmers' cooperative membership and  $P_i = 0$  for not farmers' cooperative membership

$Z_i$  = Estimated variable for the  $i^{\text{th}}$  observation,

$F$  = the functional relationship between  $P_i$  and  $Z_i$ .  $i = 1, 2, \dots, m$  are observation on variables for farmers' cooperative membership model,  $m$  being the sample size 131.

$X_{ji}$  = the  $j^{\text{th}}$  explanatory variable for the  $i^{\text{th}}$  observation = 1, 2, .....n.

$B_j$  = a parameter,  $j = 0, 1, \dots, n$ .

$j = 0, 1, \dots, n$  where  $n$  is the total number of explanatory variables.

The logit model assumes the underlying index;  $Z_i$  is a random variable that predicts the probability of farmers' cooperative membership.

$$P_i = \frac{1}{1 + e^{-Z_i}}$$
 \_\_\_\_\_ 3

$$1 - P_i = \frac{1}{1 + e^{Z_i}}$$
 \_\_\_\_\_ 4

If  $P_i$  is the probability of farmers' cooperative membership, then  $(1 - P_i)$  is otherwise

If the disturbance term  $U_i$  is taken in to account, the logit model becomes

$$Z_i = B_0 + \sum_{m=1}^m B_m X_i + U_i$$
 \_\_\_\_\_ 5

This model was used to analyze the data collected in this study.

### Result and discussion

#### Farmers' Cooperative Membership Trend of Sampled Agricultural Cooperatives

As result showed the membership growth of kitie agricultural cooperative has decreased from time of establishment to time of the study by 88.79%. Membership growth of Aman agricultural cooperative was decreased from time of establishment to time of the study by 49.25%. In Ginchie, Bajika, Sanka, Yegizmeret, Morita Meka, Shashaka and Biftu agricultural cooperatives the membership growth has not increased from time of establishment until the time of the study. Generally the average membership growth trend was 6.96%, which is below the standard goal.



**Table .2. Farmers’ Cooperative Membership**

Name of agricultural cooperatives	Farmers’ Cooperative Membership		Growth rate in%	Growth Trend in relation to standard
	During establishment	At the time of the study		
<b>Kitie</b>	445	121	-72.80	*
<b>Aman</b>	729	370	-49.25	*
<b>Gichie</b>	775	775	0.00	*
<b>Morita Meka</b>	40	40	0.00	*
<b>Shashaka</b>	15	15	0.00	*
<b>Mehal sheko</b>	338	538	59.17	
<b>Bajjika</b>	20	20	0.00	*
<b>Sanka</b>	22	22	0.00	*
<b>Etaka</b>	110	111	0.09	*
<b>Jenjeka</b>	74	10	-86.48	*
<b>Zutua</b>	30	72	40.90	
<b>Selam</b>	39	82	110.25	
<b>Derartu</b>	422	501	18.72	
<b>Yegizmeret</b>	338	338	0.00	*
<b>Dizu</b>	501	644	28.54	
<b>Kosokol</b>	441	156	-65.41	*
<b>Muya Kella</b>	779	572	-23.63	*
<b>Biftu</b>	24	26	8.33	*

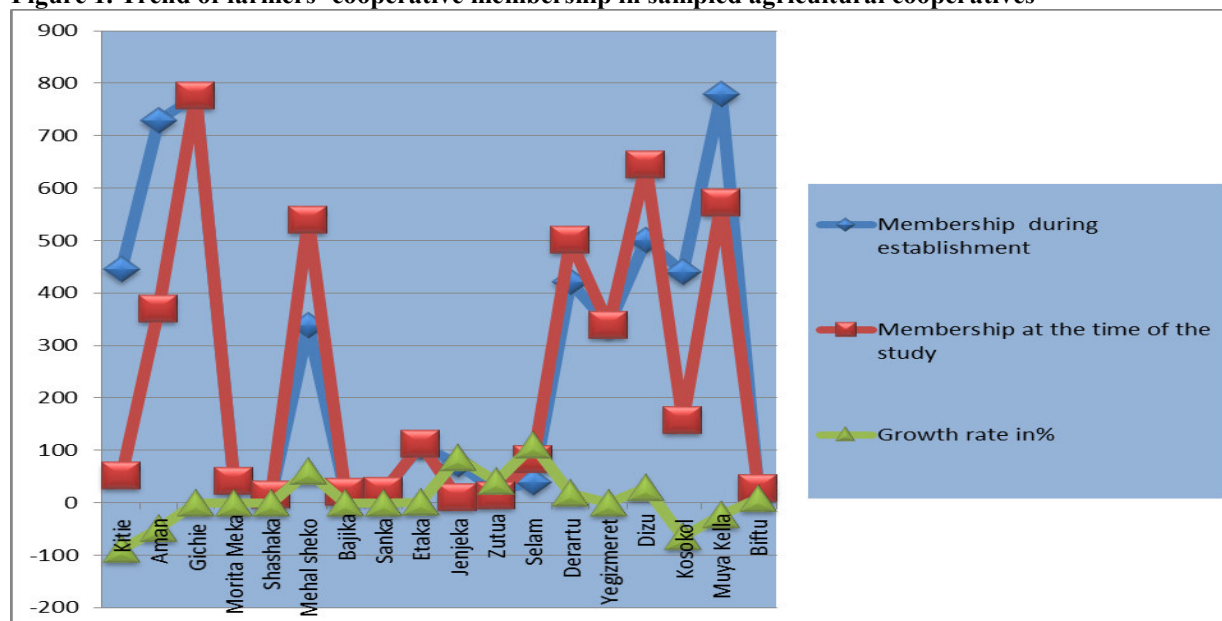
Source: Compiled From Sample Agricultural Cooperatives Documents (2015)

\*Growth below standard

**Trend analysis of farmers’ cooperative membership**

Trend analysis is a statistical device applied in the analysis of cooperative growth to reveal the trend with the passage of time. It gives an indication of the direction of change and reflects whether the cooperative membership has improved, deteriorated or remained constant over time. The membership growth of sample cooperatives was calculated by the formula:  $a/b \times 100$ . Where ‘a’ is total current members and ‘b.’ is total members at time of study. As the result indicated the average membership growth trend of sample agricultural cooperatives have gradually decreased. Also focus group discussion and key informant interview revealed that it was not in line with the sample cooperative membership growth plan. Here the percentage sign of growth proposed by world council of credit unions’ model was > 12.19% and the agricultural cooperatives was showing membership growth not in line with the proposed standard as well as showing unsustainable growth trends.

**Figure 1. Trend of farmers ‘cooperative membership in sampled agricultural cooperatives**



Source: Computed from Agricultural Cooperatives baseline data, 2015

### Econometric results

Variables in relation to factors affecting Farmers cooperative membership were identified. Fifteen (15) variables were hypothesized to explain factors affecting farmers' cooperative membership of the sample cooperatives. Out of these independent variables, eleven (11) were included in the model. From the total of eleven (11) independent variables, nine (9) of the variables were found to be significant while the remaining were less significant in explaining the variations in the dependent variable.

The binary logistic regression model show that awareness level, information access, promotion and supporting role of marketing and cooperative promotion efforts, satisfaction on cooperative services, educational level of the respondents, cooperatives' asset embezzlements, training, attitude of farmers towards cooperatives and leadership commitment were important factors influencing farmers' cooperative membership in the study area (Table 3).

**Table 3: The Maximum Likelihood Estimates of the Binary Logit Model**

Independent variables	Estimated Coefficient (B)	Standard error	Wald Statistics	Degree of freedom	Significance	Odds Ratio
Level of Education	3.565	.878	6.823	1	0.008***	12.793
Awareness level	3.692	1.472	10.055	1	0.001***	9.178
Training	2.741	1.115	6.046	1	0.015**	15.402
Marketing and cooperative Promotion offices' support	2.110	0.824	6.552	1	0.010***	8.252
Embezzlements of assets	0.115	0.055	4.445	1	0.035**	1.122
Attitude of farmers towards cooperatives	1.490	0.727	4.206	1	0.040**	0.226
Leadership commitment	3.306	1.293	6.535	1	0.011**	0.038
Trust among members and management committee	4.235	1.599	7.017	1	0.007***	0.015
Information/Media Access	6.308	1.927	10.715	1	0.001***	556.997
Family size	0.008	0.00	1.579	1	0.209	1.006
Land holding	0.515	0.790	0.286	1	0.699	1.499
Constant	10.215	2.275	10.958	1	0.000	0.000

\*\*\*, \*\* and \* represent level of significant at 1%, 5% and 10% respectively.

**Marketing and cooperative Promoters' support (MCPS):** Marketing and cooperative Promotion offices' support is the other means through which farmers' cooperative membership increases. As a result of the finding indicated Marketing and cooperative Promotion offices' support was positively and significantly related to the farmers' cooperative membership at 1% significance level. Therefore, the result of this study confirms that the frequent support of promoters has a positive effect on cooperative farmers' cooperative membership increment.

**Education (EL):** Education helps to acquire knowledge and skill to manage their business. Education also helps the members to know and understand how to manage their money and profitably handled. Human labor is the great assets in any country. This man power must be educated and trained to sustain and develop himself and his country. The result of logistic regression showed that education had an effect on farmers' cooperative membership increment of the cooperatives and it was significant by 1% probability level.

**Awareness level of respondents (AL):** As the awareness level of households gets higher, they can easily understand the process and use of cooperatives which is relevant to join in the cooperatives. The result of the survey reveals that this particular variable influences members of agricultural cooperatives of positively at 1% level of significance and its influence was stronger than other variables. The positive effect of this variable indicates the importance of awareness on cooperative issues in influencing households to involve in becoming members of agricultural cooperatives and utilization of cooperative services.

**Trust among members and management committee (TAMMC):** The result of binary logistic regression shows that trust among members and management committee members of agricultural cooperatives influences members of agricultural cooperatives at 1% level of significance and its influence was stronger than other variables. The result indicates that if a member has **trust**; he/she will stay long in agricultural cooperatives.

**Information/Media Access (IMAC):** Information /media access plays a great role in creating awareness about the benefit of agricultural cooperatives in shortest time. The information about the idea of cooperatives disseminated through media would motivate households to use the cooperatives or it would encourage them to join the cooperatives .Hence, information access was expected to have positive influence on cooperative membership. It is significant at probability level of 1%; shows that respondents who have information access were more likely to be members of the cooperatives than respondents without such access.

**Cooperative extension service (CES):** The result of the model shows that cooperative extension service is positively and significantly related to membership increment at probability level of 5%. If the number of times

the cooperative extension experts give cooperative extension service to the households is more frequent, the probability of the household to be influenced to join the cooperative will be higher.

**Training (TR):** It was defined as the training of members about the benefits of agricultural cooperatives and related matters. It is assumed that if a household gets training about the benefits of agricultural cooperatives, he/she would become a member than those did not get training. The result of binary logistic regression showed that training had an effect on membership increment of agricultural cooperatives and it was significant at 5% probability level.

**Agricultural Cooperative service (ACS):** It was defined as the type of services that the cooperative engaged in order to satisfy the needs of members. It was assumed that the service of the cooperative is satisfactory, if it has a positive relationship with membership by attracting new members. The result of logistic regression showed that effective service rendering by cooperatives to their members had an effect on the membership of the cooperatives and it was significant at 5% probability level.

**Embezzlements of assets (EA):** It was defined as the amount of money or properties of the cooperatives misused by employees or committee members or others. This variable expected to have a negative relation to the membership increment of the cooperatives. The result of the survey reveals that this particular variable influences membership increment in agricultural cooperatives at 5% level of significance.

**Leadership commitment(LC):** Unsatisfied over leadership commitment in cooperatives can restrain the non members to become the members of the cooperatives and therefore the intention of nonmembers to become members was poor which is expected to adversely affect the growth of the cooperatives. The result of binary logistic regression reveals that leadership commitment had an effect on membership increment of agricultural cooperatives and it was significant at 5% probability level.

### Conclusion and Recommendation

This study was conducted to study the factors affecting farmers' cooperative membership increment. Primary data were generated from 135 randomly selected respondents through semi-structured interview schedule conducted by well trained enumerators and by conducting group discussions and key informants' interview. The respondents involved in the interview were selected using systematic random sampling and proportionally from 18 sample agricultural cooperatives. Secondary data were collected from documents of sample cooperatives and from woreda and zonal marketing and cooperative promotion offices.

Farmers' cooperative membership increment of the cooperatives was analyzed by using trend analysis. In addition binary Logistic regression model was used to estimate the effects of hypothesized independent variables on the dependent variable. Sixteen (16) variables were hypothesized to explain factors affecting farmers' cooperative membership of the sample cooperatives. Out of these independent variables, eleven (11) were included in the model. From the total of eleven (11) independent variables, nine (9) of the variables were found to be significant while the remaining were less significant in explaining the variations in the dependent variable.

The binary logistic regression model show that awareness level, information access, promotion and supporting role of marketing and cooperative promotion efforts, educational level of the respondents, embezzlements, training, attitude of farmers towards cooperatives, trust among members and management committee and leadership commitment were important factors influencing farmers' cooperative membership increment in agricultural cooperatives in the study area.

### Recommendation

The study shows that access and mass media exposure has positive and significant relationship with farmer's membership increment. Based on this reality, cooperative agency should take an appropriate measure to establish relevant mass media and increase their accessibility by the households to follow the nature, benefit and ideology of cooperatives.

Cooperative extension service is very important for cooperatives in general and for agricultural cooperatives in particular. Membership increment in agricultural cooperatives has been, constrained by lack of cooperative extension service.

Therefore, cooperative promotion office at woreda and zonal level should facilitate cooperative extension service with appropriate cooperative extension policy, access to cooperative agents in agriculture cooperatives, defining the role of cooperative extension agents and capacity building for cooperative extension agents should be arranged to mobilize new members.

Members of the cooperatives were not in a position to get enough services and get satisfied by the services of the cooperatives. Therefore, the cooperatives should try to provide quality services to satisfy the existing members and thus attract new members and pave way for increased membership in the cooperatives.

Training of households had a significant effect on the membership increment of the cooperatives. In order to overcome households' awareness problem, cooperatives should facilitate training programs to potential



members. The training strategy of the cooperatives should focus on experience sharing in the area of cooperative membership, benefits of being member of cooperatives.

The embezzlement of cooperative assets creates gradual decrease in the sense of ownership of the existing farmer members and new farmer members were frustrated to join the cooperatives. Therefore, the cooperative assets and properties should be protected from misappropriation by way of creating sense of ownership, truthfulness in the minds of members of management committees and employ, arranging appropriate accounting system, internal financial controlling system and close supervision of the cooperative and provision of timely audit services by appropriate authority as designated in the legislation.

Members are the lifeblood of any cooperative societies. Agricultural cooperative membership growth brings new equity, financial strength, increases business volume, helps developing economies of scale and improves the performance of the cooperatives. But the annual membership growth of agricultural cooperatives was below the established goal and plan of the cooperatives. Therefore, propagating the philosophy and benefits of agricultural cooperatives to the general public mainly to the youth helps to bring new heads to the cooperatives and it is very important for the sustainable development of cooperatives.

Some degree of members' turnover is inevitable, but successful cooperatives will retain their members. The cooperatives should assure the continuity of existing membership growth through good cooperative management practices and provision of good service for their members.

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