

**A Study on Factors Impacting Livelihood Improvement of Members of  
Agricultural Cooperatives in Gambella People  
National Regional State, Ethiopia**

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**Abstract**

*Towards achieving the study objective of factors impacting livelihood improvement of members of Agricultural Cooperatives in Gambella People National Regional State, data were collected from different sources. Primary data were collected from respondents of the sample primary agricultural cooperatives. In addition to that, FGD and key informants' interview were also conducted. The data collected were analyzed using simple statistical tools like frequencies, percentages, tables, and regression analysis with the help of a statistical package called SPSS.*

*The findings of the study show that the primary cooperatives were not in a position to fully exploit the opportunities provided by the existing environment due to gaps which emanated from internal and external factors. The internal factors that affected the primary cooperatives societies were: lack of awareness and knowledge of cooperative, inefficient management, lack of supervision, audit and inspection, absence of self-help, non-viable unit, poor service, lack of loyalty and participation.*

*On the other hand, there are external factors that holdback the sustainability of agricultural cooperatives which include; lack of access to training, interferences of local leaders in the decision and managerial affairs of cooperatives, Lack of market access, lack of available financial institutions, non-availability of infrastructures, lack of access to markets and non-availability of agriculture extension services.*

*So the study recommends that to solve the internal and external factors, primary cooperative societies have to be reorganized based on Pro. No. 985/2016 and to have in place cooperative education and training for awareness about cooperatives for efficient management of cooperatives backed by adequate supervision, audit and inspection, and all other support*

*services extension like infrastructure like transportation for ease of access to market, institutional credit, and extension services,*

**Key words:** *Agriculture, Cooperatives, Factors, Impacts, Livelihood improvement.*

## Introduction

Agricultural cooperatives play significant role in the economic growth of communities and the country in large. Cooperatives have been established to offset the problems of market failure, particularly all small scale farmers all over the world. As cited in Agnes (2011), cooperatives help to improve livelihood of the farmers with access to markets and build up their bargaining power.

Realizing the importance of agricultural cooperatives in rural development in Gambella, the federal government enacted Cooperative Law which came into force in 1998 to promote and guide cooperative development. According to this law, cooperative should be set up by following principles: (a) members should play the dominant role amongst in their cooperatives (b) the key purpose is to serve members and act in the common interests of all members; (c) the members shall join and exit voluntarily; (d) all members are equal and cooperatives are democratically controlled; (e) surplus should be redistributed, based on the volume of members' patronage (NPC 2006). Although this law provided a legal environment for the establishment of cooperatives in Ethiopia, it is still not apparent how to successfully develop and operate agriculture cooperatives in Gambella. Therefore, identifying the factors that impacting livelihood improvement of agricultural cooperative unions in Gambella would help the promotion and future viability of agriculture cooperatives. In the last few years, several studies have been done but most of them were based in the developed cooperative regions of the Ethiopia (Han et al. 2006; Yu 2009; Zhang and Yuan 2010). There is limited research on agriculture cooperatives in Gambella, especially in the western part of the country.

The performance of agricultural cooperatives in developing countries including Ethiopia, was found to be disappointing; they did not help increase production, they did not reduce poverty and inequality, they did not foster self-reliance, could not bring about structural changes and failed to develop in to viable and self-managed institutions capable of extending sustainable services to their members (Haileselassie, 2003 as cited in Birhanu, 2011). These factors that impacting

livelihood improvement of agricultural cooperative unions in Gambella are categorized in to internal and external factors and presented below.

The internal challenges of cooperative are factors which arise internally within the cooperative or externally from outside the organization that would negatively affect its sustainability. These internal challenges of agricultural cooperatives include: lack of proper supervision, Audit and Inspections, inefficient management, lack of awareness and knowledge of cooperatives principle, Poor services rendered by the primary cooperative, uninspiring leadership, absence of self-help members, non-viable units, dependence up on external aids, lack of loyalty and participation, lack of communication etc.

External challenges are factors that exist outside the boundary of the organizations. The external challenges of agricultural cooperatives include access to training, government interference, access to market, none availability of financial institutions, none availability of infrastructure, access to improved seeds and access to agricultural services.

### **Statement of the problems**

Agricultural cooperatives face many challenges worldwide which among others include: poor management, lack of capital resources, inadequate training, extension and education programs, lack of communication, unclear and inadequate government policies and intervening in cooperative internal matters (Prakash, 2000). Based on their significances in economies of countries, governments have different levels of interest in regulating and providing support to cooperative sectors and to agricultural cooperatives in particular. Government's involvement and interventions in the sector vary from oversight and regulation to actual implementation or targeted supports depending on the types of state and development levels of the sectors. In most countries, the government provides targeted (organizing, training, auditing etc) service/support for the cooperative sector in its early development stages. Over time, these services/supports move to being provided by multiple private, public, non-governmental organizations (NGOs), and cooperative sector stakeholders (Yoseph, 2014)

To encourage farmers to mobilize collectively in agricultural cooperatives that would make farmers to engage in the production, processing and marketing of agricultural products and gives them access to markets. Seed production started in Ethiopia specifically Amhara region before 10 years by organizing informal seed producer groups in collaboration with governmental and nongovernmental organizations. Informal seed producer groups were functioning without a legal

ground and vision, mission and strategic plans, therefore to increase a supply of seed in accountable and sustainable manner legal groups became important and seed producer cooperatives are emerged (Kefal et al., 2012).

The main push factors for the rural exodus mentioned by regional consultation meeting (RCM) participants are poor infrastructure and service provision as well as lack of mechanization and social facilities. The lack of respect towards farmers and the lack of role models and leaders among young farmers also appear as reasons to not pursue a future in agriculture. An RCM participant from Latin America stated that in some countries in the region, young men consider migration to be a necessary step in the transition to adulthood but migration is not always the preferred option for youth and that many of them would like to stay in the rural areas if there were more opportunities. Loans are the most commonly offered financial products to youth. Although, many times accessing credit remains difficult for young people. Youth often lack the required collateral such as land or savings to obtain credit from financial institutions (MIJARC, FAO and IFAD, 2012).

### **Objectives:**

The main purpose of this study is to explore the effectiveness of Agricultural Cooperatives in Improving Livelihood of farmers in Gambella People National Regional State.

### **The specific objectives of the study are:**

1. To establish demographical variations of respondents in Agricultural Cooperatives.
2. To determine the economic, training and transportation factors supporting the Agricultural Cooperatives.
3. To study the impact of Income, Marketing, Credit, Agricultural Support services and Infrastructure facilities on Livelihood Improvement of Farmers in Agricultural Cooperatives in the study area.

### **Methodology**

#### **Data collection procedures and sources**

Based on the nature of the topic, qualitative research was conducted. Interviews with the agricultural cooperatives members Manager, Implementing Agency representative, existing in the cooperatives and participants were conducted.

Interviews and observations were used to gather information. Interviews were structured in order to make comparisons among interviewees. During interviews the researcher was taken notes and also records the proceedings of the interview. Secondary data in the form of documentation (Annual Reports, Framework Implementation Manual) will be used to get information. Participants will be photographed as they perform their duties (use of audio-visuals).

Interviews are regarded as the most effective means for obtaining large amounts of data instantly and clarification of answers can be done immediately (Marshall and Ross, 1995: 80) in the research report by Lamont (2000:61).

Primary data were collected via in-depth interviews with the target audience and the use of electronic devices. Secondary information coming from documents, previous research documents and similar were ideally considered as indicated. The following sources of evidence were used to collect data:

- Documents (Newspaper articles, implementation reports, thesis on different subjects but related to the study);
- Agricultural cooperatives booklets (booklets from the Department of Cooperative were used).
- Direct Observation (Site visits with participants were conducted.. Notes was taken after each site was visited);
- Participant observation (Interaction between members was observed and how they interact with their site managers).

### **Sampling Size and Sampling Technique**

Following to the regional cooperative promotion agency, there are agricultural cooperatives functioning currently in the three zones (twelve districts) which were found under Gambella regional state and 225 kebeles with their farmers. Then, cluster or multistage sampling technique was applied to select sample size of the respondents. The three zones were selected for purposely in order to know the potential of agricultural cooperatives and farmers in each zone. In each district three (3) agricultural cooperatives were selected and four (4) management committees of agricultural cooperatives were selected purposely in each cooperative due to they know more about their cooperatives. To select districts under each zone systematic sampling was used to

select eight (7) districts from twelve (12) under those of three Zones. But in order to be able to select kebeles simple random sampling method was employed to select 5 kebeles and 5 farmers was selected from each kebele through purposely because of being model in that area.

Thus, to determinethe sample size, the researcher was apply **the Census Methods**

Table 3.1 No of Zones, districts and kebeles under Gambella people regional state

| Numbers of district under Anway Zone |                     | No of districts under mejang zone |                            |
|--------------------------------------|---------------------|-----------------------------------|----------------------------|
| Districts                            | Number of Agr.Coops | Districts                         | Number of Agr.Coops        |
| 1. Abobo                             | 20                  | 1. Mengesi                        |                            |
| 2. Gog                               | 16                  | 2. Godere                         | 14                         |
| 3. Jor                               |                     | <b>No of special district</b>     |                            |
| 4. Dima                              |                     | District                          | <b>Number of Agr.Coops</b> |
| 5. Gambella                          | 20                  | 1. Itang                          | 17                         |
| Total                                | 56                  | Total                             | 17                         |
| Numbers of Neur Zone districts       |                     |                                   |                            |
| Districts                            | Number of Agr.Coops |                                   |                            |
| 1. Lare                              | 15                  |                                   |                            |
| 2. Jikawo                            | 18                  |                                   |                            |
| 3. Nyeninyang                        |                     |                                   |                            |
| 4. Makuey                            |                     |                                   |                            |
| 5. Akobo                             |                     |                                   |                            |
| Total                                | 33                  |                                   |                            |

Source: From Gambella cooperative promotional agency of the region 2016

**Total numbers of Agricultural cooperatives which are functioning in the five districts**

| Name of Woredas/district | Members of each Agri_ cooperative | Number of sampled members    | Name of Agri_ cooperatives |
|--------------------------|-----------------------------------|------------------------------|----------------------------|
| Gambella District        | 20                                | $(20 \times 100) / 176 = 11$ |                            |
| Lare District            | 15                                | $(15 \times 100) / 176 = 8$  |                            |
| Abwobo District          | 20                                | $(20 \times 100) / 176 = 11$ |                            |
| Gog District             | 16                                | $(16 \times 100) / 176 = 7$  |                            |
| Godere District          | 14                                | $(14 \times 100) / 176 = 7$  |                            |
| Jikawo District          | 18                                | $(18 \times 100) / 176 = 15$ |                            |
| Itang Special District   | 17                                | $(17 \times 100) / 176 = 9$  |                            |
| <b>Total</b>             | <b>120</b>                        | <b>= 95</b>                  | <b>-</b>                   |

*Source: From Gambella cooperative promotional agency of the region 2016*

### Methods of Data Analysis

In order to address the first and second objectives, percentage analysis was employed using frequency tables. As to the third objective, i.e., to study the impact of income, marketing, credit, agricultural support services and infrastructure facilities on livelihood improvement of agricultural cooperatives, regression analysis was done.

### Sex of Respondents

Table 4.1 - Distribution of sample members based on their Sex (n=120).

| Sex of respondents |        |           |         |               |                    |
|--------------------|--------|-----------|---------|---------------|--------------------|
|                    |        | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid              | Male   | 98        | 81.7    | 81.7          | 81.7               |
|                    | Female | 22        | 18.3    | 18.3          | 100.0              |
|                    | Total  | 120       | 100.0   | 100.0         |                    |

**Source: Field survey, March 2019**

## Age of respondents

Sex of the member involves the condition of being either a male or a female. In cooperative societies, if members have awareness about cooperative values and principles, discrimination in terms of sex cannot find a room. From the table 4.1 above, the result reveals that, sex of the sample members implies that around 81.7% are males and the remaining 18.3% are females. This implied that majority of agricultural cooperatives members are male.

Table 4.2 - Distribution of sample members based on their Age level (n=120).

| Age of respondents |       |           |         |               |                    |
|--------------------|-------|-----------|---------|---------------|--------------------|
|                    |       | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid              | 20-30 | 60        | 50.0    | 50.0          | 50.0               |
|                    | 31-40 | 52        | 43.3    | 43.3          | 93.3               |
|                    | 41-50 | 4         | 3.3     | 3.3           | 96.7               |
|                    | 51-60 | 4         | 3.3     | 3.3           | 100.0              |
|                    | Total | 120       | 100.0   | 100.0         |                    |

**Source: Field survey, March 2019**

Age refers to the number of years the member has lived at the time of conducting the study. It is important variable that determines the physical capability of individual members which enable them to engage in different activities including their cooperatives. As presented in the table 4.2 above, the ages of sample members who participated in the study ranged from 20 to 60 years. The majority members ages are 50% ranged from 20-30 average and 52% from 31-40 the remaining 3.3 and 3.3% are ranged from 41-50 and 51-60 years respectively.

## Educational Level of the Members

Education acts as a channel of information which enables awareness creation about cooperatives and a source that generates employment and income for the people. This variable refers to the level of formal years of schooling and non-formal education that the member has completed. Education increases farmer's ability to acquires, process and use agriculture related information Table 4.3 - Distribution of sample members based on their educational level (n=120).

| Education of respondents |                           |           |         |               |                    |
|--------------------------|---------------------------|-----------|---------|---------------|--------------------|
|                          |                           | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                    | Illiterate                | 40        | 33.3    | 33.3          | 33.3               |
|                          | Literate (Read and Write) | 51        | 42.5    | 42.5          | 75.8               |
|                          | Grade completed (1-12)    | 29        | 24.2    | 24.2          | 100.0              |
|                          | Total                     | 120       | 100.0   | 100.0         |                    |

**Source: Field survey, March 2019**

As indicated in the table 4.3 above, the majority members of the cooperatives societies 42.5% of the sample members were illiterate (read and writes) and 33.3% were illiterate the remaining 24.2 were found attended only elementary school grades (1<sup>st</sup> to 12<sup>th</sup>).

From this, it can be concluded that from the above result below 50% of the sample members were found in elementary schools and illiterate level which are the lowest levels of education.

### **Marital Status of the Respondents**

From the table below, it can be observed that, marital status of the socio-economic characteristics of the sample members selected for the study implies that the majority of 91.7% of the sample members are married and the remaining 8.3% are unmarried.

Table 4.4 Distribution of sample members based on their Marital Status level (n=120).

| Marital Status respondents |          |           |         |               |                    |
|----------------------------|----------|-----------|---------|---------------|--------------------|
|                            |          | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                      | Single   | 4         | 3.3     | 3.3           | 3.3                |
|                            | Married  | 110       | 91.7    | 91.7          | 95.0               |
|                            | Widowed  | 3         | 2.5     | 2.5           | 97.5               |
|                            | Divorced | 3         | 2.5     | 2.5           | 100.0              |
|                            | Total    | 120       | 100.0   | 100.0         |                    |

**Source: Field survey, March 2019**

### **Religion of Respondent**

From the table below, it can be identified that, ReligionStatus of the socio-economic characteristics of the sample members selected for the study show that the majority of 91.7% of the sample members are Protestant and the remaining 8.3% are belonging to others religions as described in the following table below.

Table 4.5 - Distribution of sample members based on their Religion Status(n=120).

| Religion of Respondent |            |           |         |               |                    |
|------------------------|------------|-----------|---------|---------------|--------------------|
|                        |            | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                  | Orthodox   | 4         | 3.3     | 3.3           | 3.3                |
|                        | Protestant | 110       | 91.7    | 91.7          | 95.0               |
|                        | Muslim     | 3         | 2.5     | 2.5           | 97.5               |
|                        | Catholic   | 3         | 2.5     | 2.5           | 100.0              |
|                        | Total      | 120       | 100.0   | 100.0         |                    |

Source: Field survey, March 2019

## Members' Occupation

Occupation refers to the business holding condition by the members of the society. It is basically refers to the employment generated by the government, NGOs or self. It is an economic indicator that members use as a source of income by which members depend on to improve their living conditions and seems to have relationship with the performance of agricultural cooperatives.

Table 4.6 - Distribution of members based on their occupation (n=120).

| Main Occupations |                         |           |         |               |                    |
|------------------|-------------------------|-----------|---------|---------------|--------------------|
|                  |                         | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid            | Farming                 | 68        | 56.7    | 56.7          | 56.7               |
|                  | Petty Trading           | 22        | 18.3    | 18.3          | 75.0               |
|                  | Farming & Petty trading | 14        | 11.7    | 11.7          | 86.7               |
|                  | Others                  | 16        | 13.3    | 13.3          | 100.0              |

|  |       |     |       |       |  |
|--|-------|-----|-------|-------|--|
|  | Total | 120 | 100.0 | 100.0 |  |
|--|-------|-----|-------|-------|--|

**Source: Field survey, March 2019**

As shown in the table 4.6 above, the sample members were categorized in to farming, pettytrading, and both (farming and off-farm activities) with different off-farm activities such as trading, farming and petty tradingand others (such as daily labor, beekeeping, hunting).

Thus, the result reveals that majority of members 56.7% were engaged in farming and 18.3% engaged only in petty trading, and 11.7% were engaging in both farming and petty. The remaining 13.3% have engaged in other activities that include daily labor, bee keeping and hunting. Though from this, it will be concluded thatthe majority of them were farmers, they do different activities besides farming to make a better living since farming is a seasonal activity.

### Major Types of Crops Produced By the Members

As presented in the Table 4.7 below, though there are different types of crops that can be produced in the study area, the result reveals that 46.7% of the members produce maize which is the principal crop produced and consumed in the area followed by Sorghum 26.7% and rice13.3% that produce ground nuts and sesame respectively. It is also observed that there is a possibility for a single member to produce more than one crop. Therefore, though different crops can be grown in the area, sample members of this study depend on only three types of crops that maize is the dominant since it is the major crop used for food by the people of the study area. The remaining honey 2.5%, sesame%2.5%, Groundnuts% 4.2% and others are 4.2%.

**Table 4.7 - Distribution of members based on the main types of crops they produce (n=120).**

| Major Types of Crops |         |           |         |               |                    |
|----------------------|---------|-----------|---------|---------------|--------------------|
|                      |         | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                | Maize   | 56        | 46.7    | 46.7          | 46.7               |
|                      | Honey   | 3         | 2.5     | 2.5           | 49.2               |
|                      | Rice    | 16        | 13.3    | 13.3          | 62.5               |
|                      | Sorghum | 32        | 26.7    | 26.7          | 89.2               |
|                      | Sesame  | 3         | 2.5     | 2.5           | 91.7               |

|  |            |     |       |       |       |
|--|------------|-----|-------|-------|-------|
|  | Groundnuts | 5   | 4.2   | 4.2   | 95.8  |
|  | Others     | 5   | 4.2   | 4.2   | 100.0 |
|  | Total      | 120 | 100.0 | 100.0 |       |

Source: Field survey, March 2019

### Types of Transportation

As indicated in the following table below, though there are different types of Transportations, majority of the members 42.5% have stated that they are using Bajaj and Human Labors in order to transport their commodities to the markets center. While the remaining respondents Car %21, Back Animals 3.3% Car and Human Labors 10.8% and 25.8% by using Traditional Water boats

Table 4.8 - Distribution of members based on their means of transportation (n=120).

| Means of Transportation |                         |           |         |               |                    |
|-------------------------|-------------------------|-----------|---------|---------------|--------------------|
|                         |                         | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                   | Car                     | 21        | 17.5    | 17.5          | 17.5               |
|                         | Pack Animals            | 4         | 3.3     | 3.3           | 20.8               |
|                         | Car and Pack Animals    | 51        | 42.5    | 42.5          | 63.3               |
|                         | Car and Human Labors    | 13        | 10.8    | 10.8          | 74.2               |
|                         | Traditional Water boats | 31        | 25.8    | 25.8          | 100.0              |
|                         | Total                   | 120       | 100.0   | 100.0         |                    |

Source: Field survey, March 2019

### Reasons for Membership

The table 4.9 indicates that, majority of the members 45% have joined their agricultural cooperatives by their own interest and free choices as additional sources of income, followed by 29.2% who join cooperatives by looking for services rendered by the cooperatives and 22.5% joined cooperatives through Awareness by promoters done by cooperatives promoters. The remaining .8% and 2.5% joined their cooperatives through Influenced by neighbors and Forced by administration and .8% have stated that they joined coop for food for work and/food.

Here, to keep members stay in their cooperatives, members should get all the services expected to be offered by the cooperatives. If members do not get what they expect from cooperative, they will immediately leave the societies that challenges the sustainability of the cooperatives.

**Table 4.9 - Distribution of members based on reason for membership (n=120)**

| How did you become a member in the cooperative? |                                                      |           |         |               |                    |
|-------------------------------------------------|------------------------------------------------------|-----------|---------|---------------|--------------------|
|                                                 |                                                      | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                           | Own interest and free choices                        | 54        | 45.0    | 45.0          | 45.0               |
|                                                 | Awareness by promoters                               | 27        | 22.5    | 22.5          | 67.5               |
|                                                 | looking for services rendered by the cooperatives    | 35        | 29.2    | 29.2          | 96.7               |
|                                                 | Influenced by neighbors                              | 3         | 2.5     | 2.5           | 99.2               |
|                                                 | Forced by administration: Food for work and/food aid | 1         | .8      | .8            | 100.0              |
|                                                 | Total                                                | 120       | 100.0   | 100.0         |                    |

Source: Field survey, March 2019

### How members get their cooperatives

From the table below, it can be stated that, majority 57.5% members have gets their cooperatives good and 35.8 have stated that their cooperatives are very good and the remaining .8% bad, 3.3% Cannot judged/ indifferent and 2.5% Better than others

**Table 4.10 - Distribution of members based on how they gets their cooperatives (n=120).**

| How did you feel after getting organized into cooperatives? |                    |           |         |               |                    |
|-------------------------------------------------------------|--------------------|-----------|---------|---------------|--------------------|
|                                                             |                    | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                                       | Very good          | 43        | 35.8    | 35.8          | 35.8               |
|                                                             | Good               | 69        | 57.5    | 57.5          | 93.3               |
|                                                             | Better than others | 3         | 2.5     | 2.5           | 95.8               |

|  |                            |     |       |       |       |
|--|----------------------------|-----|-------|-------|-------|
|  | Bad                        | 1   | .8    | .8    | 96.7  |
|  | Cannot judged/ indifferent | 4   | 3.3   | 3.3   | 100.0 |
|  | Total                      | 120 | 100.0 | 100.0 |       |

Source: Field survey, March 2019

### Livelihood of Respondents

The most important issue in organizing agricultural cooperatives is to change Livelihood of the members. As indicated in the following table below, majority of the members 56.7% have responded that their cooperative have improved their life, while 38.7% stated that their live have been slightly improved the remaining only 5.0% have responded that their live have not improved.

**Table 4.11 - Distribution of members based on the Livelihood category (n=120).**

| Has your livelihood improved as a result of your membership in the cooperative? |                   |           |         |               |                    |
|---------------------------------------------------------------------------------|-------------------|-----------|---------|---------------|--------------------|
|                                                                                 |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                                                           | Improved          | 68        | 56.7    | 56.7          | 56.7               |
|                                                                                 | Slightly Improved | 46        | 38.3    | 38.3          | 95.0               |
|                                                                                 | Not Improved      | 6         | 5.0     | 5.0           | 100.0              |
|                                                                                 | Total             | 120       | 100.0   | 100.0         |                    |

Source: Field survey, March 2019

### How members Get Economic Support

The primary agriculturalcooperatives societiesmembers have been asked about how they can get any economic support. Majority members of the primaryagricultural cooperatives societies 93.3% stated that they are using the services rendered while the remaining 3.3% have responded that they are buying additional share capital and .8% by using available loanlastly, 2.5% have stated that they are getting economic support by using other means.

**Table 4.12 - Distribution of sample members based how they get economic support (n=120).**

| How do you get economic support? |           |         |               |                    |
|----------------------------------|-----------|---------|---------------|--------------------|
|                                  | Frequency | Percent | Valid Percent | Cumulative Percent |

|       |                                 |     |       |       |       |
|-------|---------------------------------|-----|-------|-------|-------|
| Valid | Using available Loan            | 1   | .8    | .8    | .8    |
|       | Using the services Rendered     | 112 | 93.3  | 93.3  | 94.2  |
|       | Buying additional share capital | 4   | 3.3   | 3.3   | 97.5  |
|       | Others                          | 3   | 2.5   | 2.5   | 100.0 |
|       | Total                           | 120 | 100.0 | 100.0 |       |

Source: Field survey, March 2019

### Members' participation

Members participation refers to the tendency of members to actively take part in attending the general assembly meeting, involvement in the development of business plan, election process, decision making, exercising leadership responsibilities, monitoring and evaluation of activities related to cooperatives. Active participation of members maintains the sustainability of their cooperatives 46.7% have stated that they Simply attending discussion assemble and 30.8% mentioned that they attending discussion and actively expressing feeling, Ideas and views and the remaining 17.5% were voting either to support or reject , 1.7 were acting as informant , .8% was Contribution in share 2.5% were acting as others.

Table 4.13 - Distribution of sample members based on their participation (n=120).

| In what aspect did you participate in your cooperative? |                                                                        |           |         |               |                    |
|---------------------------------------------------------|------------------------------------------------------------------------|-----------|---------|---------------|--------------------|
|                                                         |                                                                        | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                                   | Simply attending discussion assemble                                   | 56        | 46.7    | 46.7          | 46.7               |
|                                                         | Attending discussion and actively expressing feelings, ideas and views | 37        | 30.8    | 30.8          | 77.5               |
|                                                         | Acting as Informant                                                    | 2         | 1.7     | 1.7           | 79.2               |
|                                                         | Voting either to support or reject                                     | 21        | 17.5    | 17.5          | 96.7               |

|  |                       |     |       |       |       |
|--|-----------------------|-----|-------|-------|-------|
|  | Contribution in share | 1   | .8    | .8    | 97.5  |
|  | Others                | 3   | 2.5   | 2.5   | 100.0 |
|  | Total                 | 120 | 100.0 | 100.0 |       |

Source: Field survey, March 2019

### Income improvement after becoming member of Cooperative

The important condition in any cooperatives societies is livelihood improvement, then members have been asked about their income improved after becoming member of Cooperative, and majority 67.5% have responded that no their income have not been improved after becoming member of Cooperative societies, while the remaining 32.5% only stated that their income have been improved after becoming member of Cooperative societies,

Table 4.14 - Distribution of sample members based on their income improved after becoming member (n=120).

| Is your income improved after becoming member of Cooperative? |       |           |         |               |                    |
|---------------------------------------------------------------|-------|-----------|---------|---------------|--------------------|
|                                                               |       | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                                         | No    | 81        | 67.5    | 67.5          | 67.5               |
|                                                               | Yes   | 39        | 32.5    | 32.5          | 100.0              |
|                                                               | Total | 120       | 100.0   | 100.0         |                    |

Source: Field survey, March 2019

### Access to training

Access to training refers to the probability of getting training for the members of the cooperatives by participating in order to acquire the knowledge and skills needed to build up their capacity. Cooperative trainings defined as those training activities that are organized to improve job performance of the cooperative staffs and of government employees engaged in supporting and supervision of cooperatives.

Table 4.15 - Distribution of sample members based on Training they undergone (n=120).

| Have you ever been given training on cooperatives and cooperative related activities? |
|---------------------------------------------------------------------------------------|
|---------------------------------------------------------------------------------------|

|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | Yes   | 10        | 8.3     | 8.3           | 8.3                |
|       | No    | 110       | 91.7    | 91.7          | 100.0              |
|       | Total | 120       | 100.0   | 100.0         |                    |

**Source: Field survey, March 2019**

Therefore, table 4.22 above indicates that from the total of 120 sample members, only 8.3% of the members have got training whereas the remaining 91.7% never got any training regarding cooperatives. The natures of trainings that only few members got were awareness creation and management of cooperatives which were conducted far ago. Therefore, lack of training for members of cooperatives is a threat to the success and sustainability of cooperatives since members need knowledge on how to perform their activities as according to their plans.

### **Agriculture extension services**

This section presents only the frequency and percentage of access to get agriculture extension service of the interviewed respondents.

Table 4.16 - Distribution of members based on the agriculture extension services (n=120)

| <b>Do you have access to agricultural extension services?</b> |          |           |         |               |                    |
|---------------------------------------------------------------|----------|-----------|---------|---------------|--------------------|
|                                                               |          | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                                         | Agree    | 15        | 12.5    | 12.5          | 12.5               |
|                                                               | Disagree | 105       | 87.5    | 87.5          | 100.0              |
|                                                               | Total    | 120       | 100.0   | 100.0         |                    |

**Source: Field survey, March 2019**

As indicated in the table 4.23 above, the result reveals that, only 12.5% of the sample members have got a chance of getting agriculture extension services whereas the remaining 87.5% never got a chance of getting agriculture extension services. Therefore, it can be understood from the above table that majority of members were using traditional ways of farming system that is very difficult to have large farmlands that required for members to increase their productivity.

### **Government Interferences**

Government interference is a situational factor that stands for the involvement of government in the administrative affairs of the cooperatives especially in decision making that may discourage

members morale in the agricultural cooperatives business operation since in principle; cooperatives are autonomous and free from politics and government interferences. Members were asked agree and disagree questions regarding government interferences in the activities of their cooperatives and the results of the field survey are presented in the table below.

**Table 4.17 - Perception of members based on the influence of government interferences (n=120)**

| Government interference in the activities of your cooperative? |          |           |         |               |                    |
|----------------------------------------------------------------|----------|-----------|---------|---------------|--------------------|
|                                                                |          | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                                          | Agree    | 19        | 15.8    | 15.8          | 15.8               |
|                                                                | Disagree | 101       | 84.2    | 84.2          | 100.0              |
|                                                                | Total    | 120       | 100.0   | 100.0         |                    |

**Source: field survey, March 2019**

It can be observed from the table 4.24 above that out of 120 members, only 15.8% agreed that there is local government interference in the activities of cooperatives where as 84.2% disagreed that there is no government interference in the activities of cooperatives. High government interference in the decisions and managerial affairs of the cooperatives will discourage members from participating in their cooperatives that cause the cooperatives to fail.

## Access to Market

Access to markets stand for the availability of markets near the areas of agricultural cooperatives. Lack of market access for the producers (members) of agricultural cooperatives; negatively affect the sustainability of agricultural cooperatives. Members were asked agree and disagree questions regarding access to market.

**Table 4.18 - Distribution of sample members based on access to market (n=120)**

| Do you have access to market to sell your products? |          |           |         |               |                    |
|-----------------------------------------------------|----------|-----------|---------|---------------|--------------------|
|                                                     |          | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                               | Agree    | 49        | 40.8    | 40.8          | 40.8               |
|                                                     | Disagree | 71        | 59.2    | 59.2          | 100.0              |
|                                                     | Total    | 120       | 100.0   | 100.0         |                    |

**Source: Field Survey, March 2019**

The table 4.18 above indicates that, from the total of 120 sample members, 40.8% were found agreed to having access of market while the remaining majority of the members 59.2% never had any access to market. As far as the major marketing problems of agricultural cooperatives in the study area are concerned, with high transportation costs, distance of the market places and low price for outputs are the main problems that highly affect the performance of the cooperatives. According to GebreMedhin (2006), getting the market right requires a plan, in which incentives, institutions and infrastructures are aligned. Therefore, lack of access to market infers that farmers of cooperatives will not have alternative sources to sell their products and make them lose trust from the cooperatives.

**Problems in transportation of the products**

As indicated in the following table, the most factors affecting the viability of the cooperative are High transportation cost which have accounted to 34.2% of the total while the majority 39.2% have stated that there is much Distance of the market from their cooperatives and 4.2% only have mentioned that there is Low prices for outputs that affect their interest of productions, the remaining 22.5% have mentioned other situations.

Table 4.19 - Distribution of sample members based on Problems in transportation of the products (n=120)

| Problems in transportation of the products |                          |           |         |               |                    |
|--------------------------------------------|--------------------------|-----------|---------|---------------|--------------------|
|                                            |                          | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                      | High transportation cost | 41        | 34.2    | 34.2          | 34.2               |
|                                            | Distance of the market   | 47        | 39.2    | 39.2          | 73.3               |
|                                            | Low prices for outputs   | 5         | 4.2     | 4.2           | 77.5               |
|                                            | Others                   | 27        | 22.5    | 22.5          | 100.0              |
|                                            | Total                    | 120       | 100.0   | 100.0         |                    |

Source: Field survey, March 2019

**Availability of Financial Institutions**

This represents the availability of financial institutions that provide credit services to the farmers or members of agricultural cooperatives. Availability of financial institutions such as Micro Finance Institutions, RUSACCOs and others, will have a positive impact on the sustainability of agricultural cooperatives when they provide members of cooperatives with credits. As indicated below table 4.20, the majority 91.7% disagree that there are no enough available financial institutions while the remaining 8.3% agree that there are some and very little institutions.

Table 4.20 - Responses of members based on the availability of financial institutions (n=120).

| Credit provision after becoming a member? |          |           |         |               |                    |
|-------------------------------------------|----------|-----------|---------|---------------|--------------------|
|                                           |          | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                     | Agree    | 10        | 8.3     | 8.3           | 8.3                |
|                                           | Disagree | 110       | 91.7    | 91.7          | 100.0              |
|                                           | Total    | 120       | 100.0   | 100.0         |                    |

Source: Field survey, March 2019

### Availability of Infrastructures (Road)

This variable implies the availability of infrastructures such as roads and other rural services through the areas where farms of agricultural cooperatives are found. Inadequate infrastructures assumed to have negative influence on the sustainability of agricultural cooperatives since members of cooperatives could not bring their produces to the market areas. Members were asked agree and disagree questions regarding the availability of infrastructures.

Table 4.21 - Distribution of members based on the availability of infrastructures (Road) (n=120).

| Is Infrastructures (such as roads and other rural services) available in your areas of farming? |          |           |         |               |                    |
|-------------------------------------------------------------------------------------------------|----------|-----------|---------|---------------|--------------------|
|                                                                                                 |          | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                                                                                           | Agree    | 25        | 20.8    | 20.8          | 20.8               |
|                                                                                                 | Disagree | 95        | 79.2    | 79.2          | 100.0              |
|                                                                                                 | Total    | 120       | 100.0   | 100.0         |                    |

Source: Field survey, March 2019

Table 4.21 above describes that, out of 120 members, only 20.8% agreed with the availability of infrastructures (roads and other rural services) and the majority 79.2% of them disagreed that there are no available infrastructures such as roads in their locals' areas.

### Regression Analysis:

Regression Analysis is conducted to study the Impact of “Income after becoming member”, “Access to agricultural extension services”, “Access to Market to sell the products”, “Getting credit after becoming a member” and “Infrastructure availability” on “Livelihood improvement” of the respondent.

| <b>Model Summary</b>                                                                                                                                                                                                                                                                                                                                         |                   |          |                   |                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|-------------------|----------------------------|
| Model                                                                                                                                                                                                                                                                                                                                                        | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1                                                                                                                                                                                                                                                                                                                                                            | .794 <sup>a</sup> | .730     | .714              | .369                       |
| a. Predictors: (Constant), Is Infrastructures (such as roads and other rural services) available in your areas of farming?, Do you have access to market to sell your products?, Do you have been given credit after becoming a member?, Is your income better after becoming member of Cooperative?, Do you have access to agricultural extension services? |                   |          |                   |                            |

| <b>ANOVA<sup>a</sup></b>                                                                               |            |                |     |             |        |                   |
|--------------------------------------------------------------------------------------------------------|------------|----------------|-----|-------------|--------|-------------------|
| Model                                                                                                  |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
| 1                                                                                                      | Regression | 26.438         | 5   | 5.288       | 38.818 | .000 <sup>b</sup> |
|                                                                                                        | Residual   | 15.529         | 114 | .136        |        |                   |
|                                                                                                        | Total      | 41.967         | 119 |             |        |                   |
| a. Dependent Variable: Has your livelihood improved as a result of your membership in the cooperative? |            |                |     |             |        |                   |

b. Predictors: (Constant), Is Infrastructures (such as roads and other rural services) available in your areas of farming?, Do you have access to market to sell your products?, Have you been given credit after becoming a member?, Is your income better after becoming member of Cooperative?, Do you have access to agricultural extension services?

| Coefficients <sup>a</sup> |                                                             |                             |            |                           |       |      |
|---------------------------|-------------------------------------------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model                     |                                                             | Unstandardized Coefficients |            | Standardized Coefficients | T     | Sig. |
|                           |                                                             | B                           | Std. Error | Beta                      |       |      |
| 1                         | (Constant)                                                  | .286                        | .094       |                           | 1.986 | .040 |
|                           | Is your income better after becoming member of Cooperative? | .929                        | .114       | .735                      | 8.153 | .000 |
|                           | Do you have access to agricultural extension services?      | .800                        | .202       | .447                      | 3.957 | .000 |
|                           | Do you have access to market to sell your products?         | .500                        | .082       | .416                      | 6.092 | .000 |

|                                                                                                        |              |      |      |       |             |
|--------------------------------------------------------------------------------------------------------|--------------|------|------|-------|-------------|
| Have you been given credit after becoming a member?                                                    | .500         | .218 | .234 | 2.292 | .024        |
| Is Infrastructures (such as roads and other rural services) available in your areas of farming?        | <b>1.229</b> | .153 | .844 | 8.040 | <b>.000</b> |
| a. Dependent Variable: Has your livelihood improved as a result of your membership in the cooperative? |              |      |      |       |             |

Level of significance is more with infrastructure followed by income and agriculture services, as is evident from Standardized coefficient Beta values.

As to the determination of the significant impact of independent variables on dependent variable, there is a significant impact of “Income after becoming member”, “Access to agricultural extension services”, “Access to Market to sell the products”, “Getting credit after becoming a member” and “Infrastructure availability” on “Livelihood improvement” of the respondents, as is evident from the significance value.

### Findings, Conclusion and Recommendations

Majority of the respondents of agricultural cooperatives were married, Protestants, farmers, cultivated maize as dominant crop, used bajaj autos and manual labourers for transportation. In addition to that, majority of them have joined cooperatives with their own will as they perceived coops to be good enough and believed that coops could improve their lives. Considerable slice of respondents used cooperative services. While this being the encouraging

side of their association with cooperatives, majority of the respondents on the other hand were found to be passive participants in general assembly with undeveloped economic state, and suffered from lack of opportunity for getting access to training, extension services, market infrastructure and access, and credit. These areas need to be crucially revisited by the stakeholders. From these findings, it is logical to recommend that agricultural cooperatives need to arrange for adequate market infrastructure facilities to ease market accessibility, extension of transportation amenities, cooperative training, cooperative extension, institutional credit through cooperatives. In addition to that, it is also evident standardized coefficient beta values that infrastructure had more level of significance followed by income and agriculture services. Hence, the agricultural cooperatives should critically take into consideration the findings in view, and should try to develop better infrastructure facilities so that the farmer members will have ease of access to transportation and market, cooperative training, extension, and institutional credit services through cooperatives. This in turn, will result in active participation of member farmers in cooperative activities and thus greatly enrich the rule of people, whereby livelihood of farmer members would get improved.

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