

## Determinants Of Multi-Purpose Primary Cooperatives Marketing Performance In The Case Of West Hararghe Zone, Ethiopia

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**ABSTRACT:** The research was conducted in west Hararghe Zone of Oromia National Regional State. The purpose of this paper is to identify the determinant factors of multipurpose Cooperatives Performance. To address the research objectives, 336 questionnaires were distributed to respondents, a total of 272 questionnaires were filled and returned. The return rate was 81 % (n = 272). The collected data was analyzed using SPSS and Smart PLS 3. In this study descriptive statistics like mean, standard deviations, simple percentage, frequency and tables were used to make some general observations about the data gathered and used to explain the characteristics of the sample. In addition to descriptive statistics, Structural Equation Modeling (SEM) was used to measure direct and indirect effect of the constructs. SEM results showed that only five factors have a significant positive impact on MPCMP such as members' related factor, cooperative management factor, marketing factor, and financial factor and infrastructural factors. Thus, the path between (Members -> Coop Performance) was (Path Coefficients = 0.288, T Statistics = 4.364) with a strong significance P-value (P=0.00). The path between (Finance -> Coop Performance) was (Path Coefficients = 0.201, T Statistics = 4.438 and P-value=0.000). The path between (Infrastructure-> Coop Performance) was (Path Coefficients = 0.221, T Statistics = 4.131 and P-value=0.000). The path between (Marketing -> Coop Performance) was (Path Coefficients = 0.119, T Statistics = 2.205) with a strong significance P-value (P=0.028). Moreover, the path between (Management -> Coop Performance) was (Path Coefficients =0.222, T Statistics = 3.826) with a strong significance P-value (P=0.00).Furthermore, indirect path coefficient value shows that members related factors and Cooperative management factor have strong positive indirect effect on primary multipurpose cooperative performance. Implications of this research work will help the cooperatives societies and Cooperative promotion office to identify the major determinants factors that affect the performance of multipurpose cooperatives.

**Key Words:** Multipurpose Cooperatives Marketing Performance, Members related Factor, Cooperative Management Factor, Marketing Factor, and Financial Factor, Infrastructural Factor and Nature of Business Factor

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### I. INTRODUCTION

Cooperatives are democratic, member-run and member-financed enterprises. They have been a model for bringing together people across all spheres of society in common economic and social interests. A cooperative business is owned and controlled by the people who use its services and whose benefits are shared by the users on the basis of use (USDA, 2002). Cooperative enterprises put social justice and equity at the heart of economic progress. As member-owned, member-run and member-serving businesses, cooperatives empower people to collectively realize their economic aspirations, while strengthening their social and human capital and developing their communities. Cooperatives play an important role in achieving social stability and social inclusion. With their ownership structures and goals that are different from those of investor-owned enterprises, cooperatives encourage diversification and innovation, and enable a fairer distribution of income. Being member-owned and run cooperatives also contribute to keeping the production of goods and services close to the needs of the people that they serve. In this context, cooperatives provide a good platform for promoting collective entrepreneurship among marginalized populations who have difficulties entering the traditional labor market (COPAC, 2014).

The concept of cooperation is not new. It was happened even before the formation of modern cooperatives. However, the modern Cooperative enterprise is born in the Agricultural and Industrial Revolutions of the 19th and 20th centuries in Europe. The Rochdale society of equitable pioneers in 1844 was the first successful consumer cooperative business. A group of 28 workers of Rochdale in England formed it as consumer or buyers cooperative. The cooperative had its own business practices and principles, which made the

cooperative to be successful (Euro Coop, 2008). Since 1884, many types of cooperatives have been established worldwide to meet their members common economic, social and cultural needs, including agricultural cooperatives, credit cooperatives, Consumer cooperatives, worker cooperatives, credit unions, , and mutual-aid societies have been set up almost everywhere. According to the (ICA, 2016), in total, about, 250 million people make their livelihood through co-operatives. At least 100 million households receive their health care through health co-operatives. The world's 300 largest co-operatives have annual turnover over USD 2 trillion. In Ethiopia, Cooperation among people has existed since history has been record. Traditional forms of Cooperative societies occur both in rural and urban areas and involved community members voluntarily assembling financial resources through "iqub", which was an association of people having the common objectives of mobilizing resources, especially finance, and allocating it to members on rotating basis. There were also traditional cooperatives operating with a purpose of optimally utilizing the scarce resources such as labor among the cooperators within a short period of time, known as "debbo /wonfel, among others. There also was the idir, which was an association for provision of social and economic insurance for the members in the events of death, accident, damages to property, among others. These informal associations continue to operate in Ethiopia (Bezabih, 2009).

However, in Ethiopia, the modern cooperatives movement had started at the time of Emperor Haile Selassie at the beginning of 1960s by putting emphasis on the establishment of multipurpose agricultural cooperatives. The first cooperative legal action was made and it is known by Decree number 44/1961. The main reasons for this decree was to decrease unemployment, decrease migration from rural area to urban, decrease the number of students who drop out of their education, and finally to disarmament of military without proper compensation and pension (Zemen 2005). During the reign of Haile Selassie, the cooperative legislation No241/1966 was proclaimed (Bezabih, 2009). This was the first cooperatives organization legal proclamation in Ethiopia. The main objective of this law was to decrease the amount of interest paid for credit, to minimize the risk of individual in case of bankruptcy, and to increase the implementation of innovation in practical life. Based on this proclamation 158 cooperatives were established with 33,400 members and 9,970 Birr total capital (Zemen 2005). During the Derg regime, cooperatives that were organized earlier were considered unnecessary and discarded. During the regime peasant associations were given legality by the proclamation No. 71/1975. In this proclamation, the objectives, powers and duties of peasant associations, service cooperatives and agricultural producer cooperatives were clearly stated. The newly organized cooperatives under the regime have purposefully made instruments of political power. Their organizational procedures were not based on internationally accepted cooperative principles (FCA, 2009). The cooperatives to be established under this proclamation were producers, service, saving and credit and housing cooperatives. Hence, according to data taken from ministry of agriculture, up to 1990 there were 10,524 different types of cooperatives with 4,529,259 members and combined capital of Birr 465,467,428 throughout the country (Zemen 2005). Following the overthrow of the military government in 1991, The new era in cooperative development was then started in 1998 when new cooperative legislation No 147/1998 was enacted. The proclamation was generally characterized by the principles of cooperation such as voluntary formation, business orientation and democratic membership. More specifically, It provides laws of cooperative societies amalgamation and division of societies, rights and duties of members of a society, registration of members, payment of shares, transfer of shares or benefit management bodies of cooperative societies including their powers and duties (FCA, 2009). Based on this proclamation, different cooperative societies have been established including: Agricultural Cooperative Societies, Housing Cooperative Societies, Industrial and Artisans Producer's Cooperative Societies, Consumers' Cooperative Societies, Multi-purpose Societies, Saving and Credit Cooperatives Societies, and Mining Cooperative Societies.

Cooperative in Ethiopia are largely economic entities performing economic functions contributing a lot to economic department in the country and will continue to greatly contribute in the future, Currently cooperatives have extended across the entire country, and there are 75,274 primary and secondary cooperatives, both agricultural and nonagricultural sector, of which, 74,904 are primary and 370 secondary cooperatives. Throughout the country the total member of primary cooperative reached to 14,902,340 of which, 10,684,557 are male and 4,217,783 are female members and holding a total capital of 15,720,560,928 billion birr (FCA, 2016).

However, even if there is positive indicators, cooperatives exists extensive problems such as the lack of finance and management talent, the lack of cooperative awareness and inadequate regulations (MOA, ATA & FCA, 2012). According to (Bezabih, 2009), the functionality of cooperatives is constrained by shortages in skilled human resources, due to high staff turnover and repeated structural adjustment of the cooperative promotion agencies, shortage of capital and limited access to credit and technical skills constraints and capital shortages, which hinder the attainment of objectives. In addition, Lack of skills in cooperative development is also attributed the allocation of cooperative professionals to other sectors and replacing them with people who have no cooperative background, which affects the performance of cooperatives.

Therefore, as it revealed by different sources, Multi-purpose Cooperatives' function cannot be completely comprehended. Thus, scholars have proposed some relevant research on the operating efficiency of multi-purpose cooperatives and hoped to improve the performance of cooperatives. Therefore, this paper examines the determinants factors of multipurpose agricultural cooperative societies marketing performance in West Hararghe Zone.

## **II. LITERATURE REVIEW**

### **2.1. Cooperative Performance**

According to (Chamaru, 2012), profitability and management efficiency indicators mostly used among those net profit, return on assets (ROA), return on investment (ROI), and earning per share (EPS) are some common examples of the profitability indicators. Effective use of capital, management stability and efficiency of operations are other most popular measurements. Moreover, as (Divandari et al., 2010) identified four types of performance measures: Key result indicators (KRIs) tell you how you have done in a perspective or critical success factor; Result indicators (RIs) tell you what you have done; Performance indicators (PIs) tell you what to do to increase performance dramatically.

However, the problem is whether those are suitable to measure cooperative performance. Because cooperatives are different up to some extent from this profit printed organizations. That means, cooperatives almost not differ from other business organization. They are doing business, but their objectives have some unique differences from other organizations. They have to provide goods and services to its members and thus enable them to attain improved income and savings, investments, productivity, and purchasing power and promote among them equitable distribution of net surplus through maximum utilization of economics of scale, cost-sharing and risk-sharing without, however, conducting the affairs of the cooperative for eleemosynary or charitable purposes. Because of that background, they do not have a profit maximization objective (Chamaru, 2012). In addition, He suggested two main indicators to measure cooperative performances. That is cooperative business performance and cooperative principle performance. In other words, anyway, they are doing business (without profit maximization objective), therefore their business performance should be measured to get an idea about the performance. Moreover, Anderson & Vincze (2000) mentioned that performance expectations based on a company's strategic goals, the standards that met or exceeded by leading marketers. A firm establishes performance criteria consistent with its mission and objectives. Furthermore, Davis (1997) Cooperative value performance can be measured through the actions and programs implemented by considering cooperative values practice in day-to-day operations.

### **2.2. Marketing Performance**

According to (Neely, 2007), assessing marketing performance is very challenging. Unlike purely internal measures of performance, such as defects per million, marketing performance based on external, largely uncontrollable actors, such as customers and competitors. Furthermore, (Lamberti & Noci 2010) identify the following marketing performance indicators, such as financial output indicators, which compare the results of the marketing actions to the costs associated to implement the actions (e.g. profits, sales, cash flow). Non-financial output indicators, such as market share, customer satisfaction and so on; input indicators, which reflect marketing performance in terms of effort (e.g. marketing budget and marketing assets) and multiple, hybrid indicators that evaluate macro dimensions related to efficiency, effectiveness and interdependence of the multiple dimensions of the marketing performance management system.

Hence, marketing performance measured on different techniques mentioned above, to make the study more manageable, the performance of agricultural cooperatives in west Hararghe zone studied by giving strong emphasis on sales growth, customer satisfaction, member transaction, social responsibility, and technical or organizational viability of primary multipurpose cooperative.

### **2.3. Key Factors For Cooperative Performance**

Several authors have discussed the determinate factors of cooperative society's performance. According to (Mahazril et al., 2012), cooperatives' strategic planning and participation from their members are the identified factors that contribute to their overall achievement and performance of cooperatives. As (Opatu, Nweze, Ibrahim, & Akerele, 2014) highlighted, the following factors that determine the efficiency of the performance of the cooperatives such as experience of managers, amount of credit from donors and volume of savings generated from members. Besides, (Prakash, 2003), the following factors enhance the impact of agricultural cooperatives: Internal Factors are viable and integrated cooperative trained professional and motivated staff; well-honed means to encourage members' involvement and participation; strong vertical structural support; dedicated, enlightened, and selfless leadership; inclusive programs for members' education and information. External factors are positive support and helpful role of the government; availability of basic

infrastructure; market reforms; reasonable rate of growth in agriculture; healthy relationships with regulatory and development institutions.

## 2.4. Theoretical Framework

### Relationship between Exogenous factors with Endogenous factor and Exogenous Variables with Endogenous Variables

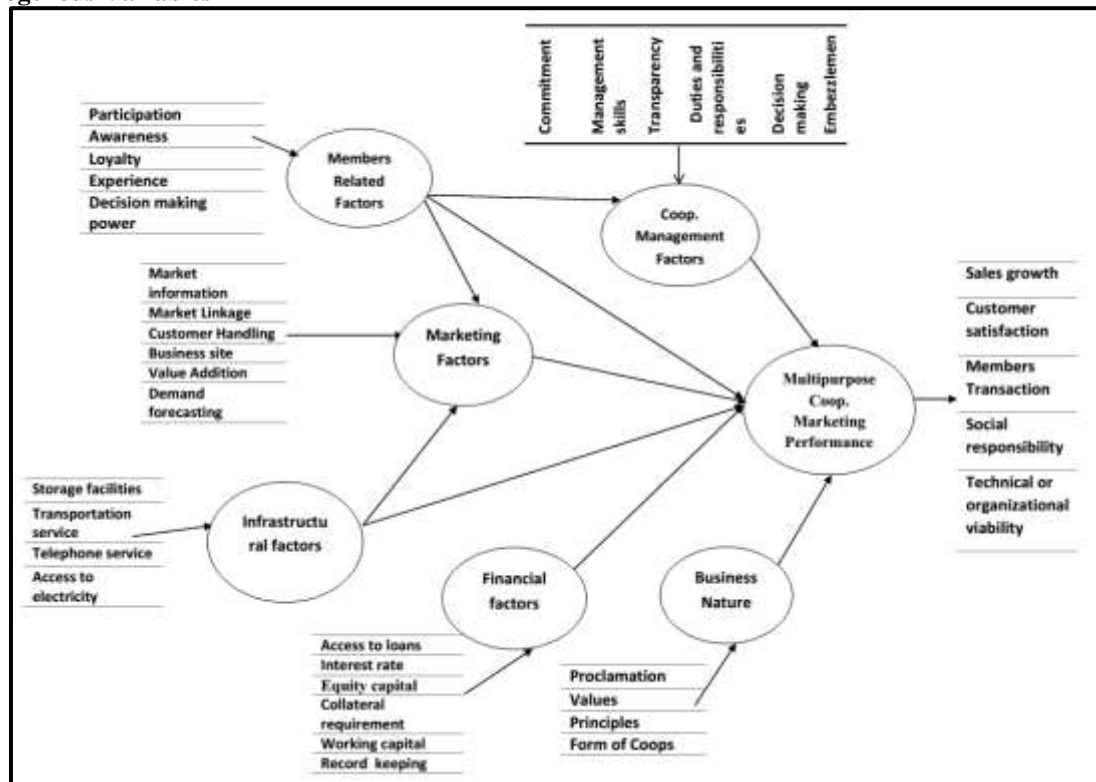


Figure 1: Conceptual Framework

Source: Researchers drawing

## 2.5. Description Of Endogenous Factors And Associated Variables

Endogenous latent factor is influenced by exogenous factors in the structural model, either directly or indirectly. Variation in values of endogenous variables is said to be explained by the model since all latent variables that influence them are included in the model specification (Byrne, 1998). In this study, therefore, this research also attempts to measure the performance of multi-Purpose cooperatives with subjective measures. It expressed by sales growth, customer satisfaction, member transaction, social responsibility, and technical or organizational viability of primary multipurpose cooperative.

## 2.6. Description Of Exogenous Factors And Associated Variables

Exogenous latent factors are synonymous to independent variables which cause fluctuations in the values of other latent variables in the statistical model. Changes in the values of exogenous variables are not explained by the model (Byrne, 1998). The set of exogenous latent factors and exogenous observed variables used in this study are;

Members related Factor shows the degree to which members of MPCs exercise their right of ownerships, good understanding and general responsibilities towards their cooperative. This includes different predictors like: members' participation (Mem1), members' awareness (Mem2), members' loyalty (Mem3), member's decision making power (Mem4) and members experience (Mem5). Management related Factor include different predictor or variables like: committee members commitment (Mgt1), committee members knowledge and skills (Mgt2), transparency and accountability (Mgt3), division of activities, duties and responsibilities (Mgt4), Gender sensitive (Mgt5) and embezzlements (Mgt6). Marketing factor refers to market information (Ma1), business site (Ma2), , market linkage (Ma3), customer handling techniques (Ma4), value addition (Ma5) and demand forecasting skills (Ma6). Financial factor include: access to loans (Fin1), equity capital (Fin2), collateral requirement (Fin3), Working capital (Fin4), interest rate (Fin5) and Record keeping. Infrastructural factor include: storage facilities (Inf1), transportation service (Inf2), access to communication

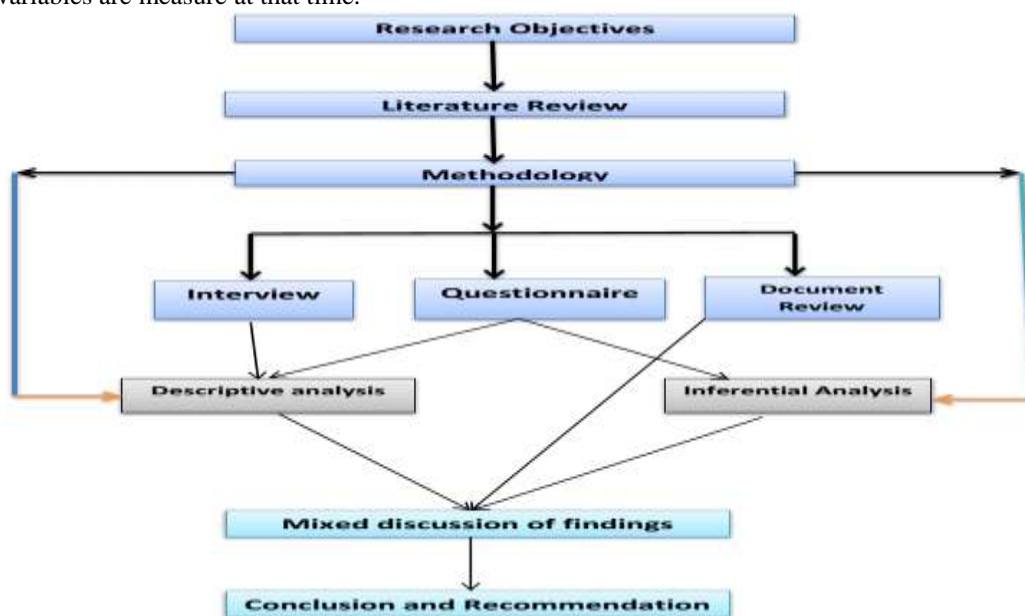
service (Inf3) and electricity (Inf4). Finally, Business Nature related factors include: proclamation (Nat1), By-laws (Nat2), principles (Nat3) and forms of business (Nat4).

### III. RESEARCH METHODOLOGY

#### 3.1. Research Design

The research design is the conceptual structure with in which research conducted; it constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2004). To assess the determinant factors of agricultural cooperative marketing performance descriptive and explanatory research design adopted. Descriptive research design is that the researcher has no control over the variables; he can only report what has happened or what is happening. Explanatory research attempts to simplify why and how there is a relationship between two or more aspects of a condition or phenomenon. Explanatory research tries to find out explanations of observed phenomena, problems, or behaviors. It attempts to “connect the dots” in research, by identifying causal factors and outcomes of the target phenomenon (Anol, 2012).

Based on time horizon, the research design is cross sectional. According to (Michael, 2014), a cross-sectional research design (also called a one-time correlational study), each person participates on one occasion, and all variables are measure at that time.



Source: Researchers drawing

Figure 2: Research Map

#### 3.2. Data Collection Method and Instrument

The researchers used both qualitative and quantitative data. Qualitative data was appropriate since meanings were based on expressions through words and analysis was conducted through the use of conceptualization. Quantitative data is numerical data or data in the form of numbers that can be analyzed by using statistical techniques (Moody, 2002). However, the study is highly focused on quantitative data. The researchers used the two methods of data collection: primary data and secondary data. According to (Saunders et al., 2007), Primary data is data collected specifically for the research project being undertaken. For this study, the primary data were collected from members of MCS through structured and semi-structured questionnaire. Using structured questionnaire and closed-ended questions facilitates statistical analysis and summary of data and the process of replication easier (Bryman and Bell, 2011). The questionnaires were pre tested and modified before the execution of the survey. According to (Collis and Hussey, 2003), Secondary data is data that already exists such as books, documents and films. Therefore, to make the study more fruitful variety of books, journals, and pamphlets reviewed which help the researchers to insight information about Multi-purpose cooperatives and related theories to the topic of the research.

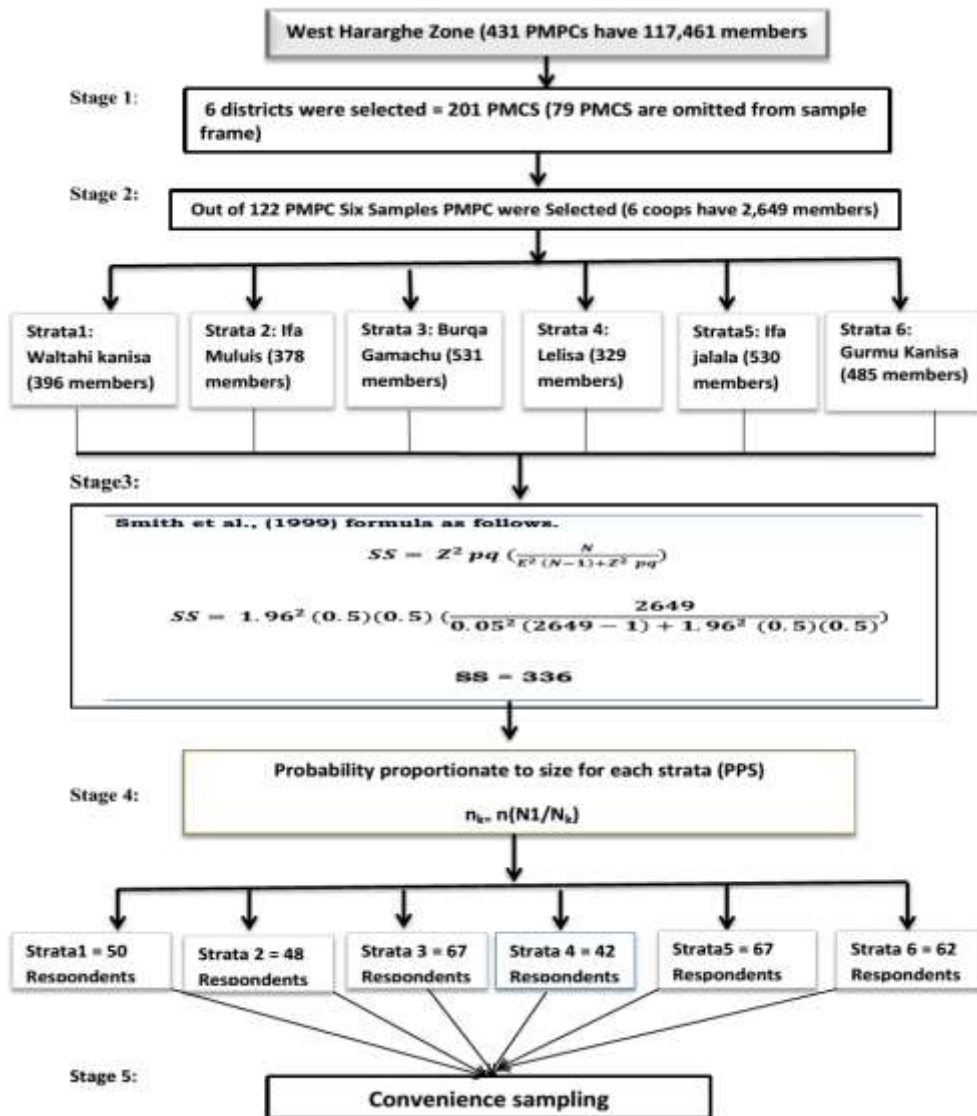
#### 3.3. Target Population

The target population is a clearly defined group of clients who will participate in the study and more often than not they are defined in terms of the sample units and elements as well as the extent and time of conducting a survey (Hair, Bush &Ortinou, 2002). Population is the universe of units from which the sample is to be selected (Bryman and Bell, 2013). Moreover, (Mugenda and Mugenda, 2003), explain that the target

population should have some observable characteristics, to which the researcher intends to generalize the results of the study. The unit of analysis may be a person, group, organization, country, object, or any other entity that you wish to draw scientific inferences about (Anol, 2012). According to West Hararghe Zone cooperative promotion office (2017), there are 431 multipurpose primary cooperatives in west hararghe zone. The current study target population is all MPC in west Hararghe Zone.

### 3.4. Sampling Design

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample design may as well lay down the number of items to be included in the sample i.e., the size of the sample (Kothari, 2004)



**Figure 3: Sample Design chart**  
Source: Researchers drawing

### 3.5. Sampling Procedure and Size Determination

A sample is a subset or relatively small fraction of the total elements in the population (Zikmund, 2003). There are several approaches to determining the sample size. These include using a census for small populations, imitating a sample size of similar studies, using published tables, and applying formulas to calculate a sample (Glenn, 1992). In this study, To select sample respondents from total study population, both probability and nonprobability sampling methods were employed. Probability sampling permits

specifying the probability that each sampling unit will be included, and the non-probability sample is a sampling method in which there is no way of specifying the probability of each unit's inclusion in the sample. On the other hand non-probability sampling involves a procedure that uses a small number of items or a portion of the population to make a conclusion regarding the whole population (Zikmund, 2003).

West Hararge Zone is subdivided into 14 districts and 2 city administrations. For this study, six districts were selected randomly. Randomly selected districts are O/Bultum, Tulo, Doba, Chiro, Gemechis and Mesela. These districts have 201 primary multipurpose cooperatives (46.6% of the zone), out of these 79 MCS are omitted from the sampling frame process due to the fact that these cooperatives are established recently between 2012 up to 2016. Thus, the study uses 122 multipurpose primary cooperatives as target population. by considering the available resource and time as well as homogenous nature of the population, 6 MCS were selected Out of 122 MACS through simple random sampling method and these selected 6 MCS have 2,649 members.

Second, to draw the sample respondents the researchers used (Smith et al., (1999)) formula and 336 sample respondents have drawn using this mathematical equation. The researcher desires a 95% confidence level. The acceptable error is generally set at 0.05 /5% probability that a significance difference occur by chance. Recommends a value estimate of p at 0.5 as that gave a maximum sample value and yield the desired results.

Smith et al., (1999) formula as follows.

Smith et al., (1999) formula as follows.

$$SS = Z^2 pq \left( \frac{N}{E^2 (N - 1) + Z^2 pq} \right)$$

$$SS = 1.96^2 (0.5)(0.5) \left( \frac{2649}{0.05^2 (2649 - 1) + 1.96^2 (0.5)(0.5)} \right)$$

**SS = 336**

Where:

SS= required sample size

Z = z value at 95% confidence level (1.96);

P = the population in the target population estimated to have characteristics being measured (50%); q = 100 – p =50%

N= target population

E = margin error (0.05).

In third stage, the determined sample size distributed to each cooperative on the basis of probability proportional to size (PPS). Probability proportional allocation formula adopted according to (kotari, 2004) as follow:

$$n_1 = \frac{nN_1}{N}$$

Where:

n= determined sample size

N= target population

N<sub>1</sub>= total number of population in each cooperatives

n<sub>1</sub>= number of samples in each cooperatives

**Table 1: Randomly selected MCs and Probability proportionate to size**

S. No	Districts	Name of Multipurpose Primary cooperatives	Membership in Number			Probability proportionate to size for each cooperative (PPS)
			Male	Female	Total	
1	O/Bultum	Waltahi Kanisa	384	12	396	50
2	Tulo	IfaMuluis	360	18	378	48
3	Doba,	Burqa Gamachu	466	65	531	67
4	Chiro	Lelisa	244	85	329	42
5	Gemechis	Ifa Jalala	451	79	530	67
6	Mesela	Gurmu Kanisa	375	110	485	62
<b>Total</b>			<b>2280</b>	<b>369</b>	<b>2,649</b>	<b>336</b>

Source: WHCPO, 2018 and Computed by the Author

In stage fourth, to select the specific individual respondent member from sixth MPCs, Convenience sampling technique applied. This is for the reason that, convenience sampling is a generic term that covers a wide variety of ad hoc procedures for selecting respondents. Convenience sampling means that the sampling units are accessible, convenient and easy to measure, cooperative, or articulate (Scott & Gerald, 2010).



### 3.6. Methods of Data Analysis

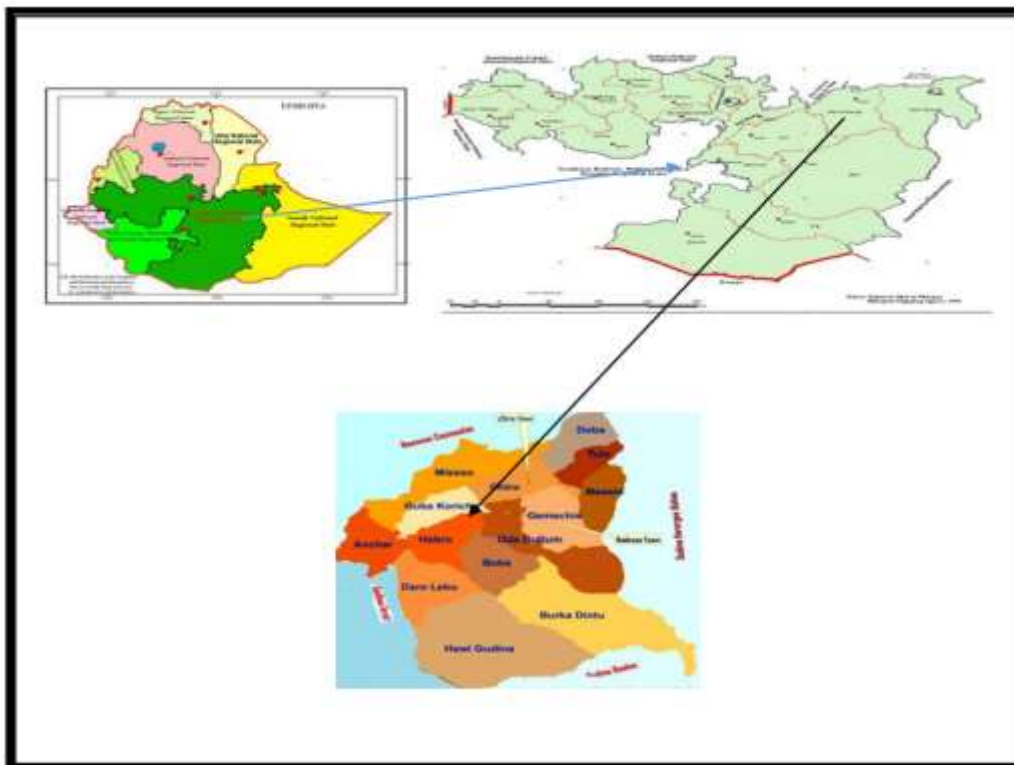
To assess the determinant factors that affect marketing performance of multi-purpose cooperatives. Data collected from primary and secondary sources were recorded, organized, analyzed and interpreted in relation to research objectives; this is done both quantitatively and qualitatively by using different Statistical Packages such as Statistical Package for Social Science SPSS (version20) and Smart PLS3 computer software.

### 3.7. Pilot Test

The main aim of piloting was to identify weakness in design and instrumentation and to provide alternative data for selection of a probability sample (Kothari, 2008). This helps the researcher to establish to what extent the instruments measured accurately the attributes under investigation. Moreover, the purpose of pre-testing a tool is to ensure that items in the tool bear the same meaning to all respondents and to assess the average time that is required to administer the instrument (Mugenda and Mugenda, 2003). In this study, a pilot was done on 30 members of Multi-purpose cooperatives and this encompassed of 5 members (respondents) from each stratum of Multi-purpose cooperatives.

### 3.8. Description of the study area

The study conducted in West Hararghe zone of Oromia Regional State in Ethiopia. West Hararghe is bordered on the south by the Shebelle River which separates it from Bale, on the southwest by Arsi, on the northwest by the Afar Region, on the north by the Somali Region and on the east by East Hararghe (OFEDB, 2011). The zone extends from 8° 40' 20.8" (8.6725°) north latitude and 40° 50' 55.9" (40.8489°) longitude. Average elevation of the zone is 1,353 meters (4,439 feet). The zone is subdivided into 14 districts administrations and its major towns include Chiro, Bedessa, Gelemso, and Mieso. The capital city of the zone is Chiro, which is located 324 kilometers east of Addis Ababa on the main road heading to the major eastern Ethiopia cities of Dire Dawa and Harar. West Hararghe Zone has a total population of 1,871,706, an increase of 47.16% over the 1994 census, of whom 958,861 are men and 912,845 women; with an area of 15,065.86 square kilometers, West Hararghe has a population density of 124.23. While 160,895 or 9.36% are urban inhabitants, a further 10,567 or 0.56% are pastoralists. A total of 395,127 households were counted in this Zone, which results in an average of 4.74 persons to a household, and 380,019 housing units. The three largest ethnic groups reported were the Oromo (90.12%), the Amhara (7.24%) and the Somali (1.26%); all other ethnic groups made up 1.38% of the population. Oromiffa was spoken as a first language by 89.47%, Amharic was spoken by 8.82% and Somali by 1.2%; the remaining 0.51% spoke all other primary languages reported. The majority of the inhabitants were Muslim, with 88.05% of the population having reported they practiced that belief, while 11.11% of the population professed Ethiopian Orthodox Christianity (CSA, 2007).



**Figure 4:** Maps of Ethiopia, Orimiya and Location of the Study Area (Source: ORAMA, 2013))

## IV. RESULTS AND DISCUSSION



**4.1. Questionnaires Return Rate**

A total of 336 questionnaires were distributed to respondents which constituted Members, Management Committee, Control Committee and purchasing Committee. A total of 272 questionnaires were filled and returned giving a response rate of 81 percent. According to (Mugenda and Mugenda, 2003), 50% response rate is adequate, 60% good, above 70% is rated very good. Therefore in this study there was a very good response on the return of the questionnaires.

**4.1. The Co-Linearity Issues**

The simplest diagnostic is to use the correlation coefficients, extreme collinearity being represented by a correlation coefficient of 1. The rule of thumb is that the presence of high correlations (generally 0.90 and above) indicates substantial collinearity. Other common measures include the tolerance value and its inverse – the variance inflation factor (VIF). Small tolerance value is (0.10 or below) and a large VIF value (10 or above), this indicates high collinearity (Hair et al., 2006). For this study; both VIF of constructs and VIF of indicators were assed.

The table 2: shows that all tolerance value greater than 0.1 and all VIF values for all factors are under 10, which demonstrated that the data set is free from multi-co linearity problems. Moreover, (VIF Values) of all indicators are under 10 which demonstrated that the there was no serious multi-co linearity problems in the survey data (See Table 10 of the appendix part)

**Table 2: Variance Inflation Factor (VIF Values) Results of Factors or Constructs**

Factors	Collinearity Statistics	
	Tolerance	VIF
Management	.670	1.492
Members	.560	1.787
Nature	.989	1.012
Marketing	.694	1.441
Finance	.698	1.433
Infrastructure	.595	1.680

Source: Survey Data (2018)

**4.2. Results of Descriptive Analysis**

The results of the analysis on demographic variables (sex of participants, age of participants, marital status, educational status, duration of membership and reasons for membership) are presented in table 3. Regarding to gender of participants, most of the respondents are male 240 (88.2%) while 32 (11.8%) are female. Besides, as the survey result shows the greater part of the membership of the cooperatives is male dominated. Even though the number of women in the Zone is 50.28% of the total population, women participation and membership to the cooperative in the zone was too low compared to male participation (OFEDB, 2011).

The age distribution of the sampled ranges from 24 to 63 minimum and maximum respectively. The average ages of sampled members are 40.17 years. The majority of respondents are between ages of 24 and 45 years in which implies that the sample farmers are at an economically productive age.

Concerning marital status of respondents, of total 272 sample respondents, almost all of the respondents 257 (94.5%) were married. Some of them were divorced 8 (2.9%) while a few 4 (1.5%) and 3 (1.1%) were single and widow respectively

Regarding to educational qualification, majority (39.3 %) of the respondents achieved primary education. In the other way, a significant number of members (25.4%) and 24.6% were uneducated and achieved secondary education respectively while (10.7 %) were can read and write (See Table 3). Better educational background of farmer members is believed to have positive impact on their readiness to accept new ideas, innovations and technology than uneducated ones.

The survey result discloses that, the minimum and maximum share holdings were 1 and 3 with an average and standard deviation of 1.7463 and 0.76234 shares among sample sequentially. This implies that the number of shareholdings was too few per person which becomes constraint to the financial capacity of the cooperatives to engage in different businesses and diversify their services. Moreover, the minimum and maximum years of membership to the cooperative were 2 to 12 years respectively. Moreover, the average membership in the cooperative is 5.6949 years. A focus group discussion with committee members also indicates those members with more years of membership were expected to be active participant in the cooperative, for they have tested the benefits of the cooperative, have more sense of ownership, concern to the cooperative and have more shares compared to the new.

Evidence conformed, 99 (36.4%) of the respondents became members of a cooperative to get to obtain fertilizer and selected seeds. For instance, 75 (27.6%) and 65 (23.9%) became members of a cooperative to obtain credit services and improve their livelihood respectively. In similar analysis, 22 (8.1%) and 11 (4%) of

respondents became members of a cooperative as result of education and influenced by neighbor respectively. This evidence implies that most farmers become the member of the cooperatives to obtain multifaceted services from the cooperative. However, cooperatives currently are not in a position to provide multifaceted services rather they are focused only on the distribution of farm inputs.

**Table 3: Results of Descriptive Analysis**

Indicators	Category	Frequency	Percentage (%)
sex	Male	240	88.2
	Female	32	11.8
	Total	272	100.0
Age	Minimum = 24.00		
	Maximum = 63.00		
	Mean = 40.1728		
	Std. Deviation = 9.26543		
	N = 272		
Marital Status	Single	4	1.5
	Married	257	94.5
	Divorced	8	2.9
	Widow	3	1.1
	Total	272	100.0
Education	Illiterate	69	25.4
	Read and write	29	10.7
	Primary school	107	39.3
	High School Education	67	24.6
	Total	272	100.0
Duration of Membership	Minimum = 2.00		
	Maximum = 12.00		
	Mean = 5.6949		
	Std. Deviation = 2.49847		
	N = 272		
Amount of share	Minimum = 1.00		
	Maximum = 3.00		
	Mean = 1.7463		
	Std. Deviation = 0.76234		
	N = 272		
Reasons for Membership to Cooperative	To obtain fertilizer and selected seeds	99	36.4
	To improve livelihood	65	23.9
	As result of education	22	8.1
	To obtain credit services	75	27.6
	Influenced by neighbor	11	4.0
	Total	272	100.0

Source: Survey Data (2018)

### 4.3. Reliability and Validity Assessment

#### Cronbach's Alpha

Cronbach's alpha method that measures internal consistency, based on the average inter-item correlation (Cronbach, 1951). Cronbach's alpha is a measurement internal consistency reliability that assumes equal indicator loadings (Hair et al., 2014). The reliabilities of this questionnaire were approved by means of the Cronbach's Alpha ( $\alpha$ ) value.

**Table 4: Cronbach's Alpha**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Coop Performance	0.824	0.822	0.023	36.191	0.000
Finance	0.888	0.888	0.013	70.059	0.000
Infrastructure	0.802	0.800	0.021	38.417	0.000
Management	0.811	0.809	0.021	39.274	0.000
Marketing	0.875	0.875	0.013	69.408	0.000
Members	0.828	0.827	0.018	46.177	0.000
Nature and forms of business	0.909	0.908	0.011	80.711	0.000

Cronbach's Alpha, CR, Mean, STDEV, T-Values, -Values (P<0.05)

Source: Survey Data (2018)

The table 3: shows that the reliability (Cronbach's  $\alpha$  values) exceeded the benchmark of 0.70 which recommended by (Nunnally & Bernstein, 1994 and Hair et al., 2014), indicating that the instrument possessed an acceptable internal consistency. Since all the alpha coefficients were greater than 0.7, the

conclusion is drawn that the instrument had a good internal consistency of the items in the scale and were appropriated for the study. For more clarification see (See table 4.7 and figure 4.6).

**Composite Reliability**

Composite Reliability determines how a set of latent indicators of constructs are consistent in their measurement (Chao & Lin, 2009). The composite reliability (reliability coefficient  $\rho$ ) of the factors for each construct (latent variables) which also refers to the internal consistency of indicators measuring the underlying factors (Fornell & Larcker, 1981). The composite reliability varies between 0 and 1, with higher values indicating higher levels of reliability. It is generally interpreted in the same way as Cronbach's alpha. Specifically, composite reliability values exceeded the benchmark of 0.70 which recommended by (Nunally & Bernstein, 1994). Therefore, Composite reliability values below 0.60 indicate a lack of internal consistency reliability.

**Table 5:** The summarized Results of the Composite Reliability Scores

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
Coop Performance	0.878	0.877	0.014	63.453	0.000
Finance	0.918	0.918	0.009	107.121	0.000
Infrastructure	0.871	0.869	0.012	73.007	0.000
Management	0.868	0.867	0.013	69.417	0.000
Marketing	0.909	0.909	0.008	108.408	0.000
Members	0.878	0.877	0.012	76.043	0.000
Nature and forms of business	0.936	0.919	0.083	11.301	0.000

CR, Mean, STDEV, T-Values, -Values (P<0.05)

Source: Survey Data (2018)

As Tables 4 depicts, coefficients values of composite reliability of coop performance (0.878), finance (0.918), infrastructure (0.871), management (0.868), marketing (0.909), members (0.878) and nature and forms of business (0.936) are greater than 0.70 which is recommended by (Nunally & Bernstein, 1994). This means all the Composite reliability values of each construct high levels of internal consistency of the items in the scale and are appropriated for the study. For more clarification see (table 5).

**Convergent Validity**

According to (Nachmias and Nachmias, 2007) Convergent validity is concerned with measuring the degree of a positive relationship among scale items developed to measure the same construct. Convergent validity can be assessed by using average variance extracted (AVE) and composite reliability methods. (AVE) should be above the cut-off- value of 0.5 or greater to suggest adequate convergent validity (Hair et al., 2006) and composite reliability should be above 0.7. An AVE of less than 0.50 indicates that, on average, more error remains in the items than the variance explained by the construct (Hair et al., 2014).

**Table 6:** The Summarized Results of Average Variance Extracted (AVE)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
Coop Performance	0.591	0.591	0.030	19.590	0.000
Finance	0.691	0.691	0.024	28.754	0.000
Infrastructure	0.629	0.628	0.024	26.570	0.000
Management	0.570	0.569	0.026	21.968	0.000
Marketing	0.667	0.667	0.022	29.885	0.000
Members	0.591	0.591	0.025	23.376	0.000
Nature and forms of business	0.786	0.759	0.085	9.276	0.000

CR, Mean, STDEV, T-Values, -Values (P<0.05)

Source: Survey Data (2018)

Table 6 confirms that the average variances extracted for Coop Performance(0.591), Finance (0.691), Infrastructure (0.629), Management (0.570), Marketing (0.667) Members (0.591) and Nature and forms of business (0.786) exceeded the threshold of 0.50, which indicates that this study had adequate levels of convergent and discriminant validity. The results of convergent Validity of all constructs are satisfactory because all latent variables have high loading above 0.5 which is recommended by (Hair, Black et al., 2010 and Hair et al., 2014). These results of AVE assured that which items measure theoretical constructs with reality related. For more clarification see (table 6).

**4.4. Discriminant Validity**

The discriminant validity value is measured by comparing the value of the square root of average variance extracted (AVE) of each construct and the correlation between the constructs in the model; if the value of AVE is greater than the value of the correlation between the constructs of the model, it is said to have a good discriminant validity (Fornell & Larcker, 1981).

Fornell-Larcker compares the square root of the AVE values with the latent variable correlations. Specifically, the square root of each construct's AVE should be greater than its highest correlation with any other construct. (Note: This criterion can also be stated as the AVE should exceed the squared correlation with any other construct. The logic of this method is based on the idea that a construct shares more variance with its associated indicators than with any other construct (Hair et al., 2014). Therefore as we have seen below Table 7; the square root of the AVE of each construct higher than its highest correlation with any other construct. This indicating Validity assesses items measure theoretical constructs.

**Table 7:** Fornell-Larcker Criterion discriminant validity value

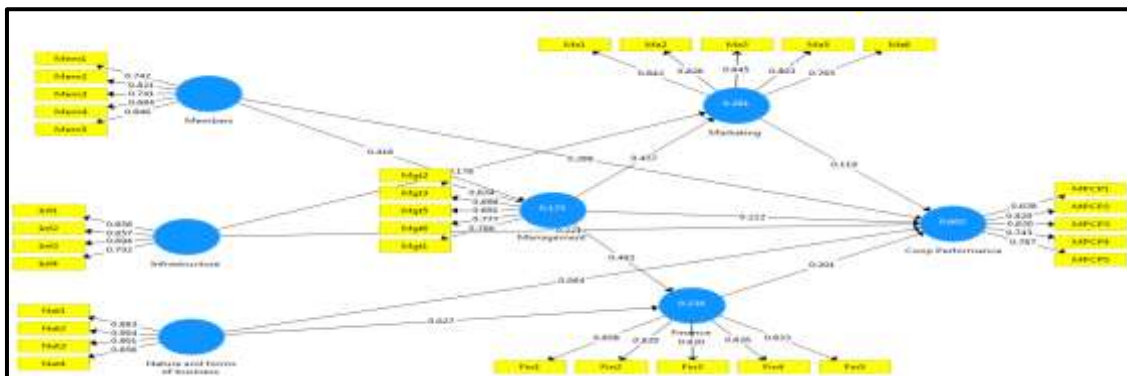
	Coop Performance	Finance	Infrastructure	Management	Marketing	Members	Nature and forms of business
Coop Performance	0.769						
Finance	0.516	0.831					
Infrastructure	0.565	0.267	0.793				
Management	0.571	0.483	0.311	0.755			
Marketing	0.497	0.479	0.320	0.512	0.817		
Members	0.626	0.307	0.632	0.418	0.327	0.769	
Nature and forms of business	0.110	0.039	0.013	0.025	0.045	0.083	0.886

Source: Survey Data (2018)

An indicator's outer loading on the associated construct should be greater than all of its loadings on other constructs (i.e., the cross loadings). The presence of cross loadings that exceed the indicators' outer loadings represents a discriminant validity problem. This criterion is generally considered rather liberal in terms of establishing discriminant validity (Hair et al., 2010). Therefore, this advocates that a construct is unique and captures phenomena not represented by other constructs in the model.

**4.4.1. Structural Model**

The Structural Equation Modeling (SEM) technique was used to test a set of relationship between independents and a dependent variable. Once an acceptable measurement model is available, the structural model evaluation should be able to start (Bentler & Hu, 1999). A structural equation model uses equations of a covariance structure, and is typically used to determine causality between an observed and theoretical model. Structural equation models are able to determine potential factors without measurement errors using confirmatory factor analysis and a method that links the potential factors via regression analysis. In other words, the SEM appropriately combines with factor and regression analysis to find causal relationships (Jung, Yen, & Jeong, 2015). In order to test the relationships between the exogenous latent factors with endogenous latent factors in the structural model or to test the effects of different Factors on MPCP, and to assess causality between an observed and theoretical model, structural equation modeling was developed as follows.



**Figure 5.** Structural equation modeling for different factors and Primary Multipurpose cooperative performance algorithm results (Source: Survey data (2018))

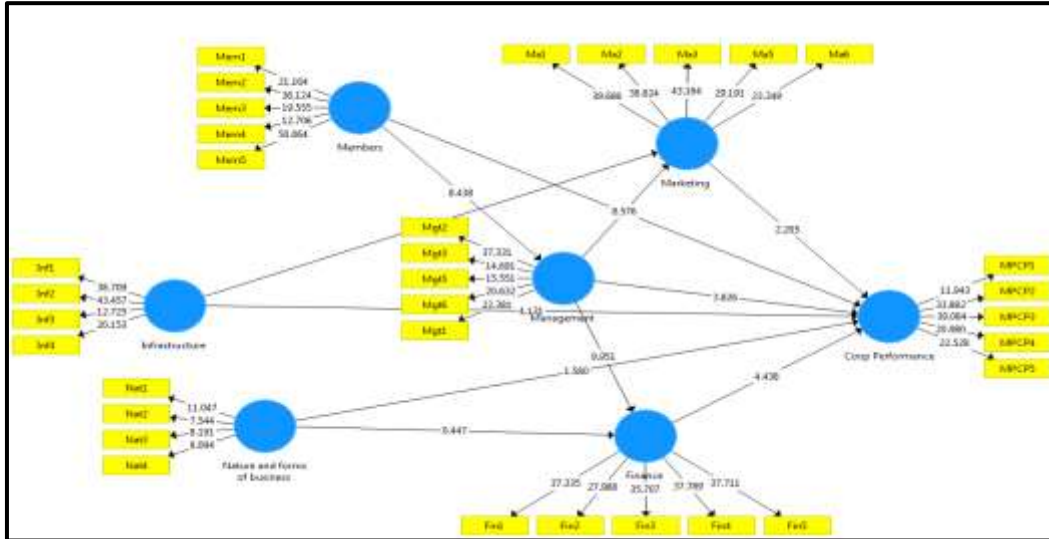


Figure 6. Structural equation modeling for different factors and Primary Multipurpose cooperative performance bootstrap results (Source: Survey data (2018))

Source: Survey Data (2015)

Path coefficients: are the relationships between the latent variables in the structural model. The path coefficients have standardized values between -1 and + 1. Estimated path coefficients close to + 1 represent strong positive relationships (and vice versa for negative values) that are almost always statistically significant (i.e., different from zero in the population). The closer the estimated coefficients are to 0, the weaker the relationships. Very low values close to 0 are usually non-significant (i.e., not significantly different from zero). Path coefficients with standardized values below 0.10 are usually not significant (Hair et al., 2014).

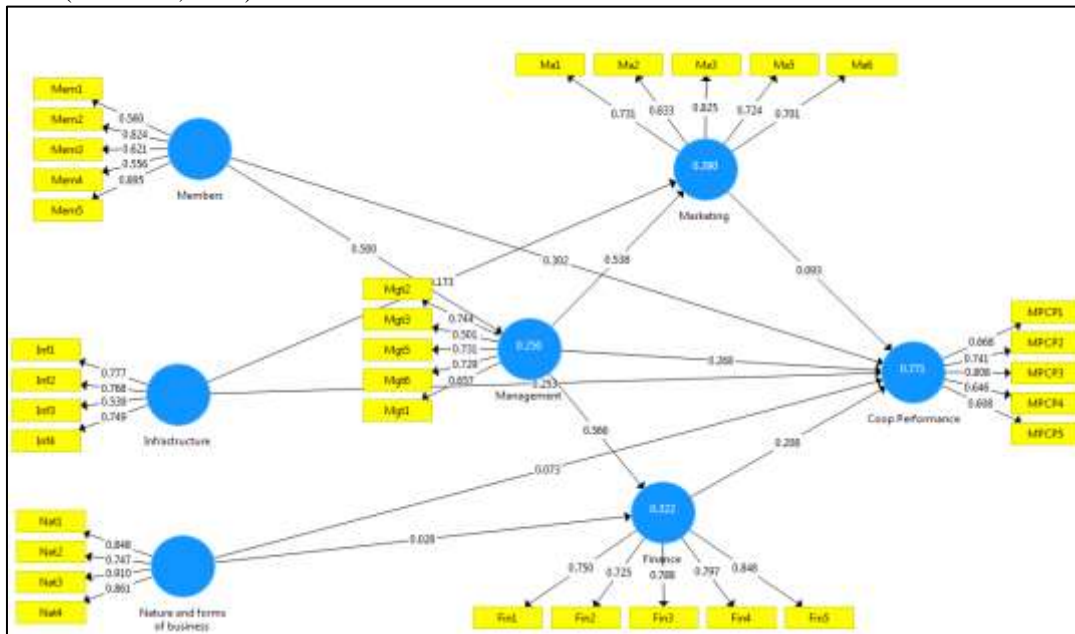


Figure 7: Structural Equation Modeling for Different Factors and Primary Multipurpose cooperative performance consistent algorithm results (Source: Survey data (2018))

As we have seen figure 4.12: most paths are statistically significant considering significance value is above 1.96 except relationship between Business Nature Factors and Agricultural Cooperatives' Marketing Performance is not a significant relationship regarding that (T Statistics = 1.572) which is less than 1.96.

**Table 8:** Structural Equation Modeling Path Summery

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
Finance -> Coop Performance	0.201	0.201	0.045	4.438	0.000
Infrastructure-> Coop Performance	0.221	0.218	0.053	4.131	0.000
Infrastructure -> Marketing	0.178	0.180	0.062	2.884	0.004
Management->Coop Performance	0.222	0.218	0.058	3.826	0.000
Management -> Finance	0.482	0.485	0.048	9.951	0.000
Management -> Marketing	0.457	0.460	0.053	8.576	0.000
Marketing -> Coop Performance	0.119	0.119	0.054	2.205	0.028
Members -> Coop Performance	0.288	0.294	0.066	4.364	0.000
Members-> Management	0.418	0.423	0.050	8.438	0.000
Nature and forms of business -> Coop Performance	0.064	0.064	0.041	1.580	0.115
Nature and forms of business -> Finance	0.027	0.030	0.061	0.447	0.655

Path coefficients, Mean, STDEV, T-Values, P-Values (**P<0.05**)

**Source: Survey Data (2018)**

The path coefficient between (Finance -> Coop Performance) Finance related Factor and multipurpose Cooperative Performance is (Path Coefficients = 0.201, T Statistics = 4.438) with a high significance P-value (P=0.000). This highly significant (P = 0.000) path coefficient indicates that Finance related Factor has a positive direct effect on multipurpose cooperatives marketing performance. This means that multipurpose cooperatives marketing performance positively and directly influenced by Finance related Factor.

The path between (Infrastructure-> Coop Performance) is (Path Coefficients = 0.221, T Statistics = 4.131) with a high significance P-value (P=0.000). This highly significant (P=0.000) path coefficient indicates that infrastructural factor has a positive direct effect on multipurpose Cooperative Performance. The path between (Infrastructure -> Marketing) Infrastructure Factor and Marketing related issues is (Path Coefficients = 0.178, T Statistics = 2.884) with a high significance P-value (P=0.004). This highly significant (P=0.004) path coefficient indicates that infrastructural factor has a positive direct effect on marketing related activities.

The path between (Management -> Coop Performance) was (Path Coefficients =0.222, T Statistics = 3.826) with a strong significance P-value (P<0.00). This highly significant (P =0.00) path coefficient indicates that management related factor has a positive direct effect on multipurpose Cooperative Performance. The path coefficient between (Management -> Finance) Management Factors and Finance was (Path Coefficients = 0.482, T Statistics = 9.951) with a strong significance P-value (P=0.000). This significant (P =0.000) path coefficient indicates that Management Factors has a positive direct effect on Finance related factors.

The path between (Management -> Marketing) Management Factors and Marketing factor was (Path Coefficients = 0.457, T Statistics = 8.576) with a strong significance P-value (P=0.00). This highly significant (P = 0.00) path coefficient indicates that Management Factors has a positive direct effect on Marketing factor.

The path between (Marketing -> Coop Performance) was (Path Coefficients = 0.119, T Statistics = 2.205) with a strong significance P-value (P=0.028). This highly significant (P =0.028) path coefficient indicates that marketing Factors has a positive direct effect on multipurpose Cooperative Performance. Moreover, the path between (Members -> Coop Performance) was (Path Coefficients = 0.288, T Statistics = 4.364) with a strong significance P-value (P=0.00). This highly significant (P =0.00) path coefficient indicates that Members related Factors has a positive direct effect on multipurpose Cooperative . Furthermore, the path between (Members -> Management) was (Path Coefficients = 0.418, T Statistics = 8.438) with a strong significance P-value (P=0.00). This significant (P =0.00) path coefficient indicates that Members related Factor has a positive direct effect on Management.

On the other hand, there is a small positive but insignificant path coefficient between (Nature and forms of business -> Coop Performance) Nature and forms of business and multipurpose Cooperative (Path Coefficients = 0.064, T Statistics = 1.580 and P=0.115). This insignificant P value indicates that in the context of this study there is positive but insignificant effect of Nature and forms of business on multipurpose Cooperative performance.

Additionally, there is a small positive but insignificant path coefficient between (Nature and forms of business -> Finance) Nature and forms of business -> Finance (Path Coefficients = 0.027, T Statistics = 0.447 and P=0.655). This insignificant P value indicates that in the context of this study Nature and forms of business there is positive but insignificant effect on Finance.

From the above results, According to the Path coefficients table all the arrows (Finance -> Coop Performance, Infrastructure-> Coop Performance, Infrastructure -> Marketing, Management->Coop Performance, Management -> Finance, Management -> Marketing, Marketing -> Coop Performance, Members -> Coop Performance, Members -> Management) are statistically significant (Path Coefficients values greater than 0.1 and T Statistics values greater than 1.96 and p values significant (P<0.05) ) at 0.05 significant levels. Direct effects of exogenous factors on endogenous factor has been discussed in previous section. This section provides indirect effects of constructs of the model on each other as an additional result.

**4.1.1. Structural model Indirect Effects**

Researchers are often interested in evaluating not only one con-struct's direct effect on another but also its indirect effects via one or more mediating constructs. The sum of direct and indirect effects is referred to as the total effect. The interpretation of total effects is particularly useful in studies aimed at exploring the differential impact of different driver constructs on a criterion construct via several medi-ating variables (Hair et al., 2014). Therefore, to evaluate the direct and indirect effects of based on Previously defined constructs, the following final Structural Equation Modeling were defined

**Table 9: Indirect effect of Path Summery**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Infrastructure -> Coop Performance	0.021	0.022	0.014	1.517	0.130
Management -> Coop Performance	0.152	0.151	0.028	5.414	0.000
Members -> Coop Performance	0.156	0.156	0.028	5.516	0.000
Members -> Finance	0.202	0.206	0.035	5.696	0.000
Members -> Marketing	0.191	0.195	0.034	5.670	0.000
Nature and forms of business -> Coop Performance	0.006	0.006	0.013	0.442	0.659

Path coefficients, Mean, STDEV, T-Values, P-Values (P<0.05)

Source: Survey Data (2018)

**Table 10: Specific Indirect Effects Path Summery**

Indirect paths	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Members -> Management -> Finance -> Coop Performance	0.041	0.041	0.012	3.387	0.001
Nature and forms of business -> Finance -> Coop Performance	0.006	0.006	0.013	0.442	0.659
Members -> Management -> Coop Performance	0.093	0.092	0.026	3.545	0.000
Infrastructure -> Marketing -> Coop Performance	0.021	0.022	0.014	1.517	0.130
Members -> Management -> Marketing -> Coop Performance	0.023	0.023	0.011	2.099	0.036
Members -> Management -> Finance	0.202	0.206	0.035	5.696	0.000
Members -> Management -> Marketing	0.191	0.195	0.034	5.670	0.000

Path coefficients, Mean, STDEV, T-Values, P-Values (P<0.05)

Source: Survey Data (2018)

As it is illustrated in table 10: Members related factor has indirect effect on multipurpose Cooperative performance by mediated Management factor and Financial factor ((path one =  $0.418 * 0.482 * 0.201$ ) + (path two =  $0.418 * 0.222$ ) + (path three=  $0.418 * 0.457 * 0.119$ )). Therefore, indirect Path coefficients of Members related factor on multipurpose Cooperative performance ( $0.041 + 0.093 + 0.023 = 0.157$ ). Members related factor has an indirect effect on financial factor by mediated cooperative management factor ( $0.418 * 0.482 = 0.202$ ). Members related factor has also an indirect effect on marketing factor by mediated cooperative management factor (indirect Path coefficients =  $0.418 * 0.457 = 0.17684$ ). Cooperative management factor has an indirect effect on MPCMP by mediated financial factors and marketing factors ((path one =  $0.457 * 0.0.119$ ) + (path two =  $0.482 * 0.201$ )). therefore, indirectPath coefficients of Cooperative management factor has an indirect effect on multipurpose cooperative performance ( $0.054383 + 0.096882 = 0.152$ ).

Indirect Path coefficient value shows that members related factors and Cooperative management factor have strong positive indirect effect on primary multipurpose Cooperative performance

For more information see appendix F.



## V. CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

### 5.1. Conclusions

The present research employed descriptive analysis and structural equation model analysis. Descriptive analysis used to describe the socio-demographic profile of the respondents. Descriptive analysis shows that most of the respondents are male 240 (88.2%) while 32 (11.8%) are female. The age distribution of the sampled ranges from 24 to 63 minimum and maximum respectively. The majority of the respondents 257 (94.5%) were married. Some of them were divorced 8 (2.9%) while a few 4 (1.5%) and 3 (1.1%) were single and widow respectively. Majority (39.3 %) of the respondents achieved primary education. In the other way, (25.4%), 24.6% and (10.7 %) were uneducated, achieved secondary education, read and write respectively. The minimum and maximum years of membership to the cooperative were 2 to 12 years respectively. The average membership in the cooperative is 5.6949 years. Moreover, Evidence conformed that, 99 (36.4%) of the respondents became members of a cooperative to get to obtain fertilizer and selected seeds. For instance, 75 (27.6%) and 65 (23.9%) became members of a cooperative to obtain credit services and improve their livelihood respectively. In similar analysis, 22 (8.1%) and 11 (4%) of respondents became members of a cooperative as result of education and influenced by neighbor respectively.

Structural model results confirmed that, out of the six explanatory factors five of them were influenced Multi-purpose cooperatives positively and significantly. Members' related predictors (Members participation, Members Awareness and Member's decision making powers Members) are found to be significant determinants of Multi-purpose cooperatives marketing performance. Cooperative management related predictors (committee commitment, awareness, knowledge and skills) are found to be significant determinants of Multi-purpose cooperatives marketing performance. Marketing related predictors (Market information, location, and business linkage) are found to be significant determinants of Multi-purpose cooperatives marketing performance. Financial related predictors (Access to loans, Equity capital, and working capital management) are found to be significant determinants of agricultural cooperatives marketing performance. Infrastructural related predictors (Storage facilities, Transportation service, communication service and electricity) are found to be significant determinants of multi-purpose cooperatives marketing performance.

One important finding of this study was, members related factors, infrastructural and cooperative management factors were found to be the most significant determinants of Multi-purpose cooperatives marketing performance. Members' related facto (members' participation, members' awareness, Member's decision making powers, and members' loyalty) has strong, positive, direct and indirect effect on multi-purpose cooperatives marketing performance. Infrastructural factor (Storage facilities, Transportation service, communication service and electricity) has strong, positive, direct and indirect effect on multi-purpose cooperatives marketing performance. Like the two factors, cooperative management factor (commitment, management skills, Transparency and Accountability,) has strong, positive, direct and indirect effect on PMCMP.

### 5.2. Directions for Future Research

This study attempted to investigate factors influencing primary multi-purpose cooperatives. However, this study is limited to west Harargha zone only which makes difficult to generalize and make inference to the whole region. Thus, Future research may make an in-depth study in this regard by considering other zones of the region or the country so as to clearly factors influencing multi-purpose cooperatives marketing performance. Future research could also consider the embeddedness of other factors like demographic factors, legal and political factors, Technological factors, and organizational linkage factors as construct factors and as predictors' variables.

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**APPENDIX**

**Table 1: Path Coefficients**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Finance -> Coop Performance	0.201	0.201	0.045	4.438	0.000
Infrastructure -> Coop Performance	0.221	0.218	0.053	4.131	0.000
Infrastructure -> Marketing	0.178	0.180	0.062	2.884	0.004
Management -> Coop Performance	0.222	0.218	0.058	3.826	0.000
Management -> Finance	0.482	0.485	0.048	9.951	0.000
Management -> Marketing	0.457	0.460	0.053	8.576	0.000
Marketing -> Coop Performance	0.119	0.119	0.054	2.205	0.028
Members -> Coop Performance	0.288	0.294	0.066	4.364	0.000
Members -> Management	0.418	0.423	0.050	8.438	0.000
Nature and forms of business -> Coop Performance	0.064	0.064	0.041	1.580	0.115
Nature and forms of business -> Finance	0.027	0.030	0.061	0.447	0.655

Source: Survey Data (2018)

**Table 2: Total Indirect Effects**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Finance -> Coop Performance					
Infrastructure -> Coop Performance	0.021	0.022	0.014	1.517	0.130
Infrastructure -> Marketing					
Management -> Coop Performance	0.152	0.151	0.028	5.414	0.000
Management -> Finance					
Management -> Marketing					
Marketing -> Coop Performance					
Members -> Coop Performance	0.156	0.156	0.028	5.516	0.000
Members -> Finance	0.202	0.206	0.035	5.696	0.000
Members -> Management					
Members -> Marketing	0.191	0.195	0.034	5.670	0.000
Nature and forms of business -> Coop Performance	0.006	0.006	0.013	0.442	0.659
Nature and forms of business -> Finance					

Source: Survey Data (2018)

Source: Survey Data (2018)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Members -> Management -> Finance -> Coop Performance	0.041	0.041	0.012	3.387	0.001
Nature and forms of business -> Finance -> Coop Performance	0.006	0.006	0.013	0.442	0.659
Members -> Management -> Coop Performance	0.093	0.092	0.026	3.545	0.000
Infrastructure -> Marketing -> Coop Performance	0.021	0.022	0.014	1.517	0.130
Members -> Management -> Marketing -> Coop Performance	0.023	0.023	0.011	2.099	0.036
Members -> Management -> Finance	0.202	0.206	0.035	5.696	0.000
Members -> Management -> Marketing	0.191	0.195	0.034	5.670	0.000

Source: Survey Data (2018)

**Table 4: Effects Total Effects**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Finance -> Coop Performance	0.201	0.201	0.045	4.438	0.000
Infrastructure -> Coop Performance	0.242	0.240	0.053	4.609	0.000
Infrastructure -> Marketing	0.178	0.180	0.062	2.884	0.004
Management -> Coop Performance	0.373	0.369	0.050	7.422	0.000
Management -> Finance	0.482	0.485	0.048	9.951	0.000
Management -> Marketing	0.457	0.460	0.053	8.576	0.000
Marketing -> Coop Performance	0.119	0.119	0.054	2.205	0.028
Members -> Coop Performance	0.444	0.450	0.061	7.290	0.000
Members -> Finance	0.202	0.206	0.035	5.696	0.000
Members -> Management	0.418	0.423	0.050	8.438	0.000
Members -> Marketing	0.191	0.195	0.034	5.670	0.000
Nature and forms of business -> Coop Performance	0.070	0.070	0.042	1.665	0.096
Nature and forms of business -> Finance	0.027	0.030	0.061	0.447	0.655

Source: Survey Data (2018)

**Table 5: Outer Loadings**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Fin1 <- Finance	0.858	0.857	0.023	37.335	0.000
Fin2 <- Finance	0.820	0.819	0.029	27.988	0.000
Fin3 <- Finance	0.820	0.821	0.023	35.707	0.000
Fin4 <- Finance	0.826	0.826	0.022	37.789	0.000
Fin5 <- Finance	0.833	0.832	0.022	37.711	0.000
Inf1 <- Infrastructure	0.858	0.858	0.022	38.709	0.000
Inf2 <- Infrastructure	0.857	0.856	0.020	43.457	0.000
Inf3 <- Infrastructure	0.694	0.691	0.055	12.725	0.000
Inf4 <- Infrastructure	0.752	0.748	0.037	20.153	0.000
MPCP1 <- Coop Performance	0.638	0.635	0.053	11.943	0.000
MPCP2 <- Coop Performance	0.829	0.830	0.024	33.882	0.000
MPCP3 <- Coop Performance	0.830	0.830	0.021	39.084	0.000
MPCP4 <- Coop Performance	0.743	0.741	0.035	20.980	0.000
MPCP5 <- Coop Performance	0.787	0.786	0.035	22.528	0.000
Ma1 <- Marketing	0.842	0.842	0.021	39.686	0.000
Ma2 <- Marketing	0.826	0.825	0.021	38.824	0.000
Ma3 <- Marketing	0.845	0.843	0.020	43.164	0.000
Ma5 <- Marketing	0.803	0.804	0.028	29.191	0.000
Ma6 <- Marketing	0.765	0.764	0.033	23.349	0.000
Mem1 <- Members	0.742	0.739	0.035	21.164	0.000
Mem2 <- Members	0.821	0.822	0.023	36.124	0.000
Mem3 <- Members	0.741	0.743	0.038	19.555	0.000
Mem4 <- Members	0.684	0.677	0.054	12.706	0.000
Mem5 <- Members	0.846	0.847	0.017	50.064	0.000
Mgt2 <- Management	0.834	0.834	0.022	37.331	0.000
Mgt3 <- Management	0.698	0.696	0.047	14.691	0.000
Mgt5 <- Management	0.691	0.691	0.044	15.551	0.000
Mgt6 <- Management	0.777	0.776	0.038	20.632	0.000
Nat1 <- Nature and forms of business	0.883	0.864	0.080	11.047	0.000
Nat2 <- Nature and forms of business	0.904	0.884	0.120	7.544	0.000
Nat3 <- Nature and forms of business	0.901	0.877	0.110	8.191	0.000
Nat4 <- Nature and forms of business	0.856	0.833	0.106	8.094	0.000
Mgt1 <- Management	0.766	0.760	0.034	22.381	0.000

Source: Survey Data (2018)

**Table 6: Outer Weights**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
Fin1 <- Finance	0.231	0.231	0.014	16.714	0.000
Fin2 <- Finance	0.223	0.223	0.018	12.240	0.000
Fin3 <- Finance	0.243	0.243	0.017	14.095	0.000
Fin4 <- Finance	0.245	0.246	0.016	15.396	0.000
Fin5 <- Finance	0.261	0.260	0.019	14.045	0.000
Inf1 <- Infrastructure	0.343	0.345	0.025	13.721	0.000
Inf2 <- Infrastructure	0.340	0.341	0.024	14.432	0.000
Inf3 <- Infrastructure	0.238	0.239	0.034	6.920	0.000
Inf4 <- Infrastructure	0.331	0.328	0.033	10.045	0.000
MPCP1 <- Coop Performance	0.250	0.248	0.020	12.365	0.000
MPCP2 <- Coop Performance	0.278	0.278	0.016	17.245	0.000
MPCP3 <- Coop Performance	0.303	0.303	0.018	16.809	0.000
MPCP4 <- Coop Performance	0.242	0.242	0.017	14.045	0.000
MPCP5 <- Coop Performance	0.228	0.229	0.013	17.024	0.000
Ma1 <- Marketing	0.234	0.235	0.019	12.392	0.000
Ma2 <- Marketing	0.267	0.266	0.020	13.584	0.000
Ma3 <- Marketing	0.264	0.263	0.019	13.637	0.000
Ma5 <- Marketing	0.232	0.234	0.020	11.780	0.000
Ma6 <- Marketing	0.225	0.225	0.020	11.074	0.000
Mem1 <- Members	0.208	0.207	0.019	10.706	0.000
Mem2 <- Members	0.307	0.308	0.021	14.808	0.000
Mem3 <- Members	0.231	0.232	0.023	9.859	0.000
Mem4 <- Members	0.207	0.204	0.031	6.720	0.000
Mem5 <- Members	0.333	0.332	0.023	14.561	0.000
Mgt2 <- Management	0.292	0.293	0.020	14.767	0.000
Mgt3 <- Management	0.197	0.197	0.023	8.446	0.000
Mgt5 <- Management	0.287	0.288	0.023	12.395	0.000
Mgt6 <- Management	0.286	0.286	0.022	12.850	0.000
Nat1 <- Nature and forms of business	0.284	0.286	0.171	1.668	0.096
Nat2 <- Nature and forms of business	0.251	0.254	0.185	1.357	0.175
Nat3 <- Nature and forms of business	0.305	0.289	0.165	1.852	0.065
Nat4 <- Nature and forms of business	0.289	0.273	0.189	1.532	0.126
Mgt1 <- Management	0.258	0.256	0.021	12.071	0.000

Source: Survey Data (2018)

**Table 7: Fornell-Larcker Criterion**

	Coop Performance	Finance	Infrastructure	Management	Marketing	Members	Nature of business
Coop Performance	0.769						
Finance	0.516	0.831					
Infrastructure	0.565	0.267	0.793				
Management	0.571	0.483	0.311	0.755			
Marketing	0.497	0.479	0.320	0.512	0.817		
Members	0.626	0.307	0.632	0.418	0.327	0.769	
Nature and forms of business	0.110	0.039	0.013	0.025	0.045	0.083	0.886

Source: Survey Data (2018)

**Table 8: Heterotrait-Monotrait Ratio (HTMT)**

	Coop Performance	Finance	Infrastructure	Management	Marketing	Members
Coop Performance						
Finance	0.600					
Infrastructure	0.688	0.314				
Management	0.691	0.557	0.386			
Marketing	0.575	0.539	0.371	0.594		
Members	0.727	0.350	0.763	0.488	0.363	
Nature and forms of business	0.132	0.052	0.062	0.103	0.064	0.120

Source: Survey Data (2018)

**Table 9: Inner VIF Values**

	Coop Performance	Finance	Infrastructure	Management	Marketing	Members	Nature of business
Coop Performance							
Finance	1.632						
Infrastructure	2.424				1.169		
Management	2.045	1.001			1.169		
Marketing	1.794						
Members	2.703			1.000			
Nature and forms of business	1.019	1.001					

Source: Survey Data (2018)

**Table 10: Outer VIF Values**

Variables	VIF Values
Fin1	2.564
Fin2	2.139
Fin3	2.143
Fin4	2.095
Fin5	2.093
Inf1	2.242
Inf2	2.208
Inf3	1.415
Inf4	1.417
MPCP1	1.280
MPCP2	2.846
MPCP3	2.256
MPCP4	1.941
MPCP5	2.652
Ma1	2.291
Ma2	2.060
Ma3	2.219
Ma5	1.968
Ma6	1.746
Mem1	1.692
Mem2	1.831
Mem3	1.654
Mem4	1.492
Mem5	2.009
Mgt2	2.119
Mgt3	1.653
Mgt5	1.360
Mgt6	1.710
Nat1	2.705
Nat2	3.373
Nat3	3.083
Nat4	2.329
Mgt1	1.776

Source: Survey Data (2018)

**Table 11: R Square**

	R Square	R Square Adjusted
Coop Performance	0.602	0.593
Finance	0.234	0.229
Management	0.175	0.172
Marketing	0.291	0.285

Source: Survey Data (2018)

**Table 12: Construct Reliability and Validity**

	Cronbach's Alpha	rho_A	Composite Reliability	Average Extracted (AVE)	Variance
Coop Performance	0.824	0.832	0.878	0.591	
Finance	0.888	0.890	0.918	0.691	
Infrastructure	0.802	0.818	0.871	0.629	
Management	0.811	0.818	0.868	0.570	
Marketing	0.875	0.879	0.909	0.667	
Members	0.828	0.856	0.878	0.591	
Nature and forms of business	0.909	0.912	0.936	0.786	

Source: Survey Data (2018)

**Table 13: Number and membership of Primary Multi-Purpose Cooperatives in West Hararghe Zone**

	Districts	Number of M-P Coop	Male	Female	Total Members
1	Chiro	39	7749	1559	9308
2	Burka Dimtu	18	2269	1453	3722
3	Gemechis	35	12057	2602	14659
4	Mieso	45	3545	475	4020
5	O/Bultum	31	5834	761	6595
6	Anchar	22	5408	1704	7112
7	Darolebu	39	9754	2200	11954
8	Doba	40	10910	1421	12331
9	Mesela	25	9013	2206	11219
10	Boke	21	8366	4853	13219
11	Habro	33	5510	499	6009
12	Tulo	30	7723	519	8242
13	GubaKoricha	29	6557	1698	8255
14	HawiGudina	24	670	146	816
	Total	431	95,365	22,096	117,461

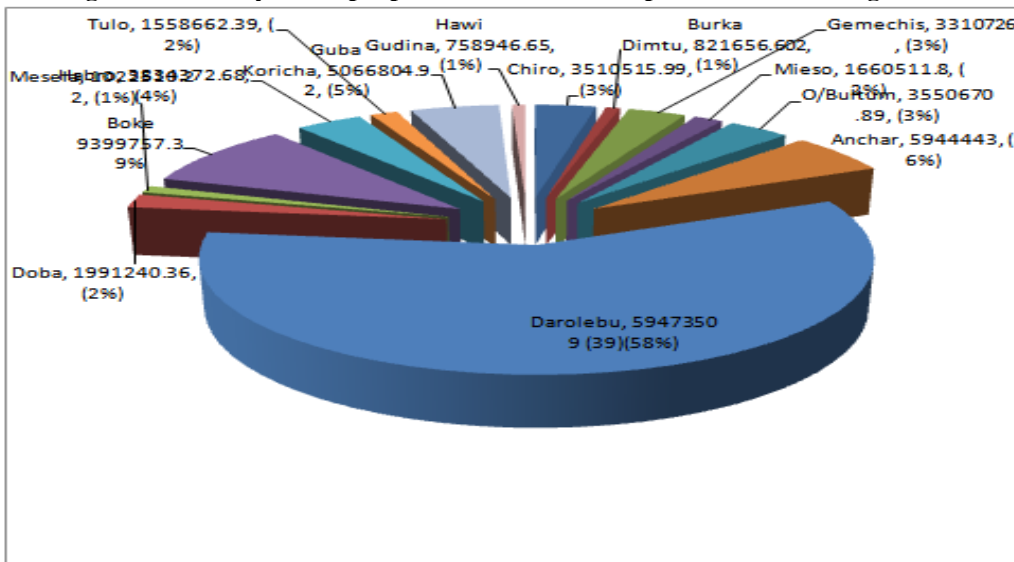
Source: West Hararghe Zone Cooperative Promotion office 2018

**Table 14: Financial position of Selected Primary Multi-purpose Cooperatives**

Name of cooperative	Current Asset	Fixed Asset	Total Asset	Liability	Capital
Waltahikanisa	746,246	412,685.70	1,158,931.70	334,475	824,456.70
IfaMuluis	73,415.74	26,153	99,568.74	-	99,568.74
BurqaGamachu	78,765.48	738,158.86	816,924.34	527,572.39	289,351.95
Leelisa	285,217	301,760	586,977.00	131,541.98	455,435.02
Ifajalala	445,980	227,666.50	673,646.50	-	673,646.50
GurmuKanisa	183,840.44	1028.95	184,869.39	135,913.73	48,955.66
Total	1,813,464.66	1,146,778.62	3,520,917.67	1,129,503	2,391,414.57

Source: Each selected primary multi-purpose cooperatives base line data, 2018

**Figure 1: Primary Multi-purpose and amount of capital in West Hararghe Zone**



Source: Computed based on data from West Hararghe Zone Cooperative Promotion office 2018

Tewodros Biset Amene "Determinants Of Multi-Purpose Primary Cooperatives Marketing Performance In The Case Of West Hararghe Zone, Ethiopia "International Journal of Business and Management Invention (IJBMI) , vol. 07, no. 10, 2018, pp 11-32