FACTORS DETERMINE THE PERFORMANCE OF SELECTED MULTIPURPOSE AGRICULTURAL COOPERATIVES IN WEST SHEWA ZONE, OROMIA REGION, ETHIOPIA

*Mr. KEBEDE G/WOLD
Ph.D. Research Scholar

**Prof. S. NAKKIRAN
Professor of Cooperative Management,Department of Cooperatives,
Institute of Cooperatives and Development Studies, Ambo University, Ethiopia

ABSTRACT

Cooperatives plays significant role in Ethiopia to improve the lives of people in rural areas. They are organized in providing social, cultural and economic needs of members. The objective of the study is to explore factors determine performances of multipurpose agricultural cooperatives. To meet the intended objectives of the study, data were drawn from primary and secondary sources and follows a mixed method research approach. A two-stage stratified sampling method was employed to select the sample districts and cooperative societies. To attain the objectives of these study 236 respondents were selected through the Kothari formula, the data were analyzed with the descriptive statistics by SPSS version 20. It has been recommended that a reduction on input price for members; provide adequate, reliable and up-to-date market information; marketing and transaction costs has to be reduced; improved saving activities through diversify members' income; a conducive government policy in terms of supportive measures and frequency of the training, contact with members and cooperative learning should be strengthened.

Key words: *Multipurpose Agricultural Cooperatives, Small holder Farmers*

INTRODUCTION

Cooperation among people has long history in the world and they are as old as human society, agricultural in many **c**ountries (Gray, 1998; Veerakumaran, 2007). Cooperatives in developing countries have proven to be largely ineffective and unsustainable (Deininger, 1995). In Africa, cooperatives were dominated by the state control and of liberalization where the majority of African cooperatives introduced legislation and policies. (Abate, 2013; Braverman, 1991).

The Ethiopian government has continued supporting cooperatives through various policies and programs aimed at enhancing cooperative performance.

The performance of agricultural cooperatives remains poor due to illegal practices such as stealing (Ergetew, 2014) and downsized due to competition from the private traders (MerihunFikru and EndriasGeta, 2017; Muthyalu, 2013). Therefore, the study aims to identify factors that determine the performance of multipurpose agricultural cooperatives. This study

focuses on cooperatives in West Shewa Zone, Oromia region, where there is a high number of agricultural cooperatives.

OBJECTIVES OF THE STUDY

To identify factors that determines performance of multipurpose agricultural cooperatives in some cooperative societies of West Shewa Zone, Oromia region, Ethiopia

DESCRIPTION OF THE STUDY AREA

The study was carried out in West Shewa Zone, Oromia region where three districts were selected percussively and six cooperative societies (Assgorii, Barodo, Metii, Billo, Quillimmitto and T/Gebakimissa) were identified on the bases of some selection criteria. Agriculture is the dominant economy of the area where mixed farming was practiced. The major crops grown in the area are teff, barely, sorghum, maize, lentils chickpeas and that of animals are oxen, cows, sheep, goat, etc.

RESEARCH METHODOLOGY

This research employed a mixed method approach where both qualitative and quantitative data types were used to identify factors determine performance of agricultural cooperatives. Questionnaires had been developed to collect data and it was distributed to the respondents among 236 cooperative members. To supplement data gathered from questionnaires qualitative data were gathered from key informant interview focused group discussions and personal observations to increase reliability of results.

The data collected from questionnaires were analyzed using Statistical Package for the Social Sciences (SPSS) version 20.0 software. Multivariate model with six response variables from i= 1, 2… 6 each of them being affected by multiple (fifteen) explanatory variables.

The model can be specified as follows:

$$yi = \alpha i + \sum_{j=1}^{n} \beta j Xj \ + \varepsilon i$$

Where:

$$yi^1 = responsevariables$$

xj^2 = explanatory variables
α_i = Intercept
εi = errorterms
i= 1, 2, 3,4,5,6
j= 1, 2 ... n=15
n= number of explanatory variables

The model was used to determine whether there is a significant relation between the dependent and independent variables.

Sample size determinations

Sample size determination is the most important design decision problem that faced by most researcher or scholars who are engaged in research. The sample size of the study or the number of member of the respondents was determined using Kothari (2004) formula:

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

Where:

n = is the minimum sample size required (236)

N = is number of population (Cooperative under study) 6054

P and q = are estimates of the proportion of population to be sampled (i.e. based on pilot-test conducted on some variables the proportion were determined), (p = 0.8 and q = 0.2).

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

e= acceptable error term (0.05)

$$n = \frac{0.8 * 0.2 * (1.96)^2 * 6054}{(6054-1)(0.05)^2 + (1.96)^2 * 0.8 * 0.2}$$

$$n = \frac{0.16 * 3.8416 * 6054}{6053 * 0.0025 + 3.8416 * 0.16}$$

$$n = \frac{3721.1274}{15.747156} = n = \underline{236}$$

From the selected district cooperatives two hundred thirty six (236) respondents were selected by using Probability Proportional to size sampling techniques (PPS).

Table 1. Sample districts and selected cooperative societies

S/N	Name of the districts	Name of selected PMAC	Year of establishment	Capital	Total No. of members			PPS		Total
					Male	Female	Total	Male	Female	
1	Ambo	Meti	1969	252, 067.15	461	74	535	18	3	21
		N/Bilo	1977	64, 318.00	248	39	287	10	3	13
2	Dendi	Asgorii	1997	102, 534.45	830	143	973	32	6	38
		Borodoo	1997	176, 567.00	474	288	762	18	11	29
3	T/kutaye	G/Kemissa	1988	789, 985.50	1403	94	1497	55	4	59
		Qiiliinxo	1994	348, 018.30	1435	565	2000	56	20	76
Total				2,191,808.7	4851	1203	6054	189	47	236

Source: Zonal Cooperative Promotion Office (2017)

RESULTS AND DISCUSSIONS

This section presents the descriptive and multivariate model analysis results. The descriptive statistical analysis was used to determine the demographic, institutional, marketing, socio-economic and service factors. While multivariate model was used to determine whether there is a significant relation between the dependent and independent variables.

Determinants of Membership size: The study revealed that out of 15 explanatory variables hypothesized, only two covariates have been found statistically significant while the remaining variables were not significant at α=0.05. The study shows that input price and membership size has an inverse relationship.

Determinants of Members business participation: Out of 15 independent variables hypothesized, only 3 variables have found to be statistically significant covariates to affect business participation. The finding result indicates both input price and marketing cost have an inverse relationship with member's business participation, while there is a positive relationship between income and member's business participation.

Determinants of Members Savings: Out of 15 variables hypothesized, only two covariates namely (input price at p-value=0.028 and income at p-value= 0.008) have found to statistically significant variables that determines members saving. The finding result shows that there is an inverse relationship between input price and member's savings, while there is a positive relationship between income and member's savings.

Determinants of knowledge achieved with training: Regarding determinants of members' knowledge achieved with training, out of fifteen variables assumed, only three variables namely occupation with p-value of 0.001, education with p-value of 0.000 and alternative information with p-value of 0.035 were found to be statistically significant determinants of it. All the three covariates have positive association with the dependent variable. For more justification and elaboration of analysis facts see the tables under.

CONCLUSION

A unit rise in input price, results in an 8.3% decline in capital growth. On the contrary, the study reviles that an improved for access and proper utilization of up-to-date market information gives rise to capital growth by 28.4 %.

The study also indicates that price of input rises by one unit, member's business participation declines by 17.8%. Similarly when marketing cost rises by one unit, member's business participation comes down by 60%. On the other hand, as income increases by one unit, member's business participation improves by 5.8%

The study shows that a better legislation/proclamation in the government policy results in an improvement of dividend payment by 11.1%. The present study shows that when access to market information improves by one unit, dividend payment improves by 98.5%. This study shows how powerful is information to determine dividend which is a function of net profit.

REFERENCES

- Abate Gashaw. T., Francesconi, N. &Getnet, K. (2013). "Impact of agricultural cooperatives on smallholders' technical efficiency: evidence from Ethiopia", *Euricse Working Paper* n. 50 | 13
- Akinwumi, J. (2006). Road map to re-engineering cooperatives in Nigeria. A paper presented at the south west cooperative leaders' conference, organized by cooperative federation of Nigeria South west zone at Obisesan Hall, Ibadan, and September 7.
- BezabihEmana and MengistuNiguesse, (2011).Strategizing cooperative development in Ethiopia. Agricultural Transformation Agency and IFPRI, Addis Abeba, Ethiopia.
- Braverman, A., J. L. Guasch, M. Huppi, & L. Pohlmeier. (1991). promoting rural cooperatives in developing countries: the case of sub-Saharan Africa, World Bank Discussion Papers No. 121. World Bank. Washington, D.C.

- DejeneAredo. (1993). *Semi-formal financial sectors in Ethiopia: a Study of the Iqub, Iddir, and Savings and Credit cooperatives.* AERC Research Paper 21 African Economic Research Consortiums, Nairobi October 1993.
- DeribiFegesa. (2012). An assessment of the perception of apple Growing Farmers on the Problems, Challenges and Opportunity of forming apple cooperatives of some selected cooperatives in Ambo district, West Shewa zone, Oromia region Ethiopia.
- EmanaBezabhi. (2009). *Cooperatives: a path to economic and social empowerment in Ethiopia.* Cooperative Facility for Africa-Coop AFRICA Working Paper No. 9. International Labor Office - Dar es Salaam: ILO.
- ErgetieTemecew. (2014). Challenges and prospects of agricultural cooperatives, the case of KaluWoreda.
- FCA (2013). The Success and Challenges of Cooperatives in Ethiopia: A paper presented on National Cooperative Symposium in Adama, Ethiopia.
- FCA (2014). The Success and Challenges of Cooperatives in Ethiopia: A paper presented on National Cooperative Symposium in Mizan, Ethiopia.
- Gray, T. W. &Ch, A. K. (1998). Member Participation in Agricultural Cooperatives: A Regression and Scale Analysis. Rural Business-Cooperative Service Research Report 165December 1998.
- JasiahSelvam (2004). Teaching materials on cooperative theory, value and practice. https://www.cia.gov/library/publications/the-world-facebook/geos/et.ht (central intelligence agency). Assessed on 27, March, 2017.
- Karthekeyan, M. (2008). Cooperative leadership and Skill Development. England Africa Partnership Project, Building capacity to Support Committee for the Promotion of Aid to Co-operatives Rome.
- Kothari,C.R. (2004). *Research Methodology: Methods and techniques.* New Delhi. New Age International (P) Ltd publishers.
- MerihunFikru and EndriasGeta (2017) Performance of Multi-Purpose Agricultural Cooperatives in Woliata Zone, Southern Ethiopia, International Journal of Economic and Business Management
- MoA& ATA. (2012). Agricultural cooperatives sector development strategy, 2015-2020 FDRE.
- Veerakumaran, G. (2007). Ethiopian Cooperative Movement-An Explorative Study: Department of Coop-eratives, Mekelle University.