

Assessment of Managerial Efficiency and Effectiveness of Multipurpose Primary Agricultural Cooperatives in East Wollega Zone, Ethiopia

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Abstract	Article Information
<p>The study was designed to examine the managerial efficiency and effectiveness of primary multipurpose agricultural cooperative leaders in serving their member in East Wollega Zone, Oromia region, Ethiopia. The data were collected from 245 respondents and descriptive statistics and multiple linear regressions were used for data analysis. The result of the research indicated that the cooperative leaders in the study area are managerially inefficient and ineffective for which the services delivered were inadequate, with no quality, they fail to minimize cost of operation, service are not timely provided as per member need and weak capital mobilization. Thus, the overall management performances of the cooperatives are low consequently resulted in low member satisfaction. The main factors that affect the managerial efficiency and effectiveness of the cooperative leaders negatively are commitment and competency of management committee; market information and market research, cooperative training, incentive and capital inadequacy. For improving the managerial efficiency and effectiveness of the cooperative leaders the cooperatives need to provide programed training and elect leaders with relatively educated and committed among the members; the leaders need to be hunt market information and conduct member need assessment to provide demand driven services so as satisfying members in service. And also cooperative promotion office or the cooperative policy maker required to device motivational, training, education and cooperative professionalization schemes which would be inspire the leader for their striving efforts to serve members efficiently and effectively.</p>	<p>Article History: Received : 11-10-2015 Revised : 19-12-2015 Accepted : 21-12-2015</p> <p>Keywords: Multipurpose Cooperatives Efficiency & Effectiveness Managerial Efficiency Cooperative Leaders</p> <p>*Corresponding Author: Asfaw Temesgen Bari</p> <p>E-mail: asfaw.tembari@gmail.com</p>
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INTRODUCTION

Cooperative societies are member owned and controlled organizations formed by people of similar problem. Cooperatives are business enterprise established mainly for providing service for members. This entails that unlike corporate business organization, cooperatives are service motive organization. Cooperatives must maintain effective interactive and collaboration between leaders, members, employees and marketing operators so as enhancing its business performance which need management dedication as one measure of managerial efficiency (Chambo, 2009). This is due to that, managerial efficiency and effectiveness in cooperative is indispensable for providing sufficient services for members and determining sustainability of the cooperative in the market. As it is indicated by Ariyaratne *et al.* (2000) efficiency and effectiveness of cooperative is a critical for future cooperatives endeavor.

Thus, Cooperative leaders, most importantly management committee required to be competent in identifying main members' demand and needs, the key markets and marketing agents and planning accordingly, to use the limited cooperative resources effectively for producing goods or providing services in order to accomplishing the organizational goals and objectives of

the cooperative for satisfying members' need for which the cooperatives are established (Krishnaswami and Kulandaiswamy, 2000).

Efficiency and effectiveness are mutually exclusive things. For a manager, they are both fundamental preconditions (Drucker, 2005). From this being effective manager is able to properly analyze the evolving environment and selecting the right things as the areas of strategic focus for the enterprise performance. From this standing point, cooperative leaders need to be vibrant are effective in delegation of authority and communicating internal and external stakeholders planning based on members' need and exploiting the market and policy opportunities for producing intended result that satisfying members need through efficient cooperative resource utilization and formulating strategies and policies (Bolden *et al.*, 2003).

Besides, being efficient requires a carefully carved cultural and operational framework which helps the manager to achieve a particular degree of success, given the level of resources applied to achieve financial objective of the business (Halager, 2008; Tuominen *et al.*, 2010) However, efficiency in cooperative cannot be

measured by this yardstick (index) because cooperatives are service oriented rather than financial returns for member on their investment in their cooperative (Krishnaswami and Kulandaiswamy, 2000). Instead, managerial efficiency in cooperative is measured by the extent of effective timely and adequate service rendered by the cooperative for their members, membership coverage and member users' satisfaction.

In cooperative, efficiency increased through minimizing business operation costs while maintaining quality of services (Rouse and Von Pischke, 1997) so as offer efficient services at attractive prices. These are consistent with efficient operations and long-run sustainability of cooperative society. Therefore, managerial efficiency is essential in cooperative business to produce goods or service that primarily satisfies members and then earns fair margin to survive in competitive market consequently providing sustainable services.

Some indicators are used to measure managerial efficiency and effectiveness in cooperative. According to Schermerhorn *et al.* (2010), Tuominen *et al.* (2010) Ortmann and King (2007) and Torgerson *et al.* (1998) these indicators include adequacy, quality and price of service cost of operation, democratic control by members Service delivery time, overall cooperative performance and member satisfaction on service.

Cooperative leaders would be effective in serving members by their striving efforts as a work team for achieving the goal of the cooperative sustaining the cooperative in the competitive market the cooperative required to serve the members effectively that can be measured in terms in satisfying member-owners needs; providing goods and services of member need timely, mobilizing adequate capital internally and overall business performance of the society (Schermerhorn *et al.*, 2010; Tuominen *et al.*, 2010). As outlined by Ortmann and King (2007) and Torgerson *et al.* (1998) the cooperative societies providing efficient service in terms of adequacy, quality and price, cost of operation and practicing democratic control by members.

Generally managerial efficiency and effectiveness determines the success of cooperative that can be measured in terms of cooperative business performance, timely service, internal capital mobilization and overall members' satisfaction. Hence the study was designed to examine managerial efficiency and effectiveness of

cooperative leaders of primary multipurpose agricultural cooperative in serving their member in east Wollega zone.

MATERIALS AND METHODS

Target Population

The target population for the present study is the members of primary cooperative societies in East Wollega zone. In 17 woredas of the zone there are 238 multipurpose farmers' cooperatives (East Wollega Zone Cooperative Promotion Office 2014) from which the sample societies drawn. However population for the study was 4895 who are members of sample society.

Sampling Procedures

Multistage sampling method was used to select the respondents for the research. In the first stage, among the 17 woredas three were selected using random sampling technique. In the second stage, ten primary multipurpose cooperative societies were selected using random sampling procedure from the sampled woredas proportionally. In the third stage the individual respondents were selected using systematic sampling technique from sample societies proportionally.

Sample size

To determine sample size practical consideration is important such as cost and time of data collection particularly in qualitative research. Therefore, in order to collect the qualitative data in depth small sample size is preferred but not less than 2% of the population due to that the sample size to be drawn from the population is representativeness and reliability, meaningful sample-size and adequate for the analysis (Kothari, 2004) and (Adams *et al.*, 2007). Besides Greener (2008) states that small sample size is possible for population with less variation. Hence, in this case the populations of the study are cooperative members in same occupation (farming community).

Thus, 5% of members of sample cooperative societies which accounts for 245 respondents were selected by using systematic random sampling method as follow

$$I = \frac{N}{n}$$

Where, I= sample interval; N =population of the study and n= sample size

$$I = \frac{N}{n} = \frac{4895}{20} = 245$$

Hence, every 20th person was selected as much as the required sample was drawn from sample cooperatives.

Table 1: Sample distribution

Sample Woredas	Number of Coops	Number of Sample Coop	Members of Sample Coops			Sample Respondents		
			Male	Female	Total	Male	Female	Total
Guto Gida	18	4	2114	358	2472	108	16	124
Gobu Sayo	13	3	1195	187	1382	60	9	69
Sasiga	15	3	910	131	1041	45	7	52
Total	46	10	4219	676	4895	214	31	245

Twelve (12) key informants were selected; three from the Zone, six from the districts and from farmers' cooperative union (3) for which the sample cooperatives are affiliated using purposive sampling technique in order to include those who are closely work with the sample cooperative and five focus group discussions were

administered with management committee of the sample societies.

Data Collection Methods

The study was used both primary and secondary data. The primary data were collected from individual

respondents, key informants and focus group discussion using structured scheduled questionnaires, open ended in-depth interview and checklist respectively. Likert scale data collection method also used for rating the perception of the respondents. The secondary data were collected from documents of sample cooperatives societies such as annual reports and minutes of the management and other committees of the cooperative to support primary data.

Data Analysis

The collected data were analyzed by using SPSS Version 20 and presented as frequencies, descriptive statistics; triangulation of results from different source was used for validity of the results and inferential statistics used for generalizing the findings from sample cooperative to the all similar cooperative in the study area. Correlation and regression analysis were used to investigating the association and extent of factors to affect managerial efficiency and effectiveness of cooperative leaders and to identify the most determinant factors amongst the factors. The presence of multi-collinearity was tested using variance inflating factor (VIF) provided that if VIF value is large let 10 or above indicates high collinearity or low tolerance (Saunders *et al.*, 2003; Gujarat, 2005)

RESULT AND DISCUSSION

**Managerial Efficiency and Effectiveness
Managerial Efficiency & Effectiveness of Cooperative Leaders**

The respondents have asked their views about the managerial efficiency and effectiveness of their cooperative leader and found out that 11.0% of the respondents are agreed, however 85.3% of the respondents are argued that the leaders of cooperative under study are inefficient and ineffective in serving

members need, mean of respondent is 4.04 and standard deviation 0.960 (Table 2).

Table 2: Cooperative leader are managerial efficient and effective

Categories	Frequency	%	Mean	SD
Strongly agree	6	2.4	4.04	.960
Agree	21	8.6		
Neutral	9	3.7		
Disagree	131	53.5		
Strongly Disagree	78	31.8		
Total	245	100		

This implies that majority of the respondents agreed that leaders of cooperative under study are inefficient and ineffective in serving members. Results from Key informant interview also support this finding; however, the result from focus group discussion revealed that the cooperative under study are managerially efficient and effective. Based on the result from individual respondents and key informants, cooperative leaders in the study area are managerial inefficiency and ineffectiveness.

Indicators of Managerial Efficiency and Effectiveness

Managerial efficiency and effectiveness of the cooperative leaders is justified by use of indicators. The opinion of respondents, the mean and standard deviation are shown in the table 3. From the result it is found that the service by sample cooperatives is inadequate (76.6% of respondents) as compared to members' needs, the quality of most of the services are not good (66.5% of respondents) and cost of operation is relatively high (58.7% of respondents). However cooperative in the study area are good in providing service with lower than market price (63.7% of respondent).

Table 3: Indicators of managerial efficiency and effectiveness of cooperative leaders

Categories	Responses	Frequency	Percentage	Mean	SD
Service adequacy	Adequate	57	23.3	1.77	0.423
	Inadequate	188	76.7		
	Total	245	100.0		
Service quality	Good	82	33.5	1.67	0.473
	Bad	163	66.5		
	Total	245	100.0		
Price of service	Lower than market price	156	63.7	1.51	0.739
	At market price	53	21.6		
	Higher than market price	36	14.7		
	Total	245	100.0		
Relative Cost of operation	High	144	58.7	1.41	0.493
	Low	101	41.3		
	Total	245	100.0		
Democratic control	Practiced	164	66.9	1.65	0.467
	Not practiced	81	33.1		
	Total	145	100		
Overall cooperative performance	High	87	35.5	1.64	0.480
	Low	158	64.5		
	Total	245	100.0		
Service delivery time	Timely	67	27.3	1.73	0.447
	Not timely	178	72.7		
	Total	245	100.0		
Capital mobilizing from members	Adequate	94	38.4	1.62	0.487
	Inadequate	151	61.6		
	Total	245	100.0		
Member satisfaction on service	High	81	33.1	1.67	0.471
	Low	164	66.9		
	Total	245	100.0		

Thus, all of these indicators justify that cooperative leaders in the case are managerially inefficient and ineffective for they were not achieving the goal of the cooperatives as per members' needs. The result from Key Informants also support most of these finding such as service inadequacy, high cost of operation, low overall performance of cooperative & less member satisfaction.

Factors for Managerial Efficiency and Effectiveness of the Cooperative Leaders

Descriptive Analysis

Management Factors

Management factors for managerial efficiency and effectiveness of the cooperative leaders are grouped into two as commitment and competence of cooperative leaders. Accordingly, as indicated in the table 4, 18.0% of the respondents perceived those cooperative management committees (leaders) are committed nevertheless 79.6% of the respondents are responded that the cooperative leaders in the study area are not committed to service the members efficiently and

effectively. On the other hand 62.04% of respondents are said that cooperative leaders are not competent to perform cooperative societies' business.

The data collected from the Key Informant also confirmed the results from the respondents. However, results from FGD argued it. Their view and secondary data from the sample societies shows that educational level of the management committee is low that affect the competency. Thus, these management factors are affecting managerial efficiency and effectiveness of the cooperative leaders negatively. That means the result indicates that primary multipurpose agricultural cooperatives leaders in the study are have little leadership and managerial capacity to pass efficient decision and effective resource allocation and utilization to the best of members interests. These results are in concurrent with findings by Bezabih (2012), which stated as cooperatives in Ethiopia are low in leadership and management capacity because of low interest and literacy gap from the cooperative leaders.

Table 4: Cooperative leaders are committed and competent

		Categories	Frequency	Percentage	Mean	SD
Management factors	Commitment of cooperative leader	Committed	44	18.0	3.74	1.139
		Neutral	6	2.4		
		Not committed	195	79.6		
	Total		245	100.0		
	Competent of the cooperative leader	Competent	93	37.96	1.62	0.486
		Not competent	152	62.04		
Total		245	100.00			

Market Factors

As depicted in the table 5 below, 82.4% (62.8% disagree and 19.6% strongly disagree) of the respondents disagree that cooperative leaders in the study area are

unable to collect and use market information and 73.8% of the respondents agree that the cooperative under study fail to conduct market research to analysis market situation and members need to plan members' service.

Table 5: Uses of market information and market research by cooperative leaders

		Categories	Frequency	Percentage	Mean	SD
Marketing factor	Collect and using market information	Strongly agree	12	4.9	3.80	1.052
		Agree	31	12.7		
		Neutral	0	0.0		
		Disagree	154	62.8		
		Strongly disagree	48	19.6		
	Total		80	100.0		
	Conduct market research and use it	Yes	65	26.2	1.73	0.442
		No	180	73.8		
Total		245	100.0			

The results from key informant interview are also agreed with such views of the respondents. Hence, these market factors also negatively affecting managerial efficiency and effectiveness of the cooperative leaders. This result also agreed with finding of Asfaw (2011) that indicated management committee of primary multipurpose agricultural cooperatives in East Wollega zone failed to collect and use market information for undertaking marketing activities to serve member effectively.

Cooperative Factors

As revealed in the table 6 below, 82.4% of the respondents agree that the multipurpose primary agricultural cooperative societies in the study area were not providing training for the leaders to capacitate the

leader and 75.1% of them said the cooperative failed to provide incentive for leaders and 76.3% of the respondents agreed that the cooperative operate business with low capital.

Results from the key informant interview and focus group discussion are also supporting these views of respondents. As well as the secondary data from the sample cooperative shows that there is no continuous training, no any incentive for the leaders and the cooperative operated business with weak financial status due to low profit from the business and low share capital of the cooperative societies. Therefore, lack of training and incentive for leaders and operating business with inadequate capital are cooperative organizational factors

affecting cooperative managerial efficiency and effectiveness negatively.

which pinned out that agricultural cooperative in Africa are not yet cultivated committed and qualified leadership and management due to lack of objective based training and incentive which attracts them.

This is in harmony with the finding of study by Chambo, (2009) in Africa and Prakash (2000) in Japan

Table 6: Provision of training and incentive and capital adequacy of cooperatives

	Categories	Frequency	Percentage	Mean	SD
Provision of training for leaders	Yes	43	17.6	1.82	0.381
	No	202	82.4		
	Total	245	100.0		
Provision of incentive for leaders	Yes	61	24.9	1.75	0.433
	No	184	75.1		
	Total	245	100.0		
Capital of the cooperative	Adequate	58	23.7	1.76	0.426
	Not adequate	187	76.3		
	Total	245	100.0		

Correlation and Regression Analysis

As revealed in the table 7 below, there is relationship between managerial efficiency and effectiveness of multipurpose primary agricultural cooperative leaders and

management factors (commitment and competence of leaders); market factors (market information and market research) and cooperative factors (training, incentive and capital).

Table 7: Regression model summary for managerial efficiency and effectiveness of cooperative leaders

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Management factors	0.764	0.583	0.567	0.456
Market factors	0.731	0.534	0.520	0.553
Cooperative factors	0.719	0.517	0.503	0.619

As it can be seen from the table the correlation coefficient (R-value) indicate the association of the factors with the managerial efficiency and effectiveness of cooperative leaders and adjusted R square values reveal that the managerial efficiency and effectiveness of cooperative leaders in the study area is explained 56.7% (adjusted R square =0.567) by management factors, 52.0% (adjusted R square = 0.520) by market factors and 50.3% (adjusted R square =0.503) by cooperative factors among which management factors are the most determinant factors for managerial efficiency and

effectiveness of multipurpose primary agricultural cooperative in the study area as compared to the rest two categories.

As depicted in the table 8 below, partial regression coefficient (B) expresses the association between managerial efficiency and effectiveness of cooperative leaders as a dependent variable and each of explained explanatory variables as factors for managerial efficiency and effectiveness of multipurpose primary agricultural cooperative. VIF values indicate less collinearity effects.

Table 8: Regression Coefficients for factors of managerial efficiency and effectiveness cooperative leaders

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
(Constant)	4.454	0.617		0.22	0.000			
1	Commitment to serve members	0.081	0.054	0.037	1.49	0.013	0.348	1.652
	Competence of leader	0.073	0.127	0.096	0.574	0.050		
(Constant)	4.702	0.331		1.22	0.000			
2	Use of market information	0.222	0.139	0.102	1.59	0.027	0.571	1.429
	Conducting & use of market research	0.064	0.059	0.072	1.09	0.011		
(Constant)	4.155	0.452		0.186	0.000			
3	Provision of training for leaders	0.094	0.164	0.073	0.574	0.005	0.434	2.305
	Provision of incentive for leader	0.162	0.142	0.037	-1.142	0.025		
	Adequacy of cooperative capital	0.057	0.146	0.025	-0.388	0.006		

As it can be seen from the same table among independent variables from categories competence of management committee members with beta value of 0.096 from management factors (regression model 1), collection and use of market information with Beta value of 0.102 from market factors (regression model 2) and

management committee training with Beta value of 0.073 from cooperative factors (regression model 3) are the most determinant factors that affecting managerial efficiency and effectiveness of multipurpose primary agricultural cooperative in the study area.

CONCLUSIONS

The study is focusing on assessment of managerial efficiency and effectiveness of primary multipurpose agricultural cooperative and identifying critical factors that affecting cooperative managerial efficiency and effectiveness. Hence from this investigation the following conclusions have been made. The result of the study shows that the elected cooperative leaders in the study area are managerially inefficient and ineffective. The indicators of the managerial inefficiency and ineffectiveness according to the finding are the cooperative management committee are low in educational level even most of them are with primary education. Business planning and services were not adequate and also not diversified. At the same time not based on members demand and as well as services were not supplied timely. According to the finding of the study, none commitment and low competence of cooperative leaders from management factors; fail to use market information and conduct market research from marketing factors and lack of consistent leaders' training and lack of incentive for management committee are found to be factors that negatively affecting the elected cooperative leaders to serve the member effectively and efficiently.

Based on the study, the following points are suggested for consideration in improving the efficiency and effectiveness of the multipurpose agricultural cooperatives in the study zone. For serving members efficiently and effectively, cooperative leaders required to plan and diversify services to meet members' needs; deliver in time of their need especially those services which are time bounded such as agricultural inputs. Thus, it is recommended that professionalize the business through employing trained paid staffs and delegate the employed professional staff to undertake routine business activities and technically advice management committee of the cooperatives.

According to the result the leader of cooperative under study are not committed and not competent to serve the members. So that it is advised that the cooperatives need to elect relatively educated leaders among the members and providing training and education for elected cooperative leaders to build competence and commitment of leaders and enhance managerial efficiency and effectiveness of the cooperative leaders to serve members needs. It is found that cooperative leaders in the study area are managerial inefficient and ineffective of cooperatives due to lack of using market information and market research in managing the business. Therefore, cooperative in the study area need to gather up-to-date market information and utilize it and conduct market survey for identifying what members of the cooperatives need so as implement it for informed decision making regarding members' needs.

REFERENCES

Adams John., Khan T.A., Raeside Robert and White David. (2007). *Research Methods for Graduate Business and Social Science Students*. SAGE publisher Los Angeles.

Ariyaratne, B. Chatura., Featherstone, M. Allen., Langemeier R. Michael., and Barton G. David. (2000). Measuring X-Efficiency and Scale Efficiency for a Sample of Agricultural Cooperatives *Agricultural and Resource Economics Review* 29(2):198-207.

Asfaw, Temesgen (2011). *Grain Marketing Performance, Problems and Prospects of Cooperative: A Study on Multipurpose Agricultural Cooperatives in East Wollega Zone, Oromia National Regional State. Ethiopia*. Lambert Academic Publisher, Germany.

Bezabih Eman (2012). *Cooperative Movement in Ethiopia: Workshop on perspectives for Cooperatives in Eastern Africa* October 2-3, Uganda.

Bolden, R., Gosling, J., Marturano, A. and Dennison, P. (2003). *A Review of Leadership Theory and Competency Frameworks*. Centre for leadership studies. http://business-school.exeter.ac.uk/documents/discussion_papers/clsmgmt_standards.pdf accessed on Dec, 2014.

Chambo Adam Suleiman (2009). *Agricultural Co-operatives: Role in Food Security and Rural Development*. Cooperative and Business Studies, Moshi, Tanzania. accessed on June, 2015.

East Wollega Zone Cooperative Promotion Office, (2015). *Annual Report*. June 2015 (Unpublished) Nekemte, Ethiopia.

Drucker Peter (2005). *Efficient Versus Effective*. <http://www.thinkingmanagers.com/peter-druker-efficient-nt-effective> accessed on July, 2014.

Greener Sue (2008). *Business Research Methods*. Sue Greener & Ventus publisher ApS. ISBN 978-87-7681-421-2.

Gujarat, N. Damoddar (2005). *Basic Econometrics* 4th edition. The McGraw-Hill Companies.

Halageri Sadananda (2008). *Efficient Versus Effective*. www.thinkingmanagers.com accessed on July, 2013

Kothari, R.C. (2004). *Research Methodology: Methods and Techniques*. New Age International (P) Ltd., Publishers. ISBN (13): 978-81-224-2488-1.

Krishnaswami, V. and Kulandaiswamy, O.R. (2000). *Cooperation Concept and Theory*. Tamilnadu: Arudra Academic Publisher.

Ortmann, G.F. and King, R.P. (2007). *Agricultural cooperatives I: History, Theory and Problems*. *Agrekon: Agricultural Economics Research, Policy and Practice in Southern Africa* 46(1): 18-46.

Prakash Daman, (2000). *Development of Agricultural Cooperatives. Relevance of Japanese Experiences to Developing Countries*. *Development of Agricultural Cooperatives. Relevance of Japanese Experiences to Developing Countries*. www.uwcc.wisc.edu/info/intl/daman_japan.pdf Accessed on July 06, 2009.

Rouse G. John and Von Pischke D.J. (1997). *Mobilizing Capital in Agricultural Service Cooperatives*. FAO Publication.

Schermerhorn, John R. Jr. Hunt, G James, Osborn N Richard and Uhl-Bien Mary (2010). *Organizational Behavior* 11th ed. John Wiley & Sons, Inc.

Saunders Mark., Lewis Philip., Thornhill Adrian. (2003). *Research methods for business students fifth edition* Pearson Publisher

Torgerson, E. Randall., Reynolds, J. Bruce, and Gray, W. Thomas. (1998). *Evolution of Cooperative Thought, Theory, and Purpose*. *Journal of Cooperatives* 13: 1-21.

Tuominen Pasi., Jussila Iiro and Noora Rantanen (2010). *Managerial Competence in Consumer Cooperatives: Inducing theory from empirical observations*. *International Journal of Co-operative Management* 5(1): 9-22.