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Accounting Information and Co-Operative Success

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Abstract:
The study examined the relationship between the use of accounting information and the cooperative success. Little has been known on what accounting information is used by the co-operatives in making important decisions pertaining to their operations. The study, therefore, examined the use of cost information, income statement information, balance sheet information and budget information among co-operatives. The study used survey research design whereby data were collected using questionnaires from 50 co-operatives in Kilimanjaro region. Data were analyzed using Pearson's correlation, regression analysis as well as ANOVA. The findings of the study indicate that, there is a strong positive relationship between accounting information and the success of the co-operatives. For co-operatives to achieve success, among other things, they should be able to use effectively accounting information, which acts as a tool for informed decisions-making. Also, using accounting information properly for the benefit of the organization promotes transparency and encourages members to safeguard their co-operatives affairs for effectiveness, increased productivity and enhanced accountability.

1. Introduction

1.1. Background of the Study

In Tanzania, co-operatives have been an important agency of change, especially in its efforts to alleviate poverty, that's why Tanzania decided to register co-operatives (Tairo, 2012). The poor people are unable to get loans from commercial banks because of lack of collateral, high interests. Moreover, most of the banks are located in the urban areas and hence fail to reach the communities at the local level/rural areas. Also, marketing of their products is difficult without having a strong bargaining power. In the past, co-operatives played a vital role in rural and urban economic and social development of the country. However, more recently the image of co-operatives has generally become a negative one. For many people in Tanzania, co-operatives are seen as stuck in the past, unable to cope with modern economic realities. Although they have become models of member self-empowerment, their image is tarnished by poor administration and leadership, poor business practice, and by corruption (URT, 2005).

Co-operatives have their ways of operating differently from other business organizations because of their nature and structure. Also, every co-operative has its own kind of members in terms of education and income level and occupation, own culture, a certain kind of age range and capital level. There are co-operatives which are for teachers, peasant farmers, workers of certain institutions, fisheries, and others depending on the common bond of a certain people. All these have a direct bearing on the accounting information systems (Mahdi, Rostami, & Mogadam, (2010); Taragola, 2001). If the system, which is supposed to generate accounting information as output, can be affected differently, then, there is a need to focus on the co-operatives as the literatures reviewed are primarily from other organizations. For example, Nnenna (2012) and Onaolapo and Odetayo (2012) found that, the proper use of accounting information helps management to make efficient and effective decision.These studies were too general to be applicable to all kinds of organizations. Moreover, they do not tell what type of information is mostly used. Also, most the studies are not from Tanzania whose operational environment might be different from those obtaining in developed countries and even some of the developing ones.

Co-operatives have faced many challenges. For example, they generally lack professional management and many of them are engaged in activities that do not benefit their members (URT, 2005; Okwee, 2011). Some primary co-operative societies operate as agents of private traders and rent out their facilities to the private traders. In addition, co-operative unions operate facilities that may not be financially viable such as under-utilized cotton ginneries, oil mills, transport facilities and hotels. Increasing events of misappropriation of co-operative societies' resources by dishonest co-operative managers and management committee members is another bottleneck that undermines co-operative development. On the other hand, lack of training for members eliminates almost completely their ability to direct or hold responsible their co-operative leadership and managers (URT, 2005). In the past, many co-operative societies were badly managed because, among other things, proper records and performance reports were not kept and

audited accounts were not presented regularly at the AGMs. Also, leaders of some cooperative societies made decisions without involving members at AGMs. Although co-operatives have seen both successes and failures during this period, no other institution has brought so many people together for a common cause (TFC, 2006).

In the management of co-operative societies, there must be an Annual General Meeting (AGM) during which all affairs of the society may be discussed. These affairs to be discussed can include the appointment of an auditor, consideration and adoption of audited accounts, distribution of available funds, meeting expenses due to Board members and unsalaried officers, budgets and business plans and the purchase or sale of society property (TFC, 2006 ; Okwee, 2011). In this aspect, the accounting information is very important to ensure that informed and credible decisions are made.

Co-operatives have been reported to misuse of members' funds. The auditing and inspections which was done on the co-operatives for the 2012/2013 fiscal year revealed that about 329 primary co-operative societies had seriously squandered members' funds (Chiza, 2013). If we refer to the Ministry of Agriculture, Food and Co-operatives budget speech we can observe that there are co-operatives which have very educated members and staff (for example Mpwapwa Teachers and Wazalendo SACCOS) but which still faced the same problems(Chiza,2013). The question to ask is: what type of accounting information is used which blurs the understanding of members and personnel of co-operatives? Or, do they really prepare the accounts in a timely manner and report the right information to the stakeholders?

Organizations need accounting information for managers and the board of directors to make informed decisions (Heidhues & Patel, 2013). Just keeping accounts is not enough but using them is what important is (Taragola, 2001). Quality of accounting information is reflected in the decisions and practices adopted and implemented at any level within the company and, therefore, more attention should be paid to accounting information (Scorte, Cozma, & Rus, 2009). Scorte, Cozma and Rus (2009) used the metaphor of a barometer to refer to accounting, which affects both internal as well as external changes. Similarly, the decisions and practices which are reported in the co-operatives are reflections of their accounts. As such there is a need to know what type of accounting information is used in these co-operatives.

1.2. Statement of the Problem

A decision is concerned with the selection of an action often out of a number of alternatives. To choose the right one, decision-makers need some guidance, which is partially provided by information gathered by accounting. Tools used in the accounting area are consequently considered as helpful support (Lengauer, Mayr, & Parasote, 2006). One tool that has proved to be very effective in one organization, might fail in another. Different information is required for these diverse purposes; therefore, organizations have to focus on different accounting tools to support their decision-making processes (Lengauer, Mayr & Parasote, 2006; Onaolapo and Odetayo, 2012). In the literature review, it was established that there is little study concerning co-operatives on accounting information. Many studies have largely concentrated on other sectors. This situation has created a literature gap. Also, according to the structure, laws and regulations of co-operatives applicable in Tanzania, we expect the accounting information to be helpful in safeguarding the co-operatives' assets. The reality on the ground, however, is different (Chiza, 2013). Hence, there exists another research gap. There is need to establish how these co-operatives have been applying accounting information. Although accounting information is used in various sectors, there can be differences in the application of such information as well as how such information is ranked in terms of importance. This can be evidenced by Tanwongsval and Pinvanichkul's (2012) study of the accounting information requirement and reporting in SMES in Thailand, which revealed differences in application between the company limited and the partnership limited. Therefore, there is a risk of generalizing the findings from other sectors without covering the knowledge gap that exists in the application of accounting information in co-operatives in Tanzania. Also, there is a need to know the type of information which is useful for the managers in making short and long term decisions. In this regard, this study sought to analyze the application of accounting information on co-operatives for the success of such entities.

1.3. Objectives

The main objective was to examine the use of accounting information for the success of co-operatives. Specifically the study examined the type of income statement information used for the success of co-operatives, examined the type of balance sheet information used for the success of co-operatives and examined the type of budget information used for the success of co-operatives.

1.4. Research Questions

The study was guided by the following research questions which are based on the specific objectives:
- i. What type of income statement information is used for the success of co-operatives?
- ii. What type of balance sheet information is used for the success of co-operatives?
- iii. What type of budget information is used for the success of co-operatives?

1.5. Significance of the Study

The study has generated information that is essential in creating awareness in addition to covering the knowledge gap on the type of accounting information that is applied in the decision-making in co-operatives in Tanzania in relation to co-operative success. The study findings can also be significant to different stakeholders such as co-operative members, managers, co-operative officers, academic institutions, COASCO, NBAA, Politicians and NGOs. On the whole, the study contributes to the body of knowledge on the

application of accounting information by co-operative in the decision-making process in Tanzania using co-operative based in Kilimanjaro region.

2. Literature review

2.1. Empirical Literature

2.1.1. Income Statement Information and Organizational Success

Organizations are advised to check the profit margins regularly (Lengauer, Mayr & Parasote, 2006). In their study, Lengauer, Mayr and Parasote (2006) named the impact of accounting information on the management's decision-making process also crucial and found that managing director follows the profit data monthly for decision making. The director supported the theory which highlights the use of profit margin to eliminate non-profitable products. The financial manager stated that working capital, gross and operating profit were the three most important tools within the company. These variables are also important in co-operatives because without proper management of working capital, the co-operatives can suffer the problems of liquidity and losses.

Working capital, gross and operating profit are closely related to the profit tool, which is a conduct for the realization of the objective of most organizations (Lenganer, Mayr, & Parasote, 2006). In this regard, a resultant income statement represents an organization's performance for a particular period. Basic elements of this statement are revenues, expenses and their difference seen in terms of profit or loss (Zager & Zager, 2006). By applying the information which is presented in the income statements, the stakeholders can make good decisions on the improvement of their organizational performance. This application of the information can be more improved when the financial ratios are used (Müller, Oliveira & Nakamura, 2001)

H2: There is a positive relationship between the application of income statement and the co-operative success.

2.1.2. Balance Sheet Information and Organizational Success

The balance sheet is the fundamental financial statement that represents an organization's financial position and is the basis for estimating the security of business. The basic elements of the balance sheet are assets, liabilities and owners' equity. The structure of assets, liabilities and equity is especially important, together with the correlation and interdependence of assets; liabilities and capital (Zager & Zager, 2006).The balance sheet provides data which can be used to compute the ratios that provide information about the health of the business. It also provides information on the performance of the business and can be used as an input to calculate the financial ratios (Müller, Oliveira & Nakamura, 2001). Müller, Oliveira, and Nakamura (2001) established that the balance sheet information was applied by management of small firms in decision-making, alhough they did not show the type of balance sheet information that was used. The organization can know the assets it holds and their contribution to the generation of income through the use of the balance sheet.

H3: There is a positive relationship between the application of balance sheet information in decision-making and co-operative success

2.1.3. Budgeting and Organizational Success

Other researchers have underscored the importance of accounting information for the companies going through a crisis. Such information is of interest to the users when it permits and promotes informed decision-making, clarifies the uncertainty over the future of the entity and facilitates the achievement of forecasted earnings (Scorte, Cozma, & Rus, 2009). As with other organizations co-operatives can also be affected by the financial crisis because they are not isolated from the business world.

Su (2008) analyzed the accounting information system of third party logistic enterprises and concluded that accounting information did not only enlarge the scope but also enhanced the quality of service provided. The accounting information system was described as decision oriented, organic and open system which have an effective internal control mechanism. Also Su, (2008) asserted that accountants set standards and confirm budgets. The standards and budgeting information can be used for control purposes.

Mariarty, Nyarko and Braimah (2010) in their study on the use of cost information in planning and decision-making in rural water and sanitation service delivery in Ghana, found that planning and budgeting for capital maintenance was often implemented on an ad hoc basis. Also, the study claimed that the budget was the main tool for decision making in service provision.

On the whole the accounting control function plays a very important role in identifying whether the company is moving in the right direction or not. In fact, the control process would hardly be possible without the data delivered from the financial department, which are essential in comparing planned with actual outcomes. Hence, the budget helps in gathering data about possible alternatives, presents financial information about the possible outcomes and gives financial feedback during the implementation period and afterwards (Lengauer, Mayr & Parasote, 2006; Tanwongsval & Pinvanichkul, 2012).

H4: There is a positive relationship between the application of budgeting information and co-operative success.

3. Research Methodology

The research used the deductive approach and the questions were explanatory and deductive. The study reviewed the empirical literature in order to make sure important factors for success were captured. The strategy which was applied was survey. The study was also cross-sectional due to the time constraints and the necessity to describe the incidence of a phenomenon and explain relationship of factors (Saunders, 2009). As the unit of analysis was the primary co-operative societies, one questionnaire was distributed to one cooperative. In all, a sample of 50 co-operatives was selected from Kilimanjaro region. Since these co-operatives

are scattered it was difficult to use a very large sample because of time limit. Quantitative and qualitative data were collected using a questionnaire. Structured questionnaires were distributed to each co-operative. The respondents were either managers or accountants. Also secondary data was collected to increase the reliability of the information generated on the success of the co-operatives. Descriptive statistics allowed for the use of frequencies and percentages. Regression model was used to test the hypotheses and ANOVA helped to test the significance of the model.

4. Presentation and Discussion of the Findings

4.1. Correlation of Accounting Information and Co-operative Success
To come up with findings on the objectives involving relationships, a correlation analysis was done so as to determine the strengths of the relationship between the variables under study**.** Table 1 shows that independent variables correlate positively in the dependent variable by having above the required correlation of at least 0.3. In correlation Table 2 the positive correlation among independent variables and the dependent variable is evidenced. All of them are above the recommended, which is at least 0.3 and above. Table 3 indicates that the independent variables correlate to the dependent variable positively (Pearson correlation>.3). They significantly correlate to the cooperative success ($p<.01$, $p<.05$)

		Expense	Gross Profit/ %	Net Profit %	Appropriation	Coop. Success
Expenses	Pearson Correlation	1	.199	.238	.383**	.448**
	Sig. (2-tailed)		.191	.115	.009	.002
Net Profit %	Pearson Correlation			1	.280	.384**
	Sig. (2-tailed)				.062	.009
Appropriation A/C	Pearson Correlation				1	.473**
	Sig. (2-tailed)					.001
Coop Success	Pearson Correlation					1

Table 1: Correlation between Income Statement and the Co-operative Success
Source: Field data, (2014)

		Coop. Success	Inventory	Debt/Equity Ratio	Fixed Asset	Capital
Coop. success	Pearson Correlation	1	.322*	.296*	.503**	.448**
	Sig. (2-tailed)		.031	.048	.000	.002
inventory	Pearson Correlation		1	.190	.405**	.399**
	Sig. (2-tailed)			.212	.006	.007
Debt/equity ratio	Pearson Correlation			1	.280	.345*
	Sig. (2-tailed)				.062	.020
fixed asset	Pearson Correlation				1	.497**
	Sig. (2-tailed)					.001
	Sig. (2-tailed)					.000
capital	Pearson Correlation					1
	Sig. (2-tailed)					
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 2: Correlation of balance sheet information and cooperative success
Source: Field data, (2014)

		Coop. success	Set Standards	ACvsB	Discrepancies	Participative Approaches	Minimum Cash	AGM
Coop. success	P.Correlation	1	.280	.268	.555**	.490**	.485**	.318*
	Sig. (2-tailed)		.062	.076	.000	.001	.001	.033
Set standards	P.Correlation		1	.526**	.433**	.383**	.546**	.064
	Sig. (2-tailed)			.000	.003	.010	.000	.677
ACvsB	P.Correlation			1	.629**	.512**	.361*	.081
	Sig. (2-tailed)				.000	.000	.015	.595
Discrepancies	P.Correlation				1	.635**	.491**	.138
	Sig. (2-tailed)					.000	.001	.366
Participative approaches	PCorrelation					1	.397**	.177
	Sig. (2-tailed)						.007	.245
Minimum cash	P.Correlation						1	.209
	Sig. (2-tailed)							.169
AGM	P.Correlation							1
	Sig. (2-tailed)							
**. Correlation is significant at the 0.01 level (2-tailed).								
*. Correlation is significant at the 0.05 level (2-tailed).								

Table 3: Correlation between Budget Information and the Co-operative Success
Source: Field data, (2014)

4.2. Findings on the Relationship between Accounting Information and Co-operative Success

4.2.1. Regression Analysis

- Hypothesis 2

H2: There is a positive relationship between the applications of income statement information and co-operative success.

The regression model (Table 4) explains that there is a positive relationship between the use of income statement information and co-operative success by having (r=0.597). It is about 0.6, which is a fare positive relationship. However, the model also explains 35.7 percent of the variance in co-operative success (Rsquare=35.7%). This means factors other than those in the model explain the other 64.3 percent. ANOVA (Table 5) was conducted to explore the impact of income statement information on co-operative success. There was a statistically significant difference at p<.05, [F (3, 41) =7.579, p=.000]. Therefore, the model is accepted and concurred with the relationship.

The use of appropriation account contribute significantly (p=.036) to the model by having the highest standardized beta of 0.301(Table 4.25). Expenses information ranked the second having the beta of 0.277 but do not make significant contribution (p=.05) Net profit percentage information contributes a standardized beta of 0.234 but not a significant contribution (0.084). The independent variables in the model have correlated with each other at below 0.7 (Table4.16) and the VIF value is below 10 whereas the tolerance value is above 0.1 (Table 6), indicating that the researcher has not violated the multicollinearity assumptions.

It can be stated that it is possible to predict co-operative success from appropriation of profit, net profit over revenue and expenses information. These variables statistically, significantly predicted co-operative success, F (3, 41) = 7.579, p =0.00, R^2 = .36. However, two variables (expense and appropriation information) add statistically significantly to the prediction (p < .05).Also net profit ratio is significant at p<.1) Hence, there is statistically evidence that there is positive relationship between the income statement information and co-operative success.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.597[a]	.357	.310	.381
a. Predictors: (Constant), Appropriation account , net profit percent, expenses information				

Table 4: Model Summary
Source: Field data, (2014)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.298	3	1.099	7.579	.000[a]
	Residual	5.947	41	.145		
	Total	9.244	44			
a. Predictors: (Constant) Appropriation of profit , net profit over Revenue, expenses information						
b. Dependent Variable: Co-operative success						

Table 5: ANOVA
Source: Field data, (2014)

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.044	.112		-.391	.69	-.270	.183					
	Expense	.263	.130	.277	2.02	.05	.000	.525	.448	.301	.253	.835	1.198
	Netproft%	.240	.135	.234	1.77	.08	-.033	.513	.384	.267	.222	.901	1.109
	appropriation	.357	.164	.301	2.17	.03	.025	.689	.473	.321	.272	.815	1.227

Table 6: Coefficients
Source: Field data, (2014)

H3: There is a positive relationship between the application of balance sheet information in decision-making and co-operative success.

The regression model (Table 7) explains that there is a positive relationship between the use of balance sheet information and co-operative success since the R value is positive (R=.568). The relationship is not very strong but satisfactory. The model explains 32.2 percent of the variance in cooperative success. That means factors other than those in the model explain the remaining 67.8 percent. ANOVA (Table 8) was conducted to explore the impact of the balance sheet information on co-operative success. The findings show was a statistically significant difference at $p<.05$, [F (4, 40) =4.751 p=.003].

Non-current asset information contributed significantly (p=.040) to the model by having a standardized beta of 0.16. Other pieces of information contribute to the model but not significantly so since they have a less than 0.05 level of significance (Table 9). This can be attributed to because of overlapping of the variables. However, the primarily concern is its contribution to the success of the cooperative.

Conclusively, the model is able predict co-operative success from capital information, Debt/equity ratio information, inventory information and fixed asset information. These variables statistically and significantly predict co-operative success, F (4, 40) = 4.751, p =0.03, R^2 = .32. However, one variable (fixed asset information) statistically and significantly adds to the prediction (p < .05). Hence, statistically there is evidence of having positive relationship between the balance sheet information and co-operative success.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.568[a]	.322	.254	.396
a. Predictors: (Constant), capital information, Debt/equity ratio information, inventory information, non-current information				
b. Dependent Variable: Co-operative success				

Table 7: Model Summary
Source: Field data, (2014)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.977	4	.744	4.751	.003[a]
	Residual	6.267	40	.157		
	Total	9.244	44			
a. Predictors: (Constant), capital information, Debt/equity ratio information, inventory information, fixed asset information						
b. Dependent Variable: Cooperative success						

Table 8: ANOVA
Source: Field data, (2014)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.040	.157		-.254	.801	-.358	.278					
	inventory	.080	.144	.082	.556	.581	-.211	.371	.322	.088	.072	.783	1.276
	Debt/equity	.136	.166	.115	.820	.417	-.199	.472	.296	.129	.107	.864	1.157
	fixed asset	.341	.160	.332	2.124	.040**	.017	.665	.503	.318	.277	.692	1.446
	capital	.200	.151	.211	1.324	.193	-.105	.505	.448	.205	.172	.668	1.498
a. Dependent Variable: Cooperative success													

Table 9: Coefficients
*** Significant at 0.05   Source: Field data, (2014)*

H4: There is a positive relationship between the application of budgeting information and the co-operative success.

The regression model (Table 10) shows 53.8 percent of the variance in co-operative success. That means factors other than those in the model 46.2 percent. ANOVA (Table 11) was conducted to explore the impact of budget information on co-operative success. There was a statistically significant difference at p<.05, [F (7, 37) =6.145, p=.000].

The use of the budget used in the AGM contributes significantly (p=.004) to the model having as it does a standardised beta of 0.508 (Table 12). It is followed by information used to correct discrepancies, which has a beta of 0.458, hence contributing significantly to the model (p=.011). Others do not contribute significantly to the model since they have less than .05 level of significance.

The model predicts co-operative success from set standards, budget reports to the AGM, participatory approaches in preparing budgets, minimum cash balance, comparison of actual and budgeted outputs, taking corrective measures when discrepancies are discovered and presenting the budget to the board members. These variables statistically and significantly predict co-operative success, F (7, 37) = 6.145, p =0.000, R^2 = .54. Three variables (correction of discrepancy, report to the AGM and the participatory approach) statistically and significantly add to the prediction (p < .05; p < .1). The study can therefore conclude that there is statistically evidence that there is a positive relationship between the budget information and co-operative success.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.733[a]	.538	.450	.340
a. Predictors: (Constant), set standards, report the budget to the AGM, participatory approaches in preparing your budgets, minimum cash balance , compare the actual and budgeted outputs, take corrective measures when discrepancies are discovered, present the budget to the board members				
b. Dependent Variable: Cooperative success				

Table 10: Model Summary
Source: Field data, (2014)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.970	7	.710	6.145	.000[a]
	Residual	4.275	37	.116		
	Total	9.244	44			
a. Predictors: (Constant), set standards, report the budget to the AGM, participatory approaches, minimum cash balance , compare the actual and budgeted outputs, take corrective measures when discrepancies are discovered, present the budget to the board members						
b. Dependent Variable: cooperative success						

Table 11: ANOVA

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.120	.068		1.76	.086	-.018	.258					
	Correct discre	.660	.247	.458	2.67	.01	.161	1.160	.555	.403	.29	.427	2.34
	participatory	.424	.241	.266	1.76	.08	-.064	.911	.490	.278	.19	.548	1.82
	Minimumcash	.143	.164	.131	.870	.39	-.190	.476	.485	.142	.09	.549	1.82
	AGM	.809	.263	.508	3.07	.00	.276	1.341	.318	.451	.34	.458	2.18
	setstandards	.099	.144	.106	.686	.49	-.192	.389	.280	.112	.07	.519	1.92
a. Dependent Variable: Cooperative success													

Table 12: Coefficients
Source: Field data, (2014)

H5: There is a strong positive relationship between the use of accounting information and co-operative success.

To determine how the accounting information in totality has a relationship with the co-operative success, the independent variables from the combined four objectives were analyzed using regression model as shown in Table 13 below. The model gives the strong positive relationship (R=0.838) between the use of accounting information and the cooperative success. However, it explains 70.3 percent of the variation in co-operative success which means the cooperative success can also be influenced by about 30 percent of variables which are not in the model. ANOVA (Table 14) shows a statistically significant difference at p<.05, [F (13, 31) =5.643, p=.000, R^2 = .70].

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.838[a]	.703	.578	.298
a. Predictors: (Constant), Accounting information(CI, II,BI and BuI)				
b. Dependent Variable: co-operative success				

Table 13: Total model Summary
Source: Field data, (2014)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.498	13	.500	5.643	.000[a]
	Residual	2.746	31	.089		
	Total	9.244	44			
a. Predictors: (Constant), Accounting information(CI, II, BI and BuI)						
b. Dependent Variable: co-operative success						

Table 14: Total Accounting Information ANOVA
Source: Field data, (2014)

4.3. Discussion of the Findings

4.3.1. Use of Income Statement Information for Co-operative Success

The regression analysis shows that there is a positive relationship between the use of income statements and cooperative success. The finding is supported by other researchers such as Müller, Oliveira and Nakamura (2001) and by Tanwongsval and Pinvanichkul (2012). It implies that most of the co-operatives depend much on the information regarding their profitability in order to succeed. This can be the case because if the information of the income statement is mishandled or poorly presented there would be no dividends and the co-operative might already be in the dying stage without the members being aware. It is from this income statement information that co-operative members can see and decide whether to change the interest rate or not. The interest is set depending on the profitability of the co-operative. The higher the profit, the more suitable the loan interest and the vice-versa are true. It means if they charge interest which will lead to loss the co-operatives can end up with persistent losses, and hence experience failure and not success. As long as the model explains only about 36 percent of the co-operative success, the implication is that there about 65 percent which can be explained by other factors other than those used in the model. Therefore, there must be other issues to consider rather than rely only on income statement information, such as non-financial information which might be very important in the success of the co-operatives.

4.3.2. Use of Balance Sheet Information for Co-operative Success

The regression model shows that there is a positive relationship between the use of the balance sheet information and co-operative success. The relationship is positive which implies that the use of the balance sheet information can contribute to the cooperative's success. This is the case because, without the balance sheet information it is hard to know the financial position of the co-operatives. However, as is the case with other hypotheses, the model only explains 32 percent, hence leaving the other 68 percent to be explained by factors other than those in the model. Therefore, it is not only this information which is important to the success of co-operative but also other financial information sources as well.

4.3.3. Budgeting Information and Co-operative Success

The regression model presented in Table10 shows that there is strong relationship between the budget information and co-operative success. This outcome indicates that the more the budget is used properly in the co-operatives the higher the success of that cooperative. This might be true because the co-operative managers strive to reach the targeted budget because their performance can be measured easily by that budget by comparing the actual and budgeted items. However, the model only explains 54 percent of the issues and the rest, 46 percent, is explained by other factors.

Generally, according to Hypothesis 4, the use of accounting information in totality has a strong positive relationship with the co-operative success. But it has left about 30 percent of the variables which can lead to the success of the co-operatives unknown. This means, there are other factors at play that are important enough to be also considered such as the issue of responsible managers and moral issues as well as external factors rather than rely entirely on accounting information. This is because even if the accounting information is good, if there is no willingness to use it for benefit of the co-operative members it can be difficult to realise the contribution of that information to the co-operatives' success.

5. Conclusion and recommendation

5.1. Conclusion

Many researchers have dealt with other sectors, leaving co-operatives untouched on the usage of accounting information in ensuring success. This study has come up with findings which are specifically for co-operatives. From the findings, it can be concluded that accounting information is used by co-operatives although some information appears not to be used at all. The budget information was mostly used in the co-operatives as their guideline in their daily activities.

Most of the managers were just concerned with easily simple information such as revenue and profits. Also, the budget information used was simple with only the revenue and expenditure, without detailed information. The co-operatives were not able to use technical information such as ratios. However, for some of the co-operatives albeit very few, they show how helpful the accounting information is in their success.

On the whole, the study established a positive relationship between the use of accounting information and co-operative success. Therefore, making informed accounting information is very important as stakeholders need to use it for decisions pertaining to the operation of the co-operatives. Effective information use also requires having a good system that takes on board the interests of all stakeholders of the co-operatives.

5.2. Recommendations

Training and development should be given to the co-operative managers and accountants on accounting issues. This can help them to prepare their accounts up to the final accounts stage and be able to interpret the reported information. Short training can be recommended by the researcher for the co-operatives which are unable to employ highly qualified accountants and also unable to send their employees for further education. Also, the current situation, where COASCO helps some of the co-operatives to prepare their accounts and then audit them itself leads to some inherent errors partly because of conflict of interest. The researcher recommends that the co-operatives prepare their final accounts themselves and present them to COASCO for auditing. They should also consider the use of an external expert rather than COASCO. The co-operative staff should utilise effectively the education and development fund to make sure they are well-trained in accounting issues. This will help them to be able to prepare and interpret some important information. Also, key accounting information should be explained to the members in a simple language so that the information reported in the statements can be discernible to them to draw good decisions. As government representatives, they should make sure that they educate members of co-operatives on the importance of some of accounting information in their operations. This education can help the members identifying key accounting information necessary to establish the trend of the co-operatives. Also, they should sensitize the co-operatives' leaders and members on the importance of education on accounting issues for safeguarding the co-operatives' affairs. Academic institution should offer basic and elementary courses which are for co-operative accounting and should be taught in accessible language. Where possible such training should be organized frequently to update the knowledge and skills of co-operative leaders and members.

6. References

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