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INFLUENCE OF FINANCIAL PLANNING ON SUSTAINABILITY OF HOUSING COOPERATIVES IN NAKURU COUNTY, KENYA

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Abstract: **The objective of this study was to evaluate the influence of financial planning on financial sustainability of housing cooperatives in Nakuru County, Kenya. The institutional theory and agency cost theory guided the study. The study adopted a cross-sectional survey design and quantitative approach. A total of 240 finance officers, credit officers, operational managers, and chief executive officers working with the aforementioned firms constituted the study population. A sample of 91 respondents was obtained using simple random sampling technique. A structured questionnaire was used to aid in collecting data. The questionnaire was pilot tested and subsequently its validity and reliability determined. Data analysis was electronically carried out with the aid of the Statistical Package for Social Sciences tool. The analysis encapsulated descriptive and inferential statistics. The pertinent results were presented in tables. The study found that financial planning explained 32.6% variance in financial sustainability of housing cooperatives. The influence of financial planning on financial sustainability was established to be statistically significant ($p < 0.05$). The null hypothesis was thus rejected. The study concluded that financial planning was a critical internal factor that influenced financial sustainability of the studied cooperatives. It was recommended that housing cooperatives should have clear and reliable financial plans to enable them to effectively source requisite funds and appropriately allocate the same to ventures with high return on investment.**

Keywords: **Agency cost theory, financial planning, financial sustainability, housing cooperatives, institutional theory, Nakuru County.**

1. INTRODUCTION

Background of the Study

The origin of co-operatives in Africa can be traced to foreign models and were designed to achieve an exterior motive such as poverty alleviation and in the case of housing co-operatives they were aimed at providing shelter for their members. The challenges faced by co-operatives in Africa include political interference, management problems, donor fatigue in funding the cooperatives as well as liberalization. Co-operatives societies in Africa have remained resilient despite the problems they encounter. Co-operative societies have restructured to become more independent and rely less on the government support as well as have free membership. Agricultural and credit co-operatives are more dominate but housing co-operatives are increasing in popularity. In Africa co-operative movement is one of the most popular sectors in terms of membership and outreach [1].

In recent years, the deteriorating financial performance has increased attacks on the cooperative movement in Kenya. Fingers have been pointed to mismanagement of the sector which has resulted in poor financial performance [2]. A considerable number of Saccos in Kenya have been rendered dormant, an aspect directly linked to their lack of financial

sustainability. Upon withdrawal of members from Saccos, which is recorded to be in droves (6.0% annually), members are not promptly reimbursed their contributions to the affected Saccos. This has resulted in many cases being referred to cooperative tribunal particularly to the Saccos failing to effect the reimbursements of members' contributions within the stipulated two months duration [2]. Accordingly, it was important to look into how financial planning influenced financial sustainability of housing cooperatives in Kenya. In this regard, the present study narrowed down the focus to housing cooperatives hitherto in operation in Nakuru County.

Statement of the Problem

Kenya has a rapidly growing real estate and housing finance sector. This is in tandem with the rising demand for housing in the country. However, the ownership of housing facilities is often beyond the reach of majority of Kenyans including the working class, thanks to the huge capital outlays required to purchase a piece of land and put up a house. This explains the gap that housing cooperatives seek to bridge by offering mortgages and other related financial services to deserving Kenyans. Yet, it is indicated that the mortgage market is yet to meet the breadth of the population who may be in need of a mortgage. This has obliged many households to finance their housing independently, with savings or non-mortgage credit facilities among other complementary sources.

According to the Centre for Affordable Housing in Africa (CAHF), the rate of urbanization stood at 4.28% signaling a strong demand for affordable housing in Kenya. Housing microfinance that includes housing cooperatives are anticipated to play a leading role in increasing the supply of housing. The activities of the housing cooperatives are associated with financial risks particularly credit risk. These compromise the financial sustainability of the stated cooperatives. This is justified by the fact there are several such cooperatives which collapse or exit the market in spite of the huge demand for housing in Kenya. A case in point is Gakuyo Real Estate, which in 2018 was accused of misappropriating about Ksh 2 billion which had been contributed by members and also failing to adhere to guidelines spelt out by the Cooperative Act. Ekeza Sacco from which the stated funds had been withdrawn was deregistered. The various empirical studies that have been conducted in the past [3],[4],[5],[6] have fallen short of explicitly bringing out the link between financial planning and sustainability of housing cooperatives in Kenya. It is against this backdrop that this study was conducted.

Objective of the Study

The objective of the study was to assess the influence of financial planning on implementation of financial sustainability of housing cooperatives Saccos in Nakuru County.

Research Hypothesis

H_0: There is no statistically significant influence of financial planning on financial sustainability of housing cooperatives in Nakuru County.

H_A: There is statistically significant influence of financial planning on financial sustainability of housing cooperatives in Nakuru County.

2. LITERATURE REVIEW

A review of theories and empirical studies with regard to financial planning and financial sustainability have been reviewed in this section.

Theoretical Framework

The institutional and agency cost theories have been reviewed and discussed in relation to financial planning and financial sustainability of housing cooperatives.

Institutional Theory

The theory was advanced by DiMaggio and Powell [7] having scrutinized the work of Meyer and Rowan [8]. It is based on aspects of social structure where structures, rules, norms and routines becomes established as authoritative guidelines for social behavior. It states that institutional environment can influence development of formal structures in an organization. Organizations or firms have to conform to the institutional environment or institutions that they operate in. Institutions according to the theory refers to laws, public opinion, professional groups, regulatory authorities or even government agencies [9]. Adoption of certain norms, structures or rules regarded as institutional myths viewed as best

practice by organizations may bound other organizations in the same environment to adopt them though they may not be best practices. The theory provides that these institutional myths are accepted widely by organizations in order to attain conformity or legitimacy [8].

In addition, the theory provides that organizations may adopt the institutional myths to gain resources and to enhance survival. Furthermore, the theory provides institutional pressures that influence the look, structure or operations of an organization. These pressures are regulative, normative and mimetic. Regulative of coercive pressures force an organization to follow rules and regulations set by governing authorities. Normative pressures are social influences from groups, people or other organizations that lead to conformity. Mimetic pressures result from organizations eagerness to mimic or copy the best performing organization within an industry due to uncertainty [10]

Institutional pressures enhance homogeneity of organizational structures [7]. In the same light organizations conform to institutionalized rules or isomorphism and the foregoing is increased when the firms are highly dependent on the institutional environment, exist under high uncertainty and rely extensively on professionals. It is argued that the advantages of conformity or adhering to institutional pressures are legitimacy, prestige, stability, social support, access to resources and acceptance in professions [11]. Organizations however must strike a balance between the level of conformity and the need to be different from its competitors in a bid of enhancing financial performance [12].

Institutional theory is relevant to the operations of housing cooperatives in that, these entities are institutions which are affected by institutional pressures. These cooperatives have to adhere to government regulations on housing, government agencies on construction and client pressures on preferences of their products. With the foregoing in background, the cooperatives can plan for allocation of finances, plan for sources of capital, plan for marketing strategies inconformity with the industry in a bid to enhance survival and profitability.

Agency Cost Theory

The theory was proposed by Jensen and Meckling [13]. The theory is addresses agency relationships. It states that there is separation of ownership and management or control of the firm operations. The owners of a firm are the shareholders who act as principals and managers control the daily operations of the firm. Managers are the agents. The agency relationship between the principals and stewards therefore exists. As such this relationship creates conflict of interest between the firm's shareholders and the managers. The conflict arises where each party acts in its own interest. Managers are in the position to use firm's resources, are compensated based on profitability of the firm and therefore may manipulate accounting information or take projects with short term profits but with negative net present value. Shareholders on the other hand are interested in wealth maximization that will enhance the value of the firm [14]. The agency problem also arises since the agent's goals differ from those of the principal, decision making, information asymmetry, morals hazard and risk preference. Agency cost arise in a bid to align the agent's and owner's interests. These costs arise as a result of examining and recruiting a suitable agent, collecting information, controlling and monitoring agent actions, loss due to inefficient decisions of the agents and bonding costs [13].

The agency cost theory is revolves around agency problem and potential solutions [15]. The problem according to the author stems from incentives given to the agents of the firm. The problem may arise due to institutional structure [16]. It is postulated that the firm is like a black box which goal is to maximize value and profitability [13]. Wealth maximization therefore can be achieved if the shareholders and managers work as a team. The agency model has two sections that are positivist agency model and principal-agent model [17]. Principal-agent model postulates that principals are risk-neutral and profit seekers while agents are risk-averse and rent seekers. The positivist model dwells on agency problem and agency costs involved in minimizing the agency problem [18].

Agency cost theory can be used by housing cooperatives in ensuring financial sustainability. Managers can make prudent decisions in selection of projects with positive net present values that maximizes shareholder wealth. In addition, managers can prudently use generated profits or revenue in firm projects rather than advocating for perks and abnormal pay rises. The management is responsible for preparation of financial statements that show financial position and profitability of a firm. Managers can manipulate this information for their own favor. In this context, managers can be accountable and transparency in all financial affairs of the firm in order to show true view of the position of the firm. As such, informed decision making becomes easy in regard to financial sustainability of the firm.

Empirical Review

Past studies with regard to financial planning and financial sustainability have been reviewed in this section.

Financial Planning and Financial Sustainability of Housing Cooperatives

In Nepal a study carried out by Simkhada assessed the indicators for measuring performance of financial cooperatives [19]. The objective of the study was to identify the different indicators for measuring performance of cooperatives in Nepal. The study used focus group discussions and interviews in data collection. The study found out that that the cooperative sector in Nepal faced challenges of poor financial planning and overall financial management. The study concluded that proper financial planning and financial accountability are the drivers of excellent financial performance of cooperatives in Nepal.

A study conducted in India analyzed budgetary control with reference to dairy cooperative unions [20]. The objective of the study was to determine the importance of budgetary control in dairy cooperative unions in India. The study found out that budgetary control as a component of financial planning is a great management tool which aids in the improved financial performance of dairy cooperative unions in India. The study concluded that budgetary control was essential since it acts as a guide in financial planning operation.

A study conducted in Nigeria assessed effective financial management as a remedy for failure of cooperatives societies [21]. The objective of the study was to determine the importance of financial planning in the success of cooperatives in Nigeria. The study used a sample of 40 respondents. The study found out that financial planning is a component in financial management. The study also found out that financial planning must be fully integrated into the overall financial management of cooperatives so as to ensure the success and profitability of cooperatives in Nigeria.

A study conducted in Ethiopia analyzed the financial performance of cooperatives in Enderta Woreda Tigray region [22]. The objective of the study was to measure the financial performance of cooperatives in Ethiopia. The study used ratio analysis in analyzing the financial performance of cooperatives. The study revealed that poor performance of cooperatives was attributed to poor financial planning and lack of a clear accounting system. It was also noted that lack of preparation of financial statements at the end of each fiscal year contributed to poor financial performance of the Saccos.

In Kenya, study conducted by Njeru investigated the relationship between financial management practices of savings and credit cooperatives societies in Nairobi County [23]. The objective of the study was to establish the relationship between financial management practices and financial performance of Saccos. The study adopted survey design whereby primary data was collected using questionnaires. Regression analysis was used to determine the relationship between financial planning and profitability of Saccos. The study found out that there is a significant relationship between financial planning and financial management practices of Saccos in Nairobi County.

An empirical study conducted by Chege examined the effect of financial management practices on the performance of Saccos in the hospitality industry [24]. The objective of the study was to determine the effect of financial management practices on the performance of Saccos in the hospitality industry. Descriptive research design was adopted. The findings of the study revealed that majority of the Saccos used cash budgets in financial planning as their major financial management techniques. The study also revealed that the frequency with which financial planning was done depended on the size of the firm as well as the management.

Financial Sustainability of Housing Cooperatives

In Nepal, a study carried out by Nirmal and Bikram analyzed financial literacy and sustainability of co-operatives [25]. The objective of the study was to determine the level of financial literacy of the executive members in the agro-based cooperatives in Nepal and its effect on sustainability. The study adopted descriptive statistics in data analysis. The study found out that the executive members of agro-based cooperatives in Nepal had no financial literacy and still relied on traditional financial decision making process. The lack of financial literacy in turn affected the sustainability of agro-based cooperatives in the Nepal.

Another study analyzed the role of savings and credit cooperatives in promoting access to credit in Swaziland [26]. The objective of the study was to assess the financial sustainability of Saccos in Swaziland. The study adopted both qualitative and quantitative research design. A sample population of 45 active Saccos in Swaziland was used. The study found out that Saccos in Swaziland have not attained financial sustainability due to their poor financial structure.

In Tanzania, a study examined financial sustainability of saving and credit cooperatives [27]. The main objective of the study was to examine the financial sustainability of Tanzania saving and credit cooperatives Saccos. The study used data from Saccos' audited financial reports for the year 2011. It was revealed that about 61% of the sampled Saccos were operationally sustainable and 51% were both operationally and financially sustainable. In addition, it was noted that the sustainability score was 127%.

A study conducted in the same country examined the determinants of saving and credit co-operative society in financial sustainability in Ilala municipality in Tanzania [28]. The main objective of the study was to identify the determinants of financial sustainability of Saccos in Ilala municipality. Data was collected through questionnaires and interviews. The study found that portfolio at risk, the cost per borrower and operating-sufficiency were among the major factors that determined financial sustainability of the surveyed Saccos. It was further noted that majority of Saccos had their portfolios at risk of default, while only few of them were close to being operationally self-sustaining.

A local study examined the financial sustainability of savings and credit cooperative societies in Kenya [29]. The main objective of the study was to determine the factors that influence the financial sustainability of Saccos in Kenya. The study used sampling method to collect data. The study revealed that financial outreach as measured by the number of members exerts a significant influence on financial sustainability, nevertheless, financial regulation, Saccos' governance, Saccos' size and Saccos' age were found to exert a significant influence on the financial sustainability of Saccos.

Conceptual Framework

A conceptual framework diagrammatically shows the variables of a study and how they perceptibly relate. Fundamentally, there are two distinct sets of variables in a basic conceptual framework. These are independent (predictor or explanatory) and dependent variables. Figure 1 shows the conceptual framework which displays the presumptive inter-relationship between the independent and dependent variables. The independent variable is financial planning. The dependent variable is financial sustainability. Financial planning looks into how a firm budgets for its funds, allocation and capital structure based on its funding policy. Financial planning was hypothesized to affect financial sustainability of housing cooperatives.

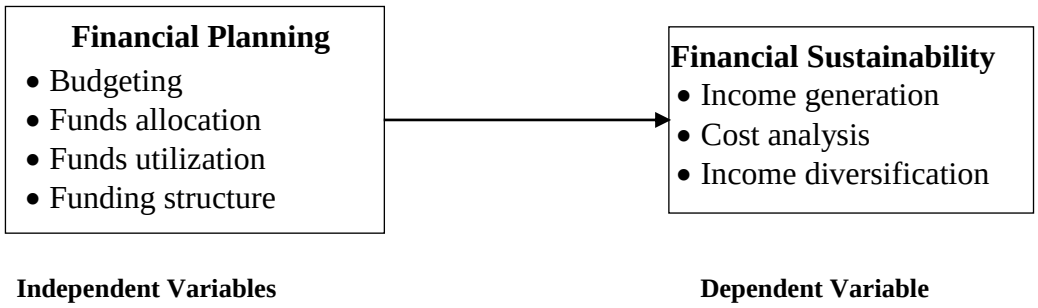

Figure 1: Conceptual Framework

3. RESEARCH METHODOLOGY

The methodology espouses on the procedure followed in carrying out the study. In this regard, it encapsulates the research design, target population, sampling procedure, and pilot testing. Other parts covered include data collection procedure, and methods of analyzing data. The methodology further states how the study findings were presented.

Research Design

The study was guided by a cross-sectional survey design. This design was adopted due to the fact that it enables collection of data aimed at drawing conclusions in respect of a population of interest at a specific point in time [30]. It is further averred that cross-sectional study design is observational in nature, and being part of descriptive design makes no attempt to alter the study phenomena [31]. This design was further justified by the fact that the participants were simply selected based on the inclusion and exclusion criteria spelt out for this particular study. In addition to this design, the study employed a quantitative approach, which is synonymous with survey studies.

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Target Population

The target population in respect of this study included finance officers, credit officers, operational managers and chief executive officers (CEOs) working with housing cooperatives in Kenya. On the other hand, accessible population which is a subset of the target population [32] comprised the mentioned staff working with housing cooperatives operating in Nakuru County. There were a total of 60 housing cooperatives in Nakuru County by the time data for the study were being collected. Therefore, the total number of such staff working with the stated cooperatives was 240. This implies that each of the aforementioned 60 housing cooperatives had 4 staff members (finance officer, credit officer, operational management, and CEO) projected to participate in the study as shown in Table 1.

Table 1: Sampling Frame

Cooperatives Staff	Each Cooperative	60 Cooperatives
Finance officers	1	60
Credit officers	1	60
Operational managers	1	60
CEOs	1	60
Total	**4**	**240**

Sample Size and Sampling Technique

From the accessible population of 240, a sample was determined using a formula developed by Nassiuma [33] as illustrated below.

$$n = \frac{NC^2}{C^2 + (N-1)e^2}$$

Where

'n' represents sample size

'N' represents study population

'C' represents coefficient of variation (21% to 30%)

'e' represents margin of error (2% to 5%)

The above equation is substituted as shown below.

$$n = \frac{240(0.3)^2}{0.3^2 + (240-1)0.025^2}$$

n = 90.23

n = 91 respondents

As shown above, the sample size constituted a total of 91 credit officers, finance officers, operational managers, and CEOs working with housing cooperatives in Nakuru County. These cooperatives have similar number of the stated employees. That is, one credit officer, one finance officer, one operational manager, and one CEO, thus totaling to 4 staff per each housing cooperative. Therefore, simple random sampling technique was adopted in order to ensure that each projected respondent had an equal chance of participating in the study [34].

Research Instrument

The study was a survey that employed quantitative method. Therefore, in tandem with Mugenda and Mugenda's [35], and Asiamah, Mensah and Oteng-Abayie's [36] assertions, a structured questionnaire was used to aid in collecting quantitative (interval) data from the sampled respondents. This implies that the questionnaire contained close-ended questions that effectively addressed all the study objectives. In addition, the questions/data items were on a Likert scale.

Pilot Study

A pilot study which is a minor study conducted before the main study with the intent of assessing the study feasibility and identifying probable weaknesses in the data collection tool [37] was carried out in Uasin Gishu County. The participants in this minor study were approximately 10% of the sample size (10 credit officers, finance officers, and operational managers working with housing cooperatives). The choice of this County was due to the fact that, similarly to Nakuru County (focus of the main study), it had been experiencing a boom in property development particularly housing. Moreover, the pilot study enabled determination of validity and reliability of data collection instrument (research questionnaire).

Validity and Reliability of the Research Instrument

Validity and reliability of the research questionnaire were determined. Content validity was determined by seeking expert review of the questionnaire by the assigned University supervisor. This involved assessing the extent to which the instrument's scale items constituted a representative sample of the content domain [38]. The verdict of the supervisor was considered to be sufficient in determining the content validity of the questionnaire.

It is important to have reliable questionnaires in order to enhance the precision of both their assessment and evaluation [39]. Reliability of the research questionnaire was tested using the Cronbach's alpha coefficient. The Cronbach's alpha is employed as an index of reliability to measure internal consistency of a test or scale as captured in a data collection tool. Therefore, the coefficient was used to test the extent to which all the items being tested measured the same study construct or variable. The reliability threshold was alpha coefficient equal to 0.7 or greater than 0.7. The larger the coefficient the greater the reliability of the research questionnaire [40]. As illustrated in Table 2, all the five study constructs returned alpha coefficients greater than 0.7. Therefore, the entire research questionnaire was concluded to be reliable for use in collection of data required by the study.

Table 2: Results of Reliability Testing

Study Constructs	No. of Items Tested	Alpha Coefficient (α)
Financial planning	6	0.822
Financial sustainability	10	0.782

Data Collection Procedure

The researcher obtained a formal letter from the University to introduce him to the housing cooperatives from which the respondents were to be drawn. This was followed by an application for authorization letter and research permit from the National Commission of Science, Technology and Innovation (NACOSTI). An appointment to meet up with the prospective respondents was organized through the senior administration of the cooperatives that were surveyed. The respondents were engaged directly by the researcher where the questionnaires were issued, filled and subsequently collected from them.

Data Analysis

The collected data were first cleaned before processing and analysis. This involved going through all the collected questionnaires in order to ensure that none was inappropriately filled. The actual data analysis was electronically executed with the use of the Statistical Package for Social Sciences (SPSS – Version 24.0) tool. The analysis encapsulated descriptive statistics which included measures of distribution (frequencies and percentages), measures of central tendencies (means), and measures of variation (standard deviations). In addition, the analysis used various inferential statistics which included Pearson's Product Moment Correlation Coefficient (PPMCC) or bivariate correlation that was employed to measure the linear correlation between each of the predictor variables and the dependent variable. In addition, simple linear regression analysis was part of inferential statistics that the study used. The null hypothesis was tested using the t-statistics and at 0.05 precision level (margin of error. The results of both descriptive and inferential analyses were presented in tables. The following regression model was used.

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$Y = \beta_0 + \beta_1 X_1 + \varepsilon$

Where

Y	=	Financial Sustainability
β_0	=	Constant
X_1	=	Financial Planning
ε	=	Error Term
β_1	=	Regression Coefficient of Predictor Variable

4. RESULTS, INTERPRETATION AND DISCUSSION

Response Rate

The number of questionnaires which was filled and collected from respondents' vis-à-vis the total number administered constituted the response rate. The acceptable response rate in survey studies is 75%. In the context of this study, a total of 91 questionnaires were issued to the respondents. Eighty questionnaires out of the total number issued were collected from the sampled respondents. This was equal to 87.9% response rate, which was considered to be adequate for the survey study.

Descriptive Results, Interpretation and Discussion

The results of descriptive analysis of internal financial factors and financial sustainability of housing cooperatives are provided in this section. The results relate to the opinions of the selected finance officers, credit officers, operations managers and chief executive officers in respect of financial planning and financial sustainability. The results are in line with the views of the respondents which were on a 5-point Likert scale where: 1,2,3,4, and 5 represented strongly disagree, disagree, not sure, agree, and strongly agree respectively.

Descriptive Statistics for Financial Planning

It was further established, as illustrated in Table 3, that majority (75.1%) of the selected employees admitted that the utilization of funds was exclusively executed by the cooperatives' staff. A significant number (18.8%) were, however, indifferent of the stated opinion. Furthermore, 75.0% of the staff agreed that the cooperatives' members were adequately consulted during the budgeting process while 18.8% held a contrary opinion. A total of 68.8% of the sampled staff believed that there was prioritized allocation of funds to various projects. Nevertheless, 18.8% disputed the view. It was further admitted by a majority (62.5%) of the staff that there was a highly abled budgeting team in the cooperatives. However, 25.0% of the staff disputed this assertion. The study further noted that 62.5% of the surveyed members concurred that the funding structure adopted by the cooperative was similar to that of the other cooperatives while 18.8% disagreed with the assertion. The view that the housing cooperatives always had sufficient budget for its activities returned mixed reactions where 56.3% of the staff agreed while 43.8% disputed the proposition.

On average, the sampled members admitted that the utilization of funds was exclusively executed by the cooperatives' staff (mean = 4.13). The views of the staff in respect of this statement were closely related (std dev = 0.933). The staff further admitted that the cooperative members were adequately consulted during the budgeting process (mean = 4.06), and that there was prioritized allocation of funds to various projects (mean = 3.94). The opinions of the said staff in respect of the aforesaid assertions were found to be diverse (std dev > 1.000). The study further revealed that the staff generally agreed that there was a highly abled budgeting team in the cooperatives (mean = 3.75), and that the funding structure adopted by these entities were similar to that of other cooperatives (mean = 3.69). The opinions of the sampled staff on the stated assertions were largely diverse (std dev > 1.000). It was further noted that the selected staff were generally unsure of the view that the housing cooperatives always had sufficient budget for activities (mean = 3.38). The responses of the staff to this effect varied significantly (std dev = 1.418).

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Table 3: Descriptive Statistics for Financial Planning

Propositions	n	SD 1	D 2	NS 3	A 4	SA 5	Mean	Std. Dev
Utilization of funds is exclusively executed by our cooperative staff	80	0	6.3	18.8	31.3	43.8	4.13	.933
Our cooperative members are adequately consulted during the budgeting process	80	0	18.8	6.3	25.0	50.0	4.06	1.151
There is prioritized allocation of funds to various projects	80	6.3	12.5	12.5	18.8	50.0	3.94	1.306
There is a highly abled budgeting team in our cooperative	80	0	25.0	12.5	25.0	37.5	3.75	1.207
The funding structure adopted by our cooperative is similar to that of the other cooperatives	80	12.5	6.3	18.1	25.0	37.5	3.69	1.365
Our cooperative always has sufficient budget for its activities	80	6.3	37.5	0	25.0	31.3	3.38	1.418

Descriptive Statistics for Financial Sustainability

The results shown in Table 4 demonstrated that 93.8% of the selected members concurred that the operating capital ratio had increased since the establishment of the surveyed housing cooperatives. Only a marginal number of staff disputed this view. Furthermore, most (87.6%) of the staff believed that the payables turnover had increased significantly over the preceding year. Only 6.3% disagreed with the stated proposition. It was further ascertained that 87.4% of the sampled employees agreed that the working capital ratio had increased since the establishment of the housing cooperatives while 6.3% disputed the assertion. While 75.5% of the staff agreed that in order to ensure sustainability, the cooperatives conducted cost analysis of all projects prior to their initiation, 12.5% of them disagreed with the proposition. Moreover, 68.8% of the staff concurred that the housing cooperatives had recorded drastic rise in asset turnover over the previous one year. Approximately a quarter (25.1%) of the staff disagreed with the foregoing view. The opinion that the receivables turnover had remained largely the same over the last one year raised varying responses with 18.8% of the staff disagreeing, 12.5% being unsure while the rest (68.8%) agreeing with the view. It was further noted that the sampled staff equally agreed (50.0%) and disagreed (50.1%) that the housing cooperatives had sustainable income sources. Majority (56.3%) of the selected employees admitted that the liquidity ratio of the firms had significantly increased in the last financial year. However, 43.8% disagreed with the stated argument. Furthermore, while 37.5% disputed that the firms had diversified sources of income, 43.8% agreed with the view. The rest of the staff (18.8%), however, were indifferent of that view.

It was generally admitted that the operating capital ratio had increased since the establishment of the housing cooperatives (mean = 4.13), and that the payables turnover had increased significantly over the last one year (mean = 4.06). The views of the participating staff on the aforestated views did not vary significantly (std dev < 1.000). It was further found that the staff were in agreement that the working capital ratio had increased since the establishment of the housing cooperatives (mean = 4.00), and that in order to ensure sustainability, the cooperatives conduct cost analysis of all projects prior to their initiation (mean = 3.75). Yet, the opinions of the respondents with regard to these propositions varied significantly (std dev > 1.000). The staff further agreed that the cooperatives had recorded drastic rise in asset turnover (mean = 3.75), and also that the receivables turnover had remained largely the same (mean = 3.69) over the course of the preceding year. The variation in the staff's responses was significant (std dev > 1.000). Moreover, it was generally observed that the selected staff were not sure whether the cooperatives had sustainable income sources or not (mean = 3.25), and if the liquidity ratio of the firms had significantly increased over the previous financial year (mean = 3.13). Their opinions on these assertions were expectedly dissimilar (std dev > 1.000). Lastly, the staff were found to be indifferent regarding the opinion that the housing cooperatives had sustainable income sources (mean = 3.12). Similarly, the views of the staff with regard to this assertion were established to be largely divergent (std dev = 1.325). The fact that the operating capital ratio was observed to have increased mirrored the results of a study conducted in Tanzania which revealed that most of the Saccos were not only operationally sustainable but also financially sustainable [27].

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Table 4: Descriptive Statistics for Financial Sustainability

Propositions	n	SD 1	D 2	NS 3	A 4	SA 5	Mean	Std. Dev
The operating capital ratio has increased since the establishment of our housing cooperative	80	6.3	0	0	62.5	31.3	4.13	.933
The payables turnover has increased significantly over the last one year	80	6.3	0	6.3	56.3	31.3	4.06	.972
The working capital ratio has increased since the establishment of our housing cooperative	80	6.3	6.3	0	56.3	31.1	4.00	1.067
In order to ensure sustainability, our cooperative conducts cost analysis of all projects prior to their initiation	80	12.5	0	12.5	50.0	25.5	3.75	1.207
Our cooperative has recorded drastic rise in asset turnover the last one year.	80	6.3	18.8	6.3	31.3	37.5	3.75	1.307
The receivables turnover has remained largely the same over the last one year	80	6.3	12.5	12.5	43.8	25.0	3.69	1.165
Our cooperative has sustainable income sources	80	6.2	43.8	0	18.8	31.2	3.25	1.445
The liquidity ratio of our firm has significantly increased in the last financial year	80	31.3	12.5	0	25.0	31.3	3.13	1.702
Our firm has diversified sources of income	80	12.5	25.0	18.8	25.0	18.8	3.12	1.325

Inferential Results, Interpretation and Discussion

The inferential statistics used by the study were aimed at enabling drawing of inferences or conclusions relative to financial planning and financial sustainability of housing cooperatives in Nakuru County. The Pearson Product Moment Correlation Coefficient (PPMCC) and univariate regression analysis were used to this effect. The pertinent interpretation and discussion are also provided.

Relationship between Financial Planning and Financial Sustainability

The study used PPMCC to determine the direction, magnitude and significance of the relationship between financial planning and sustainability of housing cooperatives. The significance of the relationship was tested at 95% confidence level (p-value = 0.05). The results as shown in Table 5, indicated existence of a positive, moderately strong, ($r = 0.571$) and statistically significant ($p < 0.05$) relationship between the two study constructs. The results implied that there was a moderate and substantial likelihood of improving financial sustainability of the surveyed cooperatives if and when financial planning was enhanced. In other words, planning on the sources of funds and how the cooperatives would prudently utilize the funds in different investment ventures was likely to result in improved financial sustainability in the long-term. Financial plans were, therefore, found to be fundamental in ensuring financial sustainability of housing cooperatives. Given that financial performance and financial sustainability are closely associated, it is evident that the findings herein are in concurrence to earlier observation that proper financial driving is one of the drivers of excellent financial performance of cooperatives in Nepal [19].

Table 5: Correlation between Financial Planning and Financial Sustainability

		Financial Sustainability
Financial Planning	Pearson Correlation	.571**
	Sig. (2-tailed)	.000
	n	80

****. Correlation is significant at the 0.01 level (2-tailed).**

Results of Univariate Regression Analysis

The simple linear regression analysis was used to determine the influence of financial planning on financial sustainability of housing cooperatives in Nakuru County. As shown in Table 6, the results of ($R^2 = 0.326$) revealed that 32.6% of the variation in financial sustainability of the aforesaid cooperatives could be explained by financial planning. The remaining

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67.4% could be attributed to other factors that were not examined by the present study. These findings underscored the critical role played by financial planning in reference to enhancement of financial sustainability of housing cooperatives in Nakuru County.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1	.571[a]	.326	.317

a. Predictors: (Constant), Financial Planning

The F-statistics which resulted from the analysis of variance (ANOVA) was used to determine whether the adopted regression model was suitable in investigating the influence of financial planning on financial sustainability of housing cooperatives. The results ($F = 37.731$; $p < 0.05$) as presented in Table 7 revealed that the adopted regression model was statistically significant, thus underlining its suitability in the analysis of the study constructs.

Table 7: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.522	1	20.522	37.731	.000[a]
	Residual	42.425	78	.544		
	Total	62.948	79			

a. Predictors: (Constant), Financial Planning

b. Dependent Variable: Financial Sustainability

The results illustrated in Table 8 were also used to substitute and explain the univariate regression model adopted by the study as illustrated below.

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \varepsilon}$$

Where Y represent financial sustainability

β_0 represent the constant factor

β_1 represent the coeficient of predictor variable

X_1 represents financial planning

ε represents the error term

Substituting the equation:

$$\mathbf{Y = 1.272 + 0.623 X_1}$$

The results implied that the a unit change in the fianncial sustainability of the housing cooperatives was dependent on 0.623 unit variation in financial planning when all other factors were held constant ($\beta_0 = 1.272$). Enhancing financial planning was likely to influence to a large extent financial sustainability of the housing cooperatives. The management of housing cooperatives should put more emphasis on financial planning in order to enhance financial sustainability of the firms.

Table 8: Beta Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
1 **(Constant)**	1.272	.396		3.209	.002
Financial Planning	.623	.101	.571	6.143	.000

a. Dependent Variable: Financial Sustainability

The results of this study which underscored the significant role played by financial planning in enhancing financial sustainability of housing cooperatives replicate observations made in past empirical studies. A study with similar results was conducted in Nigeria [21]. The study indicated that in order to ensure the success (a characteristic of financial sustainability) of cooperatives, financial planning must be integrated into the overall financial management of these firms. A related study supported these findings by indicating that poor financial planning contributed to poor financial performance of cooperatives [22]. Financial resources were established in the present study to be critical in enhancing financial sustainability of housing cooperatives.

Testing Null Hypothesis (H_0)

In this article, the null hypothesis was tested using the t-statistics at 95% confidence level (p-value = 0.05). This means that results that returned $p > 0.05$ were rejected while those that returned p-value < 0.05 failed to be rejected. The results of the t-statistics shown in Table 8 were used in testing the stated hypotheses. The null hypothesis (**H_0**) stated that: There is no statistically significant influence of financial planning on financial sustainability of housing cooperatives in Nakuru County. The alternative hypothesis was that (**H_A**) stated that: There is statistically significant influence of financial planning on financial sustainability of housing cooperatives in Nakuru County. The findings ($t = 6.143$ $p < 0.05$) indicated that there was statistically significant influence of financial planning on financial sustainability. The stated null hypothesis was, therefore, rejected and the alternative hypothesis considered to be true.

5. DISCUSSION

According to the study findings, it was revealed that the utilization of funds was exclusively executed by the staff of housing cooperatives. It was also noted that the cooperative members were adequately consulted during the budgeting process and that there was prioritized allocation of funds to various projects. The findings further illustrated that there was a highly capacitated budgeting team in the cooperatives and that the funding structure adopted by a specific housing cooperative was similar to that of other cooperatives. However, it was largely unclear whether or not cooperatives always had sufficient budget for activities. There existed a positive, moderately strong and statistically significant relationship between financial planning and financial sustainability ($r = 0.571$; $p < 0.05$). Similarly, the influence of financial planning on financial sustainability of housing cooperatives ($t = 3.056$; $p < 0.05$).

The results showed that the operating capital ratio had increased since the establishment of the housing cooperatives in Nakuru County. The payables turnover had also increased significantly over the last one year. It was ascertained that in order to ensure sustainability, the cooperatives conducted cost analysis of all projects prior to their initiation. The cooperatives had recorded drastic rise in asset turnover over the preceding year, and the receivables turnover had remained largely the same over the same period. There was some degree of uncertainty with regard to whether the cooperatives had sustainable income sources or not, and if the liquidity ratio of the firms had significantly increased in the last financial year. It was also unclear whether the cooperatives had sustainable income sources. The 38.6% of the variation in financial sustainability was attributed to credit risk management, financial resources, financial transparency and financial planning. The financial resources and financial planning were the most important internal financial factors that influenced financial sustainability of the housing cooperatives in Nakuru County. In general, there was a probability of enhancing financial sustainability of the housing cooperatives if the internal financial factors were improved.

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concluded that the existence of financial resources is essential; but, without sound plans, mismanagement is bound. Financial planning in the housing cooperatives was concluded to be sound. This is because the cooperatives had expertise in budgeting, had structures of consultation during budgeting and prioritized fund allocation to important projects. In respect to financial sustainability, financial planning was inferred to be core. Since the demand for housing is on the rise especially with the skyrocketing price of land and construction materials, the cooperatives may look into the sustainability of investments versus the budget and the sources of funds. As such, financial planning becomes paramount in financial sustainability.

Recommendations

The study recommends that the cooperatives should have clear financial plans especially on allocation of funds and sources of capital. This is because the cooperatives in Nakuru County did not always have sufficient budget for activities. The planning for sources of funds should take into consideration the cost of obtaining the funds. The management committees of the cooperatives ought to screen projects before committing the resources to avoid threat in financial sustainability.

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