

Effect of Financial Management Practices on Profitability of Agricultural Processing Enterprises in Rwanda

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Abstract: *The research aimed was to examine effect of financial management practices on profitability of agricultural organization in Rwanda because Agricultural processing enterprises performs below expectation due to a combination of factors including poor financial management and its believed poor financial management in agricultural business organisation have affected profitability of many agricultural business organisation, coupled with the fact in Nyirangarama agricultural processing industries Rwanda they are few professional accountants to conduct the practice of professional financial accounting. The researcher achieved this by use of three specific objectives namely; To analyze the effect of financial planning on profitability of Nyirangarama agricultural processing industries; To examine the effect of financial records on profitability of Nyirangarama agricultural processing industries and to establish the effect of financial reporting on profitability of Nyirangarama agricultural processing industries. The research is beneficial to the researcher, and JKUAT. The researcher reviewed both theoretical and empirical literature on the effect of the effects of financial management practices on profitability of agricultural organization around the world. The researcher used descriptive method of study based on qualitative and quantitative approach in order to get better analysis of the study. The population size was 120 and sample taken was 75 respondents. Both primary and secondary sources, with their relevant tools like questionnaire and documentary analysis were used in order to come up with required data. The researcher used mean, standard deviation and regression analysis to establish relationship between the variables. It was established Nyirangarama agricultural processing industries have financial management practices which includes; financial planning practices which includes (effective inventory plan, they cash management plan, have capital investment and asset management plan). Financial recording practices (have general ledger for records, accounts receivable records book for recording all the payments received from clients, accounts payable records book for recording all the payments made by the organization and inventory records book for recording incoming and outgoing inventory records) and financial reporting practices (have income statement, have reports on cash flow information, stakeholder's equity report and have a comprehensive have financial statement). The financial management practices have got positive effect on profitability of the organization inform of net profit and liquidity. The multivariate regression model formed: $Y = 11.610 + 0.432 X_1 + 0.130 + 0.500 X_2 + 1.089 + 0..$ The regression equation above established that taking all factors constant net profit and liquidity improves as a result of (financial planning, financial recording and financial reporting) at Zero organisation performance Constant Term in spite of some few challenges. The financial management practices have got positive effect on profitability of the organization inform of net profit and liquidity. The organization should conduct comprehensive financial planning in order to improve on the organization profitability. The organization should employ qualified accountants to manage the financial transactions of the organization hence improving financial performance.*

1. Introduction

Financial management is one of several functional areas of management which is central to the success of any small business (Meredith, 2006). Financial management is the management of finances of a business in order to achieve the financial objectives of the business. McMahon et al. (2008) defines financial management based on mobilizing and using sources of funds: Financial management is concerned with raising the funds needed to finance the enterprise's assets and activities, the allocation of these scarce funds between competing uses, and with ensuring that the funds are used effectively and efficiently in achieving the enterprise's goal.

Financial management as used in this study is composed of five (5) constructs and these include; working capital management which is also subdivided into cash management, receivables management and inventory management. Other constructs under financial management include; investment, financing, accounting information systems and financial reporting and analysis. Ross et al (2009) indicated three kinds of decisions the financial manager of a firm must make in business; these include the

financing decision, and decisions involving short-term finance and concerned with the net working capital, investment and financial reporting.

Inefficient financial management may damage business efficiency and this will continuously affect the growth of the Small and Medium enterprises. However, efficient financial management is likely to help business to strengthen their business efficiency and, as a result, these difficulties can partly be overcome, also regardless of the business enterprise, if the financial decisions are wrong, profitability of the enterprises will be adversely affected. Consequently, a business organization's profitability could be damaged because of inefficient financial management. Business Enterprises have often failed due to lack of knowledge of efficient financial management. Similarly, Ang (2012) indicated three main financial decisions including the investment decisions, financing decisions and dividend decisions. Meredith (2006) asserts that financial management is concerned with all areas of management, which involve finance not only the sources, and uses of finance in the enterprises but also the financial implications of investment, production, marketing or personnel decisions and the total performance of the enterprise.

Studies on the relationship between financial management practices and financial performance have presented mixed results. Klammer (2013) in his study of the relationship between sophisticated capital budgeting methods and financial performance in US, found out that, despite the growing adoption of sophisticated capital budgeting methods, there was no consistent significant association between financial performance and capital budgeting techniques. Moore and Reichert (2009) in their multivariate study of firm performance and use of modern analytical tools and financial techniques study in 500 firms in US, they showed that firms adopting sophisticated capital budgeting techniques had better than average firm financial performance. More specifically, firms using modern inventory management techniques and Internal Rate of Return (IRR) reported superior financial performance, unlike those firms using methods such as Payback method & Accounting Rate of Return (ARR), (Raheman & Nasr, 2007). Wanyugu (2011) did a research on financial management practices of micro and small enterprises in Kenya a case of Kibera and found out that the management of the financial practices is an important factor in the performance of SMEs. Siba (2012) did a study on the relationship between financial risk management practices and financial performance of commercial banks in Kenya. She found that bank managers are financial risk averse and avoid uncertain business ventures. Thus their performance relies on practices that they deem not risky.

Nyongesa (2011) looked at the relationship between financial performance and financial management practices of insurance companies in Kenya. The study revealed that there was a consistent, significant positive association between financial management practices and financial performance. However, the study did not establish reasons for this correlation.

Locally Rwanda is one of the few East African countries with few professional accountants and this has affected financial performance of many business companies for example Inyange Industries which is a food processing company was liquidated in 2010 due to poor financial management practices and this call for improved financial management practices (Hatega 2007). Agricultural processing enterprises have played and continue to play significant roles in the growth, development and industrialization of many economies the world over. In the case of Rwanda, Agricultural processing enterprises have performed below expectation due to a combination of problems which range from attitude and habits of within themselves through environmental related factors, instability of governments and frequent government policy changes as well as poor financial management practices. In spite of the fact that Agricultural processing enterprises have been regarded as the bulwark for employment generation and technological development in Rwanda, the sector nevertheless has had its own fair share of neglect with concomitant unsavoury impacts on the economy (Hatega 2007). Therefore, it is upon the above background that is why the researcher was prompted to examine the effect of financial accounting practices on profitability of agricultural organisation in Rwanda.

2. Statement of the Problem

Sound financial management practices are crucial to the survival and wellbeing of many business enterprises of all types. Studies of reasons for business failure show that poor or careless financial management is the major cause of failure (Berryman & Peacock, 2011). According to financial management theory, the objective of the firm is to maximize the wealth of its shareholders. Financial management practices adopted by organizations are said to maximize the shareholders' wealth when they contribute to the company's performance. Under the assumption of economic rationality, sound financial management practices can be regarded as a means by which a firm uses in order to fulfil its objectives.

Financial management in small and medium organisation where agricultural organisation belongs is often different to that found in large firms due to the more dynamic nature of their cash flow cycle, general paucity of working capital, and their ability to raise finance through debt or equity (Welsh and White, 2011). SMEs also lack the financial management and accounting systems available to large firms, as well as the professional staff who manage such systems. Typically the owner-manager is required to perform these tasks, often, but not always, with support from a bookkeeper and an accountant. This is a pattern found throughout the world, both within the advanced economies that comprise the Organisation for Economic Co-operation and Development (OECD) group of nations, and the developing economies (OECD, 2010).

Poor business performance has for long remained unexplained most especially in the third-world countries perspective where the Small and Medium Enterprises occupy the large part of the economy. However, some studies from developed nations see (Nguyen, 2011) cite inefficient financial management practices to contribute immensely to SMEs poor business performance inform of profitability.

Agricultural processing enterprises have played and continue to play significant roles in the growth, development and industrialization of many economies the world over. In the case of Rwanda, Agricultural processing enterprises have performed below expectation due to a combination of factors where by financial management challenges is one of them and its believed poor financial management in agricultural business organisation have affected profitability of many agricultural business organisation, coupled with the fact Rwanda has got few professional accountants to conduct the practice of professional financial accounting accordingly. It is based on the above problem that is why the researcher is prompted to examine the effect of financial accounting practices on profitability of agricultural organization in Rwanda.

3. Objective of the Study

1. To analyze the effect of financial planning on profitability of Nyirangarama agricultural processing industries.

4. Conceptual Framework



4.1 Research Design

Research design is the blue print on how one goes about answering the objectives of the study (Bryman and Bell, 2007). It refers to the way in which the study is designed and the method that will be used in carrying out the research. The study was a descriptive design basing on both qualitative and quantitative approach. A quantitative approach is linked to deductive method of testing theories while qualitative approach is characterized with inductive testing (Saunders, et al., 2003). The study focused more on the qualitative approach but in some instances, quantitative approach was employed in order to get better understanding and more insightful interpretation of the results. For this study, the quantitative method investigated the effects of financial management practices on profitability of agricultural organization in Rwanda. The qualitative data collection method on the other hand investigated the extent to which the financial management practices effects profitability of agricultural organization in Rwanda.

4.2 Target Population

Target population in statistics is the specific population about which information is desired. According to Ngechu (2014), a population is a well-defined or set of people, services, elements and events, group of things or households that are being investigated. This definition ensures that population of interest is homogeneous. The population of this study comprised of 120 staffs of Nyirangarama agricultural processing industries.

4.3 Sample Size Determination

The sample size was derived from a population of 120 people being targeted in the study. The researcher used Slovene's formula at a confidence interval of 95% and margin of error of 5% as described below.

$$\text{Where; } n = \frac{N}{1 + N(e)^2}$$

n = the minimum sample size

N = the population from which the sample was drawn estimated at 120 staffs of Nyirangarama agricultural processing industries

e = the margin of error estimated at 10%.

$$n = \frac{120}{1 + 120(0.5)^2} = \frac{120}{1 + 120(0.0025)} = \frac{120}{1.6}$$

n=75

Therefore, 75 members will be sampled

4.4 Sampling Techniques and Procedures

Random sampling technique was used to select respondents from Nyirangarama agricultural processing industries in the department of finance, accounting, administration and IT department. The study had 75 respondents who were used in data collection. A list of employees was obtained from Nyirangarama agricultural processing industries Human Resource Office and it is this list that was used to group the employee into strata (department). Then the researcher followed by random sampling technique in order to avoid bias and reduce the chances of error. The researcher also ask the management on key supervisors, where names were provided to the researcher and screened on the parameter of performance. Some groups were purposively selected in order to explore most of the research questions especially accountants.

4.5 Data Collection Method

According to Malhotra and Birks (2006) primary data is information which has been collected by researcher himself for the first time. Primary data is suitable for this study as it is less time consuming and less expensive as compared to primary data collection method. Data was mainly collected by using questionnaire technique.

4.5 Data Analysis And Presentations

The data collected was processed and analyzed using SPSS (Version 22). This involved data coding, editing and tabulation especially quantitative data. The purpose of all these is to make the information clear and understandable for other people. Qualitative analysis technique was used. The Qualitative analysis techniques complemented with some statistics were mainly obtained from the secondary data through documentary analysis from the case study organization. The researcher used mean, standard deviation and regression analysis to establish relationship between the independent variable and dependent variables (financial management practices and Nyirangarama agricultural processing industries).

A multivariate regression analysis was used to determine the relationship between the dependent and the independent variables.

The multivariate regression model was:

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

Where:

Y = Profitability;

β_0 = Constant Term;

$\beta_1, \beta_2,$ and β_3 = Beta coefficients;

X_1 = Financial Planning;

ϵ = Error term

The study used a 95% confidence level. A 95% confidence interval reflects a significance level of 0.05. This shows that for an independent variable to have a significant effect on the dependent variable, the p-value should be below the significance level (0.05).

5. Research Findings and Discussion

Table 1: The view of respondents on the financial planning and profitability

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Nyirangarama agricultural processing industries have effective inventory plan	75	4.5733	.59669	-1.075	.277	.188	.548
Nyirangarama agricultural processing industries have effective cash management plan	75	4.4000	.63671	-.581	.277	-.579	.548
Nyirangarama agricultural processing industries have plan for capital investment	75	4.3733	.58756	-.309	.277	-.676	.548
Nyirangarama agricultural processing industries have effective asset management plan	75	4.4267	.57359	-.367	.277	-.765	.548
Valid N (listwise)	75						

Source: Primary, 2018

In finding out whether Nyirangarama agricultural processing industries have effective inventory plan, this was justified by a very strong mean of 4.5733 and heterogeneous standard deviation of .59669; implying that majority of the respondents agreed that Nyirangarama agricultural processing industries have effective inventory plan. On whether Nyirangarama agricultural processing industries have effective cash management plan, was justified by a strong mean of 4.4000 and heterogeneous standard deviation of .63671, which implies that majority of the respondents agreed that Nyirangarama agricultural processing industries have cash management plan.

Furthermore, the researcher wanted to find out whether Nyirangarama agricultural processing industries have plan for capital investment; this was justified by a strong mean of 4.3733 and heterogeneous standard deviation of .58756; implying that majority of the respondents agreed that Nyirangarama agricultural processing industries have capital investment. Lastly, on whether Nyirangarama agricultural processing industries have effective asset management plan; this was justified by a strong mean of 4.4267 and heterogeneous standard deviation of .57359; implying that majority of the respondents agreed that Nyirangarama agricultural processing industries have asset management plan.

Table 2: Profitability of Nyirangarama agricultural processing industries

	N						
	Mean		Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Nyirangarama agricultural processing industries net profit has improved in the last three (3) years	75	4.6133	4.6133	-1.420	0.277	0.874	0.548
Nyirangarama agricultural processing industries liquidity has improved in the last three (3) years	75	4.6667	0.60030	-1.640	.277	1.639	0.548
Valid N (listwise)	75						

Source: Primary, 2018

In finding out whether Nyirangarama agricultural processing industries net profit has improved in the last three (3) years, this was justified by a very strong mean of 4.6133 and heterogeneous standard deviation of 4.6133; implying that majority of the respondents agreed that Nyirangarama agricultural processing industries net profit increased in the last three years. On whether Nyirangarama agricultural processing industries liquidity has improved in the last three (3) years, was justified by a very strong mean of 4.6667 and heterogeneous standard deviation of .60030, which implies that majority of the respondents agreed that Nyirangarama agricultural processing industries liquidity has improved in the last three (3) years.

R-square is equal to 0.644(64.4%). This implies that 64.4% variations in profitability have been captured by the model above, since the p value is 0000, this means that profitability in relation to financial planning is statistically significant as seen further in ANOVA table below.

Table 4: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	70.24	1	70.24	131.881	.000 ^b
	Residual	38.88	73	0.533		
	Total	109.12	74			

a. Dependent Variable: Profitability (Net profit & Liquidity)
 b. Predictors: (Constant), Financial planning

10.1 Regression analysis models on financial planning and profitability

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802 ^a	.644	.639	.72980

a. Predictors: (Constant), Financial planning

Table 4.5: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.161	0.673		2.391	0.019
	Independent variable	0.432	0.038	.802	11.484	.000

a. Dependent Variable: Profitability (Net profit & Liquidity)

From coefficient table above, the researcher came up with following regression equation in order to justify the study.

$Y = \text{Profitability}$

$B_1 = \text{Constant Term}$

$B_1 = \text{Beta coefficients}$

$X_1 = \text{Financial planning}$

$Y = 1.610 + 0.432 X_1 \text{ (Financial planning)} \dots \text{Equation (i)}$

The results indicate that financial planning have a relationship with profitability. The significance is 0.000 which indicates that there is positive relationship (0.432) between financial planning and profitability. These results provide reasonable evidence to the consistent view that, the profitability of the organization justified by increase in net profit and liquidity hence they improved profitability in the organization. The beta of financial planning is .802 with a t-statistic of 11.484. The positive coefficients mean a unit change in financial planning leads to a 0.432 units increase in profitability while keeping financial recording and constant and since the P- value = 0.000 < 0.05 the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

6. Conclusion

In conclusion, it was established that Nyirangarama agricultural processing industries have financial management practices which includes: Financial planning practices (effective inventory plan, cash management plan, capital investment and asset management plan); Financial recording practices (general ledger for records, accounts receivable records (book for recording all the payments received from clients), accounts payable records (book for recording all the payments made by the organization) and inventory records (book for recording incoming and outgoing inventory records) and Financial reporting practices (have income statement, have reports on cash flow information, stakeholder's equity report and have a comprehensive financial statement). The financial management practices have got positive effect on profitability of the organization inform of net profit and liquidity. The multivariate regression model formed: $Y = 11.610 + 0.432 X_1 + \epsilon$. The regression equation above established that taking all factors constant net profit and liquidity improves as a result of (financial planning, financial recording and financial reporting) at Zero organization performance Constant Term in spite of some few challenges.

7. Recommendation

The researcher has suggested the following recommendations basing on the challenges provided by the respondents:

- The organization should conduct comprehensive financial planning in order to improve on the organization profitability.
- The organization should employ qualified accountants to manage the financial transactions of the organization hence improving financial performance.
- The organization should ensure that there are timely accurate and complete records of all accounting

transactions in order to promote financial performance of the organization.

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