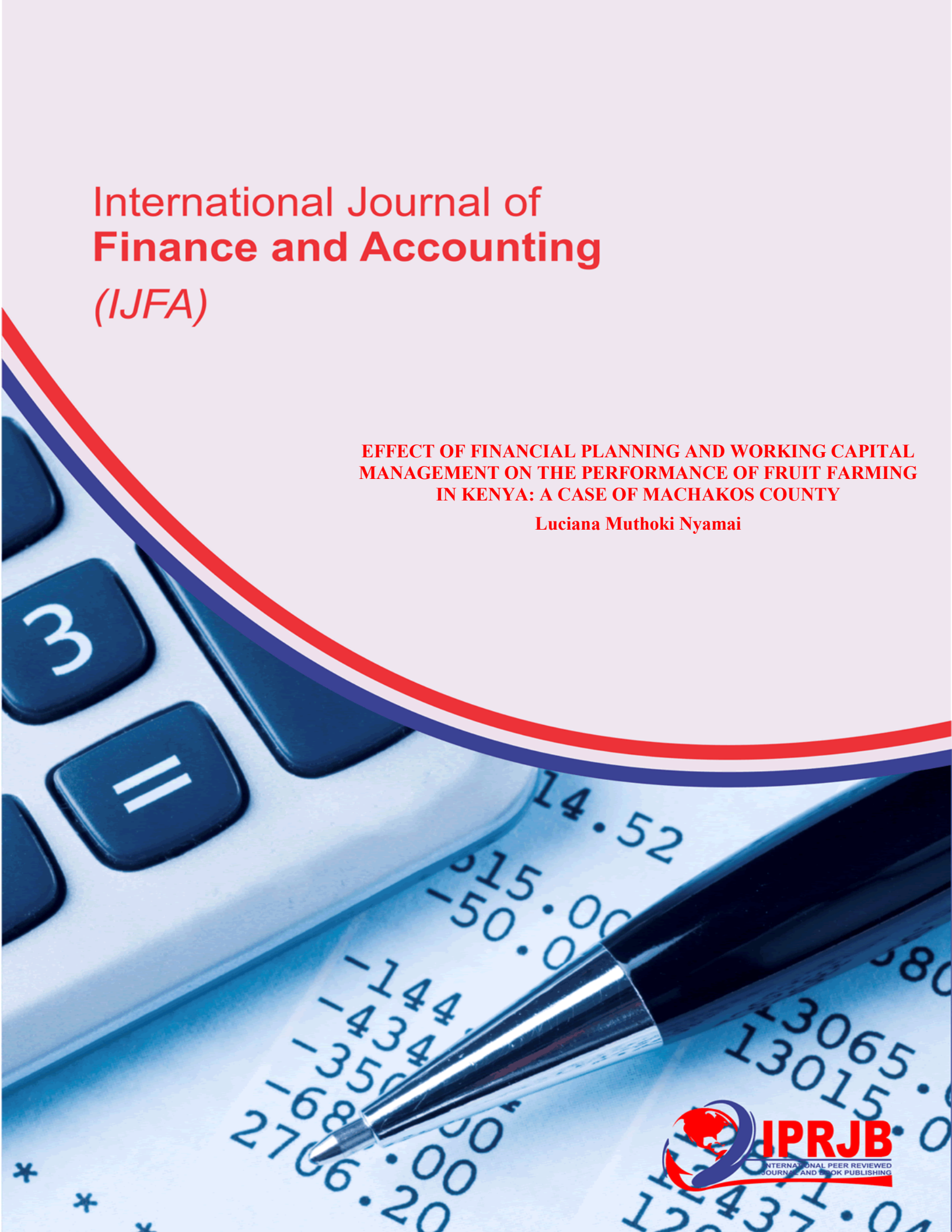
International Journal of
Finance and Accounting
(IJFA)

EFFECT OF FINANCIAL PLANNING AND WORKING CAPITAL MANAGEMENT ON THE PERFORMANCE OF FRUIT FARMING IN KENYA: A CASE OF MACHAKOS COUNTY

Luciana Muthoki Nyamai



International Journal of Finance and Accounting
ISSN 2518-4113 (Online)
Vol.3, Issue 1 No.2, pp 19 - 34, 2018

www.iprjb.org

EFFECT OF FINANCIAL PLANNING AND WORKING CAPITAL MANAGEMENT ON THE PERFORMANCE OF FRUIT FARMING IN KENYA: A CASE OF MACHAKOS COUNTY

[1*] Luciana Muthoki Nyamai
Masters Student, Africa Nazarene University
[*]Corresponding Author's Email: lucynyamai38@gmail.com

Abstract

Purpose: The purpose of this study was to establish the effect of financial planning and working capital management on the performance of fruit farming in Kenya.

Methodology: Descriptive research and correlation research design were used in this study. The target population in this study was fruit farmers in Mwala Sub County in Machakos County who were 2702. Quota sampling technique was used and the sample size was 348. Primary data was collected using a questionnaire. Quantitative data was analyzed by use of descriptive and inferential statistics (correlation). Qualitative data collected was analyzed using content analysis technique. The findings of this study were presented in tables, charts and graphs.

Results: The study established that financial plans have a positive and significant correlation with performance of fruit farming. Working capital management, too, was found to have a positive and significant correlation with performance of fruit farming.

Unique Contribution to Theory, Policy and Practice: Based on these findings, the researcher recommended that the agricultural ministry in the county government need to train mango farmers on financial planning and have follow-up programs on the same. The study also recommended that the government, NGOS and investors whose interest lies in supporting farmers need to extend their training support to them. Further, financial institutions need to implement mechanisms for supporting the mango farmers financially.

Keywords: *Financial planning, working capital management and performance.*

1.0 INTRODUCTION

1.1 Background to the Study

Fruit Farming has emerged as a very significant sector in the world (Global Horticulture Market Outlook, 2015). This is because production of fruits, flowers and vegetables have acquired much significance in recent times because of their increasing demand. It is because of the changes in lifestyles of people globally and their focus towards healthy eating habits that has made individuals to increase their consumption of fruits and vegetables. This sector is highly valued because of its impact on the economy as it employs indirectly and directly over 4 million people at country level with smallholder farmers contributing over 60% of the production (Joosten, Dijkxhoorn, Sertse & Ruben, 2015).

Fruit farming plays a key economic role around the world. In Europe's economies for instance, fruit farming employs as much as 66% of the total employed personnel in the private sector and account for 55% of total revenues in the EU (Bauer, 2015). The role played by fruit farming in any society is undeniably vital; for instance, in Australia around 98% of the agri-ventures are composed by fruit farming. Most of times, agricultural sector is seen as a black box on when it come to development, however the entrepreneurial measures strategies undertaken by young entrepreneurship have had influence in the development of the horticultural productions (Stonehouse & Pemberton, 2002).

In Africa, as pointed out by Tschirley, Munguzwe, Ayieko, Cairns, Kelly and Mukwiti (2012), fruit farming is being confronted by a series of intractable constraints which have been making fruit farming at commercial scale difficult to achieve and quite risky. The constraints faced include high costs for chemicals, fertilizers, piecework labor, transport and other needed equipment. These costs are a major barrier for many smallholder farmers, especially since agricultural credit markets are nearly non-existent in rural Sub Sahara Africa (Tschirley et al. 2012). The scenario in Tanzania presents a picture of the fruit farming performance in African and regionally whereby, Oswald (2013) points out that Tanzania's fruit farming industry faces several universal challenges. These include: low quality and productivity, weak production base, invisibility and marginalization, bottlenecks in land and limited access to finance especially long-term financing and investment. Other challenges include inadequate market development support, policy and infrastructure, weak industry linkages, lack of entrepreneurship culture, and inadequate skilled and competent human resource.

In the Kenyan context, high farm inputs costs, stringent worldwide standards, harsh weather, out of date technology, and global economic meltdown have hit hard fruit farming which is a vital lifeline for thousands of Kenyan farmers (Economic Survey Report, 2015). Adding to this, Meme (2015) points out that there has been slow growth rate in fruit farming over recent decades. This situation has worsened by the market condition whereby Fintrac (2016) points out that Kenya has been losing market share in the global market despite having being one of the most successful producers and exporters of fresh produce and flowers in Sub-Saharan Africa. The same views are raised by Wachira (2015) who acknowledges that one of the key

contributors to losing market share in the global fruit farming market is because to regulatory and policy deficiencies. He adds that profits in the sector have contracted as a result of currency fluctuations. Oxford Business Group (2016) also point out that the European union (EU) demanded that Kenya cuts the amount of chemical residue in all EU-destined produce exports has resulted to fall in vegetable exports, costing the industry up to $30m.

Alain (2015) argues that lack of training and knowledge of the farmers, rising production costs, regulations and policy and poor food-safety compliance have been inhibiting growth of the sector. Carrato (2015) points out that reforms are crucial to enhance fruit farming sector's competitiveness, resilience with the current market volatility, stiff competition, and that there's need to address emerging concerns like declining production.

Given that fruit farming are core to the residents of Machakos County, research into fruit farming is very fundamental. Addressing the challenges facing fruit farming needs to be a top priority in order to help Machakos County to realize sustainable development as well as offering solutions to counties with related challenges. It is on this background that the researcher sought to find out the influence of financial planning and working capital management on the performance of fruit farming. The United States Agency for International Development (USAID) says that if properly exploited, the fruit farming in the country can reach between 15 and 20 per cent growth.

1.2 Statement of the Problem

The art of cultivation, production, harvest, and storage of fruits is important for any country's economy as it absorbs a huge share of the labor force, supports food and nutrition security. In Kenya, fruit farming has realized mixed performances over the recent years despite being a major foreign exchange earner. According to Institute of Economic Affairs (2013), fruit farming in Kenya in the year 2010 registered a 3.5% growth rate; year 2011 it registered a 1.3% growth rate, in the year 2012 fruit farming registered 2.5% growth rate, in the year 2013, it registered a 1.4% growth rate, in the year 2014 fruit farming registered a 2.1% growth rate, while in the year 2015 fruit farming registered a 2.6% growth rate. This is a slow growth rate considering the government borrowing rate to improve the performance of fruit farming in Kenya (Mathooko, 2015). Mathooko (2015) acknowledge that farming sector has remained underperforming.

A research by Mathooko (2015) shows that, fruits production in Kenya has been deteriorating especially to small scale famers in semi-arid areas like Machakos, Makueni and Kitui, counties. According to Kenya Economic Survey Report (2015), production of horticultural products has decreased from 57,000 to 51,351 unit tonnes between the years 2013 and 2014. This decrease according to IFAD (2015) was commonly attributed to low level of financial literacy, poor fruit farming practices, unavailable ready market, and low entrepreneurial practices among famers in small scale farmers. Despite the government's efforts to promote the general horticultural industry, Kenya has lost a chunk of its global market share in fruit farming in the last five years from 1.28 per cent to 1.23 per cent last year (Achuka, 2015). Addressing the current problem facing fruit farming would help Machakos County residents to alleviate poverty, enhance their food security and livelihood which would play a key role in supporting the targeted goal of achieving sustainable development with Machakos County and Kenya. Hence, the focus of the study was to establish the influence of financial planning and working capital management on the performance of fruit farming.

1.3 Research Objective

The study research objective was to establish the effect of financial planning and working capital management on the performance of fruit farming in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Literature

2.1.1 Capital Theory and Investment Behaviour

Access to Capital Theory is a theory of management proposed by Johnson (1982). Capital Theory outlines issues related to finance gap. This theory states that a production plan for the firm is chosen so as to maximize utility over time. Under certain well-known conditions this leads to maximization of the net worth of the enterprise as the criterion for optimal capital accumulation. Concerning the knowledge gap, debt is restricted because small firms are unaware of appropriate sources of finance and their advantages and disadvantages (Seibert et al. 2012). On supply gap, the Bolton theory argues that the unavailability of funds is imminent to small enterprises compared to large enterprises. This makes the cost of debt for small enterprises higher than the cost of debts in large enterprises.

There is a set of difficulties that hit the small enterprises harder than the well-established enterprises. Small businesses feel greater impact on taxation, face restrictions to accessing loans, are commonly less knowledgeable of sources of finance and challenged in meeting loan requirements. Small businesses face limitation in accessing the finances and penetrating the market and therefore are faced by financial constrains (Seibert et al. 2012). This results to limited growth and development due to the limitation in funding. The capital access theory as propagated in the Bolton Report help to underpin this study in that the small scale fruit farmers and the effect of agricultural loans pricing on net income of fruit farming owners (Barton & Gordon, 2008).

2.1.2 Financial Performance Measurement Theory

Financial Performance Measurement Theory states that performance measurement is important for every company operating on the market. The proponents of this theory are Kletzer and Bardhan (1987). Performance assessment of an enterprise is very important because it helps improve future work. The concept of performance has many meanings, which shows that this term is perceived differently by users of financial information in order to satisfy their interest (Jensen, 2001). We can say that: managers are concerned with the overall performance of the company, current and potential investors see performance by profits from investments made, employees show their interest for stability and benefits, suppliers for the solvency of their customers and customers are concerned about the stability of the company.

Companies need to assess the performance and change, if necessary, their own strategy to increase profits. Shareholders need this information to decide in which company they will invest, and customers sometimes use this information as a parameter before choosing a product (non-financial information). Management of a firm and their objectives are to increase the company's value, according to Jensen (2001). Without monopoly and externalities, social benefit is maximized when every individual firm in an economy fully exploits its entire market value. This

theory states that the manager should take the best decision for increasing company value. This theory was adopted due to its relevance to this study whereby it acknowledges that owners of businesses including fruit farmers need to take the best decisions in order to increase the value of their businesses.

2.2 Empirical Review

2.2.1 Financial Planning

According to Absa Financial Services (2012), financial planning is termed as the proper management of own finances to meet goals and protect assets and the future of the business. They further acknowledge that business of agriculture, whether it is intensive crop production, mixed farming or ranching and livestock farming, has common issues that need to be managed appropriately to make sure that there is sustainability. Absa Financial Services (2012) concluded that financial planning becomes very important in ensuring sustainability in agri-businesses given the increasing challenges such as drought. Similar views are raised by Rottger (2004) who argues that poor financial planning skills, especially by farmers, results in poor production. Rottger (2004) further assert that financial planning knowledge and skills by entities that have ventured into agri-business are especially significant during the season of harvesting.

Kwame (2010) points out that improper financial management practices are the key reason behind failure of many business enterprises. Olawale and Sun (2010) point out that proper procurement practice, appropriate record keeping practices, occasionally appraising the effectiveness of the fixed asset, regular maintenance repair and appropriate disposal of fixed assets will improve the performance. According to ABD (2011), mango prices fluctuate often by more than 100%, and this makes planning by farmers to be difficult. Due to the perishable nature and limited technical knowledge on handling spoilable produce, too is a major drawback to the industry.

The researcher reviewed a study by Mishra, Wilson and Williams (2007) on the factors that have impact on the financial performance of beginning farmers. The study was carried out in United States of America (USA). Descriptive research design was used in this study where secondary data was gathered and analyzed using descriptive and inferential techniques. The findings of the study were that farmers who had financial plans with books and records kept for genetically modified crops, controlled costs and participated in marketing contracts led were more successful.

Mishra and Morehart (2010) examined the relationship between profitability and record keeping practices, leasing practices, and contracting practices within USA farmers. The study was carried out in USA. Descriptive research design was used; data was collected using questionnaires and analysis was done using descriptive statistics. The study revealed that financial practices such as renting land, keeping formal records, use of forward contracting practices lowering machinery costs, and using extension information had a significant relationship with net farm income of USA farmers. The authors conclude that farm business planning allows farmers generate more returns in the long run by forming clear directions and flexible frameworks for management which supports immediate responses to deviations in plans, unexpected events and altered

conditions. The research reveals that financial plans assist farmers in communicating their farm situations to lending institutions and advisors.

Nzioki (2013) investigated the challenges that affected the marketing of horticultural produce focusing on mangoes, whereby he majored on the geographical scope of Masongaleni ward of kibwezi constituency in Kenya. The research was conducted using a case study design and the data was collected using questionnaire. The research revealed that in Masongaleni ward, marketing of mango fruits were reliant on road network, knowledge and training of farmers, middlemen and pricing of mango fruits with middlemen having the greatest influence on the marketing of mango fruits.

Onkoba (2014) investigated the effect of labor, cost of seeds, borrowing, fertilizers and leasing land on the livelihood of small scale farmers undertaking horticultural farming in Kenya. In carrying out the study, a stratified sampling procedure was used and both primary and secondary data were used. The findings of the study were that high input prices have a great effect on the levels of income of small scale horticultural farmers and significantly influence their economic livelihood. Further, high input prices were a major challenge to small scale horticultural farming.

2.2.2 Working Capital Management

Major challenge facing the fruit farming is access to working capital and efficient machines (Grant, Kadondi, Mbaka & Ochieng, 2015). Grant, *et al* (2015) further argues that, with limited working capital, fruit farming performances are constrained. Karani, Ibrahim and Maina (2015) note that due to limited credit access, farmers' income sources are used to raise money which they require as working capital. However, as noted by Msuya, Hisano and Nariu (2008), in the long run, this practice may not result to specialization and therefore translating to a negative effect on efficiency.

According to Mercycorps (2012), farmers lack adequate business skills and efficient agricultural practices, so they fail to manage their farms well appropriately which results to low mango harvests and sales. They recommend that farmers need to be helped to manage their businesses through investment in primary equipment, plan cash flow, access credit so that they obtain more returns and overcome hindrances better. Mercycorps (2012) warns that farmers harvest all the mangoes in the farms including those that are over-ripe fruit and under-ripe at once and this leads to less earnings from their crops. Brent and LaDue (2003) argue that various practices, including net present value decisions, are not extensively embraced by farmers.

Dutta (2000) investigated management of working capital of horticulture sector in Himachal Pradesh. The study used descriptive research design. Data was collected using questionnaires and analyses using descriptive statistics. The study revealed that the position of the working capital worsened significantly during the study period. It was also found that despite suffering huge losses, horticulture farms were holding huge idle inventories and hence failed miserably to trade-off between liquidity and profitability. The results from the regression analysis revealed that there was no significant correlation between sales and gross working capital.

Isti and Muhammad (2015) analyzed working capital finance sources for farmers undertaking large scale farming in Sempu District of Banyuwangi Regency. The research applied descriptive qualitative research methods while the sample was selected using purposive snowball sampling technique. The study findings established that farmers obtained direct impacts by selecting

appropriate working capital funding sources and the impact varied according to the selected sources. The study established that positive impact realized from self-funding is the fast realization of working capital, with no monthly weight and full advantageous benefits. Further revelations were that farmers, who received working capital from institutions that are not formal including middlemen, realized direct impacts, such as long-term period of repaying loans, the absence of collateral and the share of risk. It emerged that there was a negative association with obtaining working capital from informal sources like middlemen and informal commitment to them as this resulted to low selling price as a consequence under an unwritten agreement.

Gitau *et al* (2014) investigated how cash management practices influenced the financial performance of agri-business enterprises operating in Kenya. The study used cluster and purposive sampling techniques. A structured questionnaire was administered to the respondents and collected data was analyzed by use of descriptive statistics. The findings of the study established that majority of agri-business owners lacked adequate knowledge on judicious management of their financial resources. The study concluded that majority of agri-business owners had not utilized cash management practices effectively.

Namdepi (2014) investigated working capital requirements and hindrances and their effect on the performance of flower sector in Kenya using a case of Naivasha. The research methodology adopted was survey method and the sample size was selected from flower firms situated in Naivasha County. Data collected was analyzed descriptively. The study findings established that there was unlimited access to necessary working capital finance requirements for Small and Medium Enterprises operating in the Kenyan market. It emerged from this study that in structuring working capital finance, the constraints encountered include; lack of knowledge and awareness of other sources of finance other than banks, the regulatory and legal framework, varying buyer wants, enterprise cash flow limitations, increased competition from competitors, infrastructural constraints and lack of managerial training and experience.

A review of the work of Kwame (2010) established that, horticulture products generally need much more working capital as compared to other crops. This is because horticulture products require more inputs such as pesticides and fertilizer. In addition, input costs are more than the labor costs incurred if comparison is made between vegetables and cereals. Paramasivan and Subramanian (2009) acknowledge that efficient working capital management is vital to the performance of every enterprise and needs constant assessment and consciousness in managing debt collection, stock levels and payment of creditor while increasing profitability. Understanding working capital is necessary in operating a business efficiently and effectively. With reliable procedures and processes put forth for control and administration of all the components of working capital, an enterprise will continually improve hence resulting to optimization of enterprise performance.

3.0 RESEARCH METHODOLOGY

Descriptive research and correlation research design were used in this study. The research site for this study was Mwala Sub County in Machakos County. The target population in this study was fruit farmers in Mwala Sub County in Machakos County who were 2702. Quota sampling technique was used and the the sample size was 348 farmers derived using the Yamane formula. Primary data was collected using a questionnaire research tool that was self-administered to the

respondents. Data collected was both quantitative and qualitative in nature and quantitative data was analyzed by use of descriptive and inferential statistics (correlation). On the other hand, qualitative data collected was analyzed using content analysis technique.

4.0 RESULTS AND DISCUSSION

4.1 General Information

Table 1: provides the results on the response rate and the demographic information

Response rate	**Frequency**	**Percent**
Returned	256	74
Unreturned/Rejected	92	26
Total	**348**	**100**
Gender	**Frequency**	**Percent**
Male	112	43.8
Female	144	56.3
Total	**92**	**100**
Period of Time in Mango Agri-business	**Frequency**	**Percent**
0-5 Years	77	30.1
6-10 Years	98	38.3
11-15 Years	43	16.8
Over 15 Years	38	14.8
Total	**256**	**100**
Education level of Respondents	**Frequency**	**Percent**
Postgraduate	54	21.1
Degree	3	1.2
Certificate/Diploma	39	15.2
'O' Level	119	46.5
Others	41	16
Total	**256**	**100**
Trainings of the Respondents	**Frequency**	**Percent**
Trained	199	77.7
Not trained	57	22.3
Total	**256**	**100**
Level of Training of Respondents		
Basic	175	68.3
Intermediary	64	25.2
Advanced	17	6.5
Total	**256**	**100**

Out of these farmers, 256 filled in and returned dully filled questionnaires resulting to a response rate of 73%. It was established that 56.3% of the respondents were females while 43.8% were males. According to the results, 38.3% respondents had been engaging in Mango agri-business for 6 to 10 years. A further 30.1% respondents had been involved in mango agri-business for less than 6 years, 16.8% for 11-15 years, whereas 14.8% for over 15 years. Majority of the respondents, as shown by 46.5% had 'O' Level as their highest levels of education, 21.1% had postgraduate degrees, 21.1% had certificate/diploma while 16.0% had other levels of education. According to the findings, 77.7% of the respondents had been trained in Mango agri-business while the remaining 22.3% had not been trained. Majority of the farmers had basic training at 68.3% while those who had intermediary and advanced trainings were 25.2% and 6.5% respectively.

4.2 Descriptive Statistics

4.2.1 Influence of Financial Planning

The respondents were asked to rate their levels of agreement with statements related to the effect of planning their finances on their mango agribusiness. A Likert scale of 1 to 5 where 5= strongly agree, 4= agree, 3 = neutral, 2= disagree and 1= strongly disagree was used to determine the respondents ratings on the statements and the findings are presented in table 2 below.

Table 2: Influence of Financial Planning

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Mean	Std. Deviation
Record keeping practices are done regularly	25	68	39	93	31	2.86	1.22
Having a plan has contributed to the success of my mango farm	32	97	20	83	24	3.12	1.25
There is a clear expenditure plans for my mango business	23	77	32	88	36	2.86	1.25
Having expenditure plans lead to better use of available funds	36	89	23	79	29	3.09	1.29
Plans are made prior regarding pricing of the fruits	27	101	39	60	29	3.14	1.22
My mango business has a budget which is strictly observed	25	67	48	93	23	2.91	1.17
Mean of Weighted means						**3.00**	**1.23**

As shown in the table above, mean of weighted means of 3.00 was obtained which implies that the respondents were indifferent with the statement on influence of financial planning influences.

According to the findings, the respondents were indifferent when asked whether plans were made prior regarding pricing of the fruits as shown by weighted mean of 3.14. This could suggest that there was no planning made by majority farmers on pricing. Further, the respondents were neutral in that having a plan has contributed to the success of their mango farm as shown by weighted mean of 3.12. The findings imply that there was mixed results of success which could be attributed to having no plans by majority of the respondents.

The respondents were neutral in having expenditure plans led to better use of available funds as shown by weighted mean of 3.09. Further, they disagreed with the statement that their mango business has a budget which is strictly observed as shown by weighted mean of 2.91. This is an indication that most farmers had no budgets. In addition, the respondents disagreed that record keeping practices were done regularly and that there was a clear expenditure plan for their mango businesses as shown by weighted means of 2.86 in each case. The findings can be construed to imply that there was no clear expenditure plans for their mango businesses and most farmers did not uphold record keeping practices in their mango agri-businesses. When asked to provide additional information on how financial planning affects performance of their Mango agri-business, they said that training on financial planning was needed.

4.2.2 Effects of Working Capital Management

The study sought to establish the respondent's levels of agreement with statements regarding how management of cash for day to day farm activities affected performance of their agri-businesses. A Likert scale of 1 to 5 where 5= strongly agree, 4= agree, 3 = neutral, 2= disagree and 1= strongly disagree was used to determine the respondents ratings on the statements and the findings are presented in table 3.

Table 3: Effects of Working Capital Management

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Mean	Std. Deviation
Cash management practices in are observed in my mango farm regularly	21	10	29	85	18	3.09	1.16
I have adequate knowledge and training on management of working capital of my farm	17	63	23	127	26	2.68	1.15
The working capital position has improved over years in my farm	24	86	46	84	16	3.07	1.14
I receive short term loans from financial institutions to boost my farm	18	57	18	100	63	2.48	1.27
Obtaining working capital from financial institutions and other sources enhances my mango farm	11	65	12	92	76	2.39	1.27
Mango trees usually require more working capital	133	54	28	28	13	4.04	1.24
Mean of Weighted means						**2.96**	**1.21**

From the findings, mean of weighted means of 2.96 was obtained which implies that the respondents were indifferent with the statement on effects of working capital management. The respondents strongly agreed that mango trees usually require more working capital as shown by weighted means of 4.04. However, they were indifferent when asked whether "cash management practices were observed in my mango farm regularly" and whether "the working capital position has improved over years in my farm" as shown by weighted means of 3.09 and 3.07 respectively. These findings imply that not all the farmers observed cash management practices regularly, and that working capital position had not significantly improved.

According to the findings above, the respondents disagreed when asked whether they had adequate knowledge and training on management of working capital of their farm as shown by weighted means of 2.68. They further disagreed when asked whether they received short term loans from financial institutions to boost their farm as shown by weighted means of 2.48. Finally, the respondents disagreed with the statement that obtaining working capital from financial institutions and other sources which enhanced my mango farm as shown by weighted means of 2.39. This is a clear indication that indeed the farmers we not receiving adequate financial support from the lending institutions. Further, the findings revealed a gap in training among the farmers on management of working capital of their farm. The Mango farmers were asked to provide additional information on how working capital management affected performance of their mango agri-business. The respondents indicated that they obtained funds from merry go rounds and table banking hence they needed funding as well as training.

4.2.3 Performance of Fruit Farming

The study sought to find out whether, planning well, having cash to run daily activities in the mango farms, having correct farming tools, having the best options of mangoes had changes on the farmer production of mangoes. A Likert scale of 1 to 5 where 5= greatly improved, 4= improved, 3 = constant, 2= decreasing and 1= greatly decreased was used to determine the respondents ratings on the statements. The findings represented below based on the rating by the respondents.

Table 4: Performance of Fruit Farming

Statement	Improved Greatly	Improved	Constant	Decreasing	Decreased Greatly	Weighted Mean	Std. Deviation
Returns from horticulture farming	22	172	51	10	1	3.80	0.66
Production capacity	27	172	48	6	3	3.84	0.68
Quality of produce	23	160	57	15	1	3.74	0.72
Marketing of the produce	15	51	62	125	1	2.80	0.97
Mean of Weighted means						**3.55**	**0.76**

From the findings, mean of weighted means of 3.55 was obtained which implies that the respondents were of the position that financial management practices affected performance of

fruit farming in Kenya. According to the findings, the respondents said that production capacity, returns from horticulture farming and quality of produce had improved as shown by weighted mean of 3.84, 3.80 and 3.74 respectively. However, marketing of the produce remained constant as shown by weighted mean 2.80.

4.2 Correlation Analysis

Pearson's correlations analysis was done to establish the correlation between the independent and dependent variable at 95% confidence level and 5% significance level. The findings are presented in table 5.

Table 5: Correlation Matrix

		Performance Fruit Farming	ofFinancial Planning	Working Capital management
Performance of Fruit Farming	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	256		
Financial Planning	Pearson Correlation	.314**	1	
	Sig. (2-tailed)	.000		
	N	256	256	
Working Capital management	Pearson Correlation	.144*	.448**	1
	Sig. (2-tailed)	.021	.000	
	N	256	256	256

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

As shown above, at 5% significance level, there was a positive correlation between financial planning and working capital management and the performance of fruit farming in Kenya. This is based on the Pearson correlation coefficients obtained of 0.314 and 0.144 respectively. Further, all the correlations coefficients were significant since the values obtained were less than the significance level of the study 0.05. This conclusion was arrived at based on the criteria for testing significance which stipulates that, if the significance value obtained from analysis is less than the study's significance level then the test is deemed significant and vice versa.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

The study finding established that that there was no planning made by majority farmers on pricing and hence failure to have such plans did not result to the success of their mango farm. Further, the farmers were neutral that having expenditure plans led to better use of available funds. It emerged that majority of mango businesses had no budgets which are strictly observed. Further, record keeping practices were not done regularly and that there was no clear expenditure plans for majority of mango businesses.

Regarding working capital, the study revealed that mango trees usually required more working capital. However, farmers were indifferent on whether cash management practices were

observed in my mango farm regularly and whether the working capital position had improved over years in their farms. The study established that the farmers had no adequate knowledge and training on management of working capital of their farm. The study revealed that few farmers received short term loans from financial institutions to boost their farm but merry go rounds and table banking.

5.2 Conclusions

Financial plans have a positive and significant correlation with performance of fruit farming. Lack of financial plans does not support performance of fruit farming. Hence the performance of mango farms remains poor due to lack of plans by Mango farmers on pricing, expenditure plans and budget. Worth noting, Mango farmers do not observe record keeping practices regularly for their mango businesses. Also, in cases where there are expenditure plans for mango businesses, majority are not clear.

Working capital management, too, has a positive and significant correlation with performance of fruit farming. Working capital management has not been influencing performance of fruit farming positively as a result of them not being observed and upheld. This is despite mango trees requiring more working capital. Not all the farmers observe cash management practices regularly. Mango farmers have inadequate knowledge and training on management of working capital of their farms. More so, majority are unable to access short term loans from financial institutions implying they receive inadequate financial support from the lending institutions. They only rely on merry go round and table banking.

5.3 Recommendations

Based on the findings, the researcher recommended that the agricultural ministry in the county government need to train mango farmers on financial planning and have follow-up programs on the same. The study further recommended that the government, NGOS and investors whose interest lies in supporting farmers need to extent their training support to them. Further, financial institutions need to implement mechanisms for supporting the mango farmers financially.

REFERENCES

ABD. (2011). *The Mango Sub-Sector in Kenya. The Results of the Mango Tree Census and Baseline Survey for Eastern Province. Final Report*. Nairobi, Kenya: IDMS.

Absa Financial Services. (2012). *The Importance of Financial Planning in the Agri-Market*.

Achuka, A. (2015). *Kenya's Global Market Share of Horticulture on the Decline*.

Alain, C. (2015). *Horticulture Challenges.* Nairobi, Kenya: Alain Charles Publishing.

Barton, G. M., &Gordon, P. (2008). *U.S. Patent No. 7,467,306*. Washington DC: Patent and Trademark Office.

Bauer, E. A. (2015). Enhancing Agricultural Education in United Kingdom through Competitive Mechanism. *Agricultural Finance Review*, *5*(1), 15 – 24.

Brent, A. G., & LaDue, E. L. (2003). Financial management practices and farm profitability. *Agricultural Finance Review*, 63(2), 157 – 174.

Carrato, M. (2015). *Reforming Horticulture Sector to Boost Competitiveness*.

Dutta, J. S. (2000). *Working Capital Management of. Horticulture Industry in HP: A Case Study of HPMC*. Unpublished Thesis, Himachal Pradesh University.

Economic Survey Report. (2015). *Economic Survey Report*. Nairobi: Government press.

Fintrac, C. (2016). *Global Competitiveness Study: Benchmarking Kenya's Horticulture Sector For Enhanced Export Competitiveness*

Gitau, B. N., Nyangweso, G., Mwencha, N., & Onchangwa, G. A. (2014). Influence of cash management practices on financial performance of agribusiness enterprises in Kenya. *International Journal of Social Sciences and Entrepreneurship, 1* (12), 260-270.

Global Horticulture Market Outlook, (2015). *Global Horticulture Market Outlook report.*

Grant, W., Kadondi, E., Mbaka, M., & Ochieng, S. (2015). *Opportunities for Financing the Mango Value Chain: A Case Study of Lower Eastern Kenya*. Nairobi: FSD Kenya.

Institute of Economic Affairs (2013). *Annual Report (213*).

Isti, F., & Muhammad, A. G. (2015). The Decisions of Working Capital Financing Sources: A Study on Large Red Chili Farmers in Sempu District, Banyuwangi Regency. *Journal of Social and Development Sciences, 6*(2), 46-51.

Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate objective function. *Journal of Applied Corporate Finance*, *14*(3), 8-21

Johnson, D. L. (1982). *Class & social development: a new theory of the middle class* (Vol. 1). Sage Publications, Inc.

Joosten, F. J., Dijkxhoorn, Y., Sertse, Y., & Ruben, R. (2015). *How does the fruit and vegetable sector contribute to food and nutrition security?* (No. 2015-076). LEI Wageningen UR.

Karani, G., Ibrahim, M., & Maina, M. (2015). Factors Affecting Technical Efficiency of Passion Fruit Producers in the Kenya Highlands. *Asian Journal of Agricultural Extension, Economics & Sociology, 5*(3), 126-136.

Kletzer, K., & Bardhan, P. (1987). Credit markets and patterns of international trade. *Journal of Development Economics*, *27*(1-2), 57-70.

Kwame, B. (2010). *Financial Management Practices of Small Firms in Ghana*: An Empirical Study.

Mathooko, C. (2015). *Horticulture Commodity Chains: The Impact of the UK Market on The African Fresh Vegetable Industry*. Nairobi, Kenya: IDS.

Meme, S. M. (2015). *Export Performance of the Horticultural Sub-Sector In Kenya: An Empirical Decisions*. Unpublished MBA Thesis, University of Nairobi.

Mercycorps. (2012). *From Farm to Market*.

Mishra, A. K., & Morehart, M. J. (2010). Factors Contributing to Earnings Success of Cash Grain Farms. *Journal of Agricultural & Applied Economics, 31*(3), 623-37

Mishra, A. K., Wilson, C. A., & Williams, R. P. (2007). *Technology Adoption, Management Practices, and Financial Performance of New and Beginning Farmers: Evidence from a National Survey*

Msuya, E., Hisano, S., & Nariu, T. (2008). Explaining Productivity Variation among Smallholder Maize Farmers in Tanzania. *International Rural Sociology Association, 5*(3), 126-136.

Namdepi, D. A. (2014). *Effects of Working Capital Requirements and Barriers on the Performance of Flower Industry in Naivasha, Kenya*. Unpublished MBA thesis, United States International University.

Nzioki, B. (2013). *Challenges Affecting Marketing of Horticultural Produce in Kenya: Mango Fruits in Masongaleni Ward of Kibwezi Constituency*. Unpublished MBA thesis, Kenyatta University.

Olawale, Y., & Sun, M. (2010). Cost and Time Control of Construction Projects: Inhibiting Factors and Mitigating Measures in Practice. *Construction Management and Economics, 28*(5), 509 – 526.

Onkoba, O. B. (2014). Small Scale Horticultural farming along the Kenyan Highways and Local economic development: Exploring the effect of factor prices. *An Online International Research Journal, 1*(3), 102-119.

Oswald, M. (2013). *Taping Export Opportunities for Horticulture Products in Tanzania: Do We Have Supporting Policies and Institutional Frameworks?* ICBE-RF Research Report N0. 65/13.

Oxford Business Group. (2016). *Kenya's Horticulture Segment Creates Opportunities*.

Paramasivan, C., & Subramanian, T. (2009). *Financial Management*. New Delhi: New Age International Pvt Ltd Publishers.

Rottger, A. (2004). *Strengthening Farm Agribusiness Linkages in Africa*.

Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2012). A Social Capital Theory of Career Success. *Academy of management journal*, *44*(2), 219-237.

Stonehouse, G., & Pemberton, J. (2012). Strategic planning in SMEs-some empirical findings. *Management Decision*, *40*(9), 853-861.

Tschirley, D., Munguzwe, H., Ayieko, M., Cairns, J., Kelly, V., & Mukwiti, M. (2012). *Fresh Produce Production and Marketing Systems in East and Southern Africa: Comparative Assessment*.

Wachira, C. (2015). *Kenyan Horticulture Loses Economic Viability on Rising Costs*.