EFFECT OF WORKING CAPITAL MANAGEMENT ON FINANCIAL SUSTAINABILITY OF GOVERNMENT OWNED ENTITIES IN THE MINISTRY OF AGRICULTURE, LIVESTOCK AND FISHERIES (MOALF), KENYA

WACHIRA ROSALY NJERI, PROF. GREGORY NAMUSONGE, DR. FRED MUGAMBI

The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com
Vol. 4, Iss. 3 (11), pp 147 - 175, Aug 10, 2017, www.strategicjournals.com, ©strategic Journals

EFFECT OF WORKING CAPITAL MANAGEMENT ON FINANCIAL SUSTAINABILITY OF GOVERNMENT OWNED ENTITIES IN THE MINISTRY OF AGRICULTURE, LIVESTOCK AND FISHERIES (MOALF), KENYA

Wachira Rosaly Njeri[*1], Prof. Gregory Namusonge[2], Dr. Fred Mugambi [3]

[*1]Jomo Kenyatta University of Agriculture & Technology [JKUAT] Box 81310-80100 Mombasa, Kenya
[2]Jomo Kenyatta University of Agriculture & Technology [JKUAT], Box 81310-80100 Mombasa, Kenya
[3]Jomo Kenyatta University of Agriculture & Technology [JKUAT], Box 81310-80100 Mombasa, Kenya

Accepted: August 3, 2017

ABSTRACT

Financial sustainability is prime to any organization; be it profit making or nonprofit making and its eminence cannot be over-emphasized. Even though various studies have been done on financial sustainability, limited research have been carried out on financial sustainability of GoEs hence there is limited information on GoEs in the MOALF. This study sought to identify financial sustainability basics. The study focused on investigating the "effect of working capital management on financial sustainability of government owned entities in the ministry of agriculture, livestock and fisheries (moalf), Kenya. A causal research design was adopted and with 27 organizations responding positively, giving a sample size of 134. The study used both primary and secondary sources of data. The secondary data involved review of published information on Financial Statements of GoEs in MOALF. Data was obtained for a period of 7 years from 2009/2010 to 2014/15 financial years and analyzed using SPPS version 21 statistical software. From the study it was evident that, management of working capital was key factor that influenced financial sustainability of the GoEs. It was positively correlated to financial sustainability. The study recommended that prioritized resource utilization should be given more emphasis as a means to ensure that institutional goals are set in line with the availability of funds. There should be proper projects evaluation and prioritization before allocation of resources is done to the most profitable project, bottom up resource management should be adopted, thereby keeping expenditure within the approved levels is also key. GoEs should endeavour to adopt hybrid model of management that incorporates both public and private interface. Policies on investment should be developed, Investment in green finance and adoption of climatic finance that significantly reduce effects on the environment enhancing sustainability. They should also adopt a holistic evaluation model not limited to financial evaluation through innovative accounting that encompassing the key goals and objectives of their existence and adoption of risk assessment framework. The Ministry should set limits with the set frameworks for the Key ratios used to measure Financial Sustainability.

Key Words: *Working Capital Ratio, Working Capital Management, Working Capital, Financial Sustainability, Performance, Firm's Growth, Organizational, Commitment, Profitability, State/Government Owned Enterprises, Integrated Reporting*

INTRODUCTION

Establishing the financial capacity and sustainability is central to the functionality and survival of an organizations and which cannot be achieved in isolation, the need to undertake performance evaluation is key in order to realize its potential in a bid to become financial stable, However there is a razor-thin distinction between financial sustainability and financial self-sufficiency which has led to the two concepts being examined in the same vein (Leon, 2001). Distinctively the financial sustainability means ensuring the longevity of an organization while financial self-sufficiency implies managing operations without seeking financial assistance. Organization's sustainability is often associated with its financial strength, but financial sustainability alone is insufficient over time. There is need to develop its overall capacities. A sustainable organization is able to survive in the long run by generating its own revenue and without depending on contributions from donors, financiers, and well-wishers (Nganga & Kibati 2016). FS is sometimes seen as a mix of revenue, expenses and assets management. Accordingly (Meyer 2002), the concept to sustainability includes, amongst other criteria like obtaining funds at market rate and mobilization of local resources. Therefore financial self-sustainability is achieved when an organization can be able to cover the relevant costs of funds. It also involves all other elements and functions of an organization and major decision made which should be considered as a model through which to filter sustainability. Organization should be efficiently and fairly govern the use of these assets in order to generate resource for sustainability with full commitment to the process throughout the organization, from the board of directors through senior management and the entire staff (Johnson, G & Scholes K. 2007). FS is a process, not an end in itself so an organization does not become sustainable and then rest on its success, it is critical to keep constant evaluation of its sustainability management strategies keep the organizations abreast to achieve their desired objectives. Organization quest to improve their financial soundness is often affected by the way they operate and respond to both the internal and external factors, innovation and leadership styles (William, 2014.) key attributes to FS, are seen as sound financial practices, active fund management, planning and ability to innovate, infrastructure development. Fundamental principle of non-profit making organizations such as GoEs is the need to maintain their ability to be financially agile in order to maintain their function of serving social and Economic welfare which requires consistent and continually availability of resources. This is achieved when capital structure levels and standards are enhanced according to a long term plan of the entities without compromise in their own services delivery, and the ability to develop resilience to occasional economic shocks in the short term such as the current cash crunch being experienced from time to time (Bowman, 2011, CBK 2017). Financial sustainability is promoted through a broad based, interdisciplinary approach. Lack of good management or technical capacity prevents the organization from generating revenue and adversely affects FS. Learning from organisations that have managed to achieve financial sustainability to some extent, is important to GoEs paths to success in financial sustainability include, they being proposition on the maintaining strong stakeholder relationships, including beneficiaries, staff and donors; obtaining a range of types of funding, including unrestricted funds; building financial reserves; Assessing and managing risks and strategically managing and financing overhead costs.

Operational self-sustainability is when the operating income is sufficient enough to cover operational costs like salaries, supplies, loan losses, and other

administrative costs. And financial self-sustainability (which he referred as high standard measure) is when GoEs can also cover the costs of funds and other forms of subsidies received when they are valued at market prices (Meyer, 2002).

The measures of financial sustainability allow an organization to assess and compare their performance against those of others, through an analysis of various indicators that include but not limited to operating surplus ratio, net financial liabilities ratio, interest cover ratio, asset sustainability ratio and asset consumption ratio (LGA, 2006). These performance measures focus on the future directions and the dimensions of resources needed for financial sustainability as supported by (Christensen *et al* 2007). Financial sustainability can also be gauged by an organization's net income (the surplus of revenues over expenses); liquidity (the cash available to pay bills); and solvency (the relationship of assets and debt or liabilities). According to (Nganga & Kibiti 2016), the key elements of FS are capital structure composition and resource allocation. (Gibson 2012) notes that the financial sustainability is influenced by capital/ asset ratio and operating expenses/loan portfolio that enables organisations to cover all its present costs and the costs incurred in growth, if it expands operations, its financial costs adjusted with inflation costs and costs incurred in growth (Onyuma *et al* 2005) points out that FS is influenced by the ability of an institution to generate sufficient funds to sustain the costs of its programs. These costs are such as pricing of the product, costs of funds, administrative overheads, loan losses or portfolio quality, and inflation and each cost has its own significance way of being controlled.

To analyze the sustainability of a GoEs two known set of ratios have been developed. These are widely accepted and they enable a comparison among GoEs all over the world. These two most important ratios are Operational Self Sufficiency.

The establishment of GoEs resulted from the Government reforms agenda on State Corporation in 2013, the proliferation of the Stake Corporation and Ministries was driven by lack of adherence to formation framework which often resulted to duplication of government's functions and creates inefficiency and often bring scrabble for the government subsidy. This prompted the reform in order to have GoEs that will support with an objective to drive the Government agenda of meeting the social and economic benefit for their citizen, among others. Four sectors, were merged to form MOALF which are Agriculture, Livestock development and Marketing, and Fisheries with a fundamental goal and purpose being conserving, protecting, and managing Agricultural, Livestock and Fisheries resources for socio-economic development and improving the living standards of people (GOK 2017). These activities are driven by the GoEs under the Ministry Agriculture, Livestock and Fisheries which include the following Entities and Semi-autonomous agencies: Kenya Seed Company, Nyayo Tea Zones Development Corporation, Muhoroni Sugar Company (under receivership), Nzoia Sugar Company, Chemelil Sugar Company, Kenya Animal Genetic Resources Centre (KAGRC), Kenya Meat Commission, Kenya Veterinary Vaccines Production Institute (KEVEVAPI), South Nyanza Sugar Company, Agro Chemical and Food Company, Agricultural Development Corporation, Agriculture, Fisheries and Food Authority (AFFA), Kenya Plant Health Inspectorate Service (KePHIS), Pest Control Products Board, Kenya Dairy Board (KDB), Kenya Veterinary Board (KVB), Bukura Agricultural College, AHITI Kabete, Meat Training School, Agricultural Information Resource Centre and Kenya Tsetse and Trypanosomiasis Eradication Council (KENTTEC), among others. Throughout the years there has been enormous advancement of the establishment of GoEs from the structure to the management of these entities.GoEs established, plays the roles in diverse ways, enabling social and

economic transformation of the economies. (GOK, 2016), driven by agriculture as the cornerstone of the Kenya's Economy and which is widely accepted and acknowledged as one of the tools that holds a lot of potential for improving livelihood, providing employment and income for majority of the rural population. More than two-thirds of Africa's people they entirely depend on agriculture as central to their economy to (Tschirley, 2004). In Kenya it is a major source of revenue with agricultural produce exports accounting for nearly two thirds of total domestic export therefore Improving agricultural productivity and supporting the sector therefore leads to securing the communities and the economy at large.

Statement of the Research Problem

The feat of financial sustainability is paramount as it is the driver in which the Government functions and objective of meeting both Economic and Societal needs can only be met. The GoEs which are the drivers in which Government depends to achieve their goals requires being financially agile. The idea behind the Government reforms was to address the issue of inefficiency, role duplication, enhance sustainability; GoEs require being more efficient, resource oriented and self-sustainable so as to reduce dependency on Government subsidies as they strive to meet their key objective. The policy of liberalization, privatization, and globalization initiated by the Government also was to provide an enormous opportunities for the GoEs to enhance their profitability, growth and sustainability and be more self-reliance by continuously innovative, being more aggressive in marketing their product to realize more return, be more entrepreneurial, engage in resource management as flanked by (Allan *et al*., 2016) that "state corporations should be encouraged to innovate and be creative and implement new ideas and not to follow rigid rules" in order to gain competitive edge.

GoEs plays an indispensable role of meeting greater societal need, there is no doubt that with increasing demands on the state by the citizens, the challenges of financial sustainability are bound to have far-reaching consequences. GoEs are exposed to a lot of undue competition; unpredictable revenues market competition, economic downtimes, inefficiency, poor management, corruption and political interference which create overreliance on government subsidies which affect the long-term sustainability of these entities (Muthoka & Ogutu, 2014).

The GoEs has strong financial position that assist in facilitating the fiscal and public welfare, their performance and sustainability has been declining and weakening. Some studies have pointed out that this may be attributed to the implementation of the desired Government reforms in a haphazard manner that has weakened the management of these Entities, Failure to match the revenue generated and expenditure coupled, lack of adequacy of financial management skills which pushed the GoEs to relies on Government subsidy as a life line, the is need to quickly and effectively address these development challenges. Critical reviews have shown that despites interventions, the GoEs often do not operate optimally for sustainability which is often attributed some of the aforementioned factors (GOK, 2016). There are various studies done on financial sustainability, but with limited review carried out on financial sustainability of GoEs MOALF This study sought to identify the factors affecting the financial sustainability dynamics. The study exclusively examined the following factors and their influence on financial sustainability of the GoEs in the MOALF in Kenya; the resource utilisation focusing budget versus expenditure management, working capital management, how the GoEs are able to manage their liquidity levels, Investment opportunities for resources especially for the return realised and risk management, how do organisations manage

expected risks. This study sought to bridge the research gap by examining financial sustainability determinants of GoEs in the MOALF in Kenya.

Study Objective

To establish the effect of working capital management on financial sustainability of GoEs in the MOALF, Kenya

RELATED LITERATURE

Theoretical Framework

Capital Structure theory

The theories on capital structure give an overview of how an organisation is financed. Financing of the organisation has been a fundamental issue in many organisations in regards to looking at the best model of financial framework that would be applicable. There are many arguments that ideal capital structure of a firm is a challenge. The debate has been in determining the best capital structure composition as per the Mogllian and Miller theory on capital structure a theory. According to (Anshu & Kapil 2014), the value of a firm is self-determining on capital structure and that the value of unlevered firm is equal to that of levered firm.

The composition on the capital structure in organizations is structured in terms of equity and debt distribution. Capital structure, being total debt to total asset at book value influences both profitability and riskiness of the firm. Companies have been struggling with the composition of capital structure for many decades in an effort to balance and be stable (Anshu & Kapil, 2014).

(Mujahid & Akhtar 2014) evaluated the impact of capital structure on the firm's financial sustainability and shareholders wealth in textile sector of Pakistan. The study conducted the regression analysis on a sample data of 155 textile firms for the year 2006 to 2011. (Mujahid & Akhtar 2014) used the overall textile sector Return on Assets (ROA), Return on Equity (ROE) and Earnings per Share (EPS) ratios as accounting measures to evaluate the impact of Capital Structure on firm's financial sustainability and shareholders wealth. The study established that the capital structure positively impact the firm's financial sustainability and shareholders wealth. Similarly, (Velnampy & Niresh 2012) revealed that profitability of the firm is dependent upon the capital structure decisions. The important part of the firm's financial strategy is to prosperous choice and use of its capital. The relationship between firm's capital structure and the firm's profitability is very significant as the profitability of the firm can be directly affected by the capital structure decisions.

The studies by (Abor, 2005) revealed that there is a significant relationship between total debts and total assets that make up the capital structure, suggesting that firms depend more on debt as a way of financing which influential financial sustainability.

(Gupta et al, 2010) cited some studies showing contradictory results about the relationship between increased uses of debt in capital structure and financial performance. (Ghosh, et al., 2000, Berger & Bonaccorsi 2006) reported a positive relationship between leverage and financial performance, while (Gleason et al 2000, Simerly & Li 2000) showed negative relationship between financial performance and leverage level. Similarly, (Zeitun & Tian 2007) found that debt level is negatively related with financial performance. Several researchers have studied firms' debt use and suggested the determinants of financial leverage by reporting that firm's debt-equity decision is generally based on a trade-off between interest tax shields and the costs of financial stress (Upneja & Dalbor, 2001).According to the trade-off theory of capital structure, optimal debt level balances the benefits of debt against the costs of debt hence, use of debt to a certain debt ratio

results in higher return on equity, however, the benefit of debt would be lower than the cost after this level of capital structure. In other words, the more a company uses debt, the less income tax the company pays, but can cause greater its financial risk.

Agency Cost Theory

The Agency Cost theory focuses on the agency conflict between the manager and the stakeholders of an organisation. This theory considers necessary factor that creates conflict between equity holders and their manager also conflict arising between owners and manager of firms. Markets focus a lot on performance of any organization so that the interested investors are able to any investment decision derived by the manager of affirm on behalf of the Owner (Ahmadabadi, et al., 2013). Shareholders lay their focus on financial performance of an organisation in order to invest their funds in specific operations within the organization, which will eventually increase the firm's value, wealth and enhancing financial sustainability.

According to (Anshun & Kapil 2014), the agency theory has a reflection on the capital structure of a firm arguments are made that managers would use a lot of debt to finance high risk projects while shareholders would prefer to maximise expected return therefore, inherent risks and conflict arises associated with investment decisions which prompts managers to avoid investment. (Gatsi, 2016) in his study on debt structure affirmed a theoretical summary of the agency cost theory where they argued that two sets of agency problems were be faced by firms, conflict between managers and stockholders and conflict between stockholders and bondholders. For the managers and stockholders conflict, managers usually overspend or take less leverage and these are seen not benefiting the stockholders therefore ultimately affecting financial sustainability.

Agency theory is relevant in trying to align management performance of a firm. According to (Innocent, 2016) the debt usage by a firm improves in the long run the cost efficiency of the firm. Agency theory depicts that high leverage is a mechanism used for governance promoting the management to be more vigilant in ensuring cash flow management and generating more income that covers cost.

There are static and dynamic trade-off theories of the corporate capital structure. Static trade-off theory asserts that optimal debt-to-equity ratio is determined by the trade-off between costs and benefits of borrowings, with the firm's assets and investment plan fixed (Chen & Hammes, 2005). Interest tax shields are considered to be benefits of the borrowings while increased probability of bankruptcy or financial distress is borrowings' costs. The costs of financial distress can be direct and/or indirect. Direct costs appear only when the company indeed GoEs through the bankruptcy procedure: legal and administrative costs, costs of shutting down operations and disposing of assets. Indirect costs occur mostly as agency costs associated with conflicts of interest between equity and debt investors: risk-shifting, underinvestment. The shareholders have also an incentive to force managers to undertake riskier projects as their losses are minimal if the project fails. This constitutes the assets substitution problem or problem of risk-shifting which also results from different interests of equity and debt investors. Other indirect costs are costs imposed by possible liquidation on firm's customers, employees and suppliers (Myers 2003). Thus, according to the static trade-off theory of the corporate capital structure the firm management chooses the firm's leverage comparing the interest tax shields and the probability of bankruptcy. And when there are no adjustment costs to new debt-to-equity ratio the chosen firm leverage is considered to be optimal

that is such that maximizes firm's value. Consequently, the static trade-off theory implies that firms with higher intangible assets and growth opportunities as well as with lower profitability borrow less as they experience either higher probability of bankruptcy or chance of losing value of assets.

Behavioural Finance Theory

The behavioral theory is among the new contemporary theories that seek the cognitive factor and emotional issues that impact the decision making process of an individual or group. It rests on the inability to explain the empirical patterns of the traditional theory framework, while the traditional theory uses the model that are assumed to be rational meaning decision making process are drawn by unbiased and the decisions are consistent with profit maximization which often do not hold. In behavior theory it is clear that decisions are based on behavior biasness and are not fully rational. It is the influence of psychology on behavior of financial practioners and long-term effects seen in the market (Sewell 2007). According to traditional finance, it uses models in which the economic agents are assumed to be rational, which means they are efficient and unbiased processors of relevant information and that their decisions are consistent with utility maximization. (Barberis & Thaler 2003,) note that the benefit of this framework is that it is "appealingly simple". They also note that "unfortunately, after years of effort, it has become clear that basic facts about the aggregate stock market, the cross-section of average returns, and individual trading behavior are not easily understood in this framework." Behavioral finance is based on the alternative notion that investors, or at least a significant minority of them, are subject to behavioral biases that mean their financial decisions can be less than fully rational.

Behavioral finance also has applications in analysis of corporate finance decisions. As (Sewell, 2007) note, the extension of behavioral ideas to corporate finance has taken two distinct paths. The first path, which takes the view that investors are less than fully rational, analyzes the corporate financing decisions made by management in response to the behavior of investors—that is, the rational managers make decisions in response to the mispricing of securities by behaviorally biased investors. The second path holds that corporate managers can be subject to behavioral biases and that some of the corporate finance transactions they undertake are the result of those biases.

Risk management is an important aspect of investment, and perceptions of risk are likely to be influenced by psychology. (Shiller 2003,) looks explicitly at applications of psychology in risk management, with most obvious implication of the behavioral biases that underpin behavioral finance is that overconfidence and over-optimism can lead individuals to underestimate risk. The complexity of risk may also create problems in risk perception (Shiller 2003), as noted that risk management may be regarded as more attractive when described by framing outcomes in terms of gains and losses may also affect risk-taking behavior, with evidence that individuals become risk seeking in the domain of losses.

Conceptual Framework

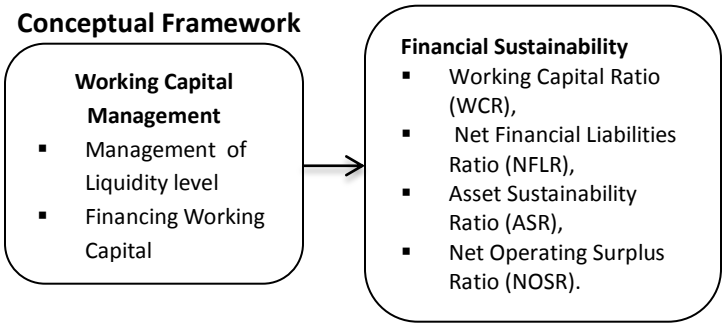

Figure 1: Conceptual Framework

Working capital management as a Determinant of Financial Sustainability

Working capital management is considered one of the most important areas on the financial management and organization management, because it directly affects the company liquidity and profitability (Azinfar & Khalili, 2013). All companies are required to monitor their working capital which is often associated with higher ratio of current assets, less liquidity, based on the short-term debt and cash flow changes. (Rehn 2012) established that many companies can substantially increase profitability by effectively managing their working capital, which are accounts receivable, inventories and accounts payables.

(Rehn 2012) analyzed the correlation between working capital management and company profitability in an industry-wise study of Finnish and Swedish public companies. The study analyzed 13 industries using panel data for the period 2002-2010. To study the correlation between working capital management and profitability, (Rehn 2012) took into account the industry in which the company operates because companies have completely different working capital requirements. The study came up with a statistically significant conclusion that working capital management affect corporate profitability. The correlation between the net trade cycle and profitability was clearly negative, as with the cash conversion cycle and profitability. The industries which are working capital intensive such as retail, machinery and wood products seemed to have a negative correlation between the working capital management efficiency variables and profitability.

In a survey on the financial and Working Capital Management (WCM) practices of small-to medium-sized Mauritian manufacturing firms' operating in diverse industry groups, (Padachi et al., 2012) established a clear preference for using firms own savings and short-term borrowing to finance the start-up. A firm relying internally generated funds (retained profit) and short-term borrowings (bank overdrafts and bank loans) to finance the current needs of the business experienced different degrees of difficulty in its ability to finance the working capital requirements. Firms meet their requirements differently based on their size, their stage in the business life cycle and their trade credit variables. The trade credit variables have an effect on the firms that are financially constrained.

(Raheman *et al.,* 2010) analyzed the impact of working capital management on firm's performance in Pakistan for the period 1998 to 2007. The study used a balanced panel data of 204 manufacturing firms listed on Karachi Stock Exchange. The results indicate that the cash conversion cycle, net trade cycle and inventory turnover in days significantly affect the performance of firms. Equally, the financial leverage, sales growth and size of firm also have significant effect on the firm's profitability. They argued that there exists negative association between inventory turnover in days and net operating profitability for the manufacturing sector as a whole, which implies that keeping lesser inventories was increased profitability. The gross working capital turnover ratio and current assets to total assets have the significant positive impact on profitability.

According to (Raheman *et a.,* .2010), sales growth has positive association with profitability since growth, as an indicator of firm's business opportunities, is a very important factor which allows firm to enjoy more profits. They also concluded that efficient management and financing of working capital can increase the operating profitability. They indicate that effective policies must be formulated for the individual components of working capital for better financial sustainability.

In order to enhance financial sustainability, an organization can generate its own revenues through creation of a trust or endowment fund (León, 2001). The objective of a trust fund is for an institution to derive benefits from the interest generated by the capital for better working capital management. The capital remains untouched. Its value must be maintained and/or increased over time. An organization can include under indirect costs (overhead) a percentage earmarked for an endowment or trust fund. If this is the case, the percentage constitutes a surplus. To do this, however, the organization must legally establish the endowment fund, and must include this investment under its indirect costs as a matter of institutional policy.

Access to finances in order to support working capital has been limited, according to (Ogalo 2011), Food and Agriculture Organization of the United Nations estimates that additional investments of $ 83 billion annually are needed if developing country agriculture is to meet food security needs in 2050. Developing countries' own capacity to fill that gap is limited. Commercial banks assistance is minimal therefore the share of public spending in agriculture in developing countries has fallen to around seven per cent posing a risk of unsustainability.

Financial Sustainability

Financial sustainability is achieved when a business is able to deliver products and services to the market at a price that covers their expenses and generates a profit. In financially sustainable businesses, long term profitability takes priority over any short term gains. For any organisation to operate financially optimally, it needs to develop long term goals that outline where you want your business to stand financially in the future and conduct business more viably.

Financial sustainability is a resultant of better financial performance which is viewed as measurement of the results of a firm's policies and operations in monetary terms (Dhandapani & Ganesh, 2013). The results are reflected in the firm's return on investment, return on assets, value added, etc. The term financial performance is also used as a general measure of a firm's overall financial health and stability measured over a period of time. (Dhandapani &Ganesh, 2013) argued that a firm must try to improve financial sustainability by making various forms of internal reconstruction like alteration of share capital, reduction of share capital, writing of lost assets, improve the management of working capital areas like cash management, inventory management and credit management in order to regulate the liquidity position and improve administrative and operation management which in turn will reduce the production and operating cost.

(Lennon, 2006) analyzed the national financial sustainability study of local government in Australia. The study conducted a financial ratio analysis using a survey of 100 councils and extrapolation from state based sustainability results. The study findings revealed that up to 10-30% of councils nationally faced sustainability challenges. The common financial issues typically facing councils with sustainability problem include minimal (or negative) revenue growth, cost growth that typically exceeded revenue growth, increasing involvement in non-core service provision, operating deficits creating a need to defer or underspend on renewal of infrastructure, particularly community infrastructure which is often repeated annually creating a backlog. Another challenge to sustainability was limited access to strong financial and asset management skills, which are critical to identifying sustainability problems, optimizing renewals expenditure and improving revenue streams. (Lennon, 2006) identified two broad

approaches to opportunities that could significantly improve financial sustainability. These approaches included internal reforms largely controllable by individual councils to improve efficiency and effectiveness, and reforms to intergovernmental funding to improve the sustainability.

(Sontag-Padilla, et al., 2012) carried out an extensive review of literature on financial sustainability for nonprofit organizations. The study established that most research studies on nonprofit organizations focus on outcomes of programs (i.e., whether they work) rather than on organizational processes and factors influencing organizational impact, and such studies rarely adhere to the "gold standard" of research (i.e., large-scale, representative studies that synthesize findings across many organizations). According to (Sontag-Padilla, et al., 2012), in the face of the recent economic downturn and increased expectations of mission impact and accountability, nonprofit organizations face a myriad of challenges in establishing and defining financial sustainability in the long term. Establishing financial sustainability should be viewed by nonprofits as a dynamic and continual process. Creating a clear strategic plan that defines the mission and builds programs and collaborative partnerships that closely align with the mission may help nonprofits overcome the challenge of establishing sustainability in the short and long term.

Measures of Financial Sustainability

Maintaining your cash flow requirements is another crucial part of operating a financially sustainable organisation. According to (Hossan & Habib 2010), they evaluated a pharmaceutical company and concluded that the performance evaluation of a company is usually related to how well a company can use its assets, shareholder equity and liability, revenue and expenses. Various studies reveal that financial ratio analysis is one of the best tools for measuring performance and evaluation of any company in order to determine how well the company has been able to utilize its assets and earn profit.

The pillars of financial sustainability include: financial and strategic planning, income diversification, sound administration and own income generation (LGA, 2006). Financial sustainability is measured through an analysis of various indicators which include: operating surplus (the difference between day to day income and expenses for the period), operating surplus ratio (by what percentage does the major controllable income source vary from day to day expenses), net financial liabilities (what is owed to others less (net of) money you already have or is owed to you), net financial liabilities ratio (how significant is the net amount owed compared with income), interest cover ratio (how much income is used in paying interest on loans), asset sustainability ratio (are assets being replaced at the rate they are wearing out) and asset consumption ratio (the average proportion of 'as new condition' left in assets) (LGA, 2006).

(Bowman.,2011) established metrics for assessing financial sustainability of nonprofits. The two financial ratios prescribed for assessing the organization's long -term ability to maintain or expand services are (1) the equity ratio, calculated as equity divided by total assets (equity is the same as net assets, and is calculated as total assets minus total liabilities), and (2) return on assets, calculated as surplus divided by total assets (surplus being total revenue minus total expense). These two ratios were characterized as solvency and profitability (or cost coverage) ratios, respectively. Short-term resilience to withstand periodic economic challenges is also gauged through two financial ratios: Operating Reserve Ratio (in months) and Mark-Up divided by Total Expenses (Mark -Up is

calculated by taking all revenue except permanently restricted revenue, subtracting all expenses except depreciation). These two ratios were characterized as liquidity and profitability (or cost coverage) ratios, respectively.

Several empirical studies on financial sustainability have been carried out in Kenya. This section reviews the empirical studies with a view to identify objectives, findings, limitations and research gaps. (Ngoe 2012) examined the actors influencing financial sustainability of youth enterprises funded under the Youth Enterprise development fund in Mombasa County. The study established that financial sustainability is affected by strategic financial planning, the administration and financial procedures and controls adopted by organizations, record keepings systems, financial reporting and reinvestment. However, the study recommended further research to identify other factors that influence financial sustainability of these enterprises. (Ngoe, 2012) also suggested that a similar study could be carried out in other counties.

(Rao, 2013) investigated the effect of funding sources on financial sustainability of Water Sector Institutions in Kenya. The study concluded that funding sources affects the financial sustainability of organizations. On the study objective, the ratio analysis revealed a strong positive relationship between internally generated funds as one funding source and financial sustainability of water sector institutions in Kenya. The study had a number of limitations. The study does not provide enough evidence that can be used to make universal arguments concerning the effect of funding sources on financial sustainability. It was not possible to tell whether the results are simply due to the nature and quality of data used or whether it is the true picture of the situation. The use of the data from the various sources like the Ministry of Finance and Ministry of Water is based on the assumption that the data is accurately captured and maintained (Rao, 2013).

(Mukiri, 2013) determined the effect of the government regulation on the financial sustainability of Microfinance institutions in Kenya. The study found that capital adequacy and liquidity requirements had a positive effect on the financial sustainability of Microfinance Institutions in Kenya. The study further found that loan provisioning had a negative effect on the financial sustainability. (Mukiri, 2013) indicated that the study was limited due to difficulty of Microfinance institutions to release their audited financial statements especially those that are not required by law as in the case of DTMs. This therefore made it hard for the researcher to obtain the full sets of audited account for all the MFIs sampled. Moreover, disproportionate sampling was used to select 30 MFIs due to different forms of MFIs, who play role in the sector. The strata contained two sets of institutions those that are DTMs and credit only MFIs. It is in these strata that the sample was picked at random. This was a limitation as it did not give all the 30 institutions equal chances of being picked.

(Wangari, 2013) examined the impact of interest rates on financial sustainability of Microfinance Institutions in Kenya. The study findings found indirect relationship between cost and financial sustainability of MFIs. The study established a direct relationship between interest rates and profitability and financial sustainability of MFIs. Nevertheless, (Wangari, 2013) recommended further studies to identify more factors that determine the financial sustainability of MFIs. The study narrowed on impact of interest rates on financial sustainability of MFIs and further research should be conducted to incorporate other institutions.

(Nyabayo, 2013) analyzed challenges facing non-governmental organizations in the attainment of financial sustainability in Busia County, Kenya. The study found out that focus on the mission statement, NGO leadership, networking with other organizations with similar objectives and client and community participation are challenges facing non-governmental organizations in the attainment of financial sustainability. The study recommends that in order to achieve financial sustainability, the non-governmental organizations should be guided by their mission statements in fundraising activities, leaders should be transparent and accountable to various stakeholders, should have strategic alliances and take client and community participation seriously through empowerment programmes.

(Onsongo, 2012) examined strategies adopted by non-governmental organizations to achieve financial sustainability in Kenya. The study established that non-governmental organizations achieve financial sustainability through strategic financial management, proper governance system, strategic alliances, internal financial sources, organizational structure, development funding and paradigm shift. He further observed that there was minimal difference between his findings and the study findings but a little different from the findings of the study carried out to investigate the strategies adopted by (Waiganjo, et al., 2012). Therefore, (Onsongo, 2012) recommended further quantitative research on strategies for financial sustainability in Kenya.

(Ndung'u, 2013) investigated the factors influencing financial sustainability of water companies operating in Nyeri County. The study finally concludes that water companies' financial sustainability is influenced positively by total operating income, net loan portfolio and funds from government and donor agencies increases the water companies' sustainability and negatively by debt equity ratio, total operating expenses and average loan size. (Ndung'u, 2013) recommended that water companies should solicit for more funds from donors, increase the range of services they provide and beef-up their governance structure since financial sustainability is achieved when service and infrastructure levels and standards are delivered according to a long term plan.(Ndung'u ,2013) also recommended that further studies should be done on the factors hindering water companies sustainability in Kenya so as to have an holistic view on Kenya water companies financial sustainability.

(Karanja & Karuti 2014) examined the factors influencing financial sustainability among Non-Governmental Institutions operating in Isiolo County, Kenya. The study adopted a descriptive research design and found out that funding in NGO's is a challenge and that there are government policies that interfere with smooth running of NGO's. They recommended that government should put in place policies that will ensure financial sustainability of the NGO's and also ensure participation of NGO's management when making policies that will affect their financial sustainability in Kenya.

(A. N. Ng'ang'a, 2016) evaluated the determinants of financial sustainability in private middle level colleges in Nakuru County, Kenya with specific emphasis on the effect of capital structure and resource allocation on financial sustainability. They found that capital structure and resource allocation had significant influence on financial sustainability. The study further concluded that capital structure of private middle level colleges in Nakuru County was mainly composed of debt from lending institutions, owners' equity injection and retained profits. The resource allocation was inferred as fundamental in enhancing financial sustainability. They further recommended that these colleges to look into

various cost effective and sustainable ways of financing their operations.

The research identifies the main elements of public sector financial sustainability as: 1) liquidity (the ability to meet financial obligations when they fall due); 2) resilience (the financial capacity to withstand shocks, whether internal or external); 3) service and fiscal responsibility (maintaining service, debt, and commitments at reasonable levels relative to both national expectations and likely future income); and 4) therefore maintaining public confidence (the ultimate guarantor that enough revenue can be collected to meet tomorrow's obligations).

Pillars of Financial Sustainability

The pillar to FS seen as to fall within the confines of Strategic and Financial Planning, Income Diversification, Sound Administration & Finance and Income Generation. (Patricia León 2001) notes these four fundamental pillars for the financial sustainability of any organization,. As the organization grows and takes on an increasing number of activities, it runs the risk of focusing on day to day management issues and losing sight of long term strategic objectives especially for the GoEs. Strategic planning as a mechanism helps to clarify an organization's mission and objectives and prioritize the actions needed to accomplish them with effective planning becoming a prerequisite driver to generate and access the available funds. There is need for Organization to have a financial plan basically consisting of projected expenditures and the organization's potential to generate the income to cover those expenditures. It helps organization determine if the organization is going to have sufficient resources available in the medium term to meet the objectives and long-term as could be described in the organization strategic plan in order to achieve self-sustainability.

Income diversification is key to financial sustainability and refers not only to internal income generation, but also income from sources eg government subsidy that provide main funding. Management of these resources is essential to achieving financial sustainability. Efficient procedures for administration and finances should be governed by a series of institutional policies which are key in making most of our resources utilization efficient and ensure transparency in fiscal management. The procedure and policies must be participatory to enable stakeholder participate in organization's financial standing and, ultimately, make appropriate decisions in a timely manner to reduce occurrences of conflicts. available assets can be utilized by the organization to generate more resources (Onyuma *et al.,* 2005), the organization subject the ir financial statements for analysis's to review financial sustainability lander and trend for decision-making purposes. Own income generation is one way for an organization to diversify its sources of revenue. Goes are subject to the pillars of financial sustainability.

METHODOLOGY

This study adopted a causal research design aimed at identifying financial sustainability determinants of Government Owned Entities' in the MOALF in Kenya. The data on financial sustainability was collected for the period 2009/10 to 2014/15. The study employed quantitative research approach as the literature on research methodology shows quantitative research approach tends to assume that there is a cause and effect relationship between known variables of interest. In line with this, quantitative research tests the theoretically established relationship between variables using sample data with the intention of statistically generalizing for the population under investigation. The study targeted a total of 5 senior and middle level management staff working in GoEs MOALF. Purposive sampling methodology was used to select 5 respondents in each of the 35 selected Agencies targeting middle level managers

RESEARCH FINDINGS

The objective of the study was to establish the effect working capital management on financial Sustainability in the MOALF, Kenya. The respondents were asked to indicate their level of agreement to the statements in Table regarding the influence of working capital management on financial sustainability of institutions in the MOALF. The response was rated on a scale of five units whereby 1=strongly disagree, 2= disagree, 3=moderately agree 4= agree, and 5=strongly agree. Table 1 shows the findings of the study.

Table 1: Descriptive findings on working capital management

Statements on working capital management		Mean	Std. Deviation
The Institutions effectively matches the inflows and outflows of cash so as to maintain adequate cash.	134	3.84	1.23254
The Institutions effectively manage inventory turnover rate	134	3.83	1.2086
The Institutions does a timely and efficient settlement of creditors for smooth financial operation.	134	3.81	1.13087
The Institutions has a timely and efficient method of collection of receivable for smooth financial operation.	134	3.78	1.2827
The Institutions ensures that the difference between the present value of assets and the book value of profit is not significant	134	3.75	1.3235
The Institutions has best practices to ensure working capital accountability and continuous improvement of receivables and payable processes	134	3.75	1.23433
The Institutions carry out regular analysis of currents assets and liabilities in order to enhance financial sustainability	134	3.74	1.3051
The Institutions effectively forecast cash flows and cycles in order to predict organizational needs and expected surpluses	134	3.72	1.3413
The Institutions is able to effectively balance the current assets against current liabilities in order to meet its short-term obligations.	134	3.68	1.2534
The Institutions efficiently converts operating working capital to cash	134	3.65	1.32482
The Institutions has enough cash reserves for forecasted or unexpected requirements	134	3.53	1.4529
The Institutions effectively manage liquidity by investing and financing strategies in order to maximize return on cash generated	134	3.48	1.38506

On average, the respondents agreed to the following statements that the institutions in the in the MOALF effectively matched the inflows and outflows of cash so as to maintain adequate cash ($\bar{x}$=3.84, SD=1.23254), effectively managed inventory turnover rate ($\bar{x}$=3.83, SD=1.2086), carried out a timely and efficient settlement of creditors for smooth financial operation ($\bar{x}$=3.81, SD=1.13087), had a timely and efficient method of collection of receivable for smooth financial operation ($\bar{x}$=3.78, SD=1.2827), ensured that the difference between the present value of assets and the book value of profit is not significant ($\bar{x}$=3.75, SD=1.3235), had best practices to ensure working capital accountability and continuous improvement of receivables and payable processes ($\bar{x}$=3.75, SD=1.23433).

Moreover, the respondents agreed that the institutions in the in the MOALF conducted regular analysis of currents assets and liabilities in

order to enhance financial sustainability ($\bar{x}$=3.74, SD=1.3051), effectively forecast cash flows and cycles in order to predict organizational needs and expected surpluses ($\bar{x}$=3.72, SD=1.3413), were able to effectively balance the current assets against current liabilities in order to meet its short-term obligations ($\bar{x}$=3.68, SD=1.2534), efficiently converted operating working capital to cash ($\bar{x}$=3.65, SD=1.32482) and the institutions had enough cash reserves for forecasted or unexpected requirements ($\bar{x}$=3.53, SD=1.4529). Nevertheless, the institutions moderately managed liquidity by investing and financing strategies in order to maximize return on cash generated ($\bar{x}$=3.48, SD=1.38506).

The respondents were asked to rate the efficiency in management of the key blocks of working capital management in the institutions for greater financial sustainability. Table 2 shows the findings of the study.

Table 2: The key blocks of working capital management

The key blocks of working capital management	N	Mean	Std. Deviation
Cash Management	134	3.89	1.17536
Inventory Management	134	3.87	1.14278
Management of miscellaneous current assets (like short term investment loans and advances)	134	3.75	1.33317
Financing Working Capital	134	3.73	1.15741
Debtors Management	134	3.73	1.323
Infrastructure Capita Management	134	3.61	1.38434

From the study findings in Table 2, majority of the respondents indicated that the following of the key blocks of working capital management moderately contributed to financial sustainability in their institution: cash management ($\bar{x}$=3.89, SD=1.17536), inventory management ($\bar{x}$=3.88, SD=1.14278), management of miscellaneous current assets like short term investment loans and advances ($\bar{x}$=3.75, SD=1.33317), financing working capital ($\bar{x}$=3.73, SD=1.15741), debtors management ($\bar{x}$=3.73, SD=1.323), infrastructure capita management ($\bar{x}$=3.62, SD=1.38434).

The respondents were asked to rate the extent to which the institutions efficiently managed the following key indicators for an assessment of working capital as a way of enhancing financial sustainability. Table 3 shows the findings of the study.

Table 3: Indicators for an assessment of working capital

Indicators for an assessment of working capital	N	Mean	Std. Deviation
Payables leakage (e.g., duplicate payments, etc.)	134	3.98	1.23189
Workforce layoffs/targeted facility closings	134	3.74	1.3078
Fragmented spending	134	3.62	1.30465
Inadequate forecasting and demand planning	134	3.57	1.30846
Aging receivables	134	3.55	1.40147
Liquidity constraints	134	3.50	1.32371
Excessive, obsolete or growing inventories	134	3.48	1.37644
Poor working capital ratios	134	3.39	1.4295
Recent credit rating downgrade	134	3.38	1.46579

On average, the respondents stated that the following indicators were greatly used to assess working capital: payables leakage ($\bar{x}$=3.98, SD=1.23189), workforce layoffs/targeted facility closings ($\bar{x}$=3.74, SD=1.3078), fragmented spending ($\bar{x}$=3.62, SD=1.30465), inadequate forecasting and demand planning ($\bar{x}$=3.57, SD=1.30846), aging receivables ($\bar{x}$=3.55, SD=1.40147) and liquidity constraints ($\bar{x}$=3.50, 1.32371).

On average respondents stated that the following indicators were moderately used to assess working capital: excessive, obsolete or growing inventories ($\bar{x}$=3.48, SD=1.37644), poor working capital ratios ($\bar{x}$=3.39, SD=1.4295), and recent credit rating downgrade ($\bar{x}$=3.38, SD=1.46579). From the study it was clear that management of working capital has a high influence on financial sustainability of GoEs, through prudent management of resources. The study findings are in agreement with Azinfar and Khalili, (2013) and Rehn (2012) who argued that prudent management of working capital is a determinant of financial sustainability because it directly affects the company liquidity and profitability.

From the study the GoEs to effectively should assess their liquidity levels, assess their net assets, then set aside surplus cash into one or more reserves and management to ensure clear communication for the purpose for such reserves.

The capital structure is also key driven by good working capital management, with proper preparation and attention on the balance sheet it is an important element of working capital management and assessment of financial sustainability by GoEs . Sustainability is reveled through balance sheet which that incorporates cash, investments, assets, receivables, inventory, and liabilities.

Financial sustainability of the GoEs in the MOALF could be improved through proper categorization and maintenance of assets. The net assets may be permanently restricted (often held in an endowment), temporarily restricted (usually for future years or programs) or unrestricted. The liquid portion of the GoE's unrestricted net assets provides flexibility funds that can be used at the organization's discretion to manage the unexpected, take risk innovate and course correct.

The availability of reserve funds provided an avenue for financial sustainability by GoEs in the MOALF. Operating reserves are essentially the accumulation of unrestricted surpluses that are available for use at the discretion of the GoE's boards. An operating reserve assisted the GoEs during times of financial crisis. Irrespective of the GoE's size or life-cycle stage, revenue must be sufficient to enable the institutions not only to survive economic storms but to thrive and adapt to new opportunities. Although not all departments or units in a non-profit GoE can accurately estimate the true cost of their operations (including both direct and indirect costs of service delivery, as well as annual expenditures required by their balance sheet).

Financial analysis and conversations with key staff can nonetheless lead to more informed working capital management and improved financial sustainability, as well as better alignment between GoEs needs and support needed from the MOALF. Improving GoE's efficiency by lowering operating cost and boosting the competitive position of the institutions are strong reasons for the management of the GoEs and the MOALF to address financial sustainability issues.

Financial Sustainability

The respondents were asked to rate the financial strength of their organization in a scale of five units. From the study findings, majority (54.1%) of the respondents rated financial strength of their organizations between 50-75%. This translated to an average of 62%.

The respondents were also asked to rate the level of their agreement with statements in Table 4 regarding factors that influence financial sustainability.

Table 4 9: Descriptive findings on financial sustainability

Statement	N	Mean	Std. Deviation
Managers are trained in financial management and cost-effective management	134	4.03	1.18803
A monitoring and reporting system is in place that shows how and why funds are allocated to particular projects	134	4.02	1.16636
Over the last two years, my organization has developed and maintained a strong stakeholders relationship (beneficiaries, staff and donors)	134	3.94	1.33624
Projects in this organization are completed in time according to the planned budget and schedule	134	3.91	1.20212
There is adequate allocation of financial resources for all activities that are planned by this organization	134	3.90	1.1351
Projects implemented in this organization have flexibility to adjust to unforeseen financial challenges and barriers	134	3.88	1.3553
Your organization has diversified its income sources	134	3.85	1.30307
Your organization often calculates the asset replacement ratio to show if assets are replaced after attaining their useful life	134	3.84	1.34812
Your organization often calculates ratio to inform on financial sustainability	134	3.82	1.2814
Your organization often calculates the operating surplus ratio to measure ability to fund ongoing operations over the long-term	134	3.78	1.25826
This organization has enough money for all contingencies	134	3.66	1.42108
The debts accrued in this organization is less than what was accrued in the last two years	134	3.60	1.48352

From the study findings in Table 4, on average, majority of the respondents agreed to the statements that managers were trained in financial management and cost-effective management ($\bar{x}$=4.03, SD=1.18803), the institutions had a monitoring and reporting systems that showed how and why funds were allocated to particular projects ($\bar{x}$=4.02, SD=1.16636), organization developed and maintained a strong network of stakeholders which included beneficiaries, staff and donors ($\bar{x}$=3.94, SD=1.33624), projects were completed in time according to the planned budget and schedule ($\bar{x}$=3.91, SD=1.20212), there was adequate allocation of financial resources for all planned activities ($\bar{x}$=3.90, SD=1.1351), projects implemented had flexibility to adjust to unforeseen financial challenges and barriers ($\bar{x}$=3.86, SD=1.3553), the organization diversified their sources of income ($\bar{x}$=3.85, SD=1.30307), the organization calculated the asset replacement ratio

to show if assets were replaced after attaining their useful life ($\bar{x}$=3.84, SD=1.34812), the organization calculated ratios to inform on financial sustainability ($\bar{x}$=3.82, SD=1.2814), the organization calculated the operating surplus ratio to measure ability to fund ongoing operations over the long-term ($\bar{x}$=3.78, SD=1.25826), the organizations had enough money for all contingencies ($\bar{x}$=3.66, SD=1.42108) and the debts accrued in the organizations were less than what was accrued in the previous two years ($\bar{x}$=3.60, SD=1.48352).

The study established that the GoEs in the MOALF strived to meet targets set in a financial year through proper utilization of the available resources. Financial sustainability of GoEs in the MOALF was also influenced by competition, taxation and technological changes in the agricultural sector.

Financial sustainability the Ministry of Agriculture depended on the ability of government owned entities to manage their finances in a way that enable them to meet the spending commitments, both now and in the future. Financially sustainable entities in the Ministry of Agriculture ensured that the future generations of taxpayers did not face an unmanageable bill for government services provided to the current generation. This came into focus in the light of increasing external borrowing by the Government of Kenya to finance budget deficit.

Financial sustainability of the GoEs in the MOALF depended on prioritized expenditure for both operating and capital activities. A high degree of stability and predictability in the overall budgetary process and specifically in expenditure was key to ensure financial sustainability ,therefore MOALF must promote a fair sharing in the distribution of available resources to all GoEs long-term financial performance and implementation of planned long-term contracts, infrastructure levels without unplanned increases in rates or disruptive cuts on budgets a that ended up hampering performance. Financial sustainability set the stage for growth by creating the stability and flexibility needed to build capacity for future stages of development.

Financial Ratios

The study calculated Working Capital Ratio (WCR), Net Financial Liabilities Ratio (NFLR), Asset Sustainability Ratio (ASR), Net Operating Surplus Ratio (NET OSR). Table 5 shows the findings of the study.

Table 5: Financial Ratios

Period	WCR	NFAL R	ASSR	NET OP S R
2009	6.67	-0.40	0.04	-0.24
2010	7.86	1.09	2.25	-0.23
2011	9.90	0.79	2.23	-0.18
2012	4.51	1.55	3.29	-0.12
2013	6.36	1.42	1.51	-0.35
2014	7.77	1.77	1.64	-0.35
2015	6.29	1.93	1.69	-0.20
Average	**7.05**	**1.16**	**1.81**	**-0.24**

The study findings in Table 5 showed that the average calculated Working Capital Ratio for the period 2009-2015 was 7.0537. The average Net Financial Liabilities Ratio, Asset Sustainability Ratio and Net Operating Surplus Ratio for the period 2009-2015 were 1.1635, 1.8088 and -0.2389 respectively.

The Net Financial Liabilities Ratio is the measurement of a government's ability to cover its costs through its own revenue efforts. Different standards have been established to recognize the varying revenue raising capacities across the sector, where some rural and remote local governments have limited rate bases and revenue raising capacity, whereas others such as major metropolitan and regional local governments have significant rate bases and other own source revenues. The Basic standard is achieved if the ratio is between 40% and 60% (or 0.4 and 0.6). An Intermediate standard is achieved if the ratio is between 60% and 90% (or 0.6 and 0.9). An Advanced standard is achieved if the ratio is greater than 90% (or > 0.9).

The Asset Sustainability ratio indicates whether a government entity is replacing or renewing existing non-financial assets at the same rate that its overall asset stock is wearing out. Standard is met if the ratio can be measured and is 90% (or 0.90). Standard is improving if this ratio is between 90% and 110% (or 0.90 and 1.10).

The Operating Surplus ratio is a measure of a government's owned entity ability to cover its operational costs and have revenues available for capital funding or other purposes. The Basic Standard between 1% and 15% (0.01 and 0.15) while the Advanced Standard > 15% (>0.15).

The study findings shows that the Working Capital Ratio, Net Financial Liabilities Ratio, Asset Sustainability Ratio and the Net Operating Surplus Ratio increased from the year 2011 to 2014 with the highest ratios recorded in the year 2014. Nevertheless, some of the ratios decreased between the year 2014 and the year 2015.

Management of Working Capital and its influence on Financial Sustainability

The study established that financial sustainability of GoEs in the MOALF was significantly influenced by management of working capital (p=0.000). The improvement of management of working capital improved financial sustainability of the GoEs as indicated by a positive regression coefficient (α_1 =0.421). This implies that a unit increase/improvement in management of working capital leads to an increase in the level of financial sustainability by 0.421 units. Working capital management helps in improving liquidity levels for the organization. From the study it was clear that liquidity level improves financial sustainability and this study was supported by (Nganga & Kibiti 2016)

The study established that GoEs in the MOALF managed working capital through the following initiatives: matching the inflows and outflows of cash so as to maintain adequate cash, effective management of inventory turnover rate, timely and efficient settlement of creditors and collection of receivables, continuous improvement of receivables and payable processes, regular analysis of currents assets and liabilities, minimization of the difference between the present value of assets and the book value, balancing the current assets against current liabilities in order to meet its short-term obligations, enhancing accountability on working capital, effective forecast of cash flows and cycles in order to predict organizational needs and expected surpluses, efficient conversion of operating working capital to cash and making sure that the institutions have enough cash reserves for forecasted or unexpected requirements.

GoEs in the MOALF used the following indicators to assess working capital: payables leakage, workforce layoffs/targeted facility closings, fragmented spending, inadequate forecasting and demand

planning, aging receivables and liquidity constraints. Nevertheless, the excessive, obsolete or growing inventories, poor working capital ratios and recent credit rating downgrade were moderately used to assess working capital.

Sustainability was enhanced by efficient management of the following key blocks of working capital management: cash, inventory, management of current assets like short term investment loans and advances, financing working capital, debtors and infrastructure capital. Even though minimal studies were available on working capital management and its influence on sustainability, the finding in the study were supported by Daniel et al (2013) which found that there was a positive correlation on returns that lead to sustainability and account payables, which showed that a reduction in days of account payables, increasing account repayment and inventory.

Conclusion

The sole purpose of setting GoEs is to facilitate and accelerate the Government function and objective of meeting both Economic and Societal needs. This is clear that it can only be achieved if the GoEs are financially agile. The effort to ensure financial sustainability in GoEs focused on how they can be able to financially sustainable in order to meet their intended societal objectives without relying on subsidies. The objective was to maintain and build the capacity of an organization that was providing a beneficial service in a community and absence of any mechanism to share and upscale experiences and success stories of GoEs at national level and, implementation of international conventions, treaties and agreements, hinder foreign trade and limiting access to new markets.

The GoEs in MOALF manages working capital through efficient matching of cash inflows and outflows, management of inventory turnover rate, settlement of creditors and collection of receivables and analysis of currents assets and liabilities. Efficient management of working capital led to realization of most of the planned activities, particularly the targets under the flagship projects such as fertilizer cost reduction project which lowered the prices of fertilize. The government has improved Capital grants to GoEs in MOALF but the capital available is still not sufficient to cater for operational demand in the agricultural sector. From the study it was clear that the GoEs are holding a lot of assets raising the asset sustainability ratios significantly which has an effect on WCM, the GoEs should covert the idle assets to cash and this will enable the organizations manage their working capital prudently.

Recommendations for Policy Development

Based on the study it is clear that:

- Resource utilization and management usually have a diverse effect that encourages economic development, even though from the study we find challenges in sustaining the sectors special economic interest, there is need to give more emphasis on prioritized resource utilization in order to ensure that institutional goals/plans are set in line with the available funds, controlling the decline of some sunset GoEs through restructuring of some of these Entities, launching new and emerging industries technologies and also channeling capital to achieve economies of scale.
- There has been market imperfection that adversely affects the GoEs achievement of its societal and economic objectives, therefore there should be proper evaluation and prioritization of projects, though conducting project appraisals and allocation is done to the most profitable project. This makes it possible to implement projects that achieve

market perfection as well as ensure their sustainability.

- The management of the GoEs needs to be restructured by adopting a hybrid model which encompasses both the traditional and private styles of management. This is a kind of continuum model of control that spars the public/ private interface. This would impact on the desired level of governance control and also act as a motivation and would eventually would breed in new styles of management that will ensure sustainability.
- Monitoring and evaluation of budget, should be done, keeping expenditure within the approved levels and proper management of expenditure. Budgeting for the available resources should be done at the institutional level and funds disbursed according to the set budgets. There is need to employ technologies in tracking down budgeting and linking the budgetary process to policy formulation and implementation and prudent management of funds through regular and spot audits engineered by the Ministry and monitoring mechanisms.
- Encourage bottom-up management of finances from the GoEs to the ministry headquarters. This will enable GoEs help the central Government in improving the budgetary process, and disbursement of resources.
- Management and staff training on prudent resource management should be a regular activities. Encourage reduction of wastage and adoption better technology in financial management such as implementation of an Enterprise Management system, in line with the Government strategic agenda of migrating to the Digital Era.
- The Ministry should encourage GoEs to diversify sources of income through appropriate investment opportunities such as listing of GoEs in the NSE and encourage partnership with foreign investors to bring in more funds.
- The Goes should therefore adopt methodologies of measuring and determining stock levels such as Economic Order Quantities to measure reorder levels so that they do not overstock and hold cash. Alternatively some asset could be converted to liquidity for immediate use or investment.
- There is need to consider privatization of GoEs that deal with manufacturing especially low performing GoEs. Privatization would prevent the red-tapes in the financial management systems. Moreover, privatization enables government entities to generate income and make profit.
- The study recommends that levies should be reintroduced to improve resources available. The withdrawal of the levies led to reduction in financial strength and suitability of some GoEs. Government should set up research funds to facilitate crop production and technology development.
- The Government to ensure that there is no unnecessary oversight by issue policy guidance on financial management, ensure GoEs do not enforce issue that have no value addition. Key is prudent financial management requires mangers to upholds principal of integrity and good governance. The Constution 2010, chapter 6 should be adhered to while recruiting managers in GoEs.
- Sustainable management of GoEs, also depend on the strength of the global economy. External threats that include the climate change and its impact on agriculture, and globalization and trade liberalization, are all demanding new adaptive measures, structural changes and capacity development in the management of the agricultural sector. The recent global

economic recession has presented new and worrying dimensions to global finance. The slow-down reduces the demand for agricultural commodities affecting the flow of capital into the developing countries. Overseas development assistance through grants has also been minimized / reduced hence less capital for projects by GoEs. the GoEs should adopt to technology that adheres these global dynamic. Come up with policies that will address effect of global policies.

- From the study it is clear that the GoEs have had equal opportunities and threats from the private/ public entities and therefore they need to consider value creation, be more innovative so as to strategically be able to talk in the fine line of sustainability, through activation of the Public-Private Partnerships . this will lead to the introduction of new technologies and improved investment opportunities in agriculture from development partners for programmes and projects with international dimensions. Collaborations between the MOALF and private organizations also benefit GoEs operating in low-resourced areas by building capacity to perform formal evaluations and demonstrate the value of their operations.
- There has been trend to try and subject GoEs to the normal financial evaluations models of focusing on profit and loss which has risked the achievement of GoEs wider goals. GoEs should not be put in the strait jacket of profit making organisations, there is need to consider evaluating them more holistic through innovative accounting, modern management behavior and organizational strategies that focuses on their wider goal and key objectives and how they have been able to achieve and contribute to societal value creation.
- There is need to adopt a risk assessment framework in order to address risks as they are anticipated through implementing Quality Management System such as adopting the ISO 9001: 2015. The creation of Quality Management office is key for sustainability.
- Effects on the environment leads to low production affecting performance that culminate to low financial sustainability by the Entities, therefore the Ministry to invests Green Finance, by they investing in activities that encourage sustainable environments. Encourage Climatic finance by supporting projects and technologies that mitigate against environments degradation, help reduce emission or adapt to climatic change. This will help GoEs especially agriculture related, which depends on environment for their products and raw material.

Recommendations further research

In the study we attempted to find the effect of working capital management on financial sustainability of government owned entities in the ministry of agriculture, livestock and fisheries (MOALF), Kenya , the research design used may not be applicable to some GoEs in other ministries given their dynamics.

REFERENCES

Abor Joshua (2005) "Effect of capital structure on profitability: *an empirical analysis of listed firms in Ghana", the journal of risk finance Vol. 6* issue: 5, pg 438 -445, https//doi.org/10.1108/15265940510633505

Adams, M., Thornton, B., & Sepehri, M. (2012). The impact of the pursuit of sustainability on the Financial Sustainability of the firm. *Journal of Sustainability and Green Business*, 1.Retrieved from http://www.aabri.com/manuscripts/10706.pdf.

Adongo, J., & Stork, C. (2005). Factors influencing the financial sustainability of selected microfinance institutions in Namibia. Published report prepared for the Namibian Economic Policy Research Unit. Retrieved from http://www.uneca.org/aec/documents/Jonathan%20Adongo_Christoph%20 Stork.pdf

Ahmadabadi, M. R., Mehrabi, E., &Yazdi, A. F. (2013). Impact of Working Capital Management on the Performance of the Firms Listed on the Tehran Stock Exchange. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, Vol. 3, No.3, July 2013, pp. 352–364.

Allan Mugambi Michael, P Karanja Ngugi (2016) influence of entrepreneurial strategies on performance of State Corporation in Kenya. *International journal of innovate research and development.*

A. N. Ng'ang'a & P. Kibati (2016) *Determinants Of Financial Sustainability In Private Middle Level Colleges In Nakuru County, Kenya* ,International Journal of Economics, Commerce and Management United Kingdom, ISSN 2348 0386 Vol. IV, Issue 10, October 2016 Page 356

Anold Gitman (2008) Corporate Financial Management. Harlow Financial times. Printice Hall.

Anshu H and Kapil S. (2014). Determinants of Capital Structure in India Indian Institute of Management Bangalore, Management review paper, 26, pg 170 – 182.

Azinfar, K., and Khalili, M. R. (2013). The Study of Factors Affecting Working Capital of Pharmaceutical Companies Accepted in Tehran Stock Exchange. *World of Sciences Journal, Volume*: 01, Issue: 14, Pages: 66-77.

Baldvinsdottir, G., Mitchell, F. And Nørreklit, H. (2010). Issues in the relationship between theory and practice in management accounting. *Management Accounting Research* 21 (2):79-82.

Barbeus N. and R.Thaler (2003).A survey of behavior finance. Handbook of the economics of finance Vol, Part.B, PP 1053-1128

Baxter, R., Bedard, J., Hoitash, R., &Yezegel, A. (2011). *Enterprise risk quality, determinants, value relevance and the financial crisis*. Bentley University Working Paper.

Bell, j (2010) Doing *your Research Project*. A guide for the first time researcher in Education Health and Social Sciences: 5th Edition, New York, MC Graw _ Hill.

Bhunia, A. (2010). A trend analysis of liquidity management efficiency in selected private sector Indian steel industry. *International Journal of Research in Commerce and Management*, 1(5), 618–628.

Bowman Wood (2011) Finance Fundamentals for nonprofit: *Building capacity and sustainability* published by: John Wesley& Sons: IncHoberen New Jersey.

Carneiro, A. (2006). *Adopting New Technologies,* Handbook of Business Strategy, pp. 307-312.

CGAP (2016) Achieving sustainable development goals, *role of financial inclusion,* 1825 street NW

Christensen, L.J., Peirce, E., Hartman, L.P., Hoffman, W.M., Carrier, J. (2007). Ethics, CSR and sustainability education in the financial times top 50 global business schools: baseline data and future research directions, Journal of Business Ethics, 73 (4), 347-68.

Chen, Ying Hong and Hammes Klaus. 2005. Capital structure theories and empirical results – a panel data analysis. *SSRN Working Paper Series.*

Daniel Magoka Maken and Arose Jagongo (2013) Working management and firm's profitability as evidenced from manufacturing &construction firm listed in Nairobi Securities Exchange Kenya. *International journal of Accounting and taxation Vol1 No 1 Dec 2013.*

Elia, M. (2006) Microfinance: Text and Cases, Basics on micro finance cases studies from the Arab Region.

Dolan, C., and K. Sutherland, (2002). Gender and Employment in the Kenya Horticultural Value Chain. Discussion Paper 8. School of Development Studies and Overseas Development Group, University of East Anglia, Norwich NR47TJ, United Kingdom.

Ellul, A., & Yerramilli, V. (2010). *Strong risk controls, lower risk: evidence from U.S. bank holding companies*. Indiana University, Working Paper.

Frankfort – Nachmias, C, and Nachmias D. (2012) Research Methods in school in Social Sciences fifth Edition, St Martin's Press, New York.

Gatsi John Gatchis (2016).Empirical note on debt structure and financial performance in Ghana. E-Book pg 210, ISBN; 9781514448298

Geessink, L. (2012). *Enterprise Risk Management and Bank Performance during a Financial Crisis*. Master Thesis, Business Administration, Financial Management Option, University of Twente.

Gibson, A. B. (2012). Determinants of operational sustainability of Microfinance Institutions in Kenya. Retrieved from: http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/10719.

Gill harm, B (2008) Developing Questionnaires (2nd Ed) London UK: *Continuum International Publishing Group Ltd, * 93- 102.*

GOK 2016 website: *http://www.kenyans.co.ke/government/ministry-agriculture-livestock-fisheries* accessed 23/2/ 2016

GOK 2013 Republic of Kenya Presidential Task force Report on Parastatal Reforms 2013:*http://www.cofek.co.ke/Report accessed 23/2/2016*

Gujarati D. & Sangeetha N. (2007) Basic Econometrics. Fourth edition Tata McGraw – Hill, New Delhi

Hawken, P. (2003). the ecology of commerce: a declaration of sustainability. Harper Business: New York.

Innocent Bayai (2016) Financing and financial sustainability of micro-financial institutions, *a conceptual review of banks and bank systems Vol II Issue 2*

Jennings, D.F., (2000), 'Strategy, Structure, and Performance: Handbook of Strategic Management', Available at http.//etiweb.tanu.edu/industrial distribution/research/ publications/strategy.htm.

Johnson, G & Scholes K. (2007). Exploring corporate strategy. Dorling Kindersley (India) P Source: PVt ltd, New Dehli.

Kahindi, J. H. P., and Karanja, N. K. (2002). *Agricultural Biotechnology, in Biotechnology*. Master's Thesis, University of Nairobi. Available at: http://hdl.handle.net/11295/65109. Accessed on 10th July, 2015.

Kameri, M. P. (2005). *Biotechnology & Food Security: Some Policy & Institutional Considerations*. Master's Thesis, University of Nairobi. Available at: http://hdl.handle.net/11295/26469. Accessed on 10th July, 2015.

Karvonen, V. (2010). *Marketing investment courage and financial performance - A study of profiles and financial implications among Finnish firms*. Marketing Master's thesis submitted to the School of Economics, Aalto University.

Kenya National Bureau of Statistics (2015). Quarterly Gross Domestic Product and Balance of Payments, First Quarter 30th June 2015. *Available at: http://www.knbs.or.ke/index.php?option=com_phocadownload&view=category&id=128:gdp-2015&Itemid=599.* Accessed 17th June 2015.

Kpedor, G. (2012). *Budgeting, Budgetary Control and Performance Evaluation: A Case Study of Allterrain Service Group (ATS)*.A thesis submitted to the Institute of Distance Learning, Kwame Nkrumah University of Science and Technology.

Kothari C. R. (2008) Research Methodology, methods and techniques 2nd edition pg 109-110.New Delhi: new age international p limited

Leon, P. (2001). *Four pillars of financial Sustainability*. Resources for Success series. (vol. 2) Virginia, US: The nature conservancy. Retrieved from http://www.parksinperil.org/files/four_pillars_eng.pdf

León, P. (2001). *Four Pillars of Financial Sustainability, Resources for Success Series*, Volume 2, the Nature Conservancy, Arlington, Virginia, USA.

Liebenberg, A., & Hoyt, R. (2011). the determinants of enterprise risk management: evidence from the appointment of chief risk officers. *Risk Management and Insurance Review*, 6 (1), 37-52.

Local Government Authority (LGA) (2006). Local Government Financial Indicators, *Information Paper*– November 2006. Available at: http://www.lga.sa.gov.au/goto/fsp.

McKinsey Quarterly (2010). *How companies manage sustainability*. McKinsey Global Survey, 2010. Available at: results www.mckinseyquarterly.com.

McShane, M., Nair, A., &Rustambekov, E. (2011). Does enterprise risk management increase firm value? *The Journal of Accounting, Auditing and Finance*, 26 (4), 641-658.

Meyer, R.L. (2002). Track Record of Financial Institutions in Assisting the Poor in Asia" ADB Institute Research Paper, No 49.

Mayers, Stewart C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics* 5/2: 147-75.

Montgomery. H. (2005). Meeting the double bottom line: *The impact of Khushali bank's microfinance program* in Pakistan. Asian Development Bank Institute Policy Paper, (8).

Mugenda, O and Mugenda A (2003) *Research Methods, Quantities and qualities approaches, Nairobi* Act Press

Mujahid, M and Akhtar, K. (2014). *Impact of Capital Structure on Firms Financial Sustainability and Shareholders Wealth*: Textile Sector of Pakistan. *International Journal of Learning & Development* Vol. 4, No. 2, URL: http://dx.doi.org/10.5296/ijld.v4i2.5511

Mukiri, S. M. (2013). The effect of government regulation on the financial sustainability of microfinance institutions in Kenya. Master's Thesis, University of Nairobi. Available at:

http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/59214. Accessed on 20th November, 2015.

Muthoka, M. N., and Ogutu, M. (2014). Challenges Facing the Horticultural Sector in Nairobi County, Kenya. OSR Journal of Humanities and Social Science (IOSR-JHSS). 19 (2), 121-124.

Ndung'u, S. K. (2013). Determinants of financial sustainability of water companies in Nyeri County. Master's Thesis, University of Nairobi. Available at: http://hdl.handle.net/11295/62771. Accessed on 20th November, 2015.

Ngoe, O. A (2012). Factors influencing financial sustainability of enterprises funded under the youth enterprise development fund program in Mombasa County. Master's Thesis, University of Nairobi. Available at: http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/11166. Accessed on 20th November, 2015.

Nyabayo, A. (2013). Challenges facing non-governmental organizations in the attainment of financial sustainability in Busia County, Kenya. Master's Thesis, University of Nairobi. Available at: http://hdl.handle.net/11295/62802. Accessed on 20th November, 2015.

Nyamsogoro, G. D. (2010). *Financial sustainability of rural microfinance institutions in Tanzania*, PhD thesis, University of Greenwich, Australia.

Ogalo, V. (2011). *Foreign Investment in Agriculture in Eastern Africa: A General Overview of Trends and Issues*. Available at: http://www.fes-kenya.org/media/publications/FDI/overview-

Ogilo, F. (2012). The Impact of Credit Risk Management on Financial Sustainability of Commercial Banks in Kenya. *DBA Africa Management Review* Vol 3 No 1 pp. 22-37.

Olembo, N. K., M'mboyi, F., Nyende, B., Oyugi, K., and Ambani, L. (2013). Status of Crop Biotechnology in Sub-Sahara Africa: A Cross-Country Analysis. Mountain View, Gate Number 123, Nairobi, Kenya. Available at http://www.jkuat.ac.ke/institutes/ibr/wpcontent/uploads/2011/06/Status-of-Biotech-in-Africa-11.pdf. Accessed 17th June 2015.

Onsongo, G. K. (2012). Strategies adopted by Non-Governmental organizations to achieve financial sustainability in Kenya. Master's Thesis, University of Nairobi. Available at: http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/13416. Accessed on 20th November, 2015.

Organization for Economic Co-operation and Development (OECD) (2011). Health: spending continues to outpace economic growth in most OECD countries.

Organization for Economic Co-operation and Development (OECD) (2001). The Application of Biotechnology to Industrial Sustainability. Available at http://www.oecd.org/sti/biotech/1947629.pdf. Accessed on 20th July 2015.

Onyuma Samuel O. and Alfred Ouma (2005)Shem *Savings and Development* : Myth of Microfinance as a panacea for poverty eradication and women empowerment Vol. 29, No. 2 (2005), pp. 199-222 Published by: Giordano Dell-Amore Foundation

Padachi, K., Howorth, C. and Narasimhan M. S. (2012).Working Capital Financing Preferences: The Case of Mauritian Manufacturing Small and Medium-Sized Enterprises (SMEs). *Asian Academy of Management Journal of Accounting and Finance*, Vol. 8, No. 1, 125–157,

Pagach, D., andWarr, R. (2011). The characteristics of firms that hire chief risk officers. *The Journal of Risk and Insurance*, 78 (1), 185-211.

Pandey, I.M. (2006). *Financial Management*, New Delhi: Vikas Publishing House Pvt. Ltd.

Patricia León (2001). Four Pillars of Financial Sustainability, USAID, *Resources for Success Series*, Volume 2

Pereira, A. M., and Roca-Sagales, O. (2001). Infrastructure and Private Sector Performance in Spain. *Journal of Policy Modeling*, 23 (4), 371–84.

Pervan, M., Curak, M. and Marijanovic, I. (2012). Dynamic Panel Analysis of Bosnia and Herzegovina Insurance Companies' Profitability. Recent Researches in Business and Economics, ISBN: 978-1-61804-102-9, available at http://www.wseas.us/elibrary/conferences/2012/Porto/AEBD/AEBD-24.pdf

Pollinger, J.J., Outhwaite, J., & Cordero Guzman, H. (2007). The question of sustainability for microfinance institutions. Journal of Small Business Management, 45(1), 23-41.

Quin Wang, Heshiman Guan &Rongrong Deng (2017). An empirical study on relationship between enterprise risk management and corporate value, from perspective of top executive incentive. *International journal of business and management Vol12No* .published by Canadian Centre of science and Education.

Raheman, A., Afza, T., Qayyum, A., and Bodla, M.A. (2010). Working Capital Management and Corporate Performance of Manufacturing Sector in Pakistan. International *Research Journal of Finance and Economics*, Issue 47, 1450-2887.

Rahnema, R. P. F., and Mahmoudi, M. (2009). Evaluating EVA and MVA in managing shareholders' added value, *Researcher,* No.7, pg 70-79.

Rehn, E. (2012). Effects of Working Capital Management on Company Profitability. *An industry-wise study of Finnish and Swedish public companies*. Master's Thesis submitted to the Department of Accounting, Hanken School of Economics, and Helsinki.

Rao, J. O. (2013). Effect of Funding Sources on Financial Sustainability of Water Sector Institutions in Kenya. Master's Thesis, University of Nairobi. Available at: http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/58807. Accessed on 20th November, 2015.

Reddy K (2010), the relationship between corporate governance practices and financial performance in New Zealand. An empirical investigation: The university of Walkato: Malaysia

Republic of Kenya (2016a). Functions of the Agriculture, Livestock and Fisheries. Available at: http://www.kilimo.go.ke/index.php/about-us/functions-of-the-ministry/. Accessed on 22nd January, 2016.

Republic of Kenya (2016b). MOALF: Economic Review of Agriculture [ERA] 2015. Central Planning and Project Monitoring Unit, MOALF, Nairobi, Kenya. Available at: http://www.kilimo.go.ke/wp-content/uploads/2015/10/Economic-Review-of-Agriculture_2015-6.pdf. Accessed on 22nd January, 2016.

Roy L. S. and Mingfang L. (2000). Environmental dynamism, Capital Structure and Performance: A Theoretical Integration and an Empirical Test. Strategic Management Journal, 21, 31-49.

Rusinko, C.A. (2005). Using quality management as a bridge in educating for sustainability in a business school, International Journal of Sustainability in Higher Education12(4),345-351.

Sekaran U. & Bougie R.(2010)-research methods for business. A skill building approach 6th edition; John Willey & sons Inc.

Sewell Martic (2007): Behavioral finance: University of Cambridge

Shields, K., Patricia, W., and Rangarjan, N. (2013). *A Playbook for Research Methods: Integrating Conceptual Frameworks and Project Management.* Stillwater, OK: New Forums Press. p. 24.

Silvanus Muthoka Mutinda, & Solomon Ngahu (2016) *Determinants of Financial Sustainability for Non-Governmental Organizations in Nakuru County, Kenya* Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 18, Issue 9 .Ver. II (September. 2016), PP 81-88 www.iosrjournals.org DOI:10.9790/487X-1809028188 www.iosrjournals.org

Sontag Padilla M.L, Stapefoot L. & Morganti G.K. (2012).Financial sustainability for non profit organizations: A review of literature: published by Rand Corporation's pg 44.

Sommer, C. (2012). *Private Equity Investments: Drivers and Performance Implications of Investment Cycles*. A dissertation for Doctor of Philosophy in Manage men, University of St. Gallen, Washington, D.C. 20433, U.S.A.

Taiana, L. (2012). *Extra-financial performance in socially responsible investment Executive MAS Thesis in Banking and Finance*. CMF Thesis Series no. 11, University of Zurich, Department for Banking and Finance / Center for Microfinance Plattenstrasse 14, 8032 Zurich, Switzerland.

Trochim William M. (2006) the research methods knowledge base 2nd edition. Internet www pg at URL <http://www.social research methods.net/kb /.Oct 20, 2006.

Tschirley, D., Muendo, K. M., and Weber, M. T. (2004). Improving Kenya's Domestic Horticultural Production and Marketing System: Current Competitiveness, Forces of Change, and Challenges for the Future. Working Paper No. 08B/2004, Tegemeo Agricultural Monitoring and Policy Analysis Project (TAMPA), Nairobi, Kenya.

Ugirase, J. M. (2013). *The Effect of Credit Risk Management on the Financial Sustainability of Commercial Banks in Rwanda*. Master of Business Administration, School of Business, University of Nairobi. University of Applied Sciences, International Business. *International Journal of Economics and Financial Issues*, Vol. 3, No. 1, 2013, pp.237-252.

Velnampy, T., and Niresh, J. A. (2012). The Relationship between Capital Structure & Profitability. *Global Journal of Management and Business Research*. 12 (13). 1. Availableat:http://www.journalofbusiness.org/index.php/GJMBR/article/viewFile/766/695.

Waiganjo, E.W., Ngethe, J. M., &Mugambi, D. N., (2012). An Investigation into the strategies adopted by Non-Governmental Organizations in Kenya to increase financial Sustainability International Journal of Current Research, Vol. 4, and Issue 4.

Wangari, L. (2013). An Investigation on the Impact of Interest Rates on Financial Sustainability of Microfinance Institutions in Kenya. Master's Thesis, University of Nairobi. Available at: http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/59778. Accessed on 20th November, 2015.

Wen, W. (2010). *Ownership Structure and Banking Performance: New Evidence in China*. Universitat Autònoma de Barcelona Department D'economia de L'empresa, 2010.

William S Kristin (2014), Non profit sustainability. Thesis submitted to Dollhouse University, Canada; financial sustainability strategies of non profit organizations.

World Bank (1998). *Public Expenditure Management Handbook*. The International Bank for Reconstruction and Development/ the World Bank, 1818 H Street, N.W.

Yang Q. (2010). *The Impact of the Budgeting Process on Performance in Small and Medium-Sized Firms In China*. A Ph.D. Thesis, University of Twente, .Printed by: Print Partners Ipskamp, Enschede, DOI: 10.3990/1.9789036529839.

Yasser Q.R. (2011): Corporate governance and firms performance on an analysis of family and non family controlled firm: The Pakistan development review 50: 1 pp.47 -62

Yonas, M. (2012) Health checkup of commercial Banks by Using CAMEL framework. *MSc thesis*, Jimma University.

Yonas, N. (2012) Determinants of Financial Sustainability of Ethiopian Microfinance Institutions, *MSc thesis*. Addis Ababa University, Addis Ababa, Ethiopia.

Yunus, M., and Jolis, A. (2003).Banker to the Poor: Micro-lending and the Battle against World Poverty. Public Affairs, London, England.

Zahra, S. A. (1993). Environment, corporate entrepreneurship, and Financial Sustainability: a taxonomic approach. *Journal of Business Venturing*, Vol. 8, no. 4, pp. 319-340.