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Effect of Resource Utilization on Financial Sustainability of Government Owned Entities in the Ministry of Agriculture, Livestock and Fisheries (MOALF), Kenya

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ABSTRACT

The Government reform agenda, was to try and address how GoEs can attain self-sufficiency to ease the burden of overreliance on subsidies, through introduction of new government guidelines, policies and strategies designed at improving their financial sustainability. However reviews have shown that despites all these improvements, the GoEs often do not operate optimally for sustainability, attributing to either internal or external factors. 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 resource utilization as a determinant. 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. Primary data was collected using structured questionnaires and interview guides. 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, fitted into a multi linear regression model and t-statistic. From the study it was evident that, management of working capital was key factor that influenced financial sustainability of the GoEs. Working capital had a positive correlated to financial sustainability with investment opportunities being inversely related to financial suitability hence lack of proper policies on Investment and strategies affects financial sustainability. The study recommends 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.

Introduction

Financial sustainability (FS) paramount to every organization. It is the ability to meet financing obligations in order to achieve their intended objectives, implement policies, fulfill its mission and serve its stakeholders for a prolonged period of time. It is a measure of the organization's ability to cover annual budgets without constraints; enabling the income or revenue by an organization to covers its operational costs, regardless if whether these funds come from donors, subsidies or internally generated. (Bowman 2011, Christensen et al, 2007, Silvanus et al 2016, Pollinger, Outhwaite & Cordero-Guzman, 2007). 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 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. Oganisation 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).

Determinants of Financial Sustainability

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 above formula indicates or measures the degree to which operating income covers operating expenses. If the calculated figure is greater than 100%, the organization under evaluation is considered to be operationally self-sufficient. In organisation, operationally sustainable institutions are able to cover their costs through operating revenues.

On the other hand FSS measures degree to which operating income covers adjusted operating expense. Organisation are on an unsubsidized basis or free from donation. Financial self-sufficiency requires adjustments for different reasons. Financial statements must be adjusted to conform to standard accounting practices, to take into account inflation and to remove the effect of subsidies and in-kind donations. FSS shows how a GoE would look if funds had been raised on a commercial basis and if services or equipment had been purchased at a market rate and were not received as a donation (Elia, M.2006).

Government Owned entities in the Ministry of Agriculture Livestock and Fisheries (MOALF)

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 governments 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. According to (Olembo *et al*, 2010). there has been progressive development that has been brought about by investing in appropriate agricultural bio-technologies, good institutions, establishing apt policies that improve the efficiency and sustainable use of available resource for the GoEs. Therefore there is a need for the GoEs to be financially sustainable this study becomes key to critically examine the determinants of financial Sustainability of all these GoEs in the MOALF, Kenya.

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 finacilas position that assist in facilitating the fiscal and public welafare , 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 evaluate the effect of resource utilization on financial Sustainability of GoEs in the MOALF, Kenya.

Objective

The study objective is to establish effect of resource utilization on financial Sustainability of GoEs in the MOALF, Kenya.

Related Literature

Theoretical Framework

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

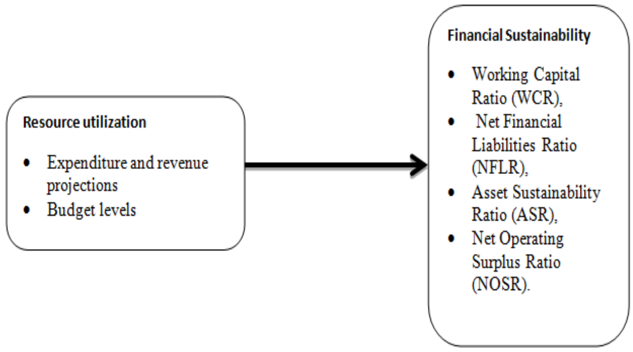
The behavioral theory is among the new contemporary theories that seek the cognitive factor and emotional issues that impact the decision making process of an individual or group. It rests on the inability to explain the empirical patterns of the traditional theory framework, while the traditional theory 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



Independent Variable **dependent Variable**

Figure 1. ***Conceptual Framework.***

Resource Utilization as a Determinant of Financial Sustainability

Several studies have analyzed resource utilization as a determinant of financial sustainability. According to (León 2001), knowing how to manage resources is as essential to achieving financial sustainability. Non-profit organizations must ensure that their scarce resources are utilized as efficiently as possible. A financial plan is necessary to ensure that an organization utilizes its resources in a sustainable way. A financial plan of action basically consist of projected expenditures and the organization's potential to generate the income to cover those expenditures within budget line in order to have surplus. The ultimate purpose of the financial plan is to determine if the organization is going to have sufficient resources available in the medium term to meet the objectives described in the strategic plan for financial stability. The financial plan operates on the basis of scenarios, ranging from the minimum feasible to the ideal. The minimum feasible scenario quantifies priorities that are indispensable to fulfilling the mission within a specific time frame, and whether the organization can cover its fixed or operational costs during that period (León, 2001).

Strategic management of an organization's assets is necessary. In order to maximize their financial potential, organizations ought to employ an income-generation technique that enhances financial sustainability (León, 2001). For instance, property that is not being used can be rented, bank accounts can be transferred to interest-bearing accounts until the funds are needed, or unused assets which retain some market value can be sold.

Studies by some other authors have analyzed resource utilization as a determinant of financial sustainability. Studies reviewed on resource utilization in reference to budget versus expenditure management, according to (OECD 2011) on health care showed that expenses tripled across the OECD countries during the past 30 years, due to a focus given to economy with a management accounting orientation which stressed on efficiency, cost control, budgeting and management control types. According to (Baldvinsdottir *et al.* 2010), the role of management accounting is increasingly expanded and diversified. In practice, it is not enough to prepare the quarterly balance sheets, register the data and do the financial reporting. There is a growing demand for innovative accounting, non-financial performance measures, organizational strategies and behavioral considerations in the functions of the management accountant. Concurrently with the spread of management accounting techniques to the public sector, pressures for quality combined with costs containment in order to ensure sustainability and excellence within a specific budget are being emphasized on.

(Kpedor 2012) analyzed budgeting, budgetary control and performance evaluation system of Allterrain Services Group in Ghana with the view to ascertain the role that the budget plays in the company performance and sustainability. The study established that most of the key actors do not work with the budget due to lack of proper induction and proper role profile of the office they occupied which consequently affects resources utilization. (Kpedor 2012) recommends that the regional business managers have to champion the course of the budget information disseminating it downwards to the project units, so that they can appreciate and understand budget as a tool for the operation in order to enhance productivity and overall performance.

(Yang 2010) examined the impact of the budgeting process on performance in small and medium-sized firms in China. The study established a positive effect of the formal budgeting process on firm's performance. A more formalized budgeting planning lead to higher sales revenues and budget goals set increased the motivation of employees to achieve budget standards. A more formalized budgetary control tends to lead to a higher growth of profit of a firm because of management control.

An emerging consensus on the role of the budget across all countries centers on how the budget affects: (a) macroeconomic performance; (b) allocation of resources; and c) efficiency and effectiveness of resource utilization (World Bank, 1998). Poor financial performance and sustainability is associated with many factors that include weak links between policy making, planning and budgeting. The weaknesses that undermine public or private sector performance include: poor planning; lack of links between policy making, planning and budgeting; poor expenditure control; inadequate funding of operations and maintenance; poor management of external aid; poor cash management; inadequate reporting of financial sustainability; and poorly motivated staff, among others. According to (World Bank 1998), central budget agencies have to take the lead in putting in place the basic policies to support all three functions of the budget - control of public resources, planning for future resource allocation and management of resources –they should be built on institutional mechanisms that support efficiency and performance orientation from all dimensions.

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 the effect of resource utilization on financial Sustainability in the MOALF, Kenya. According to (Trochim, 2006), causal effect occurs when variation in one phenomenon, an independent variable, leads to or results, on average, in variation in another phenomenon, the dependent variable.

The study investigated the effect of working capital management as the independent variable in GoEs in the MOALF in Kenya (dependent variable). 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 the study targeted a total of 5 senior and middle level management staff working in GoEs MOALF. The choice of these employees was based on the assertion that they were the most privy with financial issues and management issues in the entities. To ensure uniformity and homogeneity of the target population the study targeted only GoEs in MOALF. There were 35 entities targeted in the MOALF with 27 positively responding which represented 77.14% response rate. A sample of 35 Agencies was derived from the Slovin's Formula.

Research Findings

Resource Utilization

The study sought to evaluate the effect of resource utilization on financial Sustainability in the MOALF, Kenya. The respondents were asked to indicate their agreement with the questions on resource utilization shown in Table 4.7.

From the study findings in Table 1, majority (84.3%) of the institutions generated other resources besides what the Government provided through the MOALF. The study findings indicate that all (100%) of the institutions that generated other resources incorporate them in the budget. All the respondents (100%) indicated that their organization prepared their own budget line projection and 94.8% of the respondents indicated the budget allocation was approved by the Ministry according to expenditure line. Majority (85.8%) of the respondents stated that revenue and expenditure were tracked within the budget.

The respondents stated that approval levels are available before any expenditure and the budgetary process is guided by PFM Act of 2012. The finance department is charged with the responsibility of ensuring that the GoEs meet organizational targets within the available funds. This enhanced financial sustainability as institutional policies are formulated and operationalized in the confines of the available resource envelope. Nevertheless, the fact that GoEs in the ministry depend on government funds is a limitation to the achievement of greater levels of financial sustainability.

The respondents were requested to rate the efficiency in management of revenue and expenditure in their institutions. Figure 2 shows the findings of the study.

From the study findings in Figure 2, majority (59.6%) of the respondents stated that their institutions were moderately efficient in management of revenue and expenditure. This is an indication of lapse in enforcement regulation and policies by management.

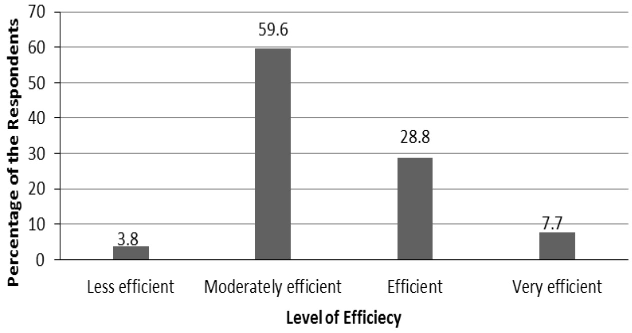


Figure 2. The efficiency in management of revenue and expenditure.

The respondents were also requested to indicate their level of agreement with the statements in Table regarding resource utilization in the institutions under 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. Mean and standard deviations were calculated as shown in Table 2.

From the study findings in Table 2, majority of the respondents agreed to the statements that the institutions adheres to the set budget guidelines by the Ministry ($\bar{x}$=4.32, SD=0.8939), the institution prevent fund from wastage ($\bar{x}$=4.29, 0.9058), the institutions' prioritize expenditure to key to areas of priority ($\bar{x}$=4.2, SD=0.8398), the institutions' links its policies and strategies to budgeting ($\bar{x}$=4.14, SD=1.1073) and the institution effectively forecast the availability of funds ($\bar{x}$=4.08, SD=1.1251).

The respondents also agreed to the statements that the institutions' has efficient debt management policy ($\bar{x}$=3.97, SD=1.1275), The institution effectively determine funds needed ($\bar{x}$=3.93, SD=1.2646), the Institution carry out cash pooling to optimize the use of surplus funds, minimize exposure to unnecessary borrowing and protect against negative bank balances ($\bar{x}$=3.90, SD=1.3322), the Institutions acquires loans to enhance their resources base ($\bar{x}$=3.85, SD=1.3458).

Table 1. Responses on Resource Utilization.

	N	Yes	No		
		F	%	F	%
a) Does your organization generate other resources besides what the Government has provided through the MOALF?	134	113	84.3	21	15.7
b) Are these resources incorporated within the budget?	113	113	100	0	0.0
c) Does the organization prepare its own budget line projection?	134	134	100	0	0.0
d) Are the budget allocations approved by the Ministry according to expenditure line?	134	127	94.8	7	5.2
e) Are the revenue and expenditure tracked within the budget?	134	115	85.8	19	14.2

Table 2. Descriptive finding on resource utilization.

Statement		Mean	Std. Deviation
The Institutions' adheres to the set budget guidelines by the Ministries	134	4.32	0.8939
The institution prevent fund from wastage	134	4.29	0.9058
The Institutions' prioritize expenditure to key to areas of priority	134	4.20	0.8398
The Institutions' links its policies and strategies to budgeting	134	4.14	1.1073
The institution effectively forecast the availability of funds	134	4.08	1.1251
The Institutions' has efficient debt management policy	134	3.97	1.1275
The institution effectively determine funds needed	134	3.92	1.2646
The Institution carry out cash pooling to optimize the use of surplus funds, minimize exposure to unnecessary borrowing and protect against negative bank balances	134	3.90	1.3375
The Institutions acquires loans to enhance their resources base.	134	3.85	1.3458
The institutions invests on fixed asset, current asset and intangible assets like patents, copyrights, etc.	134	3.81	1.3501
The Ministry effectively assist in matching expenditure and available revenue for the Institutions	134	3.77	1.3529
The Ministry assist the institutions to access loans from corporate bank accounts to as way of minimizing transactions cost for the institution	134	3.50	1.5182

The respondents also expressed moderate levels of agreement to the statements that the institutions invests on fixed asset, current asset and intangible assets like patents, copyrights, etc. ($\bar{x}$=3.81,SD=1.3501), the Ministry effectively assist in matching expenditure and available revenue for the Institutions ($\bar{x}$=3.77, SD=1.3529) and the 7 Ministry assist the institutions to access loans from corporate bank accounts to as way of minimizing transactions cost for the institution ($\bar{x}$=3.50, SD=1.5182).

The respondents were asked to indicate how often the institutions filed returns to the Ministry. Figure 3 shows the findings of the study.

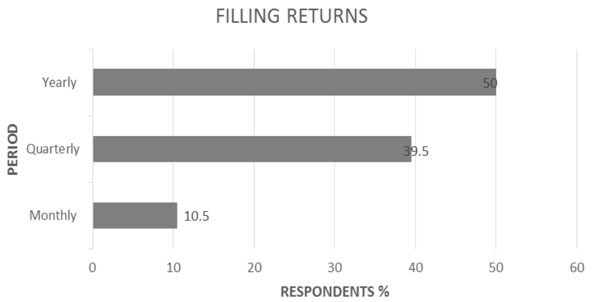


Figure 3. The frequency of filing returns to the Ministry.

The study findings in Figure 3 shows that majority (50.0%) of the respondents file annual returns to the MOALF followed by quarterly returns (39.5%) and monthly returns (10.5%). This means that there is agreed period of filling return. So majority file returns at the end of the year, which has some challenges.

The study findings in Figure 4 show the extent to which the Institutions in the MOALF achieved financial sustainability through efficient resource utilization.

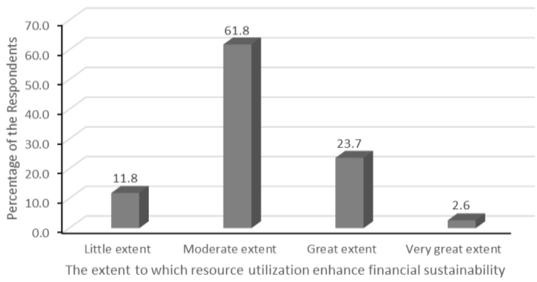


Figure 4. The extent to which resource utilization enhance financial sustainability.

Majority (61.8%) of the respondents indicated that efficient resource utilization had moderately contributed to financial sustainability of the Institutions in the MOALF.

The study findings revealed that resource utilization is a determinant of financial sustainability of GoEs in the MOALF. Knowing how to manage resources is as essential to achieving financial sustainability as knowing how to generate income. Efficient procedures for administration and finances are governed by a series of institutional policies that help GoEs in the MOALF make the most of available resources and ensure transparency in fiscal management. Moreover, these procedures must enable GoEs to anticipate the institutional financial standing and, ultimately, make appropriate decisions on resource utilization in a timely manner. The study findings are in tandem with León (2001) stated that the knowledge on management of resources is essential to achieving financial sustainability by non-profit organizations.

Therefore, non-profit organizations must ensure that their scarce resources are utilized as efficiently as possible.

GoEs to be financially sustainable should have enough revenue to meet the long-term operation needs so as to deliver on their core mission. In practice, this means attract or generate sufficient recurrent revenue to meet ongoing operating expenses, and in order to achieve the desired result,. There is need to also have adequate capital, beyond current revenue, to meet unanticipated needs and plan for the future including growth.

Efficient resource utilization strategies aimed at improving financial sustainability of GoEs in the MOALF is achievable through accounting procedures that fit the institutional needs. Similarly, León (2001) argued that the ultimate purpose of the financial plan is to determine if the organization is going to have sufficient resources available in the medium term to meet the objectives described in the strategic plan for financial stability. Prudent financial procedures on resource utilization ensure strategic management resources and maximization of financial potential.

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. Based on the study there is a positive coefficients in management of working capital (α_2 =0.421). 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 is to maintain and build the capacity of an organization that is 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.

Market imperfections which gradually erode the achievement of the sectorial need and derails sustainability, the Government should create and invest on institutions that will facilitate GoEs to have same play field. There is need to consider the wider investments opportunities that can mobilize capital and enhance infrastructure development through marker diversification for a competitive edge.

While entities in the MOALF at different stages of growth, the need to meet their revenue needs in varies, institutions that reach financial sustainability at scale have done so by purposefully investing in their capacity to generate revenue. Other GoEs in order to seek financial sustainability need to clearly define their investment strategies and align their activities. They need to certainly change their own practices to more effectively support grantees. The Ministry can help GoEs to adapt as they grow by making sure their strategies are aligned with the bigger Ministries agenda..

Despite all the challenges and constraints facing GoEs in the MOALF, GoEs still has a large number of strengths and opportunities enabling its development and growth. In this context, Kenya is endowed by its particular geographic location in East and Central Africa, favorable agricultural climate, free market economy and liberalized trade, and is signatory of a number of international conventions, treaties and agreements which provide market for agricultural products. There are a number of national projects and programmes supporting the MOALF that GoEs should take advantage of to create a niche.

The effect on climatic changes and environment have affects the production of some of the entities that grow their own products creating a long life shortage of raw material for production, this has lead to non-performance of these Entities leading to low financial sustainability

Achieving financial sustainability is an ongoing process that has to become part of day-to-day management of the GoEs in strategic planning, in administration and finances, in fundraising policies, and in the planning and implementation of income generation strategies. Achieving financial sustainability is a long-term goal that requires the concerted efforts of the entire MOALF. Government support is highly valuable in helping its Entities to conduct its business, set and modify objectives and strategies, and plan and innovate. If a strong core of GoE's work is consistent with the Ministry's funding strategies is well-managed and meets the criteria specified, the ministry can greatly improve its financial sustainability.

Recommendations for Policy Development

Based on the study it is clear that:

1) 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.

2) 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.

3) 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.

4) 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.

5) 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.

6) 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.

7) 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.

8) 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.

9) 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.

10) 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.

11) 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.

12) 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.

13) 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.

14)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.

15)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.

16)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 evaluate the effect of resource utilization on financial Sustainability of GoEs in the MOALF, Kenya. The research design used may not be applicable to some GoEs in other ministries given their dynamics thus need to explore more research using different designs. The behavioural aspect of management of GOES should be areas of focus given that many decisions are driven by the strength of emotion aspect of a manager.

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