DETERMINANTS OF EFFECTIVE MONITORING AND EVALUATION OF GOVERNMENT FUNDED WATER PROJECTS IN KENYA: A CASE OF NAIROBI COUNTY

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Determinants of Effective Monitoring and Evaluation of Government Funded Water Projects in Kenya: A Case of Nairobi County

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Accepted Mar 31, 2016

Abstract

Monitoring and evaluation of projects in Kenya is very critical because a lot of government resources are provided to organizations to implement various water projects. Not only does best practices require that projects are monitored for control but also project stakeholders require transparency, accountability for resource use and impact, good project performance and organizational learning to benefit future projects. The Government of Kenya invests a lot of funds in a number of water development projects in the urban areas which is as a result of high level of poverty, rapid increase of population and weather variability. However, most of these projects experience performance challenges in terms of completion thereby leading to confusion and uncertainty in implementation of project activities due to ineffective monitoring and evaluation. This is significant pointer that the government water funded projects in Nairobi County may stall and fail to be completed within the stipulated time period as set out in their logical framework. The general objective of this study was to examine the influence of monitoring and evaluation on performance of water projects performance in Kenya. The study was built upon the Stakeholder Theory; Resource based theory, Theory of constraints and Rogers Innovation Diffusion Theory. The specific objectives of the study was to determine the influence of technology, stakeholder involvement, project team and budgetary allocation on effective monitoring and evaluation of government water funded projects in Kenya. The study adopted descriptive design survey approach and targeted 417 employees and sample of 42 employees or 10% of the target population was considered. The stratified sampling technique method was used and primary data was collected through the use of questionnaires. On the other hand, secondary data was obtained from published documents such as journals, periodicals, magazines and reports to supplement the primary data. A pilot study was conducted to pretest the validity and reliability of instruments for data collection. The data was analyzed with help of SPSS version 21 and Excel and presented in charts and graphs to facilitate comparisons and conclusions. The study variables were regressed at 5% level of significance to establish the strength and direction of their relationship.

Key Words: Monitoring and Evaluation, Government Funded, Water Projects
INTRODUCTION

This chapter provides the background information, statement of the problem, research objectives and research questions that underpin the study, significance, scope and limitations of the study.

Background of the Study

Monitoring and evaluation of project improves overall efficiency of project planning, management and implementation and therefore various projects are started with the sole goal of changing positively the socio-political and economic status of the residents of a given region. Monitoring is the project-long process of ascertaining whether the plan has been adhered to, any deviations noted and corrective undertaken in timely manner (ADRA, 2007). The project information is obtained in an orderly and sequential manner as the project is on-going. Evaluation is the systematic and objective assessment of an ongoing or completed project, program or policy, its design, implementation and results.

Monitoring and Evaluation (M&E) has become a leading priority for many development and humanitarian organizations. Advancements in measurement approaches, indicators and targets, performance monitoring and managing for results (impact) have been made in recent years in order to adequately and effectively evaluate progress and program impact on development matters.

Global Perspective of Performance of water Projects

Globally, Australia is one of the leading countries in the world in embracing M&E systems in the development projects (UNDP, 2002). The government created a full-fledged government evaluation system, managed by the Department of Finance (DOF). This provided a spending baseline and freed up the budget process from a detailed, line item scrutiny of spending, to focus instead on changes in government policy and spending priorities in the development projects. The government of Australia advocated the principles of program management and budgeting, with a focus on the efficiency and effectiveness of government programs, through sound management practices, the collection of performance information, and the regular conduct of program evaluation (Mackay, 2011).

Kenya perspective of Water Projects

In Kenya, the monitoring and evaluation systems has not been that effective to several challenges especially in the government sector. In the year 2005, The Ministry of Planning and National Development commissioned work on the design of an appropriate framework for Monitoring and Evaluation (M and E) in the National Development Program. This proposed Monitoring and Evaluation framework has not been fully operational, for example in this view, is supported by Wanjiru (2008) who indicated in her Social Audit of CDF that, monitoring and reporting should be strengthened and deepened in all CDP projects.

Statement of the Problem

Monitoring and evaluation of projects in Kenya is very critical because a lot government resources are provided to organizations to implement various water projects. Not only does best practices require that projects are monitored for control but also project stakeholders require transparency, accountability for resource use and impact, good project performance and organizational learning to benefit future projects.
Objectives of the Study

General Objective
The purpose of the study is to establish the determinants of effective monitoring and evaluation of government funded water projects in Kenya.

Specific Objectives
The specific objectives of the study will be to;

i. Establish the influence of managerial skills on effective monitoring and evaluation of government funded water projects in Kenya.

ii. Determine effects of budgetary allocation on effective monitoring and evaluation of government funded water projects in Kenya.

iii. Examine effects of project team on effective monitoring and evaluation of government funded water projects in Kenya.

iv. Find out influence of stakeholder involvement on effective monitoring and evaluation of government funded water projects in Kenya.

Scope of the study
The study will focus only on government water funded projects in Nairobi County implemented in the last five years. The county is one of the regions whereby the government has funded most urban water projects in the country and is suitable to carry out the study to get information required in this study. The study will target 105 personnel involved in the implementation of such projects as per to the records available (NCC, 2015). The study will also limit itself to the determinants of effective monitoring and evaluation of government water funded projects. The variables under study will include; project team managerial skills, stakeholder participation and budgetary allocation.

LITERATURE REVIEW

Introduction
This literature review discusses previous studies relevant to the researcher’s topic of study. The study within this review of literature focuses on objectives set out in chapter one. By exploring these areas of literature, a significant contribution is made to this research.

Theoretical Review
Theoretical review is a collection of existing theories and models from literature which underpin conceptual framework and subsequently inform the problem statement (Mugenda&Mugenda, 2008). Theories are analytical tools for understanding, explaining, and making predictions about a given subject matter. A theory is a set of statements or principles devised to explain a group of facts or phenomena especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena (Hawking, 2003).

Theories are important in predicting, explaining and mastering phenomenon (behaviour of systems, events, activities of employees and time). Theoretical frameworks are explanations about a phenomenon and according to Marriam (2001) theoretical framework provides the researcher the lens to view the world. A theory is an accepted fact that attempt to provide a plausible or rational explanation of cause- and-effect (causal) relationship among a group of observed phenomenon (Kothari, 2004). According to Evenett and Hoekman, (2008), theories can be classified according to their
scope, function, structure and levels. The relationship depicted by these theories and models is therefore reflected in this section of the literature concerning the influence of monitoring and evaluation on performance water projects.

**Rogers Innovation Diffusion Theory**

(Rogers, 1983) considers the process of innovation diffusion as one which is dictated by uncertainty reduction behaviour amongst potential adopters during the introduction of technological innovations. Despite innovations offering its adopters new ways of tackling day-to-day problems, the uncertainty as to whether the new ways will be superior to existing ones presents a considerable obstacle to the adoption process. (Niederman, Branchau and Wetherbe, 1990) assert that to counter this uncertainty, potential adopters are motivated to seek additional information, particularly from their workplace peers. According to Rogers (1983), suggests key characteristics of innovation that consistently influence the adoption of new technologies: complexity, which is the degree to which an innovation is perceived as being complicated to use; observability, which is the degree to which the results of an innovation are observable to others; demonstrability, which is tangibility of results of adopting an innovation relative advantage; compatibility, which is the extent to which an innovation is perceived to fit together with potential adopters’ habits and practices; and trial ability, which is the degree to which innovation may be sufficiently tested prior to adoption.

Moreover, Moore & Benbasat,(1991) add image and visibility to key features of innovation that consistently influence the adoption of new technologies. Image refers to the self-perception that adopting an innovation could result in enhanced social status for individual amongst his/her peers. Visibility on the other hand, refers to the degree to which prospective users see an innovation as being visible in the adoption context.

Several reasons exist as to why organizations may choose to invest in monitoring and evaluation (M&E). These reasons include quicker response on current project, better financial control, better communications, flexibility to satisfy beneficiaries, possibility of sharing common information, easier to use lots of data and possibility of telecommunicating (Olalusi & Jesuloluwa, 2013). Nonetheless, these benefits derived from M&E can be undermined by user reluctance to accept and use the new technologies at their disposal (Davis, 1989). However, M&E promises can only be realized if the intended users of technology utilize it in manner that will contribute both to the strategic and operational objectives of the organization. One recent finding, for example, is that the organizations with more slack resources and higher levels of managerial ownership innovate less when organization performance declines (Latham, Braun 2009). Another finding is that the network density of organization’s partners strengthens the influence of technological diversity, which in turn increases the firm’s innovation performance (Phelps 2010). The theory of innovation diffusion instigated the first research objective of the study that is to establish the effect of technical capacity on effectiveness of monitoring and evaluation of water development projects in Nairobi County.

**Stakeholder Theory**

A stakeholder is “any group or individual who can affect or is affected by the achievement of an organization’s objectives” (Freeman, 1984). It is well known that companies produce
externalities that affect different stakeholders. These externalities often cause stakeholders to increase pressures on companies to reduce negative impacts and increase positive ones. The theory suggests that a firm should pursue strategies that consider the parties affected by decisions while trying to minimize damage or maximize benefits to the representative groups (Freeman 1984). This calls for governments to think beyond financial performance but have obligations towards society and its constituent groups, (Jones, 1980). In this interplay monitoring and evaluation go beyond the traditional fiduciary duties to shareholder and extend to the customers, employees, suppliers and neighboring communities (Jones, 1980). Clarkson (1995) perceived the firm as a system of stakeholders considered as a legal entity which operates for the benefit of the society. He held that the purpose of the firm was to create wealth or value to the equity holders and stakeholders.

The monitoring and evaluation in particular has to meet the different needs of stakeholders, particularly when development projects are introduced (de Brito et al., 2008). According to Boyne (2002, public projects are owned collectively by members of political communities and this comes with it the pressure to meet the interest of all stakeholders. Governments usually create environmental regulators as governmental agencies that have the authority to formulate project requirements and inspect the projects compliance to those requirements and those that fail to comply risk incurring non-compliance penalties (Henriques & Sadorsky, 1996) and having their operating permits recalled and the operations closed. In aggregate, the above views point to the fact that there is a positive relationship between stakeholder pressures and the effectiveness of monitoring and evaluation. The above theory relates to stakeholder involvement on monitoring and evaluation on performance of water projects.

**Theory of constraints**

According to Goldratt & Cox (1986) formulated this theory in production environment explaining that the throughput rate of a system is determined by bottleneck. This introduced theory of constraints as a means of managing a factory production process with an aim of maximizing throughput rate. Maximizing throughput rate would in turn maximize profit, cash flow and return on investment. In the multi-project environment, theory of constraints is applied as critical chain methodology using the same principle of a capacity constrained resource. This critical chain methodology is used by large companies such as Hitachi(Umble Umble&Murakami, 2006), ABB, Boeing, Helwett Packard and others (Stratton, 2011) for project management. Even a small company can implement the full Critical Chain as the software is available at USD250 (Stratton, 2011).

Monitoring and evaluation was shown to be an approach with significant differences to traditional critical path scheduling (Steyn, 2001) (Rand, 2000) (Lechler, Ronen &Stohr, 2005). In a large multi-project environment, like construction industry, (Jyh-Bin Yang, 2007) pointed out that a construction industry would benefit greatly from critical allocation of budget scheduling. The construction industry uses multiple costly resources in the context of multiple projects executed by a single company. He pointed out that there are definite benefits and did so from a theoretical basis. Case studies exists for large companies such as Impala
Platinum (Philis & Gumede, 2011) and complex project such as refurbishment of C-5 aircraft (Best, 2006) but literature is sparse for urban development projects. The above theory relates to the budgetary allocation on monitoring and evaluation on performance water projects.

**Financial Literacy Theory**

Financial literacy theory argues that the behavior of people with a high level of financial literacy might depend on the prevalence of two thinking styles according to dual-process theories: intuition and cognition. Dual-process theories embrace the idea that decisions can be driven by both intuitive and cognitive process. Dual process theories have been applied to several fields, including reasoning and social cognition (Evans 2008). Financial literacy covers the combination of investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being (Atkinson and Messy, 2005).

Financial literacy empowers investors by educating them to acquire relevant knowledge and skills in financial management on projects. Financial knowledge helps to overcome most difficulties in advanced projects. Financial literacy allows the investors to encounter difficult financial times, through strategies that mitigate risk such as accumulating savings, diversifying assets, and purchasing insurance for the projects. More importantly, financial literacy enhances decision making processes such as payment of bills on time, proper debt management which improves the credit worthiness of potential borrowers to support livelihoods, economic growth, sound financial systems, and poverty reduction. Financial literacy leads to more effective use of financial products and services, greater control of one's financial future and reduced vulnerability to overzealous retailers.

Financially literate investors are able to create competitive pressures on financial institutions to offer more appropriately priced and transparent services, by comparing options, asking the right questions, and negotiating more effectively. Investors are able to evaluate and compare financial products, such as bank accounts, saving products, credit and loan options, payment instruments, investments, insurance coverage, so as to make optimal decisions (Miller et al 2009). Greenspan (2002) argues that financial literacy helps to inculcate individuals with the financial knowledge necessary to create household budgets, initiate savings plans, and make strategic investment decisions. Proper application of that knowledge helps investors to meet their financial obligations through wise planning, and resource allocation so as to derive maximum utility for the projects. The theory relates to budgetary allocation on monitoring and evaluation on performance of water projects on this study.

**Human Capital Theory**

From an organizational perspective, the human capital theory hypothesizes that in a perfectly operating labor market, organizational productivity increases as individuals become more highly trained. The overall link between training and development to productivity at the workplace is based on a concept referred to as factor pricing, Maglen (2008). According to Livingstone (1999), human capital theorists insist on the importance of investment in education and imparting of the value of the worker. The theory assumes that organization specific training, such as in the events of changes, is likely to increase the organization long term productivity results on their training.
investment. The employees are more likely to have a better understanding of the structures resulting from the change and will use them appropriately to ensure productivity to the project Bosworth, Wilson & Assefa (1993). Hence, Maglen (2008) asserts that this leads to employees’ satisfaction and will also influence the level of employee engagement thus project performance.

A proper investment in training and development by an organization on its employees increases their understanding of their duties, tasks and obligations. Training also creates a conducive environment for cooperation and collaboration within employees in performing their work. This, based on the human capital theory, results in both individual and firm-wide productivity Juan (2010). The human capital theory proposes that sustainable competitive advantage is attained when an organization has a human resource pool that cannot be imitated or substituted by its competitors. According to Ngugi (2013), human capital theory emphasizes the value addition that people are assets and emphasizes investment in people generate worthwhile returns for competition key among them in performance, productivity, flexible and capacity to innovate. The above theory relates to project team on monitoring and evaluation on perfomance of water projects.

Conceptual Framework

Mathieson et al (2011) defined a conceptual framework as a virtual or written product, one that explains, either graphically or in narrative form, the main things to be studied- the key factors, concepts, or variables and the presumed relationships among them. Conceptual framework, according to educational researcher Stratman and Roth (2013), are structured from a set of broad ideas and theories that help a researcher to properly identify the problem they are looking at, frame their questions and find suitable literature. Most academic research uses a conceptual framework at the outset because it helps the researcher to clarify his research question and aim. This study will adopt a conceptual framework to describe the relationship between the determinants influencing effectiveness of monitoring and evaluation of urban government projects (Locke & Latham, 2012). The conceptual framework for the study is shown below;

Budgetary allocation
- Funds management
- Costing
- Auditing

Stakeholder Involvement
- Users
- Managers
- Government

Managerial Skills
- Planning
- Organizing
- Controlling

Project team
- Decision making
- Management skills
- Problem solving

Effective monitoring and Evaluation of government water funded projects
- Increased stakeholders commitment to project goals
- Increased number of projects implemented
- Increased number of Sustainable projects

Independent Variables
Dependent Variable
Conceptual Framework

Budgetary Allocation
Most organization are likely to have less budgetary allocation for monitoring and evaluation for water projects. Due to their limited funds face notably greater challenges to obtain and run monitoring and evaluation
activities effectively (Mbotho, 2014). It is important therefore that organizations need to be aware of the full range of finance options available in Kenya would help to identify key financial needs; understand the range of finance products available and how to access them; and identify suppliers of finance to meet the identified needs for monitoring and evaluation (Thairu, 2004).

According to Gray and Larson (2008) a project is a complex non-routine, one life time effort limited by time, budget and resources to meet customers’ needs. Effective funds management in projects is determined by parameters which govern funds control such as auditing (Kogan, 2004). The financial act 2003, section 25 (2) stipulates that funds for any project should be adequate and be disbursed in time for successful implementation of development projects, government of Kenya allocates project fund as grants and is allocated through a thorough process every financial year and the PMCs are mandated to prudently manage the allocated project funds (Bennel & Sayid, 2012).

**Stakeholders Involvement**

Stakeholder participation is described as a social process in which groups with shared needs living in a “certain geographical area” actively identify needs, make decisions, and set up mechanisms to achieve solutions/goals (Adesina, 2010). However, heterogeneous groups and individuals can become a stakeholder and collectively take action to attain shared and specific goals. To enhance stakeholder involvement in monitoring and evaluation can involve in tendering and supplies, several measures are put in place to facilitate smooth and transparent implementation of projects. These measures include: registration of contractors/suppliers and artisans, provision of information on tendering and supplies guidelines, and formation of a subcommittee for vetting and recommending suppliers (Achoka, 2013). This is also to ensure that the development project money remains to be utilized to the satisfaction of the stakeholders.

Stakeholders may be involved to use and coordinate their resources of personnel, time, money, goods, and services in a broad range of structures and strategies. Additionally, people- and community-based organizations often participate at different levels in implementation of urban development projects, thus can provide useful information for M&E of the project funds. They may have less access to resources than do government institutions and agencies and may view themselves as tokens that make the health-promotion effort look more credible (Otieno, 2007). It is best to involve key stakeholders such as volunteers, community members, local authorities, partners and donors, as much as possible in the evaluation process since their participation helps to ensure different perspectives are considered so that the evaluation findings can be owned and act as a lesson [Gray & Larson,2008]).

Lack of stakeholders’ participation at the onset of project activities lead to unclear project activities and adoption of poor projects which fail to benefit the community as a whole. These projects often lack support from the key and primary stakeholders and beneficiaries. Stakeholder involvement makes everyone feel part and parcel of the project, they own the project and take all necessary steps to safeguard the required standards (Kanua, 2009).
Managerial Skills

Bose (2012) define management as the process of achieving organization objectives through getting things done by others. This means that management has a lot to do with enterprises human and other resources. Bose (2012) further discuss five functions of management: Planning laying of objectives and determining course of action to achieve those objective, Organizing is the process of establishing relationships among members of an organization; Staffing is determining human resource needs and recruiting, selecting, training, and developing human resources; Leading is directing and channeling human behaviour toward the accomplishment of objectives; Controlling is measuring performance against objectives, determining the cause of deviations, and taking corrective action where necessary. Williams (2013) defines leadership as the use of influence to motivate people to achieve a firm’s goals. Leading is creating a shared culture and values, communicating goals to human resources in the whole enterprises and infusing the said human resources with the desire to perform highly. It involves motivating the entire firm’s human resources. Bose, (2012) define leadership as the ability to influence people willingly, follow one’s guidance or adhere to one’s decisions. Organizing is the process of creating a structure for the organization that enables its people to work effectively towards its vision, mission, and goals (Armstrong & Taylor, 2014) Organizing is an indispensable function in the management process. The first stage of organizing process involves outlining the tasks and activities to complete in order to achieve the organizational goals. Once the tasks and activities are outlined, jobs must be designed and assigned to employees within the organization. The reason for organizing the tasks and activities is to focus responsibility and a for attainment of goals on individual or team level (Meredith & Mantel Jr, 2011)

Project Team

CIC (2009) states that it is essential to ensure that sufficient project team is available to support monitoring and evaluation activities. Planning for project team needs ensures that you have employees who have the required skills and competencies for the job assigned. A project management skill is defined as ability to influence activities of others through communication they may be as a group or a single person towards achievement of specific goals or objectives of a project (Ivancevich et al., 2003).

Every project design employs a hierarchy of basic elements known as: inputs, activities, outputs, outcomes, and impacts. These elements of project design are also components of a logical framework and a results framework and of the M&E system for that particular project which the project team need to familiarize with (Owuor, 2008). Management can be defined as the act of getting things done by other people in order to achieve organizational goals (Kootz & O’Donnell, 2008). Members of the PMCs are supposed to act as leaders in projects where they are selected to oversee implementation.

The project manager should assign roles for staff and volunteers in conducting monitoring and evaluation be it in data collection, analysis, reporting, etc. and allocate time for staff/volunteers accordingly. The staff can be acquired through poaching, inward sourcing that is in-house or outward sourcing through advertisements. One of the ways of managing the monitoring and evaluation team is by taking them through the team development models
which entails these processes namely forming, storming, norming, performing and adjourning. The project manager should also allocate someone to take charge of evaluation to ensure that all the necessary pieces of work are happening. The lead person must also be able to count on the help of other key team members. These responsibilities should be made clear from the beginning, in the planning phase of a public engagement project, and should be valued by the organization as a whole on an ongoing basis (CIC, 2009).

Owuor (2013) argues that project management faces varied challenges, some of which include:

**Effective Monitoring and Evaluation of Government Funded Water projects**

Effective Monitoring and Evaluation of projects is usually one of the ingredients of good project performance. It provides means of accountability, demonstrating transparency to the Stakeholders and facilitates, organizational learning through documenting lessons learned in implementation of the projects and incorporating the same in the subsequent project planning and implementation or through sharing experience with other implementers. In Kenya, Project Managers today are concerned with the development of their projects as evidence by their enthusiasm in the adoption of M&E system. This is so because a lot of donor and government resources are provided to organizations for the implementation various water projects. However, the productivity of these projects has been lagging behind because of lack of Monitoring and Evaluation system. To alleviate this problem, some projects have adopted M&E system as a way of managing the projects. However, most projects have not adopted M&E system and although outcomes and effectiveness of M&E system are known.

Project performance is traditionally measured using the “golden triangle”, which means completing the project on time, within budget and to specification (PMI, 2004). This is the operational mindset, which is influenced by the “get the job done” approach (Dvir, Sadeh, Malach-Pines, 2006). However, several studies support the inclusion of customer satisfaction as the fourth dimension of success (Lipovetsky, Tishler, Dvir and Shenhar, 1997; Lim and Mohamed, 1999; Zwikael and Sadeh, 2007; Kerzner, 2006; Voetsch, 2004).

Monitoring and evaluation systems for projects exist in a “real world” context where external factors such as national and international policies, climate, markets, and governance are dynamic and affect the communities and target populations in which programs operate (ADRA, 2000). Local conditions such as politics, infrastructure, and services can also affect programs and their target groups. Monitoring these changing conditions is necessary for program effectiveness and assessment of project impact (Ivanceh, 2003). Monitoring and Evaluation (M&E) has become an expected and necessary component of any development program or project.

The primary purpose of M&E is to measure the degree to which an operational design is implemented as planned and hSome efforts in rural water development projects have lacked a clear focus on learning and results – including understanding what works and why, in what contexts, and how the best impacts can be achieved with resources invested. To remedy this, dozens of evaluations have been carried out and there have been recent efforts to take stock of evidence according to KfW and IEG (2011), including with systematic reviews (Waddington et al, 2010).
These low levels of access to improved water supply in developing countries have been attributed to causes such as inappropriate system designs, poor implementation and management of water resources, environmental challenges, technical challenges, inappropriate government policies and limited institutional capacity due to lack of effective monitoring and evaluation according to Whittington & Kumar (2007). In addition, communities often have considerable difficulty in sustaining operation and maintenance (O&M) of water supply infrastructure over the useful life of the hardware (Davis, 2008).

Monitoring is the systematic and routine collection of information from projects and programmes for four main purposes as written in (World Bank, 1980), to learn from experiences to improve practices and activities in the future (Ben, 2002), to have internal and external accountability of the resources used and the results obtained, to take informed decisions on the future of the initiative and to promote empowerment of beneficiaries of the initiative also discussed by (John & Khilesh, 2008). Evaluation is the assessing, as systematically and objectively as possible, a completed project or programme (or a phase of an ongoing project or programme that has been completed) Evaluations appraise data and information that inform strategic decisions, thus improving the project or programme in the future clearly indicated by (Yang, Sun & Martin, 2008). From the point of view of (Pfohl, 1986), evaluations should help to draw conclusions about five main aspects of the intervention: relevance, effectiveness, efficiency, impact and sustainability

Monitoring and evaluation, is particularly important to sustainability since it allows an ongoing review of project effectiveness (Espinosa, 2000). Key ingredient to monitor factors specifically relating to sustainability and to establish checkpoints at appropriate intervals during and after project implementation; examples of indicators to be monitored would be verifying that communities are maintaining an adequate M/E fund or that a contract remains in force for the supply of spare parts to regional distribution centers in the project area. Such indicators must be established early in the project and used in 19 monitoring activities to assure that actions are carried out when needed and to the degree necessary (Rudqvist & Woodford-Berger 1996). Monitoring and evaluation should be carried out with the participation of the beneficiaries, giving them the opportunity to decide on the criteria of success. Evaluations should be used as a management tool to identify any deficiencies and to establish a course of action to remedy problems. Ultimately, they steer the project toward the goal of sustainability (Plastow & Pantuliano, 2001). According to Vernooy (1999) the direct involvement of the local people and organisations in monitoring and evaluating their development is a step in increasing their self-help capacity, like in meeting the project purpose. However many sponsoring organizations do not develop a monitoring system with functions that build the capacity of project partners and intermediaries from the local population to reflect, analyse and take action; to increase accountability to partners, beneficiaries, managers and donors (Chamoun, 2006).

According to Bennett and Gilson (2001) monitoring and evaluation of Projects are usually constrained by limited resources, stakeholder’s participation and the cost of undertaking the monitoring and evaluation process. However, the situation can be
mitigated by strong and effective capacities at the national level to manage and coordinate project financing which adequately cover monitoring and evaluation up to the community level to identify, prioritize, successfully implement and sustain projects (Raark, 1990). Monitoring and evaluation should be carried out with the participation of the beneficiaries, giving them the opportunity to decide on the criteria of success (Allen, 2004). Evaluations should be used as a management tool to identify any deficiencies and to establish a course of action (World Bank, 2000).

**Empirical Review**

Several studies have been done on the budgetary allocation for monitoring and evaluation of water projects, as stated but none of these studies have looked at how budgetary utilization for access to finance combined with others factors such as level of education of the PMC committee, Community participation and Involvement of Technical officers influencing effectiveness of monitoring and evaluation of urban development projects. For example in Kenya, CDFs channel funds from central government through to each constituency to spend on development projects intended to address local needs. Although CDFs operate differently in each context, one core defining feature is that constituency legislators have some influence over how the funds are spent in their area. In a study done in Zambia, it was found out that in 88 per cent of projects sampled, community members raised concerns about some inappropriate projects, the misuse of funds or insufficient adherence to CDF guidelines; nine per cent of completed projects were left lying idle due to lack of effective ME systems and others stated access to finance as the key factor on monitoring and evaluation of water projects (Micah, 2012).

The funds devolved through Constituency development Fund are not adequate to cater for all community needs (Mwangi, 2010). The process of Monitoring and evaluation should be allocated more than just 2% as outlined in the. It is recommended for an allocation of between 5% -10% for monitoring and evaluation and that amounts for capacity building should be distinguished from that for monitoring and evaluation. The CDF Act allows for a 5% allocation for emergencies like drought and famine which rarely occur in some places yet monitoring and evaluation is a crucial project function that should take place frequently as long as CDF water projects exist (Bagaka, 2008).

A research by International Budget Partnership (IBS, 2010), the Kenyan CDF cites low/non-involvement of local communities in project identification and selection as one of the key challenges of the development projects. This is evidenced by data from the NACCSC (National Anti-Corruption Campaign Steering Committee) report that showed low levels of public participation: nearly 60 percent of Kenyans are not given the opportunity to be involved in project selection or prioritization (NACCSC, 2008).

Wamae (2009) in his study on contribution of CDF in employment creation recommended that there should be constant awareness creation for the community members and stakeholder involvement should be increased as well as stronger links with line government ministries. In addition, Kanua (2009), in his study on assessment of the role of community participation in successful completion of CDF projects in Imenti North constituency found out that community participation all along the
project play a significant role in determining successful completion of projects. According to Mwani (2005), in his study on effectiveness of Monitoring and Evaluation of Constituency Development Fund Projects in Kenya: A Case of Laikipia West Constituency, recommended that the Project team should be given clear roles and designations depending on their level of expertise for effective implementation of the CDF development projects. If their skills and expertise is inadequate, training for relevant skills should be organized especially for those projects where staff have to go out and do project activities on their own (Owour, 2013). The major focus of the organization should be on developing employee skills and abilities so that they can contribute to the organization effectively and enable them conduct an independent Monitoring and evaluation exercise (Gikonyo, 2008). Independence is achieved when it is carried out by entities and persons free of the control of those responsible for the design and implementation of the development intervention (Musumba, et al. 2013). Methods appropriate to various user needs should be determined, the various contexts under which they are applied and stated issues of data clarified (Hatch, 2013). Even with growth of CDF, allocations to the kitty are greatly increasing but only 2% of the fund to each constituency is given to capacity building, monitoring and evaluation (Musumba, 2013). That leaves a question as to whether the allocation can meet the current capacity in terms of human resources and available (Gikonyo, 2008). Kimenyi, (2005) in his study on efficiency and efficacy of Kenya’s CDF, noted that unlike other development funds that filter from the central government through longer and more layers of administration organs and bureaucracies, the CDF fund goes directly to the local people. He highlighted some characteristics that determine efficiency and efficacy of CDF among them as; citizen demand and constituency characteristics, size and population density and dispersion of a constituency and strategic choice of projects among others. The CDF Act, (2013) is silent on the professional skills and competencies for constituency development fund committee (CDFC) members and the PMC members which imply a significant lack of structure for sound management including planning, implementation, monitoring and evaluation of development projects. In his study on factors influencing implementation of constituency development funded projects: a case of Tigania East constituency Ntuala (2010) notes that there were no clear policies developed to guide on effective utilization of funds from the CDF kitty. He recommends that the ministry of planning and national development should come up with clearly stipulated guidelines on the project management of the CDF especially in implementation of urban development project. This could be done by issuing clear guidelines on the utilization of the fund to PMCs and the CDFCs by having effective and working M&E systems.

In spite of the huge efforts and investments in the construction of water supply infrastructure, around 63.1 of rural population (16.5m people) is relying on unsafe water (Kenya Census, 2009). The post construction operation and maintenance (O&M) of water supply systems is cited as the major challenge. As per the Water Point Mapping report of three districts, almost one third of all rural water points are dysfunctional in Kenya at any given time (SNV, 2010). According to an IRC Triple-S 2010 study, despite relative success in the provision of new rural water infrastructure in the last two to three decades, studies in many countries show...
between 30 to 40 per cent of facilities either do not function or are operating below capacity. In Kenya, about 25 to 30 per cent of the recently completed managed rural water supply projects will become dysfunctional in the first three years following completion thus affecting their performance that is they will not be sustainable. ow successfully it achieves its intended results (Owour, 2008).

**RESEARCH METHODOLOGY**

**Introduction**

This chapter describes the research design, population of study, sample size and sampling procedure, data collection tools and procedures, data processing and analysis and as well as validity and reliability of the research instruments that will be employed during the study.

**Research design**

The research design constitutes the blueprint for the collection, measurement and analysis of data, (Kothari, 2005). The study adopted a descriptive survey design. The researcher adopted this design since it is an efficient method of collecting descriptive data regarding characteristic of a sample of a population, current practices, conditions or needs.

**Target population**

Target population refers to the entire group of individuals or objects from which the study seeks to generalize its findings (Cooper and Schindler, 2008). The target population comprised of five (5) project coordinators, twenty two (22) project managers and seventy eight (78) operational staff as indicated in the population frame provided by Nairobi City County (2015).

**Data collection Tools and Procedure**

The study utilized quantitative and qualitative questionnaire that was developed for generating information on key variables of interest from the targeted respondents in this study. The research also undertook desk review of existing information about the study areas and collect qualitative data through in-depth interview from respondents who are conversant with the subject through various interactions or experiences. These respondents are specifically targeted for their ability to provide pertinent information to the study.

**Data Analysis and Presentations**

Data collected was analyzed using both quantitative and qualitative methods with the help of (SPSS) version 21 and excel. Data processing was carried out through editing, coding and classification. Content analysis was employed to analyze the qualitative data whereas statistical methods, regression and correlation analysis were utilized to analyze the quantitative data by aide of SPSS Software version 21 and excel. The findings were presented using tables, charts and graphs to facilitate comparison and for easy inference. In order to analyze the relationship between the independent variables and the dependent variable the study used Multiple Regression analysis at 5% level of significance. To test the level of significance of each independent variable against dependent variable the study used the model summary ANOVA and Coefficient Regression. According to the model summary Table, R is the correlation coefficient which shows the relationship between the independent variables and dependent variable. It is notable that there will exist a relationship between the independent variables and dependent variable as shown by R value The coefficient of determination ($R^2$) will explain the
extent to which changes in the dependent variable was explained by the change in the independent variables or the percentage of variation in the dependent variable and the four independent variables that were studied to explain Effective monitoring and evaluation of government funded water projects as represented by the $R^2$. This therefore means that other factors not studied in this research contributed to a certain percentage to be determined on Effective monitoring and evaluation of government funded water projects.

Further, the study revealed the significance value as thus the model may be statistically significant in predicting how managerial skills, budgetary allocation, project team and stakeholder participation affect effective monitoring and evaluation of government funded water projects. This may show whether the overall model was significant in the ANOVA. The study will run the procedure of obtaining the regression coefficients, and the results will be show relationships between Effective monitoring and evaluation of government funded water projects and the four variables. The Multiple Regression model that was to aid the analysis of the variable relationships were as follows:

$$Y_i = \beta_0 + \beta_{te} + \beta_{ba} + \beta_{pt} + \beta_{sp} + \varepsilon,$$

where,

- $Y_i$: Effective monitoring and evaluation of government funded water projects
- $\beta_0$: constant (coefficient of intercept),
- $te$: Managerial skills,
- $ba$: Budgetary allocation,
- $pt$: Project team,
- $sp$: Stakeholder Participation,
- $\varepsilon$: error term,
- $\beta_1, \beta_2, \beta_3, \beta_4$: regression coefficient of four variables.

**RESULTS AND DISCUSSIONS**

**Introduction**

This chapter is a presentation of results and findings obtained from field.

**Response Rate**

From the data collected, out of the 105 questionnaires administered, 75 questionnaires were fully completed and returned making a response percent of 71.42%.

**Demographic Characterization of the Respondents**

The study sought to find out the demographic information of the respondents which included gender, age, marital status and the level of education.

**Gender Distribution**

Further the study sought to determine the gender distribution of the respondents in order to establish if there was gender balance in the positions indicated. The findings indicated that majority (53%) were male respondents with (47%) being females respondents. The results indicated that the two genders were adequately represented in the study since there is none which was more than the two-thirds.

**Age Distribution**

The study established the respondent’s age distribution. The findings indicated that they are 51 and above years with few (15%) and (5%) indicating that they were 31-40 years and 20-30 years respectively. This implies that respondents were well distributed in terms of their age during the study. It also infers that majority of the respondents were at their maturity stage and therefore able to handle their roles responsibly.

**Level of Education**

The study further found it of paramount to determine the respondents’ level of education.
in order to ascertain if they were well equipped with the necessary knowledge and skills for the running and the overall management of government funded projects. From the study findings majority (40%) indicated that they had university first degree, followed by those who indicated that they had diploma at (33%) with few (14%) indicating that they had master’s degree and (7%) doctorate qualification respectively and this implies that respondents were well educated and that they were in a position to respond to research questions with ease.

**Work Experience**
The study sought to determine how long the respondents had been in the respective government funded water projects, this was to ascertain to what extent their responses could be relied upon to make conclusions for the study based on experience. The findings indicated that, majority (40%) of the respondents indicated that they had been in the implementation of the projects for a period ranging from 5-9 years followed by those who indicated that they had been in the implementation of the projects for a period of 10-19 years, (20%) indicating that they had 0-4 years and with only few (10%) indicating that they had been in implementation of the projects for a period more than 20 years.

**Budgetary Allocation**
The study sought to find out on whether there was adequate funding to influence effective monitoring and evaluation of government funded water projects in the county. The study results showed that 45% of the respondents indicated that it led to sustainability of established projects, 65% of the respondents indicated that it increased the number of people served with projects and 55% of the respondents stated that it increased the number of the completed projects. The study results is an indication that government funded water projects in the county could only be effectively monitored to enhance their sustainability, increase the number of people served with projects and increase number of completed projects if the projects received adequate funding.

**Stakeholder Involvement**
The study sought to find out on the key stakeholders involved in monitoring and evaluation of the projects. The study results showed that majority of the respondents stated that beneficiaries, 25% stated implementing staff, 44% indicated the donors and 34% of the respondents stated the government. This implies that there was no clear key stakeholders involved for effective monitoring and evaluation of the projects.

**Managerial Skills**
The study sought to find out on whether leadership skills influence effective monitoring and evaluation of government funded water projects in the county. The study results showed that 45% of the respondents indicated that it led to sustainability of established projects, 65% of the respondents indicated that it increased the number of people served with projects and 55% of the respondents stated that it increased the number of the completed projects. The study results is an indication that government funded water projects in the county could only be effectively monitored to enhance their sustainability, increase the number of people served with projects and increase number of completed projects if the projects received leadership skills.
Project Team
The study sought to find out total number of the monitoring and evaluation staff involved in the implementation of the projects. The study results showed that permanent staff in the projects were as 1% of the respondents indicated of 20 and above, 2% of the respondents cited 16 to 20, 5% of the respondents cited 11 to 15 staff and 55% of the respondents indicated less than 5 staff. Additionally, on temporal staff, 1% of the respondents indicated 20 and above, 15% of the respondents cited 11 to 15 staff, 33% of the respondents indicated less than 5 staff. Finally, on volunteer staff, 5% of the respondents indicated 11 to 15, 35% of the respondents cited 6 to 10 staff, and 55% of the respondents indicated less than 5 staff. This implies that the projects were understaffed thus hindering effective monitoring and evaluation of government funded water projects in the county.

Effective Monitoring and Evaluation of Projects
The study sought from the respondents to indicate rate of change of number of stakeholders involved in monitoring and evaluation of the projects of the organization the last five years. The study established that the number of stakeholders involved in monitoring and evaluation had made a good increase with an average of 30% of the respondents stated that it increased by 10%, with an average of 40% of the respondents indicated that it increased by more than 10%, with an average of 32% of the respondents posited that it increased by less than 10%, with an average of 35 % of the respondents cited that it decreased by 10%, with an average of 55% of the respondents indicated that it decreased by more than 10% and an average of 23% of the respondents indicated that it decreased by less than 10% in the last five years. The study findings imply that there was poor improvement on number of stakeholders involved in monitoring and evaluation in the organization in the last five years.

Correlation Analysis
Pearson correlation was used to measure the degree of association between variables under consideration i.e. independent variables and the dependent variables. Pearson correlation coefficients range from -1 to +1. Negative values indicates negative correlation and positive values indicates positive correlation where Pearson coefficient <0.3 indicates weak correlation, Pearson coefficient >0.3<0.5 indicates moderate correlation and Pearson coefficient>0.5 indicates strong correlation. The analysis of correlation results indicates that between budgetary allocation and effective monitoring and evaluation of government funded water projects show a positive coefficient 0.751, with p-value of 0.031. It indicates that the result is significant at α =5% and that if the budgetary allocation increase it will have a positive impact on effective monitoring and evaluation of government funded water projects. The correlation results between stakeholder involvement and effective monitoring and evaluation of government funded water projects also indicates the same type of result where the correlation coefficient is 0.672 and a p-value of 0.041 which significant at α = 5%. The results also show that there is a positive association between technology and effective monitoring and evaluation of government funded water projects where the correlation coefficient is 0.779, with a p-value of 0.022. Further, the result shows that there is a
position association between project team and effective monitoring and evaluation of government funded water projects where the correlation coefficient is 0.808, with a p-value of 0.038. This therefore infers that project team contributed most effective monitoring and evaluation of government funded water projects followed by technology in effective monitoring and evaluation of government funded water projects, then budgetary allocation while stakeholder involvement had the least influence on effective monitoring and evaluation of government funded water projects. The correlation matrix implies that the independent variables are very major determinants of effective monitoring and evaluation of government funded water projects as shown by their strong and positive relationship with the dependent variable; effective monitoring and evaluation of government funded water projects

<table>
<thead>
<tr>
<th></th>
<th>Effective M &amp; E of government funded water projects</th>
<th>Budgetary allocation</th>
<th>Stakeholder involvement</th>
<th>Technology</th>
<th>Project team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective M &amp; E of Correlation coefficient</td>
<td>1.000</td>
<td>Sig. (2-tailed)</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budgetary allocation</td>
<td>Correlation Coefficient</td>
<td>.751</td>
<td>Sig. (2-tailed)</td>
<td>.028</td>
<td>N</td>
</tr>
<tr>
<td>Stakeholder involvement</td>
<td>Correlation Coefficient</td>
<td>.672</td>
<td>1.000</td>
<td>N</td>
<td>75</td>
</tr>
<tr>
<td>Managerial skills</td>
<td>Correlation Coefficient</td>
<td>.779</td>
<td>.142</td>
<td>1.000</td>
<td>N</td>
</tr>
<tr>
<td>Project team</td>
<td>Correlation Coefficient</td>
<td>.808</td>
<td>.037</td>
<td>.046</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.012</td>
<td>.001</td>
<td>.001</td>
<td>.</td>
</tr>
</tbody>
</table>
Multiple Regression Analysis

In addition, the researcher conducted a multiple regression analysis so as to test relationship among variables (independent) on the on effective monitoring and evaluation of government funded water projects. The study applied the statistical package for social sciences (SPSS V. 21) to code, enter and compute the measurements of the multiple regressions for the study. According to the model summary Table 4.8, $R$ is the correlation coefficient which shows the relationship between the independent variables and dependent variable. It is notable that there exists strong positive relationship between the independent variables and dependent variable as shown by $R$ value (0.811). The coefficient of determination ($R^2$) explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable and the four independent variables that were studied explain 65.80% of the effective monitoring and evaluation of government funded water projects as represented by the $R^2$. This therefore means that other factors not studied in this research contribute 34.20% of the effective monitoring and evaluation of government funded water projects. This implies that these variables are very significant therefore need to be considered in any effort to boost effective monitoring and evaluation of government fund water projects in the county. The study therefore identifies variables as critical determinants influencing effective monitoring and evaluation of government funded water projects.

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.811</td>
<td>.658</td>
<td>.608</td>
<td>.333</td>
</tr>
</tbody>
</table>

Further, the study revealed that the significance value is 0.003 which is less that 0.05 thus the model is statistically significance in predicting how budgetary allocation, stakeholder involvement, technology and project team affect effective monitoring and evaluation of government funded water projects. The F critical at 5% level of significance was 22.321. Since F calculated (40.221) is greater than the F critical (value = 22.321), this shows that the overall model was significant.

### ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>13.305</td>
<td>4</td>
<td>3.3263</td>
<td>40.221</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>5.788</td>
<td>70</td>
<td>.0827</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19.093</td>
<td>74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NB: F-critical Value = 22.321; Predictors: (Constant): Budgetary allocation, stakeholder involvement, managerial skills, project team

The study ran the procedure of obtaining the regression coefficients, and the results were as shown on the Table 4.14 Multiple regression analysis was conducted as to determine the relationship between effective monitoring and evaluation of government funded water projects and the four variables. As per the SPSS generated table above, the equation \( Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon \) becomes: \( Y = 43.876 + 0.687X_1 + 0.608X_2 + 0.700X_3 + 0.843X_4 \)

According to the regression equation established, taking all factors into account (budgetary allocation, stakeholder involvement, managerial skills, project team) constant at zero effective monitoring and evaluation of government funded water projects was 43.876. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in budgetary allocation will lead to a 0.687 increase in effective monitoring and evaluation of government funded water projects.; a unit increase in stakeholder involvement will lead to a 0.608 increase in effective monitoring and evaluation of government funded water projects, a unit increase in technology will lead to a 0.700 increase in effective monitoring and evaluation of government funded water projects and a unit increase in project team will lead to 0.843 increase in effective monitoring and evaluation of government funded water projects. This infers that project team contributed most to effective monitoring and evaluation of government funded water projects in the county. At 5% level of significance, budgetary allocation had a 0.009 level of significance; technology showed a 0.003 level of significance, stakeholder involvement showed a 0.018 level of significance and project team showed a 0.001 level of significance hence the most significant factor was project team.

| Regression Coefficient Results |
|-------------------------------|-----------------|---------------|-----|----------------|
| Model                         | Unstandardized Coefficients | Standardized Coefficients | t    | P-value.       |
|                               | B                | Std. Error    | Beta|                |
| (Constant)                    | .43876           | .1223         |     | .035           |
| Budgetary allocation          | .687             | .203          | .502| .009           |
| Stakeholder involvement       | .608             | .349          | .454| .018           |
| Managerial skills             | .700             | .217          | .516| .003           |
| Project team                  | .843             | .193          | .663| .001           |

- 348 -
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The study sought to establish the determinants of effective monitoring and evaluation of government funded water projects in Kenya. The study examined theoretically and empirically how various variables contributed to effective monitoring and evaluation of government funded water projects. In assessing the challenges, the study focused on how select factors (Budgetary allocation, stakeholder involvement, and technology and project team) influenced the effective monitoring and evaluation of government funded water projects. This chapter captures the summary of findings, from which conclusions were drawn and recommendations made.

Summary of the Findings

What is influence of budgetary allocation on effective monitoring and evaluation of government funded water projects in Kenya?

The study sought to establish whether budgetary allocation influence effective monitoring and evaluation of government funded water projects. From the descriptive analysis, the study results revealed that adequate funding and management of funds in monitoring and evaluation influence monitoring and evaluation of water projects by increasing the number of the completed projects, number of people served with projects and lead to sustainability of established projects. The reason the projects do not access funding from the government for monitoring and evaluation include conditions are too stringent, require security, corruption in giving out funds and process too technical. For projects which are unable to access funds from the alternative financial institutions for monitoring and evaluation include tough conditions for projects, process too technical, process too procedural and unfavourable bank policy. Finally, the study revealed that the variable (Pearson correlation coefficient = .687) and p-value (0.009 < 0.05) statistically, moderately and significantly correlated to effective monitoring band evaluation of government funded water projects at 5% level of significance as it had a positive relationship with the dependent variable. This reveals that budgetary allocation is an important factor that can boost effective monitoring band evaluation of government funded water projects. This also reveals that the more budgetary allocation becomes the more the effective monitoring band evaluation of government funded water projects Therefore, from these quantitative results it can be deduced that the study which sought to establish the influence of budgetary allocation on effective monitoring band evaluation of government funded water projects was achieved because it established that budgetary allocation influenced effective monitoring band evaluation of government funded water projects.

Do managerial skills influence effective monitoring and evaluation of government funded water projects in Kenya?

From the study results, majority of the respondents indicated that to a very great extent leadership, controlling and organizing skills influence effective monitoring and evaluation of government funded water projects in the county. The study established that the respondents indicated that it led to sustainability of established projects, it
increased the number of people served with projects and the respondents stated that it increased the number of the completed projects. Thus, lack of adequate managerial skills in the county ends up prolonging the implementation of effective monitoring and evaluation of government funded water projects. Further, the study revealed that the variable (Pearson correlation coefficient = .700) and p-value (0.003 < 0.05) statistically, strongly and significantly correlated to effective monitoring and evaluation of government funded water project at 5% level of significance as it had a positive relationship with the dependent variable. This reveals that managerial skills is an important factor that can boost effective monitoring and evaluation of government funded water projects. This also reveals that the more managerial skills becomes the more the effective monitoring and evaluation of government funded water projects. Therefore, from these quantitative results it can be deduced that the study which sought to establish the influence of managerial skills on effective monitoring and evaluation of government funded water projects was achieved because it established that managerial skills influenced effective monitoring and evaluation of government funded water projects.

How does stakeholder involvement influence effective monitoring and evaluation of government funded water projects in Kenya?

From the descriptive analysis, the study results showed that majority of the respondents indicated that adequate staffing of the project team influence monitoring and evaluation of water projects. The key stakeholders involved in monitoring and evaluation of the projects include beneficiaries, implementing staff, donors, government and they normally have stakeholder meetings on monitoring and controlling the activities of the projects yearly. The stakeholders involved carrying out monitoring and evaluation activities of the projects are rarely adequate and different stakeholders have different reporting requirements which are lenient and demonstrating the long term impact of M & E of the projects to stakeholders is rarely straightforward. Further, the study revealed that the variable (Pearson correlation coefficient = .608) and p-value (0.018 < 0.05) statistically, strongly and significantly correlated to effective monitoring and evaluation of government funded water project at 5% level of significance as it had a positive relationship with the dependent variable. This reveals that stakeholder involvement is an important factor that can boost effective monitoring and evaluation of government funded water projects. This also reveals that the more stakeholder involvement becomes the more the effective monitoring and evaluation of government funded water projects. Therefore, from these quantitative results it can be deduced that the study which sought to establish the influence of stakeholder involvement on effective monitoring and evaluation of government funded water projects was achieved because it established that it influenced effective monitoring and evaluation of government funded water projects in the county.

How does project team influence effective monitoring and evaluation of government funded water projects in Kenya?

From the descriptive analysis, the study results showed that majority of the respondents indicated that adequate staffing of the project team influence monitoring and evaluation of
water projects by increasing the number of the completed projects, the number of number of people served with projects and led to sustainability of established projects. The training of the project team influenced effective monitoring and evaluation of water projects. The study established that the projects had different personnel for the different activities on monitoring and evaluation in the data collection, data analysis, report writing, dissemination of M & E funding and logical framework approach (Log frame). They normally monitor and control the activities of the monitoring and evaluation field staff quarterly. The organizations support the field staff involved in monitoring and evaluation by ensuring the staff is offered clear job allocation and designation befitting the expertise, offer adequate training for the requisite skills, constant and intensive on-site support, offer enough materials and supplies, security offered when encountered with hostile communities is very little. Finally, the study revealed that the variable(Pearson correlation coefficient = .843) and p-value (0.001 < 0.05) statistically, strongly and significantly correlated to effective monitoring and evaluation of government funded water projects at 5% level of significance as it had a positive relationship with the dependent variable. This reveals that project team is an important factor that can enhance effective monitoring band evaluation of government funded water projects. This also reveals that the more project team becomes the more the effective monitoring band evaluation of government funded water projects Therefore, from these quantitative results it can be deduced that the study which sought to establish the influence of project team on effective monitoring and evaluation of government funded water projects was achieved because it established that it influenced effective monitoring band evaluation of government funded water projects in the county.

Conclusions
The study established that budgetary allocation influenced effective monitoring and evaluation of government funded water projects. The adequate funding and management of funds in monitoring and evaluation influence monitoring and evaluation of water projects increased the number of the completed projects, number of people served with projects and lead to sustainability of established projects. The projects did not access funding from the government for monitoring and evaluation due conditions are too stringent, require security, corruption in giving out funds and process too technical. Additionally, the managerial skills such as leadership, controlling and organizing skills influenced effective monitoring and evaluation of government funded water projects in the county. The study established that it influenced it increased the number of people served with projects and the respondents stated that it increased the number of the completed projects. The lack of adequate managerial skills in the county ends up prolonging the implementation of effective monitoring and evaluation of government funded water project.

The key stakeholders involved in monitoring and evaluation of the projects include beneficiaries, implementing staff, donors, government and they normally have stakeholder meetings on monitoring and controlling the activities of the projects yearly. The stakeholders involved carrying out monitoring and evaluation activities of the projects are rarely adequate and different
stakeholders have different reporting requirements which are lenient and demonstrating the long term impact of M & E of the projects to stakeholders is rarely straightforward.

Finally, the adequate staffing of the project team influenced monitoring and evaluation of water projects. The training of the project team influenced effective monitoring and evaluation of water projects. The study established that the projects had different personnel for the different activities on monitoring and evaluation in the data collection, data analysis, report writing, dissemination of M & E funding and logical framework approach (Log frame). They normally monitor and control the activities of the monitoring and evaluation field staff quarterly. The organizations did not support adequately the field staff involved in monitoring and evaluation by ensuring the staff is offered clear job allocation and designation befitting the expertise, offer adequate training for the requisite skills, constant and intensive onsite support, offer enough materials and supplies, security offered when encountered with hostile communities is very little.

**Recommendations**

The study recommends for the budgetary allocation for adequate funding and management of funds in monitoring and evaluation influence monitoring and evaluation of water projects. The key stakeholders should always be involved in monitoring and evaluation of the projects especially beneficiaries, implementing staff, donors, government and they should have stakeholder meetings on monitoring and controlling the activities of the projects frequently. The stakeholders involved carrying out monitoring and evaluation activities of the projects should be strict and demonstrate the long term impact of M & E of the projects.

Finally, the adequate staffing of the project team should be enhanced for effective monitoring and evaluation of water projects. The training of the project team and have different personnel for the different activities on monitoring and evaluation in the data collection, data analysis, report writing, dissemination of M & E funding and logical framework approach. The organizations should support adequately the field staff involved in monitoring and evaluation by ensuring the staff is offered clear job allocation and designation befitting the expertise, offer adequate training for the requisite skills, constant and intensive on-site support, offer enough materials and supplies, security offered when encountered with hostile communities is very little.

**Recommendations for Further studies**

Since this study sought to establish the determinants of effective monitoring and evaluation of government funded water in Kenya, it was established that from literature review that there are scanty studies available on determinants of effective monitoring and evaluation of projects specifically in Kenya. Therefore, study recommends for similar studies to be undertaken in other counties for generalization of the findings of this study.
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