MONITORING AND EVALUATION TOOLS AND THE PERFORMANCE OF IRRIGATION PROJECTS IN KIAMBU COUNTY, KENYA

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D53/OL/26788/2013

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NOVEMBER, 2018
DECLARATION

I declare that this research project is my original work and it has not been submitted for the award of any degree or diploma in any other institution. No part of the project should be reproduced without the authority of the author and/or Kenyatta University.

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Victor Karianjahi Miako
D53/OL/26788/2013

This research project is submitted for examination with my approval as the appointed university supervisor.

Signature______________________________  Date _________________________

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DEDICATION

I wish to dedicate this research project to my family for their support and encouragement throughout this proposal. To my friends and colleagues, I appreciate them for their guidance and support. To God Almighty, thank you.
ACKNOWLEDGEMENT

I do wish to acknowledge my supervisor Dr. Caleb Kirui and appreciate his efforts to guide me through each step by sharing his powerful knowledge with me. I also wish to thank Kenyatta University fraternity for giving me the opportunity to be part of such a great institution.
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## ABBREVIATIONS/ACRONYMS

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<tr>
<td>PM</td>
<td>Project Management</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>ATC</td>
<td>Agricultural Training Centre</td>
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<td>NGO</td>
<td>Nongovernmental Organizations</td>
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<td>GoK</td>
<td>Government of Kenya</td>
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<td>YEDF</td>
<td>Youth Enterprise Development Fund</td>
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<td>PMI</td>
<td>Project Management Institute</td>
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<tr>
<td>UNAIDS</td>
<td>United Nations Programme on HIV/AIDS</td>
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<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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## OPERATIONAL DEFINITION OF TERMS

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<tr>
<td>Monitoring</td>
<td>Supervising activities in progress to ensure they are on-course and on-schedule in meeting the objectives and performance targets</td>
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<tr>
<td>Evaluation</td>
<td>An appraisal of a project to determine its worth or fitness</td>
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<td>Project</td>
<td>Planned set of interrelated tasks to be executed over a fixed period and within certain cost and other limitations</td>
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<tr>
<td>Planning</td>
<td>Management process, concerned with defining goals for company's future direction and determining on the missions and resources to achieve those targets</td>
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<td>Stakeholder Management</td>
<td>Refers to a critical component to the successful delivery of any project, programme or activity</td>
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<tr>
<td>Training</td>
<td>Organized activity aimed at imparting information and/or instructions to improve the recipient's performance or to help him or her attain a required level of knowledge or skill.</td>
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<tr>
<td>Baseline Survey</td>
<td>Analysis of current situation to identify the starting points for a program or project.</td>
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ABSTRACT

Monitoring and evaluation helps those involved with projects to assess if progress is being achieved in line with expectations. When planning for monitoring and evaluation, it is vital to consider whether appropriate funds and staff time can be allocated to it, since it is an on-going process and requires a significant commitment. Despite this many irrigation projects in Kenya continue to fail due to lack of proper monitoring and evaluation. This study investigated the influence of monitoring and evaluation tools on the performance of irrigation projects in Kiambu County, Kenya. The study was based on four independent variables which included strategic planning, stakeholder analysis, logical framework and baseline surveys. The study was guided by descriptive research design. The target population was three irrigation projects in Kiambu County, Kenya namely; Wamuoro Irrigation Project, Kawira Irrigation Project and Githuito Irrigation Project. The target respondents were 35 respondents comprising of 3 managers and 32 employees from the Ministry of agriculture. A census of 35 respondents was carried out. The data collection instrument was questionnaires. Data was analysed using descriptive statistics, inferential statistics and multiple regression analysis. The study revealed that strategic planning, stakeholder analysis, logical framework and baseline surveys has a positive and significant effect on the performance of irrigation projects. The study concludes that Strategic planning helps in analyzing current situation of the project, setting priorities, and focusing resources and energy to achieve better performance in projects. Stakeholder analysis is a critical component to the successful delivery of any project, programme or activity. Logical framework sets out the intervention logic of the project and describes the important assumptions and risks which underlie this logic. The baseline surveys provide data upon which projects’ progress on generation of outputs. The study recommends that project manager should establish a clear and meaningful strategic planning process, engage all levels of employees to ensure success, communicate to employees throughout and create projects to manage the strategies and prioritize all of these projects to ensure they are properly resourced. Proper communication should be done to all the stakeholders in order to ensure intended message is understood and the desired response achieved. Explore the value of the project to the stakeholder. Logical framework should be used with flexibility to planning in order to promote creative thinking and promote participatory engagement between all parties throughout the project life-cycle. Baseline survey need to be implemented in full for M&E to be an effective management tool that would influence project performance.
CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Organizations are currently in the process of reviewing ways in which Monitoring and Evaluation (M&E) can achieve greater consistency and effectiveness (World Bank, 2008), that is, where M&E will enable them to judge the impact of a project as well as obtain recommendations on how future interventions can be improved (UNDP, 2009). However, one shortcoming of the M&E system is that there are no set standards for measuring its quality (Chaplowe, 2008). Yumia and Susan (2013) concluded that for better performance of public projects it is important that organizations plan to have effective implementation strategies for better results of the implemented projects.

Execution of building projects is undertaken through management practices carried out by various project managers daily. Specific project objectives are set to be achieved at the end of the project. The objectives may vary from one project to the other. Time, cost and quality objectives are however basic and common to almost all projects (Abbasi & Al-Mharmah, 2010). In order to achieve set project objectives, specific Project Management (PM) practices are carried out daily by project managers. It has been argued that the PM practices may vary from organization to organization.

With the advent of globalization, organizations all over the world are grappling with internal and external demands and pressures for continuous improvements in project management to enhance performance and stay competitive (Kusek & Rist, 2014). These demands come from a variety of sources including donors, governments, private sector, civil society and the media. Whether it calls for greater accountability and transparency in exchange for foreign aid or real results, organizations must be increasingly responsive to stakeholders’ demand to demonstrate tangible
results (Khan, 2011). As a consequence of this, many organisations are becoming increasingly wary of factors that determine project performance and the need to manage projects carefully.

1.1.1 Monitoring and Evaluation

Monitoring is descriptive in nature and gives information on where a project is at any given time relative to respective targets and outcomes (Nyonje, Ndunge, & Mulwa, 2012). Evaluation on the other hand, is the systematic and objective assessment of a project and gives evidence of why targets and outcomes are or are not being achieved. It seeks to address issues of causality (Ogula, 2012). Applied as a function, monitoring and evaluation is an integral part of project management involving a system of reflection and communication supporting project implementation. Khan (2011) argue that when one does an evaluation, one does so on the basis of monitoring data, and judgements can best be made with these insights. In practice, the sequencing is not as linear as one following the other, but more dynamic depending on the situation.

Monitoring and evaluation can help identify problems and their causes and suggest possible solutions to problems. In this way, M&E can have influence on project performance much as there is inadequate information on this (Shapiro, 2011). According to UNDP (2009), conducting monitoring and evaluation involves a number of complementary activities of which the most important is to formulate a plan for M&E, which guide the rest of the exercise. Shapiro (2011) adds that monitoring and evaluation should be part of the project planning process and that there is need to begin gathering information about project performance in relation to targets right from the start.
According to Kusek and Rist (2014), one of the most powerful tools that influence the performance of a project, program, or policy is Monitoring and Evaluation (M&E). This is echoed by Shapiro (2014) that monitoring and evaluation enable one to assess the quality and impact of a project, against project plans and work plan. Wysocki and McGary, (2013) crowns it all by saying “If you don’t care about how well you are doing or about what impact you are having, why bother implement a project at all? You can only tell how well you are doing by monitoring performance. Naidoo (2011) notes that effective project monitoring and evaluation enhances the basis for evidence-based project management decisions. M&E itself as a management function, consists four key activities: M&E Planning, M&E Training, Baseline surveys and Information systems.

According to UNDP (2009), monitoring focuses on the implementation process and asks the key question how well is the program being implemented while evaluation analyses the implementation process. Monitoring generates periodic reports throughout the program cycle, focuses on project outputs for monitoring progress and making appropriate corrections, highlights areas for improvement for staff and tracks financial costs against budget (UNDP, 2009). Wholey (2010) states that evaluation is used in government to increase transparency, strengthen accountability, and improve performance, whereas performance management systems establish outcome-oriented goals and performance targets, monitor progress, stimulate performance improvements, and communicate results to higher policy levels and the public.

1.1.2 Performance of Irrigation Projects

Irrigation is an essential part of the package of technologies, institutions and policies that underpins increased agricultural output (FAO, 2011). According to Jurriens et al (2012), good management of irrigation schemes involving all the stakeholders including members is becoming
increasingly recognized as an essential mean to achieve successful irrigated agriculture. It is recognized that poor performance is not only a consequence of technical performance in the design and operation of irrigation systems.

Faridi and El-Sayegh (2015) reported that shortage of skills of manpower, poor supervision and poor site management, unsuitable leadership; shortage and breakdown of equipment among others contribute to delays in irrigation project completion in the United Arab Emirates. In Palestine, the local community based irrigation projects is one of the main economic engine sectors, supporting the Palestinian national economy. However, many local projects report poor performance due to many evidential project-specific causes such as: unavailability of materials, excessive amendments of design and drawings, poor coordination among participants, ineffective monitoring and feedback and lack of project leadership skills (UNRWA, 2016).

Mbachu and Nkando (2013) established that quality and attitude to service is one of the key factors constraining successful irrigation project delivery in South Africa. A research by The author showed that the South Africa Infrastructural Department (SAID) is under pressure to improve performance, that is, to deliver projects on time, on budget and to higher standard of quality. They attributed the problem to lack of skilled workers in these infrastructure departments (ID) and called for the need for a project manager in all these offices to coordinate the many on-going projects. Further, they observe that the infrastructural departments do not know whether they are achieving desired results, meeting their customer’s success criteria and achieving their desired return on investment.

In Kenya, the Ministry of Water and Irrigation annual report, (2016) estimates that Ksh 8 billion is invested annually in developing irrigation projects. However most of these Projects hardly
serve their intended purpose because they cease to function or operate below capacity as soon as the financing agencies and development partners pull out. Irrigation farming especially for high value crops and horticultural crops has a number of challenges in that farming through irrigation requires the co-operation of several farmers and different stakeholders except in individually owned irrigation projects and flower farms. To constantly maintain and improve an irrigation holding of individual farms, communal work is required in the larger irrigation systems.

1.1.3 Irrigation Projects in Kiambu County

In the area of development of irrigation infrastructure in Kiambu County, 4 acres of land on Waruhiu ATC have so far been put under irrigation and 225 cubic metres reservoir tank constructed. The sector has also done 5 distribution lines and installed drip irrigation kits for 40 farmers under the Wamoro irrigation project in Karai and Nachu wards. The County also constructed three (3) water towers for 3 tanks of 16 cubic metres each and provided distribution lines to 100 farmers under the Kawira irrigation project in Mangu. Githuito Mwiri irrigation project intake was also rehabilitated and Karaya distribution line that has benefited 120 farmers constructed in Nyanduma ward. Other projects so far finalized include excavation of 26,000M3 water pan in Ngenda ward (Kiambu County, 2016).

According to Ministry of Water and Irrigation annual report, (2016), a big number of Kenyans are hunger stricken and the main way of mitigating against hunger is through practicing irrigated agriculture so as to increase food production per unit of land since rain-fed Agriculture has become very unreliable due to changing weather patterns and environmental degradation. According to the report, efficiency of irrigation projects is not up to expectations. The irrigation
project is one such institution with a devotion to serve the community through addressing development activities that can improve the living standards of the community.

1.2 Statement of the Problem

Monitoring and evaluation (M&E) are integral tools for managing and assessing the efficiency and effectiveness of investments in agricultural projects. However, monitoring and evaluation of agricultural project performance, outcomes, and impact has been a significant challenge in Kenya. In many organisations, project monitoring and evaluation is activity seen as a donor requirement rather than a management tool (Babbie & Mouton, 2010). For this reason, organizations especially NGOs, implement project M&E just to cope with demands and pressures from funding agencies rather than as a measure to contribute to project performance (Kusek & Rist, 2014).

The level of development of irrigation in Kenya is low compared to its potential. Kenya’s irrigation potential in 2010 was estimated at 539,000 hectares, but only 105,800 hectares have been exploited for agricultural production (GoK, 2012). In this effort the government through the National Irrigation Board identifies, designs and constructs irrigation infrastructure to improve water availability for agricultural productivity and in turn improve the food security in the country. Kiambu County has 16 permanent rivers originating from Aberdare ranges, which are its main water tower. Despite the existence of these rivers only 172,872 out 469,244 households have access to piped water and 296,371 with access to potable/safe water. This represents a very low percentage of population that has access to safe and adequate water at reasonable distances to their homesteads.
Several studies have been undertaken on monitoring and evaluation on project performance. For instance, Rogito (2010) carried out a research on the influence of monitoring and evaluation on YEDF projects and found out that projects are poorly implemented because few implementers have trainings in M&E, poorly done baseline survey study leading to the failure of the project. Ong’ong’a. (2012) study on LATF showed that there was no Monitoring and Evaluation department in Local Authority Councils to follow project implementation even if an M & E framework as part of strategic management existed and suggested further research on how to strengthen Monitoring and Evaluation in the local authorities to effectively carry out their projects. This study therefore, sought to investigate monitoring and evaluation tools on the performance of irrigation projects in Kiambu County, Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to investigate the influence of monitoring and evaluation tools on the performance of irrigation projects in Kiambu County, Kenya.

1.3.2 Specific Objectives

This study was guided by the following specific objectives:

i. To examine the influence of strategic planning on performance of irrigation projects in Kiambu County, Kenya.

ii. To establish the influence stakeholder analysis on the performance of irrigation projects in Kiambu County, Kenya.

iii. To determine the influence of logical framework on the performance of irrigation projects in Kiambu County, Kenya.
iv. To investigate the influence of baseline survey on the performance of irrigation projects in Kiambu County, Kenya.

1.4 Research Questions

This study sought answers to the following research questions:

i. How does strategic planning influence the performance of irrigation projects in Kiambu County, Kenya?

ii. How does stakeholder analysis influence the performance of irrigation projects in Kiambu County, Kenya?

iii. How does logical framework influence the performance of irrigation projects in Kiambu County, Kenya?

iv. How do baseline surveys influence the performance of irrigation projects in Kiambu County, Kenya?

1.5 Significance of the Study

The study would be of significance to policy and decision makers in the agricultural sector in identifying measures to improve effective performance of irrigation projects in Kenya. In addition, the study would assist project managers in the agricultural sector in Kenya by providing insight into monitoring and evaluation affects performance of agricultural projects in Kenya and be guided in future planning. The study also hopes to be of significance to farmers and communities who are the intended beneficiaries of irrigation as it would provide information on mitigation of project. The study also hopes to be of significance to researchers and academicians on how monitoring and evaluation affects irrigation projects in Kenya and to hopefully aid in bridging the gap in the scarce information on the study.
1.6 Scope of the Study

This study was carried out in three irrigation projects in Kiambu County, Kenya namely; Wamuoro Irrigation Project, Kawira Irrigation Project and Githuito Irrigation Project. The study focused on how strategic planning, stakeholder analysis, logical framework and baseline surveys influence performance of irrigation projects. Project managers participated in the study.

1.7 Limitations of the Study

The study could face a limitation of response rate of the sampled respondents since participants might fear victimization by the management. To overcome this, researcher assured the respondents of their privacy and confidentiality of the collected data obtained from them. Also the respondent’s names were not indicated for the purposes of confidentiality. The study was conducted using predetermined questionnaires. This could stop the respondents from expressing their views freely and widely. However, the researcher overcame this by designing a questionnaire with both open and closed ended questions.

1.8 Organization of the Study

This study was organized in five chapters. Chapter one constitutes the background of the study, statement of the problem, objectives, significance, scope, limitations and organization of the study. Chapter two comprises of the theoretical literature review, empirical literature review, summary of literature review and research gaps and conceptual framework. Chapter three encompasses the methodology which presents the research design, target population, sampling design, research instrument, data collection procedure, data analysis and ethical considerations. Chapter four constitutes the research findings and discussion which presents the response rate, background information, descriptive statistics, inferential statistics and analysis of qualitative
data. Chapter five presents the summary, conclusion, recommendations for policy and practice, and recommendations for further study.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter focuses on theories anchoring the study under theoretical review, empirical review of literature based on specific objectives of the study, summary and research gaps and conceptual framework of the study.

2.2 Theoretical Review

2.2.1 Theory of Change

The theory of change, first published by Carol Weiss in 1995, is defined as a theory of how and why an initiative works. It focuses not just on generating knowledge about whether a project is effective, but also on explaining how and what methods it uses to be effective (Cox, 2009). The theory of change provides a model of how a project is supposed to work. In other words, it provides a road map of where the project is trying to reach. Monitoring and evaluation tests and refines the road map while communications helps in reaching the destination by helping to bring about change. Further, the theory of change provides the basis for arguing that the intervention is making a difference (Msila & Setlhako, 2013).

This theory suggests that by understanding, what the project is trying to achieve, how and why, project staff and evaluators will be able to monitor and measure the desired results and compare them against the original theory of change (Alcock, 2009). This theory however falls short since project success is much more complex (Babbie & Mouton, 2006). It is important to understand success beyond just knowing “what works”. Experience has shown that blindly copying or scaling an intervention hardly ever works (Mackay, 2007). An important task for monitoring and evaluation is to gather enough knowledge and understanding in order to predict with some
degree of confidence how a project and set of activities might work in a different situation, or how it needs to be adjusted to get similar or better results, hence influencing project performance.

2.2.2 Realistic Evaluation Theory

The realistic evaluation theory, first published by Pawson in 1997, provides a model centred on finding out what outcomes are produced from project interventions, how they are produced, and what is significant about the varying conditions in which the interventions take place (Pawson & Tilley, 2004). Realistic evaluation deals with ‘What works for whom in what circumstances and in what respects, and how?’ (Pawson & Tilley, 2004). The model allows the evaluator to understand what aspects of an intervention make it effective or ineffective and what contextual factors are needed to replicate the intervention in other areas (Cohen, Manion, & Morison, 2008). Realistic evaluation seeks to find the contextual conditions that make interventions effective therefore developing lessons about how they produce outcomes (Fukuda-Parr, Lopes, & Malik, 2002). This theory can greatly aid in understanding how project deliverables are produced during monitoring and evaluation process.

2.2.3 Resource Based Theory

Barney (1991) states that a firm is a collection of physical capital resources, human capital resources and organizational resources. The core premise of the resource-based view is that organizational resources and capabilities can vary significantly across firms, and that these differences can be stable. The theory focuses on the idea of costly-to-copy attributes of the firm as sources of business returns and the means to achieve superior performance and competitive advantage (Conner, 1991).
Chandler (1990) indicates that organizational capabilities emanates from lower management, middle and top management and that a firm can gain competitive advantage when its resources and capabilities are used properly. He further states that if these organization capabilities were carefully synchronized and assimilated it could achieve the economies of scale and scope needed to compete in national and international markets.

Barney (1986) states that, “sustainable competitive advantage is derived from resources that are valuable, rare, imperfectly imitable (due to path-dependence, causal ambiguity, and social complexity), and no substitutable” (Barney, 1986). A resource-based view of the firm accepts that attributes related to past experiences, organizational culture and competences are critical for the success of the firm. The above theory relates to human resource on monitoring and evaluation of performance of agricultural projects.

2.3 Empirical Review

2.3.1 Strategic Planning and Project Performance

A study carried out by Mulwa (2010) established that strategic planning concerns itself with vision, mission, goals and values of the organization, which the organization will serve, organization role in the community further concerned with resources needed people, money expertise, relationships and facilities. The study concluded that strategic planning is a technical approach that is, the planning team should be hybrid so that there is some assurance that both political and technical concerns are addressed. It fuses planning and decision making.

Ika et al (2010) established that project success was insensitive to the level of project planning efforts but on the other hand ascertained that a significant correlation does exist between the use of monitoring and evaluation tools and project “profile,” a success criterion which was an early
pointer of project long-term impact. Ika et al (2010) also accentuates that M&E is even more critical than planning in achievement of project success. Similarly one of the components of the project management methodology whose main aim is to achieve project success was monitoring project progress (Chin, 2012).

The study of Tache (2011) in Romania used critical analysis and concluded that Monitoring and Evaluation (M&E) determinants are the best that affect the sustainability of the projects. The study of Paulinus and Iyenemi (2014) in Nigeria and Ghana revealed that the absence of sustainability of the projects depended on the lack of project planning partnership due to M&E. To lead a project successfully, a project manager has to become adept at initiating, planning, executing, monitoring and controlling and closing (PMI, 2008). To do so, project managers typically use several tools and techniques to help them orchestrate activities along a project life cycle.

Monitoring and evaluation is fragmented in Uganda according to Hauge (2011) with multiple government and donor planning and progress reporting formats. Policy formulation, work planning and budgeting are undertaken as separate exercises at the sector and district levels. From an M&E perspective the major problem is that both information management and decision making is focused on the administrative process of expenditures and activities rather than on the poverty outcomes, impacts and goals that are being pursued. Planning, budgeting and incentives are geared towards tracking inputs, activities and, recently, immediate outputs. Recurrent and development expenditures are reviewed separately, rather than for their combined impact in achieving overall goals.
As a direct link between planning and control, Kusek and Rist (2014) the monitoring and evaluating functions provide the intelligence for the members of the project team to make informed decisions about the project performance. Monitoring should be designed so that it addresses every level of management requiring information about project performance and reflects the work breakdown structure of the project. Each level of management should receive the information it needs to make decisions about the project. In addition, monitoring should be consistent with the logic of the planning, organizing, directing, and motivating systems on the project.

### 2.3.2 Stakeholder Analysis and Project Performance

Naidoo (2011) noted that if the M&E function is located in a section or associated with significant power in terms of decision-making, it is more likely to be taken seriously. Naidoo (2011) further explained that M&E units want to be seen as adding value, and must for their own perpetuation be able to justify their efforts hence M&E managers need success factors to bolster their credibility. This means that the monitoring team needs to be enhanced and strengthened in order for it to have more power which will increase its effectives. In addition to power of M&E teams other factors also play a role in strengthening monitoring teams which includes: frequency of scope monitoring to identify changes, Number of persons monitoring project schedule, Extent of monitoring to detect cost over runs, (Ling et’ al., 2009).

Managing Stakeholders, teamwork among members and monitoring the progress of the project work are some of the key processes used to manage the project work (Georgieva & Allan, 2008). A good monitoring team is the one that has good stakeholders’ representation. Likewise an M&E team which embraces teamwork is a sign of strength and an ingredient for better project performance. Gwadoya, (2012) found that there was a shared need for proper understanding of
Monitoring & Evaluation practices in donor funded projects. This is an indication that there was lack of shared understanding of Monitoring & Evaluation practices in donor funded projects among the various teams. With proper enhancement and capacitating of the monitoring teams, there would be more teamwork and hence more productivity.

Yang et al (2011) carried out an analysis that suggested that increases in levels of leadership may enhance relationships among team members. The study also indicated that teamwork had a statistically significant influence on project performance. Yang et al (2011) analyzed the various factors which are critical to the success of a project most of which were centered around managing stakeholders, Assessing attributes (power, urgency, and proximity) of stakeholders, Compromising conflicts among stakeholders effectively, Formulating a clear statement of project missions, Predicting stakeholders’ reactions for implementing the strategies, Analyzing the change of stakeholders’ influence and relationships during the project process and Assessing stakeholders’ behavior. Yang et al (2011) critical success factors were mainly focused around the stakeholder’s management.

Britton (2009) adds that one critical element associated with the sustainability of an M&E system relates to the adequacy of human resources with the needed skill sets. Human resources capacity development has and continues to be an ongoing issue. On the other hand, Poister (2013) adds that performance measurement has really taken hold in government over the past several years, and over the past few years in the nonprofit sector as well.

Mulandi (2013) mentions that building an adequate supply of human resource is critical for the sustainability of the M&E system and generally is an ongoing issue. Furthermore, it needs to be recognized that growing evaluators requires far more technically oriented M&E training and
development than can usually be obtained with one or two workshops. Both formal training and on-the-job experience are important in developing evaluators with various options for training and development opportunities which include: the public sector, the private sector, universities, professional associations, job assignment, and mentoring programs (Acevedo et al., 2010).

2.3.3 Logical Framework and Project Performance

According to Ben-Dak (2012), a logical framework is a theoretical tool that aids in transforming common sense into logical connection. A logical framework is one of the tools used in project planning, monitoring and evaluation. The author also notes that project logical framework is comprised of agreements that bind diverse parties on the basis of achievement of mutual expectations. Project plans also entail budget which is a detailed and concise plan that outlines and allocates estimated resources to the execution of the project.

A study carried out by Milika (2011) established that the logical framework helps to analyse an existing situation like, including the identification of stakeholders; needs and the definition of related objectives, establish a causal link between inputs, activities, results, purpose and overall objective; (vertical logic), define the assumptions on which the project logic builds; identify the potential risks for achieving objectives and purpose; establish a system for monitoring and evaluating a communication and learning process among the stakeholders; like clients or beneficiaries, planners, decision-makers and implementers. It also considers strength weaknesses, opportunities and threats (SWOT).

Nyandemo (2010) in his study found that, logical framework is essential it is the first step in project planning and implementation. The study further found that that logical framework requires under taking three main tasks: the objectives or goals clearly stated, the target group or
beneficiaries clearly stated, and the time frame showing when the costs and when benefits are likely to occur. It improves planning by highlighting linkages. On the other hand, Leuzzi (2013) indicated that a major component of logical frame is the formulation of a Logical Frame work Matrix based on goals, purpose and activities of the project are itemized in the logical framework matrix while logical framework is a more evaporate presentation that explains all components of a project logical framework matrix is in a table form that can be read at a glance by the relevant use.

Calder (2013) in his study found that projects feel comfortable when using the Log frame approaches to evaluate project performance. The findings further second World Bank (2011) report that applauded project monitoring and evaluation successes to the effective use of Log frame matrices in monitoring of project outcomes. Relevant analysis from project and policy evaluation can highlight the outcomes of previous interventions, and the strengths and weaknesses of their implementation. It can also improve project design and use of project design tools such as the logical framework results in systematic selection of indicators for monitoring project performance.

2.3.4 Baseline Surveys and Project Performance

Rogito (2010) study on the influence of monitoring and evaluation on project’s performance found that a project implemented without the baseline study faced serious challenges on tracking its’ progress effectively on indicators. According to Rogito (2010), for best practice a baseline needs to be planned and done a year earlier to get full information on the project to undertake which was largely not done from the study findings. He concludes that youth projects were poorly performing as baseline survey study was minimally done hence it was hard to achieve
project goals. He recommends that baseline studies need to be properly timed before project implementation and the findings kept properly and used to monitor progress of projects.

World Bank (2013) says that determining the presence or absence of the success factors and constructing reliable indicators in agribusiness that can be used for benchmarking and for comparisons and requires an understanding of production and marketing systems as well as the agricultural policies and enabling environment that promotes or hinders agribusiness in a given country.

Hogger et al (2011) argue that if M&E planning has been done well and information about a situation has been collected at the beginning of the intervention, then one has baseline data. A baseline survey according to Estrella and Gaventa (2010), is a study that is done at the beginning of a project to establish the status quo before a project is rolled out. In a baseline survey, values for the identified performance indicators are collected as well. The baseline survey, which aims at collecting baseline data about a situation, is an early element in the monitoring and evaluation plan whose information is used to systematically assess the circumstances in which the project commences (Frankel & Gage, 2007). It provides the basis for subsequent assessment of how efficiently the activity is being implemented and the eventual results achieved a very big contribution to influencing project performance.

According to Action Aid (2008), baseline surveys are important to any project for the following reasons: It is a starting point for a project - One important and recommended way of starting a project is to carry out a baseline study. Through its results, a baseline serves as a benchmark for all future activities, where project managers can refer to for the purposes of making project management decisions: Establishing priority areas/planning - Baseline studies are important in establishing priority areas for a project. This is especially true when a project has several
objectives. The results of a baseline study can show how some aspects of a project need more focus than others (Action Aid, 2008).

Krzysztof et al (2011) argue that without a baseline, it is not possible to know the impact of a project. A baseline study serves the purpose of informing decision makers what impact the project has had on the target community. These writers also add that M&E tools used during a baseline study are normally the same tools used during evaluation as this is important for ensuring that project management compares “apples to apples” Krzysztof et al (2011). Bamberger et al (2008) point out that just as the name suggests, baseline surveys should be carried out at the very beginning of a project and for obvious reasons. Any manager wants to ensure that any possible impact of a project is captured at evaluation. Where a baseline study is conducted after project activities have already been initiated, the accurate picture of the initial status cannot be reflected since the project is already having some impact, however little.

2.3.5 Project Performance

According to Gido and Clements (2012), project success consists of four components namely budget (costs), schedule (time), performance (quality and utility), and customer satisfaction. The key to project success is the people, the project team and their organization (project management office), the tools and techniques used by the project team and the understanding the team has of the requirements and agendas of the stakeholders.

Pinto and Slevin (2014) cite that many people are aware of projects that come in on time and under budget and were nevertheless considered failures, yet the opposite is equally true. Similarly, Rad and Levin (2010) state that ‘many cases can be cited from the literature and anecdotal data of projects that fall short on expectations in one or more of the triple constraint
items (time, cost and quality), or in terms of client satisfaction and yet the project team officially
announces the project a success.’ Success can mean different things to different people.

Malladi (2015) stipulated that enhancement of project performance will bridge productivity gaps. In enhancing project performance, there is a need to address the problematic issues restricting project performance. However, many problems have arisen during project implementations which are centered on overruns of project indicators. Iyer and Tha (2012) revealed that 40% of Indian Construction projects are facing time overrun ranging from 1 to 252 months. Ugandan Construction Industry experiences cost and time overruns (Mubiru, 2011). Construction delay and cost overruns are cogitated as frequency project problems in Vietnam government-related funded projects.

Ogunlana (2013) studied in critical success factors in large scale construction projects in Thailand. Their study emphasized that success factors vary across various projects. Their findings revealed project planning and control, project personnel and involvement of client as critical factors influencing project success. Atkinson (2014) in their study, investigated on CSFs in construction project briefing. Briefing process is prerequisite to achieving success in project performance. This process involves the interpretation of clients’ actual views and requirements to project participants. Their study considered open and effective communication, clear and precise briefing documents, clear intention and objectives of client and clear project goal and objectives as critical success factors.


### 2.4 Summary of Literature Reviewed and Research Gaps

#### Table 2.1: Summary and Literature Reviewed and Research Gaps

<table>
<thead>
<tr>
<th>Author</th>
<th>Focus of the Study</th>
<th>Findings</th>
<th>Knowledge gap</th>
<th>Focus of the current study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phiri (2015).</td>
<td>Influence of monitoring and evaluation on project performance: a case of African virtual university,</td>
<td>Monitoring and evaluation has a directly proportional influence on project performance</td>
<td>M&amp;E needs to be implemented in full and systematically in order to influence project performance</td>
<td>Strategic Planning on the performance of agricultural projects</td>
</tr>
<tr>
<td>Dobi (2012)</td>
<td>Factors influencing adoption of monitoring and evaluation system for project management among NGOs in Rarieda district, Siaya county, Kenya</td>
<td>Demographic characteristics of the respondents such as gender, age and level of education influenced the adoption of M&amp;E system.</td>
<td>Accountability to the stakeholder’s in terms of resources use and impact of the project they implement</td>
<td>Stakeholder management on the performance of agricultural projects</td>
</tr>
<tr>
<td>Shihemi (2016).</td>
<td>Influence Of Monitoring And Evaluation Tools On Projects Performance Of Building And Construction Projects In Kenyan Public Universities</td>
<td>Baseline surveys enhances the project performance of building and construction in the University of Nairobi to a large extent.</td>
<td>The study did not focus on logical framework on project performance</td>
<td>Logical framework on performance of agricultural projects</td>
</tr>
<tr>
<td>Mureithi (2015)</td>
<td>Factors influencing the use of Levels of training, budgetary</td>
<td>Slight positive correlation between level</td>
<td>Baseline surveys on performance</td>
<td></td>
</tr>
</tbody>
</table>
monitoring and evaluation systems of public projects in Nakuru county
allocation, stakeholders participation and politics all had an influence on M&E
of training and effective monitoring and evaluation
of agricultural projects

2.5 Conceptual Framework

The independent variables in this study include planning, human resource, training and baseline surveys and the dependent variable is the performance of agricultural projects. This is shown in Figure 2.1.

**Independent Variables**

<table>
<thead>
<tr>
<th>Strategic Planning</th>
<th>Stakeholder Management</th>
<th>Logical Framework</th>
<th>Baseline surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Implementation</td>
<td>- HRM planning</td>
<td>- Objectives/Goals</td>
<td>- Indicators</td>
</tr>
<tr>
<td>- Techniques</td>
<td>- Recruitment/selection</td>
<td>- Target group</td>
<td>- Targets</td>
</tr>
<tr>
<td>- Coordination</td>
<td>- HRM management</td>
<td>- Time frame</td>
<td>- Outputs</td>
</tr>
</tbody>
</table>

**Dependent Variable**

<table>
<thead>
<tr>
<th>Project Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Cost advantages</td>
</tr>
<tr>
<td>- Delivery time</td>
</tr>
<tr>
<td>- Quality</td>
</tr>
</tbody>
</table>

Source: Researcher (2017)

Figure 2.1: Conceptual Framework
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter comprises of research design, target population, sampling design and sample size, data collection instruments, pilot study, data collection procedure, data analysis and ethical considerations.

3.2 Research Design

The study adopted a descriptive and explanatory research design. According to Kothari (2004) descriptive research design is recommended for studies that are concerned with specific predictions, with narration of facts and characteristics concerning individuals, group or situation. The design was chosen as it could enable the study to gather valid information regarding the study variables by clearly identifying the target population. Descriptive research involves gathering data that describe events and organize, tabulates, depict and described the data.

3.3 Target Population

The study targeted three irrigation projects in Kiambu County, Kenya namely; Wamuoro Irrigation Project, Kawira Irrigation Project and Githuito Irrigation Project. The targeted respondents were 35 respondents comprising of 3 managers and 32 employees from the Ministry of agriculture in Kiambu County, Kenya. This is shown in Table 3.1.

Table 3.1: Distribution of Target Population

<table>
<thead>
<tr>
<th>Category</th>
<th>Managers</th>
<th>Employees</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wamuoro Irrigation Project</td>
<td>1</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Kawira Irrigation Project</td>
<td>1</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Githuito Irrigation Project</td>
<td>1</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
<td><strong>32</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

Source: Kiambu County, Ministry of Agriculture Office (2017)
3.4 Sampling Design and Sample Size

Sampling design provides a detailed explanation of the subjects to be involved in investigation and how these are to be selected from the target group (Kombo & Tromp, 2006). (Kombo & Tromp, 2006) also assert that the sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. On the other hand, Mugenda and Mugenda, (1999) recommended that where the target population is so small that selecting a sample would be meaningless, the whole population should be studied. Therefore, a census of 35 respondents was carried out.

3.5 Data Collection Instruments

Questionnaires were used for the purpose of collecting primary data. According to Orodho (2005) questionnaires has a potential in reaching out to a large number of respondents within a short time, they are able to give the respondents adequate time to respond to the items, offers a sense of security (confidentiality) to the respondent and they are an objective method hence no bias resulting from the personal characteristics as in an interview. The questionnaires were divided into five sections whereby section A obtained data on background of the respondent, Section B, C, D, E and obtained data on strategic planning, stakeholder analysis, logical framework, baseline surveys and project performance respectively. The close-ended questions were on 5-point likert scale to allow the respondents to indicate their level of agreement on each statement provided.

3.6 Pilot Study

Pilot study according to Orodho (2005) is an activity that assists the research in determining if there are flaws, limitations, or other weaknesses within the research instrument design and allows him or her to make necessary revisions prior to the implementation of the study. A pilot
study was carried out in the ministry of agriculture, Nairobi County, comprising of 10 respondents. This enabled the researcher to capture important comments and suggestions from the respondents that enable so as to improve on the efficiency of research instrument.

3.6.1 Validity of the Instruments

Validity is the degree to which the research instruments will appropriately and accurately measure what they are supposed to measure (Orodho, 2005). Content validity was done to ascertain clarity and simplicity. Content validity which was employed by this study is a measure of the degree to which data collected using a particular instrument represents a specific domain or content of a particular concept (Cooper & Schindler, 2011). Expert opinion was requested to comment on the representativeness and suitability of questions and give suggestions of corrections to be made to the structure of the research tools. This helped to improve the content validity of the data that was collected. It also facilitated the necessary revision and modification of the research instrument thereby enhancing validity.

3.6.2 Reliability of the Instruments

Cooper and Schindler (2011) explain reliability of research as determining whether the research will truly measure that which it was intended to measure or how truthful the research results will be. Reliability was assessed with the use of Cronbach’s alpha coefficient. The coefficient was used to estimate the proportion of variance that is systematic or consistent in a set of test scores. The analysis was conducted for all statements structured on a likert point scale using Cronbach alpha score test. This method was preferred over split half technique because it was easier to calculate. The alpha score tests ranges between 0 and 1 with reliability increasing with the increase in value. Coefficient of 0.6-0.7 is a commonly recommended that indicates acceptable
reliability and 0.8 or higher indicate good reliability (Mugenda & Mugenda, 2003). The reliability results are shown in Table 3.2.

Table 3.2: Reliability Tests Results

<table>
<thead>
<tr>
<th>Research Variable</th>
<th>Cronbach's Alpha Index</th>
<th>Number of Items</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Planning</td>
<td>0.842</td>
<td>5</td>
<td>Reliable</td>
</tr>
<tr>
<td>Stakeholder Management</td>
<td>0.799</td>
<td>5</td>
<td>Reliable</td>
</tr>
<tr>
<td>Logical Framework</td>
<td>0.601</td>
<td>5</td>
<td>Reliable</td>
</tr>
<tr>
<td>Baseline Surveys</td>
<td>0.786</td>
<td>5</td>
<td>Reliable</td>
</tr>
<tr>
<td>Project Performance</td>
<td>0.766</td>
<td>5</td>
<td>Reliable</td>
</tr>
<tr>
<td><strong>Aggregate</strong></td>
<td><strong>0.759</strong></td>
<td><strong>25</strong></td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: Survey Data (2018)

The results in Table 3.2 shows that the indicators of strategic planning had the highest reliability ($\alpha = 0.842$), followed by stakeholder management ($\alpha = 0.799$), baseline surveys ($\alpha = 0.786$), project performance ($\alpha = 0.766$) and logical framework ($\alpha = 0.601$). This reveals that all the five research variables were reliable as their Cronbach’s alpha values was way above the 0.7 threshold recommended by (Rousson et al., 2002). Moreover, the result indicated that collectively the five research variables had an aggregate alpha index of 0.759 for all the 25 items and as such is within the recommended range for a reliable research instrument.

3.7 Data Collection Procedure

The researcher in person distributed the questionnaires to the sampled employees. Use of questionnaires could ease the process of data collection as all the selected respondents were reached in time. During the distribution of the instruments, the purpose of the research was
explained. The respondents were informed of the date the questionnaires will be collected and also the researcher made a visit after one week to remind the respondents.

3.8 Data Analysis and Presentation

The study used quantitative method of data analysis. Quantitative data obtained from the questionnaires was analysed using descriptive statistics such as mean and standard deviation and presented in terms of tables, frequencies, graphs and charts using Statistical Package for Social Sciences (SPSS) version 20.0. The study conducted a multiple regression analysis to test the relationship between independent variables and dependent variable. The regression equation was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Whereby

- $Y$ = Project Performance
- $X_1$ = Strategic Planning
- $X_2$ = Stakeholder Analysis
- $X_3$ = Logical Framework
- $X_4$ = Baseline Surveys

$\beta_1$, $\beta_2$, $\beta_3$ and $\beta_4$ are coefficients of determination

$\varepsilon$ is the error term

3.9 Ethical Consideration

Prior to the commencement of data collection, the researcher obtained all the necessary documents, including an introduction letter from the University. Due to sensitivity of some information to be collected, the researcher held a moral obligation to treat the information with utmost propriety. Since the respondents could be reluctant to disclose some information, the researcher assured them of confidentiality of the information given.
CHAPTER FOUR: DATA ANALYSIS, DISCUSSION AND INTERPRETATION

4.1 Introduction

This chapter presents results of the data analysis which was done based on the study objectives. Descriptive and inferential statistics were used for each variable and the findings presented in tables, figures, charts and graphs and their implications discussed.

4.2 Response Rate

The study was conducted on a sample of 35 respondents comprising of 3 managers and 32 employees from the Ministry of agriculture in Kiambu County, Kenya to whom questionnaires were administered. Out of the 35 questionnaires, 34 questionnaires were duly filled and this represented a response rate of 97.1% as shown in Table 4.1. This response rate was considered satisfactory for analysis to make conclusions for the study (Mugenda & Mugenda, 2003).

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent</td>
<td>34</td>
<td>97.1</td>
</tr>
<tr>
<td>Not Respondent</td>
<td>1</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Survey Data (2018)

4.3 Demographic Information

This section discusses the demographic information of the respondents in the study. These include, distribution of respondents by their gender, age, work experience and the level of education.
Male respondents accounted for 55.88% and female respondents were represented by 44.12% which is a proper indication the both genders were well represented in the study as shown in Figure 4.1.

The study revealed that majority of the respondents were aged between 36 to 45 years as represented 55.9%, followed by those aged between 25 to 35 years as shown by 32.4% and 11.8% of the remaining respondents were aged over 45 years. The cumulative frequency of 88.2% indicated that majority of the respondents were aged 36 years and above.
The study established that majority (41.18%) of the respondents had worked in the current station for more than 10 years, 26.47% for a period of between 5 to 9 years, 20.59% between 2 to 5 years and 11.76% for less than 2 years.

Table 4.3: Level of Education

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Diploma/College</td>
<td>4</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Post Graduate Diploma</td>
<td>10</td>
<td>29.4</td>
</tr>
<tr>
<td></td>
<td>Bachelor Degree</td>
<td>15</td>
<td>44.1</td>
</tr>
<tr>
<td></td>
<td>MA/MBA</td>
<td>5</td>
<td>14.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>34</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Survey Data (2018)

Table 4.3 shows that majority (44.1%) of the respondents had attained a Bachelor Degree level of education, 29.4% Post Graduate Diploma, 14.7% MA/MBA and 11.8% Diploma/College certificate. It can be concluded that majority of the respondents had attained a Bachelors degree level of education and above as indicated by cumulative frequency of 85.3%.
4.4 Descriptive Statistics

Quantitative data obtained from the field was analysed using descriptive statistics and the findings are presented as per the objectives of the study as follows.

4.4.1 Strategic Planning and Project Performance

The study sought to examine how strategic planning influences the performance of irrigation projects in Kenya. The findings are presented in Table 4.4.

Table 4.4: Strategic Planning and Project Performance

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The managers are involved in the design and implementation on monitoring and evaluation</td>
<td>3.88</td>
<td>1.297</td>
</tr>
<tr>
<td>The managers are involved in the reporting on monitoring and evaluation</td>
<td>4.18</td>
<td>0.797</td>
</tr>
<tr>
<td>The managers are involved when clarifying scope, purpose, intended use and audience for monitoring and evaluation process</td>
<td>4.41</td>
<td>0.783</td>
</tr>
<tr>
<td>The managers are involved for budgeting for monitoring and evaluation process</td>
<td>4.06</td>
<td>1.254</td>
</tr>
<tr>
<td>The managers are involved in knowledge dissemination of lessons learnt</td>
<td>3.82</td>
<td>1.381</td>
</tr>
<tr>
<td><strong>Aggregate Score</strong></td>
<td><strong>4.07</strong></td>
<td><strong>1.102</strong></td>
</tr>
</tbody>
</table>

Source: Survey (2018)

From the aggregate scores, strategic planning affect project performance to a great extent as expressed by a mean score of 4.07 based on the five point likert scale in the questionnaire. The results also shows that majority of the respondents strongly agreed that the managers are involved when clarifying scope, purpose, intended use and audience for monitoring and evaluation process (M=4.41, SD=0.783), the managers are involved in the reporting on monitoring and evaluation (M=4.18, SD=0.797) and that the managers are involved for budgeting for monitoring and evaluation process (M=4.06, SD=1.254). These findings concur with the findings of Ika et al (2010) who established that M&E is even more critical than
planning in achievement of project success. Kusek and Rist (2014) also observed that monitoring and evaluating functions provide the intelligence for the members of the project team to make informed decisions about the project performance.

The respondents also agreed that the managers are involved in the design and implementation on monitoring and evaluation (M=3.88, SD=1.297) and that the managers are involved in knowledge dissemination of lessons learnt. These findings are in line with the findings of Paulinus and Iyenemi (2014) in Nigeria and Ghana revealed that the absence of sustainability of the projects depended on the lack of project planning partnership due to M&E. Tache (2011) also observed that in Romania used critical analysis and concluded that Monitoring and Evaluation (M&E) determinants are the best that affect the sustainability of the projects.

4.4.2 Stakeholder Analysis and Project Performance

The study sought to examine the extent to which stakeholder analysis influences the performance of irrigation projects in Kenya. The findings are presented in Table 4.5.

<table>
<thead>
<tr>
<th>Table 4.5: Stakeholder Analysis and Project Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (M)</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Staff entrusted with monitoring and evaluation has technical expertise in the area</td>
</tr>
<tr>
<td>Staff working on monitoring and evaluation are dedicated to the function</td>
</tr>
<tr>
<td>Roles and responsibilities of monitoring and evaluation personnel have been specified at the start of the project</td>
</tr>
<tr>
<td>Human resources capacity development has and continues to be an ongoing issue in the organization</td>
</tr>
<tr>
<td>The organization has enhanced monitoring teams through proper HRM management to ensure that there would be more team work and hence more productivity</td>
</tr>
<tr>
<td>Aggregate Score</td>
</tr>
</tbody>
</table>

Source: Survey (2018)
From the aggregate scores, stakeholder analysis affect project performance to a very great extent as expressed by a mean score of 4.16 based on the five point likert scale in the questionnaire. The results also indicates that majority of the respondents strongly agreed that human resources capacity development has and continues to be an ongoing issue in the organization (M=4.76, SD=0.431) and roles and responsibilities of monitoring and evaluation personnel have been specified at the start of the project (M=4.32, SD=1.492). These findings agree with the findings of Yang et al (2011) carried out an analysis that suggested that increases in levels of leadership may enhance relationships among team members. Britton (2009) adds that one critical element associated with the sustainability of an M&E system relates to the adequacy of human resources with the needed skill sets. Human resources capacity development has and continues to be an ongoing issue.

In addition, the respondents agreed that the organization has enhanced monitoring teams through proper HRM management to ensure that there would be more team work and hence more productivity (M=4.06, SD=1.369), Staff working on monitoring and evaluation are dedicated to the function (M=3.85, SD=1.374) and that staff entrusted with monitoring and evaluation has technical expertise in the area (M=3.82, SD=1.642). These findings concur with the findings are Gwadoya, (2012) who found that there was a shared need for proper understanding of Monitoring & Evaluation practices in donor funded projects. Naidoo (2011) noted that if the M&E function is located in a section or associated with significant power in terms of decision-making, it is more likely to be taken seriously.

### 4.4.3 Logical Framework and Project Performance

The study sought to establish influence logical framework on the performance of irrigation projects in Kenya. The findings are presented in Table 4.6.
Table 4.6: Logical Framework and Project Performance

<table>
<thead>
<tr>
<th>Description</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of input in the Logical Framework e.g. material, labour</td>
<td>3.62</td>
<td>0.817</td>
</tr>
<tr>
<td>Evaluation of time schedule of Project outcomes</td>
<td>2.50</td>
<td>1.462</td>
</tr>
<tr>
<td>Range of activities in the Logical Framework e.g. contraction, procurement</td>
<td>2.24</td>
<td>0.654</td>
</tr>
<tr>
<td>Application of Logical Framework Matrix in relation to strategic plan</td>
<td>2.18</td>
<td>1.114</td>
</tr>
<tr>
<td>Assessment of the expected output or the Logical Framework</td>
<td>4.38</td>
<td>1.074</td>
</tr>
<tr>
<td><strong>Aggregate Score</strong></td>
<td><strong>2.98</strong></td>
<td><strong>1.024</strong></td>
</tr>
</tbody>
</table>

**Source: Survey (2018)**

From the aggregate scores, logical framework affects project performance to a moderate extent as expressed by a mean score of 2.98 based on the five point likert scale in the questionnaire. The results also indicate that the majority of the respondents strongly agreed on the statements that assessment of the expected output or the Logical Framework (M=4.38, SD=1.074) and Range of input in the Logical Framework e.g. material, labour (M=3.62, SD=0.817). This is in line with the findings of Nyandemo (2010) who in his study found that, logical framework is essential it is the first step in project planning and implementation. The study further found that that logical framework requires under taking three main tasks: the objectives or goals clearly stated, the target group or beneficiaries clearly stated, and the time frame showing when the costs and when benefits are likely to occur.

However, the respondents were neutral on the statements that evaluation of time schedule of project outcomes (M=2.50, SD=1.462), range of activities in the Logical Framework e.g. contraction, procurement (M=2.24, SD=0.654) and that application of logical framework matrix in relation to strategic plan (M=2.18, SD=1.114). These findings contradict the findings of Leuzzi (2013) who indicated that a major component of logical frame is the formulation of a
Logical Frame work Matrix based on goals, purpose and activities of the project are itemized in the logical framework matrix while logical framework is a more evaporate presentation that explains all components of a project logical framework matrix is in a table form that can be read at a glance by the relevant use.

4.4.4 Baseline Surveys and Project Performance

The study sought to establish influence logical framework on the performance of irrigation projects in Kenya. The findings are presented in Table 4.7.

**Table 4.7: Baseline Surveys and Project Performance**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>All the staff participates in designing research tool and data collection for baseline survey</td>
<td>3.79</td>
<td>1.122</td>
</tr>
<tr>
<td>Baseline survey help in understanding project expectations</td>
<td>3.88</td>
<td>1.610</td>
</tr>
<tr>
<td>Baseline surveys are relevant to the development objective of the project</td>
<td>4.56</td>
<td>0.660</td>
</tr>
<tr>
<td>Baseline surveys are meaningful and of interest to project management and stakeholders</td>
<td>4.50</td>
<td>0.826</td>
</tr>
<tr>
<td>Baseline surveys are responsive in reflecting changes due to project activities and sensitive in demonstrating change in as a short time period as possible</td>
<td>4.18</td>
<td>0.936</td>
</tr>
<tr>
<td><strong>Aggregate</strong></td>
<td>4.18</td>
<td>1.031</td>
</tr>
</tbody>
</table>

**Source: Survey (2018)**

From the aggregate scores, baseline surveys affect project performance to a very great extent as expressed by a mean score of 4.18 based on the five point likert scale in the questionnaire. The results in Table 4.7 indicates that majority of the respondents strongly agreed that Baseline surveys are relevant to the development objective of the project (M=4.56, SD=0.660), baseline surveys are meaningful and of interest to project management and stakeholders (M=4.50, SD=0.826) and that baseline surveys are responsive in reflecting changes due to project activities
and sensitive in demonstrating change in as a short time period as possible (M=4.18, SD=0.936). These findings concur with the findings of Rogito (2010) who on study on the influence of monitoring and evaluation on project’s performance found that a project implemented without the baseline study faced serious challenges on tracking its’ progress effectively on indicators.

The respondents also agreed on the statements that baseline survey help in understanding project expectations (M=3.88, SD=1.610) and that all the staff participates in designing research tool and data collection for baseline survey (M=3.79, SD=1.122). These findings are in line with the findings of Krzysztof et al (2011) who argue that without a baseline, it is not possible to know the impact of a project. A baseline study serves the purpose of informing decision makers what impact the project has had on the target community.

4.4.5 Project Performance

The study sought to establish the performance of irrigation projects in Kenya. The findings are presented in Table 4.8.

Table 4.8: Project Performance

<table>
<thead>
<tr>
<th></th>
<th>Mean (M)</th>
<th>Standard Deviation (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeliness of project delivery</td>
<td>3.97</td>
<td>1.446</td>
</tr>
<tr>
<td>Number of project deliverables</td>
<td>3.62</td>
<td>1.706</td>
</tr>
<tr>
<td>Number of activities implemented</td>
<td>4.29</td>
<td>1.219</td>
</tr>
<tr>
<td>Cost of project</td>
<td>3.74</td>
<td>1.163</td>
</tr>
<tr>
<td>General level of user satisfaction of project performance</td>
<td>3.22</td>
<td>1.431</td>
</tr>
<tr>
<td><strong>Aggregate Score</strong></td>
<td><strong>3.77</strong></td>
<td><strong>1.393</strong></td>
</tr>
</tbody>
</table>

Source: Survey (2018)

The results in Table 4.8 indicates that majority of the respondents strongly agreed on number of activities implemented (M=4.29, SD=1.219). The respondents agreed on the statements that
timeliness of project delivery (M=3.97, SD=1.446), cost of project (M=3.74, SD=1.163), number of project deliverables (M=3.62, SD=1.706) and general level of user satisfaction of project performance (M=3.22, SD=1.431). According to Gido and Clements (2012), project success consists of four components namely budget (costs), schedule (time), performance (quality and utility), and customer satisfaction. The key to project success is the people, the project team and their organization (project management office), the tools and techniques used by the project team and the understanding the team has of the requirements and agendas of the stakeholders.

4.5 Inferential Statistics

4.5.1 Correlation Analysis

Table 4.9: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Strategic Planning</th>
<th>Stakeholder Analysis</th>
<th>Logical Framework</th>
<th>Baseline Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Planning</td>
<td>Pearson Correlation</td>
<td>.501</td>
<td>.758</td>
<td>.445</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.001</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Stakeholder Analysis</td>
<td>Pearson Correlation</td>
<td>.501</td>
<td>1</td>
<td>-.267</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.001</td>
<td>.352</td>
<td>.127</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Logical Framework</td>
<td>Pearson Correlation</td>
<td>.758</td>
<td>.165</td>
<td>.308</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.001</td>
<td>.352</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Baseline Surveys</td>
<td>Pearson Correlation</td>
<td>.445</td>
<td>.267</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.003</td>
<td>.127</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

Source: Survey Data (2018)
The results in Table 4.9 show that correlations are reasonable; strategic planning correlates positively with all other variables. This is because each variable reflect a positive quality that contribute to better strategic planning. Stakeholder analysis only correlates with strategic planning \((r=0.501, P<0.05)\). Mulwa (2010) established that strategic planning concerns itself with vision, mission, goals and values of the organization, which the organization will serve, organization role in the community further concerned with resources needed people, money expertise, relationships and facilities.

Logical framework has a weak relationship with baseline surveys \((r=0.308, p<0.05)\) but positively correlated. According to Ben-Dak (2012), a logical framework is a theoretical tool that aids in transforming common sense into logical connection. Nyandemo (2010) in his study found that, logical framework is essential it is the first step in project planning and implementation. The study further found that that logical framework requires under taking three main tasks: the objectives or goals clearly stated, the target group or beneficiaries clearly stated, and the time frame showing when the costs and when benefits are likely to occur.

### 4.5.2 Regression Analysis

#### Table 4.10: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R Square Change</td>
<td>F Change</td>
<td>df1</td>
<td>df2</td>
<td>Sig. F Change</td>
</tr>
<tr>
<td>1</td>
<td>.815(^a)</td>
<td>.664</td>
<td>.642</td>
<td>1.791</td>
<td>.031</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Baseline Surveys, Strategic Planning, Stakeholder Analysis, Logical Framework

Source: Survey Data (2018)
R denotes the correlation between predicted and observed value (project performance). According to the observation in Table 4.10, \( R=0.815 \) which indicates a very high correlation which predicts a rather precise correlation. R square is simply the square of R and indicates the proportion of variance in project performance that can be explained by the four independent variables (strategic planning, stakeholder analysis, logical framework and baseline surveys). Because regression maximizes R square for our sample, it will be somewhat lower for the entire population.

The adjusted R square (0.641) estimates the population R square for our model and thus gives a more realistic indication of its predictive power. The adjusted R squared is high and thus shows that the model is significant in predicting project performance. This means that variables not studied in this study contribute to 0.359 (35.9%). Therefore, further studies should be carried out to address this gap.

**Table 4.11: Analysis of Variance (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>Regression</td>
<td>2.960</td>
<td>4</td>
<td>.740</td>
<td>4.231</td>
<td>.001a</td>
</tr>
<tr>
<td>Residual</td>
<td>93.069</td>
<td>29</td>
<td>3.209</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>96.029</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Baseline Surveys, Strategic Planning, Stakeholder Analysis, Logical Framework

b. Dependent Variable: Project Performance

**Source: Survey Data (2018)**

Table 4.11 that show the output of the ANOVA analysis and whether there is a statistically significant difference between our group means. We can see that the significance value is 0.01a (\( p = .001a \)), which is below 0.05 and, therefore, there is a statistically significant difference in the
Baseline Surveys, Strategic Planning, Stakeholder Analysis, Logical Framework and project performance. The F calculated at 5% level of significance was 4.231 since F calculated is greater than the F critical (value = 0.740), this shows that the overall model was significant.

**Table 4.12: Analysis of Variance (ANOVA)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.712</td>
<td>2.403</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>.710</td>
<td>.250</td>
</tr>
<tr>
<td>Stakeholder Analysis</td>
<td>.613</td>
<td>.203</td>
</tr>
<tr>
<td>Logical Framework</td>
<td>.510</td>
<td>.410</td>
</tr>
<tr>
<td>Baseline Surveys</td>
<td>.480</td>
<td>.300</td>
</tr>
</tbody>
</table>

The b coefficients tell us how many units project performance increases for a single unit increase in each predictor. Therefore, 1 point increase on strategic planning corresponds to 0.710 points increase on the project performance, 1 point increase on stakeholder analysis corresponds to 0.613 points increase on the project performance, 1 point increase on logical framework corresponds to 0.510 points increase on the project performance and 1 point increase on baseline surveys corresponds to 0.480 points increase on the project performance.

Given only the scores on our predictors, we can predict project performance by computing

Project performance = 1.712 + (0.710 x strategic planning) + (0.613 x stakeholder analysis) + (0.510 x logical framework) + (0.480 x baseline surveys)

Table 4.12 also shows that b coefficients are positive numbers that means that higher strategic planning, stakeholder analysis, logical framework and baseline surveys are associated with higher project performance. All the significance levels for the four predictors are less than 0.05 showing that b coefficients are all statistically significant.
The beta coefficients allow us to compare the relative strengths of our predictors. It can be deduced that strategic planning, stakeholder analysis, logical framework and baseline surveys has positive and significant effect on project performance as indicated by beta value 4.429, 2.802, 5.125 and 1.598 respectively.
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents a summary of the findings, conclusions and recommendations as per the research objective.

5.2 Summary of Findings

The general objective of this study was to investigate the influence of monitoring and evaluation tools on the performance of irrigation projects in Kenya. The target respondents were 35 respondents comprising of 3 managers and 32 employees from the Ministry of agriculture in Kiambu County, Kenya. The study sought to examine how strategic planning, stakeholder analysis, logical framework and baseline surveys influences project performance and the findings are presented as follows:

The first objective sought to examine the influence of strategic planning on performance of irrigation projects in Kenya. The study established that strategic planning had a very great influence on project performance as indicated by aggregate score of 4.07 with a significance variance of 1.102. It was observed that managers are mostly involved when clarifying scope, purpose, intended use and audience for monitoring and evaluation process and in the reporting on monitoring and evaluation and that the managers are involved for budgeting for monitoring and evaluation process, in the design and implementation on monitoring and evaluation and also in knowledge dissemination of lessons learnt.

The second objective was to establish the influence stakeholder analysis on the performance of irrigation projects in Kenya. The study established that stakeholder analysis had a very great influence on project performance as indicated by aggregate score of 4.16 with a significance variance of 1.216. Most of the respondents strongly agreed that human resources capacity
development has and continues to be an ongoing issue in the organization and roles and responsibilities of monitoring and evaluation personnel have been specified at the start of the project. Also, the respondents agreed that organization has enhanced monitoring teams through proper human resource management to ensure that there would be more team work and hence more productivity, staff working on monitoring and evaluation are dedicated to the function and that staff entrusted with monitoring and evaluation has technical expertise in the area.

The third objective sought to determine the influence of logical framework on the performance of irrigation projects in Kenya. The study established that logical framework to a moderate extent influence on project performance as indicated by aggregate score of 2.16 with a significance variance of 1.024. The respondents strongly agreed on the statements that assessment of the expected output or the Logical Framework. However, the respondents were neutral that evaluation of time schedule of project outcomes, range of activities in the Logical Framework e.g. contraction, procurement and that application of logical framework matrix in relation to strategic plan.

The fourth objective sought to investigate the influence of baseline surveys on the performance of irrigation projects in Kenya. The study established that baseline surveys to a very great extent influence on project performance as indicated by aggregate score of 4.18 with a significance variance of 1.031. The respondents strongly agreed on number of activities implemented. The respondents agreed on the statements that timeliness of project delivery, cost of project, number of project deliverables and general level of user satisfaction of project performance.
5.3 Conclusions

The study concludes that;

Strategic planning has a positive and significant effect on project performance. Strategic planning helps in analyzing current situation of the project, setting priorities, and focusing resources and energy to achieve better performance in projects. It helps in detecting any deviations that might arise during project implementation, establishing realistic objectives and goals that are in line with the vision and mission of the project and provides project managers the roadmap to align the project activities to attain better project performance.

Stakeholder analysis has a positive and significant effect on project performance. Stakeholder analysis is a critical component to the successful delivery of any project, programme or activity. Effective Stakeholder Management creates positive relationships with stakeholders through the appropriate management of their expectations and agreed objectives. Proper stakeholder analysis improves the accuracy of the assessment of the project environment and minimizes fundamental misunderstandings amongst parties involved. It enables project teams to assess a project’s riskiness before commencement.

Logical framework has a positive and significant effect on project performance. It sets out the intervention logic of the project and describes the important assumptions and risks which underlie this logic. This provides the basis for checking the feasibility of the project, ensuring that improbable assumptions or undue risks are carefully assessed. It provides a means of checking the internal logic of the project plan, and ensures that activities, outcomes and objectives are linked.
Baseline survey has a positive and significant effect on project performance. The purpose of baseline is to provide an information base against which to monitor and assess an activity’s progress and effectiveness during implementation and after the activity is completed. The baseline also provides data upon which projects’ progress on generation of outputs. Baselines are used later to provide a comparison for assessing the net effect of the project.

5.4 Recommendations

This study recommends that;

Strategic planning should take a bottom up and top down communication approach for effective project performance. Project manager should establish a clear and meaningful strategic planning process, engage all levels of employees to ensure success, communicate to employees throughout and create projects to manage the strategies and prioritize all of these projects to ensure they are properly resourced.

Proper communication should be done to all the stakeholders in order to ensure intended message is understood and the desired response achieved. Explore the value of the project to the stakeholder. Try to create trust with the stakeholders. Be empathetic and listen to the stakeholders. Stakeholders can be treated as risk and opportunities that have probabilities and impact. Proper management of stakeholders improves the quality of the project, cost can be controlled and also the timeline factor can be assessed and improved.

Logical framework should be used with flexibility to planning in order to promote creative thinking and promote participatory engagement between all parties throughout the project lifecycle. The logframe approach should assist project development so that during the planning stage participatory bottom approaches can be used to feed information into the logframe.
Baseline survey need to be implemented in full for M&E to be an effective management tool that would influence project performance. All these activities are carried out to detect the status of the project (monitoring), and generate evidence for the status quo (evaluation). Evidence generated in project evaluation saves as the basis for evidence-based decision making to improve performance.

5.5 Recommendations for Further Studies

Based on the study findings, this study recommends that further studies should be carried out on how other monitoring and evaluation practices not studied influence performance of irrigation projects in Kenya.
REFERENCES


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APPENDICES

Appendix I: Introductory Letter

Victor Karianjahi Miako

P.o Box 5489
Nairobi

The Manager

..........................

Ministry of Agriculture
Kiambu County- Kenya
P.O Box 1244

Dear Sir/Madam,

Re: Research Study

I am student from Kenyatta University City Campus, Pursuing a Master’s in Business Administration Degree in Project Management. Currently, I am in the process of undertaking research on the “Monitoring and Evaluation Tools on the Performance of Agricultural Projects in Kiambu County, Kenya.”

I therefore request to be granted permission to carry out the study in the attached list of selected departments in your organization.

Yours Faithfully

Victor Karianjahi Miako
MBA, Student
Kenyatta University
Appendix II: Questionnaire

Instructions:

i. Do not write your name anywhere on this questionnaire

ii. Tick [✓] where appropriate or fill in the required information on the spaces provided

Section A: Demographic Data

1. Gender: Male [ ] Female [ ]

2. Age:
   [ ] Less than 25 Years       [ ] 25 – 35 Years
   [ ] 36 – 45 Years           [ ] Over 45 Years

3. How long have you worked in the current station?
   Less than 2 years [ ] 2 – 5 years
   6– 9 years [ ] 10 and above [ ]

4. What is your level of education?
   Diploma/College [ ] University Degree [ ]
   MBA/MA [ ] Post-graduate Diploma [ ]

Section B: Strategic Planning and Project Performance

The statements below relate to strategic planning on performance of agricultural projects in Kenya. Supplied also are five options corresponding to these statements:

*Key:* Strongly agree (SA)=5, Agree (A)=4, Undecided (U)=3, Disagree (D)=2, and Strongly Disagree (SD)=1.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The managers are involved in the design and implementation on monitoring and evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The managers are involved in the reporting on monitoring and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The managers are involved when clarifying scope, purpose, intended use and audience for monitoring and evaluation process.

The managers are involved for budgeting for monitoring and evaluation process.

The managers are involved in knowledge dissemination of lessons learnt.

5. Based on your opinion, how does strategic planning influence performance of agricultural projects in Kenya?

Section C: Stakeholder Analysis and Project Performance

The statements below relate to stakeholder analysis on performance of agricultural projects in Kenya.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff entrusted with monitoring and evaluation has technical expertise in the area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff working on monitoring and evaluation are dedicated to the function</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roles and responsibilities of monitoring and evaluation personnel have been specified at the start of the project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human resources capacity development has and continues to be an ongoing issue in the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization has enhanced monitoring teams through proper HRM management to ensure that there would be more team work and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Based on your opinion, how does stakeholder management influence performance of agricultural projects in Kenya?

…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………

Section D: Logical Framework and Project Performance

The statements below relate to logical framework influence performance of agricultural projects in Kenya.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of input in the Logical Framework e.g. material, labour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation of time schedule of Project outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range of activities in the Logical Framework e.g. contraction, procurement</td>
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<tr>
<td>Application of Logical Framework Matrix in relation to strategic plan.</td>
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<tr>
<td>Assessment of the expected output or the Logical Framework</td>
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</table>

7. Based on your opinion, how does logical framework influence performance of agricultural projects in Kenya?

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56
Section E: Base Line Surveys and Project Performance

The statements below relate to base line surveys on performance of agricultural projects in Kenya.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>All the staff participates in designing research tool and data collection for baseline survey</td>
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<td>Baseline survey help in understanding project expectations</td>
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<td>Baseline surveys are relevant to the development objective of the project</td>
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<tr>
<td>Baseline surveys are meaningful and of interest to project management and stakeholders</td>
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<tr>
<td>Baseline surveys are responsive in reflecting changes due to project activities and sensitive in demonstrating change in as a short time period as possible</td>
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</table>

8. Based on your opinion, how do base line surveys performance of agricultural projects in Kenya?

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Section F: Project Performance

The statements below relate to indicators of performance of agricultural projects in Kenya due to monitoring and evaluation.

<table>
<thead>
<tr>
<th>Statement</th>
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<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>Timeliness of project delivery</td>
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<tr>
<td>Number of project deliverables</td>
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<tr>
<td>Number of activities implemented</td>
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<tr>
<td>General level of user satisfaction of project performance</td>
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</tbody>
</table>
Appendix III: Approval Letter

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

Internal Memo

FROM: Dean, Graduate School

DATE: 4th April, 2018

TO: Mr. Victor Kirianjahi Mlako
C/o Department of Management Science

REF: D53/OL/26788/13

SUBJECT: APPROVAL OF RESEARCH PROJECT

------------------------------------------------------------------

This is to inform you that Graduate School Board, at its meeting on 14th March, 2018, approved your Research Proposal for the MBA. Degree entitled, “Monitoring and Evaluation Tools and the Performance of Irrigation Projects in Kiambu County, Kenya.”

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University’s Website under Graduate School webpage downloads.

Thank you.

HARRETT ISABOKE
FOR: DEAN, GRADUATE SCHOOL

CC. Chairman, Management Science Department

Supervisors:

1. Dr. Caleb Kirui
C/o Department of Management Science
Kenyatta University
Appendix IV: Research Authorization

National Commission for Science, Technology and Innovation

Ref: No. NACOSTI/P/18/60974/23392          Date: 17th July, 2018

Vheiten Karianjahi Miako
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Monitoring and Evaluation tools and the performance of irrigation projects in Kiambu County, Kenya” I am pleased to inform you that you have been authorized to undertake research in Kiambu County for the period ending 17th July, 2019.

You are advised to report to the County Commissioner and the County Director of Education, Kiambu County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

[Signature]
BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Kiambu County.

The County Director of Education
Kiambu County.
Appendix V: Research Permit

THIS IS TO CERTIFY THAT:
Mr. VICTOR KARIANJI MIKO
of KENYATTA UNIVERSITY, 43844-100
Nairobi, has been permitted to conduct
research in Kiambu County
on the topic: MONITORING AND
EVALUATION TOOLS AND THE
PERFORMANCE OF IRRIGATION
PROJECTS IN KIAMBU COUNTY, KENYA
for the period ending 17th July, 2019

[Signature]
Applicant's Signature

[Signature]
Director General
National Commission for Science,
Technology & Innovation

Permit No.: NACOSTIP/18/60974/23392
Date of Issue: 17th July, 2018
Fee Received: Ksh. 1000
CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the License and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filing and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.

RESEARCH CLEARANCE
PERMIT

Serial No.A 19488

CONDITIONS: see back page