INFLUENCE OF MONITORING AND EVALUATION SYSTEMS ON PERFORMANCE OF NON-GOVERNMENTAL PROJECTS IN KENYA. A CASE OF MATERNAL HEALTH PROJECTS IN BUNGOMA SOUTH SUB-COUNTY, KENYA.

NALIANYA JAPHETH MICAH

A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS OF THE AWARD OF DEGREE OF MASTER OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI.

2017

DECLARATION

This research project is my original work and has not been presented for academic award in this or any other University.

SIGNATURE: …… Date: ……..

Nalianya Japheth Micah

REG NO. L50/82270/2016

This research project has been submitted for examination with my approval as the University Supervisor.

Signature: ……. Date: …….

Dr. Stephen Wanyonyi Luketero

Senior Lecturer,

School of Mathematics

University of Nairobi

DEDICATION

I would like to dedicate this work to my parents: Eliud Nalianya and Roselyne Namalwa, my brothers Jesse and David, and my sisters Miriam, Faith and Ezel.

ACKNOWLEDGEMENT

I would thank a few people and organizations for their role in helping me in developing this report: Firstly, I want to thank the Almighty God for the gift of life and strength during the development and writing of this report. I would also like to thank my family for their prayers and moral support, encouraging me to pursue my educational goals. My sincere gratitude also goes to my supervisors Dr. Stephen W. Luketero and Mrs Rael Khisa, and my lecturer Mr. Vincent Marani for their guidance in developing this report, and fellow staff at the University of Nairobi, Extra Mural Department. I would also like to thank participating NGOs, ACE Africa (K), Save The Children Bungoma, and CREADIS through their Country Directors, for enabling me carry out research in their respective organizations and complete this piece work. My personal gratitude goes to Mr. Augustine Wasonga, the Country Director of ACE Africa (Kenya), for his financial, material and moral support that he accorded me during the period of conducting this research. Lastly, my special thanks go to my colleagues Muli K. Emmanuel, Sylvia Wafula and Janet Wesonga for their encouragement and relevant ideas they gave me.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

AA - Ace Africa (Kenya)

AIDS -Acquired Immune Deficiency Syndrome

AVU -Afrcian Virtual University.

CIDA -Canadian International Development Agency.

CREADIS- Community Research in Environmental and Development Initiatives.

DDG -Digital Data Gathering

DFID- -Department for International Development.

DSS -Decision Support System

IFRC -International Federation of Red Cross and Red Crescent Societies

IS - Information System

ICT -Information and Communication Technology

HENNET- Health NGOs Network

HIS - Health Information System

HIV - Human Immuno-Deficiency Virus

KNBS - Kenya National Bureau of Statistics

MIS - M&E Information Systems

MHPs - Maternal Heath Projects

MNP - Multinational Project

M&E - Monitoring and Evaluation

NACOSTI -National Commission of Science, Technology, and Innovation

NGO -Non-Governmental Organization

OECD - Organization for Economic Co-operation and Development

RDQA - routine data quality assessments

SFCG - Search For Common Ground

SSA -Sub-Saharan Africa

SPSS -Statistical Package for Social Science

UNAIDS -United Nations Programme on HIV and AIDS

UNFPA - United Nations Population Fund.

UNDP -United Nations Development Programme.

USAID - United States Agency for International Development.

VUCCnet -Virtual University for Cancer Control Networ

WHO - World Health Organization.

ABSTRACT

The growth in number and size of non-governmental organizations in Kenya has been met with a growing concern about identifying their achievements and effectiveness of their projects. The struggle by majority of Non-governmental organizations to account for their work and demonstrated real results continues to taint their image as development change agents to various stakeholders. One of the ways in which organizations can improve effectiveness of their interventions is by strengthening their monitoring and evaluation systems. This study sought to determine the influence of monitoring and evaluation systems on performance of non-governmental based maternal health projects in Bungoma South Sub-County, Kenya. The objectives were to: determine how monitoring and evaluation plans, human Resource capacity, nature of monitoring and evaluation information systems adopted, and stakeholder participation in monitoring and evaluation influence performance of non-governmental maternal health projects in Bungoma South Sub-County. A descriptive survey design and correlation design was employed. With a target population of 101 respondents, a census was conducted on all respondents involved in implementation of maternal health projects from three non-governmental organizations (Ace Africa (Kenya), Save The Children (Bungoma), and Community Research in Environmental and Development Initiatives). Data was collected through questionnaires and analyzed using descriptive statistics. The study concluded that M&E plans influences performance of the projects as shown by a fairly strong correlation of 0.607. Although human resource capacity in monitoring and evaluation is key in performance of the projects, a moderate correlation coefficient of 0.530 established implies low M&E expertise in the organizations. The study also showed monitoring and evaluation information system influences performance of the projects. However, with a correlation coefficient of 0.533, there is room for improving the current information systems to in the three organizations to make them more efficient. The study further showed that too much stakeholder involvement in M&E had a negative influence on performance of the projects in the long-run. This was shown by a correlation coefficient of -0.489. A regression analysis indicated that, taking all the independent variables at a constant zero, performance of maternal health projects was 4.087. In overall, it was therefore concluded that monitoring and evaluation systems influences performance of the projects. The study recommends alignment of staff job descriptions with their M&E plans, increase the number of M&E training, conduct Routine Data Quality Assessment to detect areas of difficulties to staff, invest in Information and Communication Technology, and manage stakeholders' involvement in Monitoring and Evaluation in order to achieve quality data.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In their course of complementing government efforts in improving the lives of its citizen, non-governmental Organizations (NGOs) around the world have initiated and implemented projects in various sectors such as agriculture, health, human rights and community empowerment. In health sector for instant, NGOs have played a significant contribution in making available health services to the community, providing a critical source of much needed human and monetary resources (HENNET, 2014). To a large extend however, the success of such projects has always depended on the monitoring and evaluation of the projects. The World Health Organization (2006) observes that monitoring progress to our goals and evaluating the impact of our interventions and actions are essential to improving performance and achieving results. Prabhakar, (2008) also points out that monitoring and feedback is one of factors leading to project success. UNDP (2009) sums up the critical role of M&E by cautioning development practitioners that without effective planning, monitoring and evaluation, it would be impossible to judge if work is going in the right direction, whether progress and success can be claimed, and how future efforts might be improved.

However, the effectiveness of NGOs work has not been felt by the targeted beneficiaries, globally. Lewis & Kanji, (2009) observe that accountability is a complex challenge for NGOs, because they have multiple constituencies and need to be accountable in different ways to a variety of different groups and interests. In many cases accountability in NGOs has been that of over-accountability to government or donors at the expense of

‘downward’ or ‘sideways’ accountability to clients and beneficiaries (Lewis & Kanji, 2009). In the field of maternal health for instance, the proportion of mothers that do not survive childbirth compared to those who do-in developing regions is still 14 times higher than in developed regions (United Nations, 2015). Further, it is estimated that about 830 women die from pregnancy- or childbirth-related complications around the world everyday (WHO,2016). What could be the problem when both the government and NGOs have joined hands in addressing societal challenges such as maternal and new born mortality, unemployment, human rights, food security among other challenges in the world?

Lahey (2015), for instance, observes that over two-thirds of ILO independent evaluations flag poor or non-existent M&E approaches and practices as primary constraints to project effectiveness. The question that arises then is, are NGOs carrying out effective monitoring and evaluation of their projects to ensure they achieve their set objectives? Kareithi & Lund (2012) observe that since the 1990s, the role of development NGOs in international development has increased, along with massive interest and concern over NGO performance from NGO practitioners, governments, citizens, donors, policymakers and academics. Calls for effectiveness and sustainability of NGOs projects has consequently placed pressures on NGOs to undertake increased monitoring and evaluation and present measurable indicators of output, impact and capacity (AHMED, 2004).

A look at M&E systems in government and NGOs around the world reveal weaknesses in the systems that curtail achievement of project results. In Canada, accountability is a highly-held norm in government and charity organizations. However, emphasis is largely placed on financial accountability. (Kirsch, 2013) observes that although financial accountability has been around for thousands of years in

Canada…fairness and performance accountability standards have not been developed at the country or international levels but rather at the discretion of individual practitioners, organizational directives or rules established by funders. In addition, monitoring for results seem not to be prioritized with emphasis being placed on implementation monitoring of projects in charity organizations. (Kirsch, 2013) observes that much of the performance accountability by charities in Canada has been about inputs and outputs without regard to outcomes and impacts, or the resulting value to the community. This is the reason that funding organizations such as Canadian International Development Agency (CIDA) are applying pressure on charities to demonstrate results or lose funding (Wyld, 2012).

Accountability among NGOs in Bangladesh has been described as "perfunctory" by (AHMED, 2004). This is evident with the challenges noted in M&E systems especially in maternal health, research and development projects implemented by both the government (within the Ministry of Health and Family Welfare), and NGOs (Rahman, Parkhurst, & Normand, 2003). Community health workers with little experience and skills in M&E are responsible for delivering essential service packages, are in charge of monitoring and surveillance i.e. collecting data on maternal and infant deaths, pregnancies, births and incidence and prevalence of certain communicable diseases (WHO, 2006).

In Africa, the challenges associated with weak M&E systems in various projects are immense especially in sub-saharan Africa. For instance, in addition to the limited financial resources that malaria M&E systems in SSA face, they also must deal with poor access to technology and a lack of personnel with the required M&E knowledge and skills (MEASURE EVALUATION, 2015). In Botswana, where biomedical evidence between HIV/AIDS and maternal mortality suggests the linkages are strong (WHO, 2014), concerns

have emerged about monitoring and evaluation of HIV/AIDS and MHPs. M&E practices in NGOs implementing HIV/AIDS projects in Gaborone city are weak and fall below the best practices where most of the best practices were inconsistently done and others were not done at all (Muzinda, 2007). Further, HIV/AIDS project failures have also been attributed to limited stakeholder participation in M&E where exclusion of local leaders, ethnic groups and communities in the creation of national HIV prevention campaigns which led to the development of untrustworthy and ineffective campaigns (SU, 2010). Such weaknesses have led to calls to strengthen M&E systems in government and NGOs to improve their interventions and achieve results. The maternal health M&E systems in particular, require improvement in several critical dimensions namely; accuracy and completeness of morbidity and mortality data; timeliness of data; processing and analysis; and reporting, use and archiving (WHO, 2014).

Although the scope of NGOs in Ethiopia is still small and confined mostly to Addis Ababa (Clark, 2000), the ineffectiveness of their work has also been observed owing to inability by NGOs to demonstrate and achieve project results, despite the huge resources at their disposal. Studies on functioning of local NGOs project implementation, monitoring and evaluation show that short term project objectives of local NGOs have been achieved with positive, but often scattered little results. Yet, many studies say little beyond the more immediate effects of the projects, particularly they did not address monitoring and evaluation practices and challenges of local NGOs executing education projects in Addis Ababa (Tulema, 2014).

In Kenya, development challenges such as maternal and new born death persist despite the country having over 8500 NGOs (The National Council of NGOs, 2014)

complementing government efforts in matters of development. The Kenya Demographic and Health Survey (KHDS) 2008-2009 documents that maternal mortality remains high at 488 maternal deaths per 100,000 live births (KNBS, 2010), with Kenya seen to be experiencing a very slow progression in maternal health. Bungoma County for instance is ranked 8th with an estimated maternal death 266 per 100,000 live births (UNFPA Kenya, 2014). Challenges in implementation, and monitoring and evaluation of maternal health and other related programmes in Kenya explains the ineffectiveness of these programmes. An assessment of M&E functions at the Division of Reproductive Health (DRH) by Ministry of Health in Kenya revealed the weakest areas to be; supervision and auditing processes, human capacity for M&E functions, Research and Surveillance, and development of national and sub-national databases (MOH-Kenya, 2013). The M&E dimensions such as status, quality, technical autonomy, and financial autonomy all received below average ratings pointing to the weak organizational capacity of DRH's mandate to carry out its M&E mandate (MOH-Kenya, 2013). Therefore, as pointed out by WHO (2006), if M&E is effectively implemented, the system will improve accountability and performance (of projects, programmes and policies) over time

1.2 Statement of the Problem

With more than 8500 NGOs (National Council of NGOs Kenya, 2014) operating in Kenya since the 1990s, questions about their significance have emerged. Ooko,(2014) in her article, *NGOs and Development in Africa: Lessons for Donors*, poses the following questions: With so many NGOs in Kenya, why such little progress? How comes whenever NGOs begin work in an area, livelihoods seem to improve, but once they close shop, the gains made are often reversed and communities continue to suffer? These questions point

to weaknesses in programmatic approach amongst NGOs in solving societal challenges such as high maternal health deaths especially in developing countries. Kirsch (2013) notes that effectiveness is becoming a concern of the global development community. There are calls on NGOs to focus on real results. Davies (2001) points out that, associated with the growth (of NGOs) has been a growing concern about identifying the achievements of NGOs. However, there is little response from NGOs to the growing demand for public accountability to citizens on how assistance is used, what results are achieved, and how appropriate these results are, in bringing about desired changes in human development. (Karani, Bichanga, & Kamau, 2014) caution that, if you can't measure how well you are doing against targets and indicators, you may go on using resources, without changing the circumstances you have recognized as a problem at all. In addition, there has been an increase in negative unintended consequences from NGOs projects/programmes. For example, researchers have found residents in communities around Lake Victoria using mosquito nets for fishing and drying fish instead of using them in their homes to combat malaria as intended (Minakawa, Dida, Sonye, Futami, & Kaneko, 2008) as cited by (Were,2014).

Accounts of development projects gone wrong, the increasing influence NGOs play in development, and historically poor assessment practices among NGOs all raise questions about how NGO project administrators understand impacts of their activities (Were, 2014). Despite M&E being a critical factor in the project success, it is one area of weakness for many projects and programmes (UNDP, 2009) among NGOs. Program and project managers pay little attention to M&E, viewing it as a burden that should be avoided. Many at times M&E is given a much lower priority at the project's inception, as all efforts are

aimed at launching the project (Lahey, 2015). This arises, partly, due to the limited resources available even for project start-up and delivery, with often limited follow-through on implementation of the performance measurement strategies and M&E Plan, in spite of how well defined they may be (Lahey, 2015). For most NGO's, M&E is perceived as extra work and therefore in the rush of implementation, they leave out monitoring (tracking progress) themselves to be done by one individual (M&E Officer) with little support from other staff or management (Emmanuel, 2015). This makes it difficult to know if accomplishments could be achieved sooner, at a significantly reduced overall expenditure, by learning from successes and failures and applying the lessons to new interventions (Kirsch, 2013).

Therefore, as one option for demonstrating project impacts and minimizing negative unintended consequences (Were,2014), the study sought to study the M&E systems among NGOs implementing MHPs in Bungoma South-Sub County and how such systems influence performance of the projects. Particular focus was placed on M&E planning, human resource capacities, stakeholder participation and information systems employed in M&E.

1.3 Purpose of the study

The purpose of this study was to determine the influence of monitoring and evaluation systems on performance of non-governmental-based maternal health projects in Bungoma South Sub-County.

1.4 Objectives of the study

The study was guided by the following research objectives:

i. To determine how monitoring and evaluation plans influence performance of non-governmental based maternal health projects in Bungoma South Sub-County
ii. To determine how human Resource capacity for monitoring and evaluation influence performance of non-governmental based maternal health projects in Bungoma South Sub-County.
iii. To determine the extent to which nature of monitoring and evaluation information systems adopted influence performance of non-governmental based maternal health projects in Bungoma South Sub-County.
iv. To examine how stakeholder participation in monitoring and evaluation influence performance of non-governmental based maternal health projects in Bungoma South Sub-County.

1.5 Research Questions

The study sought to answer the following research questions:

i. To what extent does monitoring and evaluation plans influence the performance of non-governmental based maternal health projects in Bungoma South Sub-County?
ii. How does human capacity for monitoring and evaluation influence the performance non-governmental based maternal health projects in Bungoma South Sub-County?
iii. How does the nature of monitoring and evaluation information systems adopted in monitoring and evaluation influence the performance of non-governmental based maternal health projects in Bungoma County?

iv. To what extent does stakeholder participation in monitoring and evaluation influence performance of non-governmental based maternal health projects in Bungoma South Sub-County?

1.6 Significance of the Study

It is hoped that the findings of this study will be beneficial to various people and institutions including:

Project Managers: The findings and recommendations of the research will assist project managers in maternal health projects to identify weaknesses in the M&E systems and areas that needs improvement, and institute measures that will strengthen the M&E system to improve action and implementation of M&E activities. This will in turn bridge the gap between what was expected and what is achieved thereby increasing the overall effectiveness of their project or program.

Project staff: The study findings provides an opportunity for attitude change amongst project staff towards M&E, and will enable them to see the important role of M&E in project performance, enabling them to embrace it as a guide to their activities.

Donors*:* The study findings provide more information on accountability mechanisms in NGOs that will help donors determine the value for their money.

Government: Through the findings and recommendations from the study, government institutions will borrow best M&E practices in maternal health projects/programs. Further, the research will also inform policies regarding M&E of government activities.

Research students*:* The findings of the study contribute to the M&E literature and therefore will be useful to students and scholars in this area for their references.

1.7 Limitation of the Study

The major challenges experienced during the study were limited funds to conduct data collection in the three NGOs (AA, STC and CREADIS) and as a result, the researcher's movement to study NGOs was limited. Time was also a constraint as the study was to be concluded within one year. The researcher used personal savings to fund for the data collection activities. The researcher also used one assistant who was well trained, to collect data within the short time, while ensuring that quality of data was not compromised.

1.8 Delimitation of the Study

The study was carried out in Bungoma South Sub-County and involved NGOs implementing MHPs. The study focused on the M&E systems in these NGOs and restricted itself to the influence of M&E plans, human resource capacity in M&E, M&E information systems adopted, and stakeholder participation in M&E, on performance of MHPs. The study involved programme/project managers, M&E officers, field staff, volunteers and interns involved in the implementation of the MHPs.

1.9 Basic Assumptions of the Study

The study assumed that NGOs implementing MHPs in Bungoma South Sub-County had a functioning M&E unit. The study also assumed that programme/project managers, M&E staff, field staff, volunteers and interns working in the MHPs gave honest and unbiased opinions about the M&E systems in their organizations.

1.10 Definition of Significant Terms

Non-Governmental Organizations refers to a diverse set of institutions (from grassroots or community level, to national, regional or international level) that operate on a nonprofit basis, generally serve the public sector, and are engaged in long-term development work within the framework of international development cooperation. {They include Faith Based Organizations (FBOs), Civil Society Organization (CSOs), and Community Based Organizations (CBOs)}

Monitoring and Evaluation system refers a collection of people, procedures, data and technology that interact to provide timely information for authorized decision-makers.

NGO based projects- Projects initiated and are run by non-governmental organizations.

Performance- A set of results that represent productivity, progress and competence related to an established objective, goal, or standards of accuracy, completeness, cost, quality and speed.

Information system is an organized combination of people, hardware, software, networks and data resources that collects, stores, transforms and disseminates information in an organization (Kyalo, Mulwa, & Nyonje, 2012), and therefore supports operations, management, and decision making.

Participation- is a process through which stakeholders at various levels engage in activities, such as monitoring or evaluation, of a particular project, program or policy, share control over the content, the process and the results of the (M&E) activity and engage in taking or identifying corrective actions.

1.11 Organization of the Study

This study comprises of five chapters: Chapter one covers the background of the study covering global, regional and national view. This is followed by the statement of the problem, purpose of the study, objectives of the study, research questions, and the significance of the study. This is then followed by the limitation of the study, study assumptions, definition of terms, and finally organization of the study. Chapter Two covers the literature review under the following sub-topics: M&E plans, human resource capacity in M&E, nature of M&E information systems, and stakeholder participation. This is followed by the theoretical framework, conceptual framework, the summary of literature review and finally the knowledge gap. Chapter three encompasses the research methodology and includes; research design, target population, sample and sampling, procedures, research instruments, pilot testing of the instruments, validity and reliability of the instruments, data collection procedures, data analysis procedures, ethical issues and operationalization of variables. Chapter four presents findings of the study in line with the study objectives. Lastly, chapter five includes summary of findings, conclusions, and recommendations and areas for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents literature on the performance of non-governmental projects, M&E plans, human resource capacity for M&E, nature of M&E information systems, stakeholder participation in M&E, theoretical framework, a conceptual framework, summary of the literature review, and the knowledge gap.

2.2 Performance of Non-Governmental Based Projects

NGOs around the world have struggled with the question of accountability of their work. This is as a result of different informational demands that their work attracts from various stakeholders. Lewis & Kanji, (2009) observe that accountability is a complex challenge for NGOs, because they have multiple constituencies and need to be accountable in different ways to a variety of different groups and interests. Ramadan & Borgonovi (2015) approves this view noting that NGOs are required to manage and evaluate their performance from multiple perspectives, taking into account the projects/programs performance, the agenda of donors, the needs of beneficiaries and the internal effectiveness. It is a situation that has raised concern on performance of NGO projects from various stakeholders. Kareithi & Lund (2012) observe that the role of development NGOs in international development has increased, along with massive interest and concern over NGO performance from NGO practitioners, governments, citizens, donors, policymakers and academics. This is because there is still a lack of reliable evidence on the impact of NGO development projects and programmes (Davies, 2001). The term “performance” connotes a set of results that represent productivity, progress and competence related to an

established objective, goal, or standards of accuracy, completeness, cost, quality and speed. According to Carman (2007), the most utilized performance indicators by NGOs incorporate efficiency, effectiveness, fundraising, costs, audits and beneficiaries' satisfaction. That means measuring performance of projects/programmes will involve assessing the method that evaluates efficiency and effectiveness of a project/program and its impact (Miller, 2007) as cited by (Ramadan & Borgonovi, 2015). Therefore, there is need to establish and strengthen a project performance M&E which is critical component in a well-functioning project as it ensures performance-based result (IFAD, 2010).

2.3 Nature of Monitoring and Evaluation Planning and Performance of Non-Governmental Based Projects

M&E planning is an essential component of the M&E system, involving a practical planning for the project/programme to monitor and evaluate the log frame's objectives and indicators (IFRC, 2011). M&E plan assists in managing the process of assessing and reporting progress towards achieving project outputs and outcomes, and to identify what evaluation questions will be addressed through evaluation (USAID, 2016). Specifically, the M&E plan describes indicators, who is responsible for collecting them, what forms and tools will be used, and how the data will flow through the organization (Bullen, 2014). This means, without M&E plans, many M&E systems will fall into disuse because too little attention is given to detail at the planning stage (Sinister, 2015).

M&E plans should be documented during and shared between all stakeholders including the donors. This is the best practice which suggests as wide an engagement with different stakeholders as possible, and certainly anyone expected to carry out the work contained in the plan should be informed or consulted during its development (Simister,

2015). However, studies done on involvement of stakeholders in M&E plans have been limited to identifying the level involvement, without touching on its influence in project performance. Githika, (2013) in his study involving of stakeholders in M&E of HIV projects of civil society organizations (CSOs) in Imenti North Sub County, the study concluded that the CSOs in HIV projects were yet to embrace participatory monitoring and evaluation. Using the descriptive research design, the study established that involvement of donors, staff, community, and project beneficiaries M&E planning of projects stood at 16.1%, 48.4%, 11.3% and 24.2% respectively. However, several questions remain unexplored: how important is stakeholder involvement in M&E planning, what is the specific roles and inputs of various stakeholders? What is the implication of low stakeholder involvement in M&E planning to HIV project performance? SFCG (2010) observes that M&E plan allows all staff involved with the project to have a reference sheet of all the M&E activities during the progress of the project and highlights data. USAID (2007) adds that developing the (M&E) system in a participatory manner ensures that groups involved in collection and analysis of the information will understand what they are collecting and why it is important. This also enables the M&E planners to allocate time and resources for the various M&E activities and alert them to the time and resources required for proper M&E work (Taylor, 2001).

M&E plans should be revised, reviewed and updated with time based on the changing environment or situations in regard to implementation of a programme. This ensures that the M&E plan remain relevant in guiding implementation of a programme. According to SFCG (2010), M&E plan should be constantly updated to include up-to-date information of monitoring and evaluation progress. But how important frequent and

important it is to update an M&E plan? Simister (2015) points out that changes might need to be made because M&E systems or processes are not working properly, or because the project or programme itself has changed, and the M&E approach needs to be altered as a result. Further UNDP (2009) points out that M&E activities…take place throughout the programme and project cycles and should be reviewed and updated regularly (at least annually, for example at the time of annual reviews).

The scope of M&E plans differs depending on the size of a programme and the size of the organization. An M&E plan with a narrower scope, also known as an indicator matrix or an M&E framework, is a specific document that defines project indicators and how they will be measured (Chaplowe, 2008) ensuring that firm plans are in place to collect the indicators defined in a project or programme plan. Some of the common features in the indicator matrices include: the relevant output or objective; the indicator; the source of information used to collect the indicator; the person responsible for collection; when the indicator should be collected and the frequency of data collection on the indicator. The other type of M&E plan encompasses the broader aspects of M&E, incorporating the indicator matrix in addition to issues involving the analysis and use of information, reporting schedules, learning mechanisms, training, knowledge management and resources (Simister,2015). Studies done on scope of M&E plans have tended lean towards the narrower scope of M&E plans which is essential during implementation of M&E activities. A study by Bernard Phiri (2015) for instance, analyzed the influence of the scope M&E plans on performance of two projects (the Multinational Project (MNP) and the Virtual University for Cancer Control Network (VUCCnet)) successfully implemented by Afrcian Virtual University (AVU). The study found that AVU had an M&E plan of a narrow scope

consisting of Objectives of the project (23) Determination of project performance (21), project indicators (19); outputs and outcomes (19), conceptual measures and definitions, along with baseline data and a Monitoring schedule. This means that consideration was given to achievement of project outputs, outcomes and goals…and that the M&E plan's role was to guide the tracking of achievement of results and provide information on what is happening in the project through data collection (Phiri, 2015). Aspects of the broader M&E plans such as analysis and use of information, data management and reporting schedules, learning mechanisms, training, knowledge management and resources were not explored.

2.4 Human Resource Capacity in Monitoring and Evaluation and Performance of Non-Governmental Based Projects

Capacity can be understood as the ability of people, organizations and society as a whole to manage their affairs successfully (OECD, 2006). M&E activities utilizes the capacities of many people such as staff, beneficiaries and volunteers who are not M&E experts (Chaplowe, 2008). It is critical that capacity building and development of various people involved in M&E is planned and carried out on a regular basis for successful implementation of M&E work. As noted by UNDP (2009), there is the need to take a more holistic view in identifying and addressing the capacities needed to monitor and evaluate the results being pursued. According to (Acevedo, Rivera, Lima, & Hwang, 2010) building an adequate supply of human resource capacity is critical for the sustainability of the M&E system.

UNDP (2009) observes that staff entrusted with monitoring should have required technical expertise in the area. Among Donor funded projects in NGOs, Nyakundi (2014)

found out that staff technical skills affect the implementation of M&E, in that necessary skills play a key role in providing functional advice in the development of appropriate results-based performance monitoring systems. In quantitative terms, Nyakundi (2014) showed that a unit increase in technical skills would lead to 0.122 efficiency in the implementation of M&E. It means therefore that with competent M&E skills, projects are able to achieve their planned results. This result agrees with findingins by Ngatia (2015) which showed that a unit increase in human resource would lead to 0.288 increase in performance of agribusiness projects in NGOs in Murang'a County. However, even with high demand for expertise in M&E, and with the increasing focus of donors and borrowers on impact (Rajalahti, Woelcke, & Pehu, 2005), scorlars have found inadequate expertise in M&E both in government and NGOs staff with M&E roles. There are simply too few people in most Sub-Saharan African countries with the necessary skills and capacity of designing and implementing M&E activities… as such many NGOs lack the technical expertise, knowledge and understanding of M&E (Emmanuel, 2015). Among NGOs implementing HIV/AIDS projects in Botswana, Muzinda (2007) found that implementing the monitoring and evaluation process was not effectively done due to, among other reasons, inadequate finances, lack of expertise, stringent and multi-donor reporting requirements. Although the study by Muzinda didn't elaborate on performance of the NGOs HIV projects in the country, the study showed that all the projects implemented by the local NGOs in Botswana were not effectively monitored and evaluated (Muzinda,2007). In government infrastructural projects in Kenya, study by Wanjiku (2015) noted inadequate training and M&E expertise observing the absence of M&E expertise

such as design skills particularly Log Frame design, indicator setting, design of data collection instruments, with non-existent with data collection skills.

Apart from technical know-how, staff with M&E working experience ensure effective implementation of their interventions. In assessing and planning for human resource capacity, the first step is to determine the available M&E experience within the project/programme team, partner organizations, target communities and any other potential participants in the M&E system (IFRC, 2011). This is because effective M&E implementation requires…that the staff within the M&E unit have the necessary M&E technical know-how and experience (Odhiambo, 2013). (Acevedo, Rivera, Lima, & Hwang, 2010) also agree with view noting that both formal training and on the job experience are important in developing evaluators.

Experience in M&E can be acquired through continuous training, longer years of working in the same position, or working for different organizations. Odhiambo (2013) for instance, argues that M&E capacity of employees should continuously be developed through training and other capacity building initiatives to ensure that they keep up with current and emerging trends in the field. Stetson (2011) also observes that even staff with extensive experience in M&E should be trained on the specific objectives, tools, and protocols for each M&E activity to ensure that there is consistency and quality. Ngatia's (2015) study found that programme officers working in agribusiness NGOs in Murang'a county had received the necessary training in M&E either formally or through in-service training besides having several years of experience working with M&E systems. However, it is not clear how frequent the training in M&E was carried out with no clear type of training established. IFRC, (2011) notes that informal training (in M&E) may include on-

the-job guidance and feedback, such as mentorship in completing checklists, commenting on a report or guidance on how to use data management tools. Further, Stetson (2011) adds that M&E training should cover the following key areas: objectives and overview of the project M&E system; principles of data collection, including key ethical considerations; and finally detailed focus on specific M&E system topics such as data-gathering forms, instruction sheets, and report formats. Therefore, care should be taken to ensure that M&E training is prioritized to ensure projects are implement effectively because in most poorly performing projects training for monitoring and evaluation is not prioritized (Pearce & Robinson, 2004).

The value of well thought-out and clearly defined institutional arrangements for monitoring, evaluation and learning (ME&L) includes…clear job descriptions for line and field managers which ensured ME&L are well integrated into their normal work routines (Lai, Hancock, & Muller-Praefcke, 2012). However, weakness in the M&E system is likely to result because job descriptions of staff involved in managing and implementing projects lack assigned M&E responsibilities (Stetson, 2011). Kacapor-Dzihic's 2011 report on M&E in Bosnia and Herzegovina NGOs for instance, noted that M&E teams did not have clarified M&E roles and relevant skills. As a consequence, M&E was done on ad-hoc basis by manager of organizations…with no day–to–day technical support and coverage for ongoing M&E needs and tasks (Kacapor-Dzihic, 2011). However it is not clear whether project performance was influenced in such NGOs. Among public organizations, Mbiti & Kiruja, (2015) had similar findings oberving that staff entrusted with M&E had no technical skills, had no dedication to the function, and roles and responsibilities of monitoring and evaluation personnel had not been specified at the start of the projects.

2.5 Nature of M&E Information Systems and Performance of Non-Governmental Based Projects

Communication in projects/programs is critical as it improves clarity on expectations, roles and responsibilities, as well as information on progress and performance (UNDP, 2009). This can be achieved by having an information system that provides timely, up to date, and accurate information to M&E for decision making. An information system (IS) is an organized combination of people, hardware, software, networks and data resources that collects, stores, transforms and disseminates information in an organization (Kyalo, Mulwa, & Nyonje, 2012) that supports organization's activities. In health programs, WHO (2008) documents that in its capacity, the health information system (HIS) ensures overall (data) quality, relevance and timeliness, and converts data into information for health-related decision-making. However, as observed by Buckingham et al (2008) cited by (Nielsen, 2012) information system is not only confined to computer hardware and software but a human activity (social) system which may or may not involve the use of computer systems'.

Project/program performance relies heavily on effective MIS in M&E. Studies done in both government and NGOs have shown a strong relationship between MIS and performance of projects. Kahura, (2013) in her study on the role of MIS in construction projects in Nairobi, Kenya, established a strong and positve correlation (0.954) between Project MIS and project success. Ngatia (2015) established a lower positive correlation (0.035) between using information systems in project activities and performance with a regression analysis showing that for every unit increase in Information systems use, a 0.024 increase in performance, which if not for the presence of extreneous variables, the

relationship would be stronger. How then does an MIS beccome so important in an organization? Pathfinder International (2016) explains that managers' effectiveness is largely dependent on the existence of an equally effective MIS which allows them to plan, monitor, and evaluate operations and performance by use of information collected.

Strengthening the M&E system in organizations by employing MIS relies heavily on technological advancements. It requires articulating an MIS concept, defining clear objectives and creating a vision to transform manual system into electronic (computerized) system focused on substantial improvement in the delivery of services (Khan, 2003). It is the reason various actors are looking to information and communication technology (ICT) to increase the efficiency, speed and accuracy of data collection, storage and analysis (INTRAC, 2013). Lai, Hancock, & Muller-Praefcke (2012) observed that NGO projects in South East Asia demonstrated the feasibility and utility of ICT technology by establishing MIS with capabilities for web-based data capture and communication across multiple project sites and levels; and enhanced functionality from integration with GIS and remote-sensing tools and applications. Even though the MIS systems is able to deliver decision making information such as implementation status and progress (Lai, Hancock, & Muller-Praefcke (2012), how affordable is the technology employed? What are alternative options to such advanced ICT? Lai, Hancock, & Muller-Praefcke (2012) lack of modern telecommunication infrastructure and/or limited access to competent technical advice and support services could restrict the use of ICT in MIS establishment in certain project contexts.

M&E Staff should understand information captured by the MIS, and its relevance to the activities and objectives of a particular programme/project. An effective manager

works with his or her staff to ensure that each staff understands why certain data are being collected; how these data should be analyzed to support operations; when analyses should trigger other actions; and who should regularly receive and review data and analyses (Pathfinder International, 2016). The MIS should be understood by staff, at all levels, simple with fewer data elements, variables, formats, and procedures as much as possible, in addition to ability to create user-friendly presentations of data to share information with others. This view is supported by Kahura (2013) who while studying MIS in construction projects in Nairobi, Kenya, cautions against establishment of MIS that are too complicated and which may miss out on important information. In any case, are M&E staff trained on the MIS so as to understand its operation? How important is it to have simple and user friendly MIS? Kahura (2013) argues that it is not the complexity of the software that matters but the quality of the information generated by the system and the ability of the user to use the information to manage the project. Although a study by Phiri (2015) on ISs in NGOs (AVU) found out that database for the MNP was rather complicated, build in Microsoft Access, and required services of a consultant, measures were put in place to ensure that databases were user-friendly and were updated regularly until the end of the projects.

MIS supports management in making timely and effective decisions for planning, monitoring, and managing the project (Rajalahti, Woelcke, & Pehu, 2005) ensuring the quality of a project. A decision support system (DSS), a component of MIS; a computer based system (an application program) analyzes organizational (or business) data and then presents it in a way that helps the user to make business decisions more efficiently and effectively (Nowduri, 2012). In his study on the use of ISs in NGO projects (MNP and

VUCCnet) in Kenya, Phiri (2015) recognized its application in data capturing in various beneficiary institutions, data cleaning, data entry, data analysis and report writing. In addition to understanding project expectations, databases were also used to retrieve information about projects and to generate trends of project progress from which new strategies were devised to improve project performance (Phiri, 2015). These findings are in agreement with Kahura's (2013) findings which showed that use of (MIS) software to generate quality information needed by the user (project manager) helped them perform their tasks in a more professional manner thus increasing the success rate of the construction projects. With adoption of computerised MIS, efficiency in delivery of interventions is enhanced due to timely availability of information. For instance, adopting digital data gathering (DDG) handheld devices such as smartphones and data pens greatly improves data collection, analysis, and, providing instantaneous data access, centralized information management, improved decision making, and better designed interventions (INTRAC, 2013).

2.6 Stakeholder Participation in M&E and Performance of Non-Governmental Based Projects

Growing emphasis on participatory approaches towards development, there has been recognition that monitoring and evaluation (M&E) should also be participatory (World Bank,2016), for the purposes of enriching the quality of information. Garbutt (2013) argues that it is of no use having a complex M&E system if your partners are unable to collect data that provides the information you need. Participatory monitoring and evaluation (PM&E) allows stakeholders at various levels to engage in monitoring or evaluating a particular project, program or policy; share control over the content, the

process and the results of the M&E activity; engage in taking or identifying corrective actions (Sirker, WorldBank, & Ezemenari, 2010). How important is stakeholder involvement in M&E? Simister, (2009) argues that involving stakeholder in M&E generate better M&E data and analysis and also ensures service users have the right to be involved in all areas of work that have an influence over their lives. This increases the chances of a project/programme succeeding as high levels of engagement of users, clients and stakeholders in programmes and projects are critical to success (UNDP, 2009).

Measures need be taken to ensure that stakeholders are satisfied with their role in M&E activities. This is because failure to involve stakeholders may generate opposition to any project activities. Were (2014) observes that misunderstanding, resentment, and outright sabotage of development projects can occur where development projects define resource use but exclude local people in decision making processes.

Meaningful engagement of various stakeholders in M&E generates sufficient and relevant information that enhances project delivery. As UNFPA (2001) points out, involvement of various stakeholders such as programme stakeholders, central level decision makers, local level implementers, and communities, in programme design, implementation, monitoring and evaluation, improves programme quality and helps address local development needs. WHO (2006) also concurs with this view noting that in order to ensure effective M&E for Maternal and Newborn Health (MNH), partnerships should be established with different stakeholders, including the communities as well as other non-health sectors. Involvement of women and youth for instance has been argued to be beneficial by certain scholars. This view is confirmed by Agutu's (2014) findings on stakeholder involvement in School Feeding Programme by service providers in Kenya

which revealed substantive involvement of school administrators, students, parents and community in M&E. The resulting benefits were faster decision making, feedback, ownership, sustainability hence influence implementation of M&E (Agutu, 2014). Involvement of other marginalized groups such as women and youth has also been recognized as vital for the success of projects. Srinivas (2015) points out that participation of women in all decision making processes-whether micro or macro-will ensure that broader goals are achieved, and will benefit all sections of the society. DFID, 2010 also agrees that young people are the foundations for effective development, and if engaged they will improve many of the structural development challenges, including: enhancing the cohesion of families and communities, reducing health risks and advancing livelihood opportunities. However, studies still show that involvement of women in critical decision making positions is still limited in both government and NGOs. Were (2014) in her study of Lake Basin NGOs observed relative lower number of women in committee posisitons that managed NGO water projects in the region, further noting that the, involvement, did not necessarily translate into active participation in decision-making (Were, 2014).

Certain circumstances also limit the level of involvement stakeholders in project M&E. In developing more extractive tools or methodologies for data collection and analysis in M&E, project managers might involve service users as the passive providers of information during monitoring, review or evaluation processes, without having much say over how M&E is carried out (Simister, 2009). In addition, complex organizations have to decide how far they are willing to allow local decision-making in these areas, and how far any tools, procedures or practices should be standardized (Simister, 2009). In evaluations for example, circumstances that require independent outside judgment and specialized

information from which only technical experts can provide, a conventional approach to evaluation may be more suitable (UNFPA, 2001). Were (2013) also noted that although NGOs favored participatory projects where people from the community were actively involved, the degree to which M&E activities involved the local community appeared limited. Analyzing M&E approaches of three NGOs (Well NGO, Tank and Latrine NGO, and International NGO), Were's results showed that collection of information used in M&E did not involve direct project participants.

Some scholars also contend that increasing community participation does not necessarily lead to improvement in project outcome. Community participation in projects can lead to start-up delays and cooptation by certain groups in the community (Were, 2014). According to Cleaver (1999) community participation is difficult to implement effectively because projects are clearly articulated sets of activities with little room for empowering people, one of the essential objectives of participation. What are then factors that can hinder full community participation in M&E? According to (UNFPA, 2001), community participation can be constrained by lack of literacy skills, insufficient time, the intensity of analytical work to be undertaken during the evaluation, and the fact that many of the issues covered during the evaluation are not directly relevant to community members.A study by (Mugo & Oleche, 2015) on M&E in government developpment projects indicated that stakeholders' participation in implementation of M&E had a negative effect in the short run. To what extend then should stakeholder engagement in M&E go? At what stage of project implementation would stakeholder engagements be vital for M&E? In managing stakeholders engagement, both from stakeholders' analysis, selection and involvement, it is important to understand when each stakeholder(s) input

will be needed. For instance, UNFPA (2001) explains that participatory evaluations are particularly useful when there are questions about implementation difficulties or programme effects on different stakeholders or when information is wanted on stakeholders' knowledge of programme goals or their view of progress. Or else as observed by (Mugo & Oleche, 2015), too much stakeholders' involvement could lead to undue influence on M&E functions thus reducing the likelihood of M&E system implementation.

2.7 Theoretical framework

A theory is a set of concepts or constructs and the interrelations that are assumed to exist among those concepts (Mugenda & Mugenda, 2003). This study will adopt the systems theory advanced by Ludwig von Bertalanffy in 1968. The systems theory is based on a trans-disciplinary study of the abstract phenomena, independent of their substance, type, or spatial or temporal scale of existence. The theory investigates both the principles common to all complex entities, and the usual mathematical models which can be used to describe them. A system approach advocates for wholeness: a holistic approach that examines a system as a complete functional unit (Walonick, 2011). A *system* is a set of interconnected components that form a whole and show properties that are properties of the whole rather than of the individual components (LASZLO, 2003). M&E can be viewed as a system integrating various components that work together to deliver information to project/programme managers for decision making. According to (Matafeni, 2009), an M&E system consists procedures, data, and technology. In systems thinking, these components when they do form this 'whole' then display properties which are of the 'whole' rather than the sum of the properties of the individual components (Matafeni, 2009). This

means therefore, that indvidually, these components would not be able to function and produce the intended information to project managers.

2.8 Conceptual Framework

The study will be guided by the following conceptual framework as shown in the **figure 1**. The figure depicts factors in M&E system which influence the performance (dependent variable) of projects in NGOs in terms of timeliness, cost effectiveness, and number of deliverables.

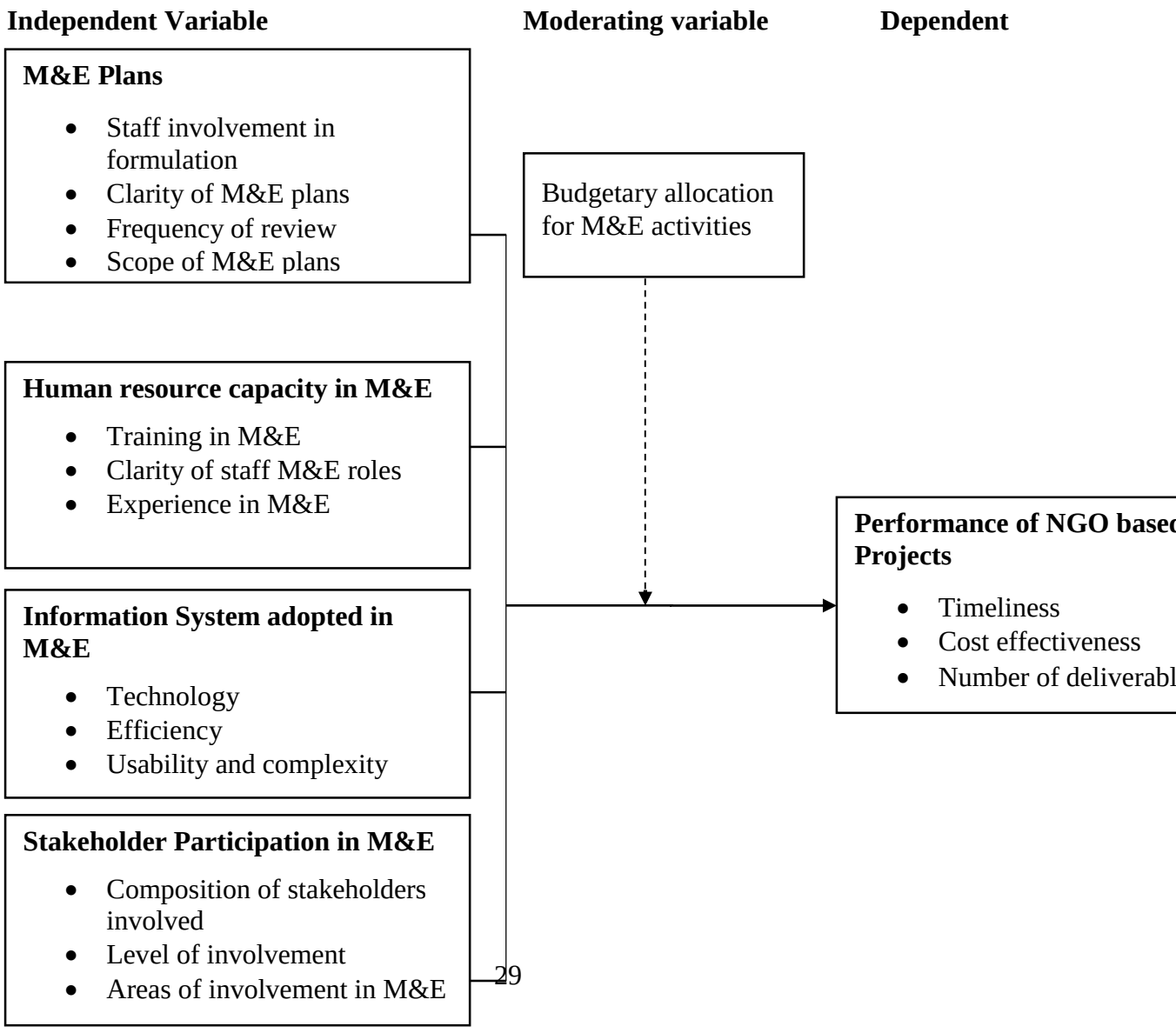

Figure 1. conceptual framework for factors in M&E system which influence performance non-governmental based MHPs.

The M&E factors (independent variables) include: M&E plans in terms of scope, clarity, frequency of review, and staff involvement in formulation; Human resource capacity in terms of level of training, clarity of staff M&E roles, frequency of internal training, and experience in M&E; Information system adopted in terms of Technology**,** efficiency**,** usability, complexity; and Stakeholder participation in M&E in terms of M&E decision making, Implementation of M&E, and women and youth involvement.

2.9 Summary of Literature Review

The literature reveals that majority of organizations do not involve stakeholders in planning of M&E activities. In addition, the scope of M&E plans varies across both government and NGOs. An M&E plan with narrow scope is solely for the achievement of project outputs, outcomes and goal. M&E plans guide the tracking achievement of results and provide information on project status, an essential component in achievement of project performance. Necessary M&E expertise and skills is necessary guiding projects/programmes in achieving its objectives. However, literature reveals, inadequate M&E skills and expertise, lack of internal training on M&E, lack of experience, mismatch between staff job descriptions and their M&E roles, and inadequate experience working in M&E. M&E system needs an effective information system to collect and enter data, clean, analyze and generate reports. An effective information system provides quality information to project managers to make timely decisions and improve project performance. It is important to involve all stakeholders (especially women and youth) in M&E activities.

Stakeholder participation in M&E facilitate faster decision making, feedback, ownership, and sustainability of projects. However, in some NGOs, level of stakeholder involvement in M&E is limited as it may lead to undue influence on M&E functions.

2.10 Knowledge gap

The literature reviewed revealed several gaps that this study explored. Despite various attempts by studies to look into the role of M&E systems in various development projects, the influence of M&E systems on performance of non-governmental based MHPs in Bungoma South Sub-County is yet to be addressed. This study explored four components of M&E systems namely M&E plans, human resource capacity in M&E, nature of M&E information systems adopted, and stakeholder participation in M&E, and their influence on performance of MHPs in NGOs in Bungoma South Sub-County.

On M&E plans, the research comprehensively explored the M&E planning in terms of level of stakeholder involvement in M&E planning, their specific inputs and implications on project performance. Further, frequency of review was explored together with broader aspects of M&E plans such as data management and reporting schedules, learning mechanisms, training, knowledge management and resources. With a correlation and regression analysis between, the research not only established the relationship between M&E plans and performance of MHPs, but attempted to predict the relationship.

The study comprehensively explored the human resource capacity aspect of M&E among staff with M&E roles. In terms of training, the study explored training in M&E acquired either formally or informally, any on job training in M&E, and the relevance of training acquired. Further the study explored the aspect of experience in M&E acquired through several years of working in the M&E position, continuous training, or from

working in different organizations. The study also exploited staff M&E roles and their understanding. All these aspects helped not only to establish the relationship between human resource capacity and performance of MHPs in NGOs, but also quantify the relationship using regression analysis.

The study also dug deep into the aspects of IS in M&E in terms of technology adopted i.e type of technology used, affordability and relavance of technology used and its importance; userbility and complexity i.e M&E staff understanding of MIS, training received on IS and challenges with IS; and efficiency i.e timeliness of information and aiding in decision making involving MHPs in NGOs in Bungoma South Sub-County. The study also established the relationship between MIS and performance of MHPs.

And finally on stakeholder involvement in M&E, the current study exploited all aspects of stakeholder involvement such as composition of stakeholders, their specific inputs and areas of their involvement, and level of involvement in M&E and their specific roles. The study establish the relatioship between stakeholder involvement in M&E and performance of MHPs in NGOs in Bungoma South Sub-County, using correlation and regressional analysis.

CHAPTER THREE

RESEARCH METHODLOGY

3.1 Introduction

This chapter covers the research methodology under the following sub-topics: research design, target population, sample size and sampling procedure, research instruments, validity and reliability of research instruments, data collection methods, data analysis, ethical considerations and operational definition of variables.

3.2 Research Design

According to Kothari (2004), a research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. This study adopted a mixed method appraoch incorporating descriptive survey research design and correlational designs. A descriptive research design in this study was key in describing the the nature of the M&E systems and factors influencing their performance. The design also assisted in testing the level of significance between M&E factors and performance of maternal health projects in NGOs. Mugenda & Mugenda (2003) points out that descriptive design allows collecton of data in order to test hypotheses or to anwer questions concerning the current status of the subjects in the study. The study also incorporated a correlational research design in oder to determine the relationship between M&E factors-M&E plans, human resource capacity, information system and stakeholder participation (independent variables) and performance of MHPs in NGOs (dependent variable).

3.3 Target Population

A population can be defined as a complete set of individuals, cases, or objects with some common observable characteristics (Mugenda & Mugenda, 2003). This study targeted programme and project managers, M&E officers, project field officers, volunteers, and interns involved in M&E activities in four NGOs implementing MHPs in Bungoma South Sub-County. A total of 101 respondents from the participating NGOs were targeted.

3.4 Sample Size and Sampling Procedure

This section presents sample size and sample procedure.

3.4.1 Sample Size

A sample size refers to the number of items to be selected from the universe to constitute a sample (Kothari, 2004). Table 3.1 shows below, the segments of the target population that were included in the final sample. The sample size for this study was 101.

3.4.2 Sampling Procedure

Owing to the small size of the target population, a census was conducted on all the staff of NGOs involved in MHPs in Bungoma South Sub-County. Mugenda & Mugenda (2003) recommends that if the target population is small, then taking the whole population in such cases is advisable. In this case, all staff with M&E roles, that is, programme/project managers, M&E officers, field staff, volunteers and interns, were included in the final study sample. Appointments with each staff involved in the implementation of MHPs in their respective NGOs were scheduled and questionnaires were then administered. Table 3.2 below shows the distribution of target population and their specific roles in maternal health projects.

Table 3.1 Showing the Number and Categories of Individuals Targeted.

Category	ACE Africa	Save The children	MANI	CREADIS	Population	%
Programme/Project Manager	2	4	2	3	11	10.9
M&E Officer	3	4	2	5	14	13.9
Field Staff	14	10	6	25	55	54.5
Volunteers	6	4	0	0	10	9.9
Intern	5	2	0	4	11	10.9
Total	**30**	**24**	**10**	**37**	**101**	**100.0**

The study targeted 101 participants, consisting of 11 (10.9%) programme/project managers, 14 (13.9%) M&E officers, 55 (54.5%) field staff, 10 (11.9%) volunteers and 11 (10.9%) interns.

3.5 Research Instruments

Questionnaires and interview guides were used in collecting data from the respondents. Respondents were expected to read and understand the questions and write down the reply in the space meant for the purpose in the questionnaire itself (Kothari, 2004). The questionnaire consisted of three parts: part A, part B and part C. Part A included the demographics, Part B involved questions on M&E plans, human resource capacity, information systems and how they influence performance of NGO MHPs, while Part C touched on views on performance of MHPs. Interview guides were also used to give more insight into the M&E systems of NGOs. (Kothari, 2004) notes that interviews are

particularly suitable for intensive investigations. Interview guides were used on head of M&E units.

3.5.1 Pilot Study

A pilot study is a mini version of a full-scale study executed as is planned for the intended study, but on a smaller scale (Payne, 2016). Pilot studies help pre-test a particular research instrument such as a questionnaire or an interview guide, in order to test various indicators, methodlogical, and reveal any deficiencies in the tool**.** A pilot study was carried on a small group of staff dealing in MHPs in the Neighboring Kimilili Sub County twice to pre-test questions in the questionnaire. Respondents were encouraged to make comments and suggestions in questions that were not clear. The questionnaire was then adjusted based on the comments of respondents and given to them for the second time. The scores of the first and the second time were recorded and correlated to test for the reliability of the questionnaire, where a score of a coefficient of 0.7 and above is deemed reliable. A total of 10 respondents were used during pilot study representing 10% of the population. Mugenda & Mugenda, (2003) advises that the pretesting sample should be between 1% to 10% depending on the sample size. The pre-stesting sample were not included in the final study sample.

3.5.2 Validity Instruments

Validity is the extent to which an instrument measures what it is supposed to measure and performs as it is designed to perform (Biddix, 2016). Questionnaires are highly standardized meaning that some points might be misinterpreted by some participants. Therefore, the researcher sought the expertise of the supervisor in the field of

M&E and research in ensuring that the research instruments met the construct validity, content and criterion validity.

3.5.3 Reliability of Instruments

Reliability is the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2003). A test-retest method was used to determine the reliability of research instruments. In this method, an instrument was given to the same individuals on two occasions within relatively short duration of time. A correlation coefficient is calculated to determine how closely the participants' responses on the second occasion matched their responses on the first occasion. Research instruments were issued to the pilot study group in a duration of five days to check whether they gave an answer that was closely related to the first one. The data was fed to the SPSS and the correlation coefficient**(r)** determined using the formula below.

$$r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[\, n\Sigma x^2 - (\Sigma x)^2 \,][\, n\Sigma y^2 - (\Sigma y)^2 \,]}}$$

A coefficient value of 0.733 was established which indicated a strong correlation between the scores. The questionnaire was considered reliable.

3.7 Data Collection Procedure

Data collection was preceded by an introductory letter acquired from University of Nairobi to carry out research. Additionally, the researcher was accompanied by a legal permit obtained from the National Commission of Science, Technology and Innovation (NACOSTI) together with a letter of transmittal. Questionnaires were accompanied with a

letter of introduction which assured the respondent of their confidentiality. The researcher introduced himself and his assistant who helped the researcher in recording of data from the respondents. Pilot study was carried in the area to test the validity and the reliability of the research instruments. Actual study was then carried out where information was collected by administering questionnaires and interviewing respondents.

3.8 Data Analysis

After data collection was complete, it was organized where it was edited, coded, and classified. Both descriptive and inferential statistics were used to explain and interpret the meaning of the information collected. Data was entered into a Statistical Package for Social Science (SPSS 20.0) which generated final analysis. The findings were summarized and presented in tables using regression and correlation, percentages and frequency distribution tables.

3.9 Ethical Considerations

Permission was obtained from the concerned authorities. These include NACOSTI, and the Country Directors of NGOs implementing MHPs in Bungoma South Sub-County that participated in the study before commencing the study. The researcher ensured that all ethical standards in research were adhered to including assuring respondents of their confidentiality, voluntary participation and informed consent.

3.10 Operational Definition of Variables

The relationship of variables is illustrated in table 3.3 below with their respective indicators.

Table 3.2 Showing Operationalization of Independent, Dependent and Moderating Variables.

Objective	Variable	Indicators	Measurement Scale	Data Collection Method	Type of Statistic
		Independent variables			
To determine the extent to which monitoring and evaluation plans influence performance of non-governmental based maternal health projects in Bungoma South Sub-County	M&E Plans	-Scope of M&E plans -Clarity of M&E plans -Frequency of review -Staff involvement in formulation	-nominal -ordinal	Questionnaire Interview guide	• Frequencies, • Percentages, correlation • Regression analysis
To determine the extent to which human capacity for monitoring and evaluation influence performance of non-governmental based maternal health projects in Bungoma South Sub-County	Human Resource capacity	-Training in M&E -Clarity of staff M&E roles -Experience in M&E	-nominal -ordinal	Questionnaire Interview guide	• Frequencies, mean, • Percentages, correlation • Regression analysis
To determine the extent to the nature of information systems adopted influence performance of non-governmental based maternal health projects in Bungoma South Sub-County	Information systems	-Technology -Efficiency -Usability	-nominal -ordinal	Questionnaire Interview guide	• Frequencies, • Percentages, correlation • Regression analysis
To examine the extent to which stakeholder participation in monitoring and evaluation influence performance	Stakeholder participation	- Composition of stakeholders involved	-nominal -ordinal	Questionnaire Interview guide	• Frequencies, • Percentages, correlation • Regression analysis

of non- governmental based maternal health projects in Bungoma South Sub-County		-Level of involvement -Areas of involvement in M&E			
		Dependent variable			
	Performance of NGO based maternal health projects in Bungoma South Sub-County	-Timeliness -Cost effectiveness -Number of deliverables	-ordinal	Questionnaire	• Frequencies, • Percentages, correlation • Regression analysis
		Moderating variable			
	Budgetary allocation for M&E activities	-M&E budgetary allocation			

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION, AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings of the study in line with the thematic areas that form study objectives. The thematic areas include demographic characteristics, M&E planning, human resource capacity, monitoring information system, stakeholder involvement in M&E, and their influence on performance of MHPs in Bungoma South Sub-County, Kenya.

4.2 Questionnaire Response Rate

The study targeted a total of hundred and one (101) respondents from four NGOs implementing MHPs in Bungoma South Sub-County. The respondents consisted of programme and project managers, M&E officers, field staff, volunteer and interns. Out of the 101 questionnaires issued out, a total of eighty-one (81) questionnaires from three NGOs (AA, STC, and MANI) were received back, representing 80.2%. According to (Mugenda & Mugenda, 2003), a response rate of 50% and above is adequate for analysis and reporting of findings of a research. Out of the 81 questionnaires, (8.6%) were programme/project managers, (13.6) were M&E officers, (55.6%) were field staff, while volunteers and interns had 11.1% representation each.

4.3 Profile of Respondents

The profile of respondents provides the demographic characteristics of respondents such as age, gender, and their profession. Respondents were therefore asked to choose

which age bracket they fall, their gender, and their profession in terms of the positions they hold in their organizations. The results were summarized in table 4.1.

Table 4.1 Showing Respondents Demographic Characteristics

Age			**Gender**			**Profession**		
Scale of measurement	**F**	**%**	**Scale of measurement**	**F**	**%**	**Scale of measurement**	**F**	**%**
18-24	11	13.6	**M**	44	54.3	**PM**	7	8.6
25-35	39	48.1	**W**	37	45.7	**M&E**	11	13.6
36-50	31	38.3				**F**	45	55.6
>50						**V**	9	11.1
						I	9	11.1
Total	**81**	**100**		**81**	**100**		**81**	**100**

Key

F=frequency; %=percentage; M=male; F=female; PM=programme/project manager; M&E= M&E officer; F= field staff; V= volunteer; I= intern

From the table 4.1, Majority of respondents (48.1%) were of ages 25-35, 38.3% of respondents were between ages 36-50, while 11 (13.6%) were between ages 18-24. This shows that the NGOs under study had majority (61.7%) of its staff in the youthful age bracket of (18-35) with staff above age (35) representing a 38.3%. In terms of respondents' gender, 54.3 % of the respondents were men while 45.7% were women. This shows a good gender balance between men and women in the three NGOs (AA, STC, and CREADIS), which is in line with the one third gender rule in the Kenyan Constitution which promotes gender equity in public appointments. In terms of respondents' professions, majority of respondents, (55.6%), were field staff, (13.6%), were M&E officers, while volunteers and interns each had 11.1% representation. 8.6% of the respondents were project/programme managers. Field staff were the majority because they are the ones involved directly in the

implementation of MHPs to the community, and therefore they have to be adequate enough to effectively implement the project.

4.4 Influence of M&E Plans on Performance of Non-Governmental Based Maternal Health Projects.

The study sought to determine how M&E plans influence performance of non-governmental based MHPs in Bungoma County. The opinions and the results of the respondents have been discussed below.

4.4.1 Awareness of the M&E plan

Respondents from the three NGOs (AA, STC, and CREADIS), were asked whether their organizations had M&E plans in place. The results were summarized as shown in the table 4.2 below.

Table 4.2 showing Availability of M&E Plans in NGOs

Scale of Measurement	Frequency (f)	Percentage (%)
Yes	72	88.9
Not sure	0	0
No	9	11.1
Total	**81**	**100**

From the table 4.2 above, 88.9% of the respondents were aware that their organization had an M&E plan, with only 11.1% saying their organization did not have an M&E plan. This implies that maternal health NGOs in Bungoma South Sub-County operate within the framework of an M&E plan. However, on how staff came to know about the M&E plans in their organizations, only 33.3% of the respondents were involved in the

development of the M&E plan while the majority 66.7% were not involved. Worth noting is that even those who were not involved in the development of the M&E plans, their organizations had shared it with them. 86.4% of the respondents acknowledged that their organization had shared the M&E plan with them while only 13.6% said the M&E plan had not been shared with them. These findings are in agreement Simister's (2015) views, which as a best practice, advises engagement with different stakeholders as possible, and certainly anyone expected to carry out the work contained in the M&E plan should be informed or consulted during its development.

4.4.2 Training and Understanding of M&E Plans

The study sought to find out whether staff, in their respective NGOs, had been trained on the components of the M&E plans, and whether they understood them even if they were trained. In terms training, respondents were to choose either 1=yes, 2=no, or 3= a little. In terms of their understanding of M&E plans, respondents were to indicate how they agreed or disagreed to the statement that they understand the various components of M&E plan. The results are shown on table 4.3.

Table 4.3 Showing Respondents' Training and understanding of M&E plans

Training on M&E plans			**Understanding of M&E plans**		
Scale of measurement	**Frequency (F)**	**Percent (%)**	**Scale of measurement**	**Frequency (F)**	**Percent (%)**
Yes	31	38.3	SA	2	2.5
No	7	8.6	D	7	8.6
A little	43	53.1	NS	31	38.3
			A	32	39.5
			SA	9	11.1
Total	**81**	**100**	**Total**	**81**	**100**

Table 4.3 shows that only 38.3% of the respondents interviewed said they were well trained on the components of the M&E plan while just 8.6% of them said they had not been trained. However, 53.1% of the respondents said they had received little training on the components of the M&E plans. This means that majority (81.6%) of the staff working in MHPs had at least received training on the M&E plan. This is key in aligning project activities with project goals and objectives. Stetson (2011) points out that even staff with extensive experience in M&E should be trained on the specific objectives, tools, and protocols for each M&E activity to ensure that there is consistency and quality. However, even though 81.4% of the respondents said they had some training on the components of M&E plan in their organizations, there is varied understanding amongst the respondents. 50.6% of the respondents cumulatively agreed that they understood the components of the M&E plan, with only 11.1% strongly agreeing. 38.3% of the respondents said they were not sure whether they understood while only 11.1% of the respondents disagreed to understanding the components of M&E plans in their respective NGOs. This shows inadequacies in the understanding of M&E plans amongst staff implementing MHPs even

though majority of respondents were said to be trained. This is in contradiction to USAID (2007) views that developing the (M&E) system in a participatory manner ensures that groups involved in collection and analysis of the information should understand what they are collecting and why it is important. This prompted the researcher to find out category of respondents understood the M&E plan well. Therefore, cross tabulation between respondents' positions and their understanding of components of their M&E plans was conducted and presented as shown in Table 4.4.

Table 4.4 Showing a Cross tabulation of Respondents' Positions and Understanding of M&E Plans

Position	**Strongly Disagree**	**Disagree**	**Not sure**	**Agree**	**Strongly Agree**	**Total**
Project/project manager			1(14.3%)	3(42.9%)	3 (42.9%)	7 (8.6%)
M&E Officer				6(54.5%)		11(13.6%)
Field staff	2 (4.4%)	3(6.7%)	22(48.9%)	16(35.6%)	4(36.4%)	
Volunteers		2(22.2%)	5(55.5%)	2(22.2%)	2(4.4%)	45(55.6%)
Interns		1(11.1%)	3(33.3%)	5(55.6%)		9(11.1%)
						9(11.1%)
Total	**2(2.5%)**	**7 (8.6%)**	**31(38.3%)**	**32(39.5%)**	**9(11.1%)**	**81(100%)**

From the table 4.4, 85.8% of project managers agreed that they understood the M&E plan in their organizations with only 14.3% saying they were not sure if they fully understood the M&E plan. All (100%) the M&E officers interviewed agreed that they

understood the M&E plan in their organizations. 40% of the field officers agreed that they understood they M&E plan while 28.9% of them were not sure if they understood the M&E plan. 11.1% of the field staff said they did not understood the M&E plan in their organizations with 4.4% field staff strongly disagreeing. 55.5% of the volunteers were not sure if they understood the M&E plans with those who agreed and those who disagreed on understanding of M&E plans standing at 22.2% each. 55.6% of interns agreed, 33.3% were not sure, while 11.1% of disagreed to understanding the M&E plan. The results show that understanding of the components of the M&E plans is high amongst the programme/project managers and M&E officers because they are ones highly involved in the project design which includes design of the M&E plans. This further shows that training on components M&E plans to field staff, volunteers and interns has not been adequate. This confirms Wanjiku (2015) findings with infrastructural projects in government projects where inadequate training in M&E was establsihed, with M&E expertise such as design skills particularly Log Frame design, indicator setting, design of data collection instruments lacking.

4.4.4 Need for Training on M&E Plans

The researcher sought to find out the need for training on M&E plan among the staff working in the three NGOs (AA, STC, and CREADIS) by asking them to indicate how they agreed or disagreed on the need to have additional training on M&E plans in their organization. The results were summarized in the table 4.5 below.

Table 4.5 Showing the Need for Additional Training on M&E Plans

Scale of Measurement	Frequency (f)	Percentage (%)
Strongly disagree	4	4.9
Strongly agree	5	6.2
Not sure	4	4.9
Agree	38	46.9
Strongly agree	30	37.0
Total	**81**	**100**

Table 4.5 above shows a strong need for training on M&E plans with 83.9% of the respondents agreed, 4.9 % were not sure while only 11.1% disagreed that they required additional training on M&E plans. The large number of respondents (83.9%) who needed training on the M&E plan is indicative of little understanding of the components of the M&E plans by staff in the three NGOs (AA, STC, and CREADIS). It is also the reason majority of the respondents indicated that that their M&E activities didn't match their project activities. With little guidance of project activities by the M&E plans in the three NGOs, project success cannot be measured accurately with without proper conception of the M&E plans, and thus the stage is set for achievement of little project success. This is situation that Karani, Bichanga, & Kamau, (2014) observe that if you can't measure how well you are doing against targets and indicators, you may go on using resources, without changing the circumstances you have recognized as a problem at all.

4.4.5 Scope of M&E Plans in Maternal health NGOs (AA, STC, and CREADIS)

The researcher was interested in finding which aspects are covered in the M&E plans of the three maternal health NGOs by asking respondents to describe the scope of

their M&E plans and giving a reason for their choice. The results were summarized in the table 4.6.

Table 4.6 showing Respondents description of scope of M&E plans in their NGOs

Scale of measurement	**Frequency (f)**	**Percentage (%)**
Narrow scope	34	42.0
Wide scope	36	44.4
Don't know	11	13.6
Total	**81**	**100**

From the table 4.6, 44.4% of the respondents indicated that their M&E plan had a wider scope, 42% said they had a narrow scope, while 13.6% of the respondents didn't know about scope of their M&E plans. On their reasons for their choice of scope of their M&E plans, 35.8% said it was because it was designed only to guide activities to achieve project results, 51.9% said it was because it provides mechanisms for training, data analysis and information use, and learning, while 12.3% didn't have an explanation for their choice of M&E plan's scope. These results show that majority of the respondents (87.7%) had an idea what the role of their M&E plan was and what it covered. This means that the M&E plans in the three organizations have integrated the aspects of both narrow and wide scope M&E plans. As Simister (2015) observes, an M&E plan should encompass issues involving the analysis and use of information, reporting schedules, learning mechanisms, training, knowledge management and resources in addition to the indicator matrix. The results, however, differ from Phiri's (2015) findings which noted a narrower scope in M&E plan in NGO, where consideration was given to achievement of project outputs, outcomes and goals and where the M&E plan's role was to guide the tracking of achievement of results.

4.4.6 Staff M&E Work Plans and Organization work plans

Respondents were asked indicate how they agreed or disagreed on whether their M&E work plans and activities matches their organization's overall M&E work plan. The results are summarized in table 4.7 below.

Table.4.7 Showing a Match between Staff M&E Activities and Work Plans, and Organization's M&E Work Plan.

Scale of Measurement	Frequency (f)	Percentage (%)
Strongly disagree	2	2.5
Strongly agree	13	16
Not sure	23	28.4
Agree	31	38.3
Strongly agree	12	14.8
Total	**81**	**100**

Table 4.7 shows that 53.1% of the respondents interviewed agreed, 28.4% were not sure, while 18.5% disagreed that their M&E work plans and activities matched their organization's overall M&E work plan. This shows that that nearly half (46.9%) of the staff interviewed had their work plans not harmonized with their organization's overall work plans. This means that not all staff means that staff are not referring to their organizations' M&E plans to inform their project activities. This is in contrary to SFCG (2010) views which points out that M&E plan allows all staff involved with the project to have a reference sheet of all the M&E activities during the progress of the project and highlights data. This is likely to be a hindrance to achieving project objectives if M&E work plans and activities of staff do not match their organizations' overall work plan.

4.4.7 Frequency of Updating and Revision of M&E Plans

The researcher was interested in finding out how frequent the M&E plans were updated and revised. Respondents were therefore asked to indicate how frequent their M&E plans are updated. Respondents were required to choose whether it was monthly, quarterly, semi-yearly, yearly, or not sure. The results are summarized in the table 4.8 below.

Table 4.8 Showing Frequency of Revision and Updating Of M&E Plans Maternal Health NGOs

Scale of measurement	Frequency (f)	Percentage (%)
Monthly	14	17.3
Quarterly	4	4.9
Semi-yearly	3	3.7
Yearly	38	46.9
Not sure	22	27.2
Total	**81**	**100**

From the table 4.8 above, 46.9% of respondents said yearly, 27.2% were not sure, 17.3% said monthly, 4.9% said quarterly, while 3.7% indicated semi-yearly with regard to updating of M&E plans in their organizations. This shows that majority of the respondents (72.8%) were aware that the M&E plans in their organizations is updated to make it relevant as the projects progress. A cross tabulation of name of the NGO and frequency of

revision of M&E plans details how each of the three NGOs (AA, STC, and CREADIS) updates their M&E plans as shown in the table 4.9.

Table 4.9 Showing Cross Tabulation of Maternal Health NGOs and Frequency of Updating of M&E Plans

Organization	Monthly	Quarter-yearly	Semi-yearly	Yearly	Not sure	Total
AA		4(14.8%)	3(11.1%	7(25.9%)	13(48.1%	27
STC	14 (66.7)		)	2 (9.5%)	)	933.3%)
CREADIS				29 (87.9)	5(23.8%)	21(25.9%
					4(12.1%)	)
						33(40.7%
						)
Total	14(17.3%	4(4.9%)	3(3,7%)	38(46.9%	22(27.2%	81(100%)
	)			)	)	

From the table 4.9, in AA organization, majority of respondents (48.1%) were not sure, 25.9% said yearly, 14.8% said quarterly, while 11.1% said semi-yearly with regard to how frequent the M&E plan is updated in their organizations. In STC Majority of respondents (66.7) said M&E plan in their organization is updated monthly, 9.5% said yearly, while 23.8% were not sure. Majority of respondents in CREADIS seem to agree that their M&E system is updated yearly with 87.9% of them saying yearly with only 12.1% not being sure. The results show majority of the staff (72.8%) working in MHPs in the three NGOs were aware that the M&E plans in their organizations is updated with only 27.2% not being sure whether it was updated or not. This is in line with Simister (2015) view that changes might need to be made because M&E systems or processes are not

working properly, or because the project or programme itself has changed, and the M&E approach needs to be altered as a result. Further, UNDP (2009) also points out that M&E activities…take place throughout the programme and project cycles and should therefore be reviewed and updated regularly (at least annually, for example at the time of annual reviews).

4.4.8 Challenges in M&E planning

The researcher sought to get insight from the M&E officers, the challenges experienced in M&E planning. An interview was therefore carried out with head of M&E units in the three NGOs. Their responses were summarized under the following themes in in table 4.10 below.

Table 4.10 Showing Thematic Areas of Challenges in M&E Planning

Insufficient Training on M&E Plans	***Poor Budgeting in M&E Planning***	***Mismatch Of M&E Activities And M&E Plans***
Due to insufficient induction and orientation when staff are hired, majority of staff end up missing on critical components of the M&E plans such specific indicators and tools in maternal health projects.	M&E officers are not involved in M&E budgeting of M&E activities. As a result, not all activities are budgeted for resulting to other activities not being carried out, or not carried out effectively.	In order to be portrayed as hardworking, some staff set their own unrealistic targets and end up carrying out activities that were not set in the initial project and M&E plans.

From table 4.10 above, challenges in the M&E staff include insufficient training on plans due to inadequate induction and orientation when staff are hired. Poor budgeting in

M&E planning as M&E officers are not involved, and as a result not all M&E activities are budgeted for, meaning not all activities are carried out. Thirdly, mismatch of M&E activities arises when staff, for looking to be portrayed as hardworking, set their own unrealistic targets and end up carrying out activities that were not planned for in M&E. The results show that the challenges experienced in M&E planning in the three NGOs are systemic and can therefore be addressed by the management of the three NGOs (AA, STC, and CREADIS).

4.4.9 M&E plans and Execution of Project Activities

The researcher was interested in the degree of relationship between the knowledge of M&E plans and performance of projects through effective execution of project activities. Respondents were therefore asked whether their knowledge of M&E plans influenced their effective execution of project activities. Respondents were also asked to rate performance of their projects based on project timeliness. A Spearman's correlation between knowledge of M&E plans and performance of maternal health projects was conducted as shown in the table 4.11 below.

Table 4.11 Showing Spearman's Correlation between Knowledge of M&E Plans and Performance of Maternal Health Projects

Correlations

			knowledge of M&E plans	Project performance in terms of project timeliness
Spearman's rho	knowledge of M&E plans	Correlation Coefficient	1.000	.607**
		Sig. (2-tailed)	.	.000
		N	81	81
	Project performance in terms of project timeliness	Correlation Coefficient	.607**	1.000
		Sig. (2-tailed)	.000	.
		N	81	81

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

From the table 4.11, a strong positive coefficient correlation of 0.607 was established between knowledge of M&E plans and project performance in terms of project timeliness. The correlation was significant at 0.01 level of significance. A positive strong correlation indicates M&E plans influences performance of MHPs in the three NGOs (AA, STC, and CREADIS). These findings are in agreement with Phiri's findings which established a strong correlation coefficient of 0.745 and 0.783 of AVU and VUCCnet project performance respectively and M&E plans.

4.5 Influence of Human Resource Capacity in M&E and Performance of Non-Governmental Based Maternal Health Projects in Bungoma South Sub-County

The study sought to determine how human resource capacity for M&E influence performance of non-governmental based maternal health projects in Bungoma County. The views and results of the respondents are discussed below.

4.5.1 Respondents' Level of Formal Education

The researcher was in interested in finding out respondents' level of formal education. This is because formal education equips individuals with skills and knowledge that help them perform well in their positions within their organizations. Therefore, respondents were asked to state their highest level of formal education attained. The results were summarized in the table 4.12.

Table 4.12 Education Levels of Respondents

Level of Education	**Frequency (F)**	**Percentage (%)**
Master and PH. D	2	2.5
University Degree	40	49.4
Middle College qualification	38	46.9
Secondary Certificate	1	1.2
Total	**81**	**100**

From the table 4.12 above, majority of respondents interviewed have university degrees and college qualifications, with 49.4% having university degree while 46.9% had middle level college qualifications. 2.5% of the respondents had higher qualifications of Master and PH. D while only 1.2% had a secondary school certificate. The results show a good balance of qualifications amongst respondents in MHPs. A cross tabulation was conducted to specifically show respondents qualifications in each position. The results are shown in table 4.13.

Table 4.13 showing a cross tabulation of respondents' positions and academic qualifications

Qualifications	Master & PHD	University degree	Middle level College qualifications	Secondary certificate	Total
Project/project manager		6 (85.7%)	1 (14.3%)		7 (8.6%)
M&E Officer		7 (63.6%)	4 (36.4%)		11(13.6%)
Field staff	1(3.3%)	19 (42.2%)	24 (53.3%)	1(2.2%)	45(55.6%)
Volunteers	1(11.1%)	5 (55.6%)	3 (33.3%)		9(11.1%)
Interns		3 (33.3%)	6 (66.7%)		9(11.1%)
Total	**2(2.5%)**	**40(49.6%)**	**38(46.9%)**	**1(1.2%)**	**81(100%)**

In the table 4.13, a cross tabulation between respondents' profession and education levels shows that 85.7% of project/programme managers have university degrees with 14.3% of them having middle level college qualifications. Among M&E officers, 63.6% of them hold university degrees with 36.4% having middle level college qualifications. 53.3% of field staff had middle level college qualifications, 42.2% had university degrees while only 3.3% had a secondary school certificate. 55.6% of volunteers had university degree, 33.3% had middle level college qualification, while only one volunteer having a Master or PH. D degrees. 66.7% of the interns had middle level college qualifications with 33.3% of them having university degrees. This shows that NGOs had a qualified staff with majority of them having middle level college qualifications and university degrees. This is in line with UNDP (2009) assertion that staff entrusted with monitoring should have required technical expertise in the area.

4.5.2 Special Training in M&E

Respondents were asked whether they have special training on M&E aside from their academic qualifications. The results were summarized in table 4.14 as shown below.

Table 4.14 Showing Respondents Special Training in M&E

Scale of measurement	Frequency (f)	Percentage (%)
Yes	28	34.6
No	53	65.4
Total	81	100

From the table 4.14 above, 34.6% indicated that they had special training in M&E besides their academic qualifications, while 65.4% said they did not have additional special training in M&E. This shows few staff had skills and relevant training in the field in M&E. This confirms Emmanuel (2015) views that there are simply too few people in most Sub-Saharan African countries with the necessary skills and capacity of designing and implementing M&E activities… as such many NGOs lack the technical expertise, knowledge and understanding of M&E.

4.5.3 Frequency of Internal Training on M&E Roles and Expectation.

Respondents were asked how frequent their organizations hold internal training to staff on M&E roles and expectations. This is because training on M&E roles and expectation should be a continuous process that happens throughout the life span of a project because it ensures quality of M&E data. A cross tabulation between particular NGO and frequency of training for the three NGOs are summarized in table 4.15.

Table 4.15 showing a cross tabulation between NGO and frequency of internal training on M&E.

Name of NGO	Monthly	Quarterly	Half-yearly	Yearly	Never	Total
AA	7(25.9%)	12(44.4%)	2(7.4%)	3(11.1%)	3(11.1%)	27(33.3%)
STC	1(4.8%)	3(14.3%)	2(9.5%)	7(33.3%)	8(38.1%)	21(25.9%)
CREADIS		1(6.2%)	4(12.1%)	28(84.8%)		33(40.7%)
Total	**8(9.9%)**	**16(19.8%)**	**8(9.9%)**	**38(46.9%)**	**11(13.6%)**	**81(100%)**

Table 4.15 shows that 46.6% of the respondents interviewed said that they are trained yearly, 19.8% said quarterly, 9.9% said quarterly and half yearly each, while 13.6% said they are never trained with regard to training on M&E roles and expectations. 44.4% of staff in AA said they trained quarterly, 26.9% said they are trained monthly, 11.1% said they are trained yearly, while 7.4% said they are trained half yearly, with 11.1% saying they have never been trained on the M&E roles and expectations. In STC, 33.3% of the respondents said they are trained yearly, 14.3% said they are trained quarterly yearly, 9.5% said they are trained half-yearly, 4.8% said they are trained monthly, while 38.1% said they are never trained on their M&E roles and expectations. In CREADIS, 84.8% of the respondents said they are trained yearly, 12.1% said they are trained half-yearly, while 6.2% said they are trained quarter yearly on the M&E roles and expectations. The varied results from the two NGOs (AA and STC) show that the two NGOs do not have a clear training plan on M&E roles and expectations but rather training happens when the need arises. But as for CREADIS training plan on M&E roles and expectations is clear and majority of staff are aware of that training plan. This ensures that staff are up to date with emerging issues in their respective fields. This is in agreement with Frank (2013) view that

M&E capacity of employees should continuously be developed through training and other capacity building initiatives to ensure that they keep up with current and emerging trends in the field.

4.5.4 Number of Trainings Received by Staff on M&E

Staff working in the three NGOs implementing maternal health projects in Bungoma were asked to indicate the number of trainings received in a recent reporting period. In this case, a reporting period can be quarterly, semi-yearly or yearly depending on an organization's reporting requirements to their respective donors. The average number of trainings received by staff per organizations is summarized in the table 4.16 below.

Table 4.16 Showing Average Number of Trainings in Received by Staff In AA, STC, CREADIS In Their Recent Reporting Periods

Organization	**Average Number of trainings received**	**Standard deviation**
AA	1.5556 (2)	0.97402
STC	2.0952 (2)	0.62488
CREADIS	3.3939 (3)	5.00587
Average number of trainings	2.44	3.332

Table 4.16 above shows that on average, respondents had an average of 2 trainings in a reporting period. AA and STC also had an average of 2 trainings each in their respective reporting periods with a standard deviation of 0.97402 and 0.62488 respectively, while CREADIS had an average of 3 trainings with a standard deviation of 5.00587. The high standard deviation of 3.332 shows that training was largely varied across the staff in different categories with those in the lower ranks (field staff volunteers and interns)

benefitting more from the trainings. This is highly manifested in CREADIS which has a very high standard deviation of 5.00587. Stetson (2011) points out that even staff with extensive experience in M&E should be trained on the specific objectives, tools, and protocols for each M&E activity to ensure that there is consistency and quality. However, the average number of internal trainings were very low, indicating that staff in the MHPs were not adequately trained. These results differ with findings by Ngatia (2015) which found that programme officers working in agribusiness NGOs in Murang'a County had received the necessary training in M&E either formally or through in-service training.

4.5.5 Areas Covered in Internal M&E Training

Respondents were asked indicate the areas that the M&E training received covered. The areas indicated included: Data collection tools and methods; Data quality; Data storage; analysis and use; Log frames and work plans; Data presentation, dissemination, and reporting; and Stakeholder partnerships and linkages. The results are summarized in table 4.17 below.

Table 4.17 Showing Areas Covered during Staff M&E Training

Areas of training	**Frequency**		
	Yes	**No**	**Total**
Data collection tools and methods	61 (75.3%)	20 (24.7%)	81 (100%)
Data quality	29 (35.8%)	58 (64.2%)	81(100%)
Data storage, analysis and use	23 (28.4%)	58 (71.6%)	81(100%)
Log frames and work plans	19 (23.5%)	62 (76.5%)	81 (100%)
Data presentation, dissemination, and reporting	70 (86.4%)	11 (13.6%)	81 (100%)
Stakeholder partnerships and linkages	37 (45.7%)	44(54.3%)	81 (100%)

From the table 4.17 above on areas covered by M&E training, 75.3% of respondents said data collection tools as opposed to 24.7% of them. 35.8% said training covered data quality while 64.2% said it not did not cover. 28.4% said data storage, analysis and use was covered while 71.6% of the respondents said it was not covered. 23.5% of the respondents said log frames and work plans was covered as opposed 76.5% who said it was not covered. 86.4% of the respondents said data presentation, dissemination and reporting was covered in training while only 13.6 said it was not covered. And finally, 45.7% of the respondents said that stakeholder partnerships and linkages was covered while 54.3% said it was not covered. The results show that M&E training undertaken within the organizations laid more emphasis on data collection tools and methods, and data presentation, dissemination and reporting. Other critical areas of M&E such as data quality, data storage, analysis and use; log frames and work plans; and stakeholder partnerships and linkages have received

little emphasis in the M&E trainings within the three NGOs (AA, STC, & CREADIS). This contradicts Stetson (2011) recommendations that M&E training should cover the following key areas: objectives and overview of the project M&E system; principles of data collection, including key ethical considerations; and finally detailed focus on specific M&E system topics such as data-gathering forms, instruction sheets, data qualty and report formats.

4.5.6 Respondents M&E roles

The researcher sought to find how well respondents knew their M&E roles. Respondents were therefore asked to respond to three questions about their M&E roles. The questions and the results are summarized in table 4.18 below.

Table 4.18 Showing Respondents' Understanding of their M&E Roles in Maternal Health Projects

M&E roles	**Yes**		**Not sure**		**No**		**Sum (F)**	**Sum (%)**
	F	**(%)**	**F**	**(%)**	**F**	**(%)**		
Do you know your M&E roles that you are expected to perform?	67	82.7	2	2.5	12	14.8	**81**	**100**
Are your M&E roles written and captured in your job descriptions?	55	67.9	13	16.0	13	16.0	**81**	**100**
Do your M&E roles and activities match your job descriptions?	30	37.0	14	17.3	36	44.4	**81**	**100**

From the table 4.18 above, 82.7% of the respondents indicated that they knew their M&E roles they are expected to perform, 14.8% did not know while only 2.5% were not sure. On whether their M&E roles are written and captured in their job descriptions, 67.9% of the respondents said agree that it was captured, 16.0% disagreed while another 16.0% were not sure. On whether their M&E roles and activities match their job descriptions, 44.4% of the respondents disagreed, 37.0% of them said it matched, while 17.3% of the respondents said they were not sure. Even though majority of respondents seem to know their job descriptions, the results show that majority of their activities are not in line with what is written in their job descriptions. This mismatch between staff job descriptions and M&E activities implies that some activities may not be carried out or maybe carried out at a different time as opposed to when they were planned for. This is a hindrance to achievement of project goals and objectives, as irrelevant data and untimely data which affects quality of MHPs in terms of its timeliness, effectiveness and achievement of project milestones. This contrasts UNAIDS (2009) view that M&E system performance includes the production of timely, quality data about the…response, and the use of data for

evidence-informed decision-making. This situation in maternal health NGOs in Bungoma South Sub-County mirrors that of M&E in Bosnia and Herzegovina NGOs where M&E teams reported not to have clarified M&E roles and relevant skills (Kacapor-Dzihic,2011). This is a weakness in the M&E system that, according Stetson, (2011), is likely to result because job descriptions of staff involved in managing and implementing projects lack assigned M&E responsibilities.

4.5.7 Working Experience in M&E

The researcher sought to establish respondents' working experience M&E roles in terms of number of years worked with assigned M&E roles and number of organizations respondents had worked in. The results are summarized as shown in table 4.19.

Table 4.19 showing Respondents experiences in M&E

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Years of experience in doing M&E work:	81	.5	13.0	4.396	2.4801
Number of organizations served with assigned M&E roles	81	1	5	1.74	.891
Valid N (listwise)	81				

Table 4.19 shows that, on average, respondents had 4.396 years of experience in M&E work with a standard deviation of 2.4801. This is a fairly good working experience that can help staff perform better in their projects. However, the high standard deviation shows that the data sets are widely spread meaning that the respondents have varied

experiences in M&E which varies according to their positions they hold. In terms of the number of organizations respondents had worked in, on average, staff had worked in 1.74 (=2) organizations with a standard deviation of 0.891. This implies that majority of the respondents had only acquired most of their experiences internally with very few having acquired from other organizations. Further, the results show that the three NGOs (AA, STC and CREADIS) have a good mix of youth (who have new knowledge) and the old (who have the wide experiences in the field of M&E). Although staff work experiences were fairly good, a lot of training, both formal and on the job training are needed in the three NGOs in order to develop the staff current capacities. As Acevedo, Rivera, Lima, & Hwang (2010) observe, both formal training and on the job experience are important in developing evaluators.

4.5.9 Challenges with M&E Human Resource Capacity

The researcher was sought to get the insight of challenges associated with M&E human resource capacity in the three NGOs (AA, STC, and CREADIS). An interview was carried out with head of M&E unit of the three NGOs. The results were summarized under the following themes in table 4.21.

Table 4.21 showing thematic challenges experienced with Human resource capacity of staff in MHPs in (AA, STC, and CREADIS)

Lack of Relevant Skills	**Negative Attitude towards M&E Training**	**Organizational Politics towards M&E**
Some staff hired to implement MHPs lack relevant skills in community development and as a result fail to conduct their activities effectively and account for them.	Some staff have formed opinions about M&E training and think they already know what the training is all about, and they end up carrying out the M&E activities as they have been doing previously. Further, some staff attend training just to get allowances and not the objectives of the training.	Some staff don't understand the concept M&E. They think M&E is about finding faults in their work and so they end up creating enmity with M&E officers when asked to give reports on time. In addition, some staff see themselves as superior to M&E officers because of their relative bigger salaries and therefore they cannot listen to them.

From table 4.21 above, lack of relevant skills among staff was highly mentioned where some staff hired to implement MHP lack relevant skills community development, and as a result fail to conduct their activities effectively and account for them. Secondly, negative attitude towards M&E was highly mentioned, with some staff having formed opinions about M&E training and think they already know what the training is all about, therefore they end up carrying out the M&E activities as they have been doing previously. Further, some staff attend training just to get allowances and not the get the objectives of the training. In terms of organizational politics, it was revealed that some staff don't

understand the concept M&E: they think M&E is about finding faults in their work and so they end up creating enmity with M&E officers when asked to give reports on time. Further, some staff see themselves as superior to M&E officers because of their relative bigger salaries and therefore they cannot listen to M&E officers. These revelations show that challenges in M&E are deeply rooted within the organizational cultures if the three NGOs (AA, STC and CREADIS).

4.5.10 Relationship between Human Resource Capacity and Performance of Maternal Health Projects in (AA, STC, and CREADIS) Bungoma County.

The researcher was interested in finding out the degree of relationship between respondents' human resource capacity and performance of maternal health projects they are working in. Respondents were asked whether their skills and experiences help them in effective execution of project activities. Respondents were also asked to rate, on a scale of 1-5, the performance of their projects in terms of project timeliness, project effectiveness and number of deliverables achieved. A spearman's correlation coefficient (*rho*) was then calculate and summarized as shown in the table 4.22 below.

Table 4.22 showing correlation between human resource capacity and performance based on project effectiveness.

Correlations

			Human resource capacity	performance based on project effectiveness
Spearman's rho	Human resource capacity	Correlation Coefficient	1.000	.530**
		Sig. (2-tailed)	.	.000
		N	81	81
	performance based on project effectiveness	Correlation Coefficient	.530**	1.000
		Sig. (2-tailed)	.000	.
		N	81	81

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

From table 4.22, a strong correlation of 0.530 was established between human resource capacity and performance of maternal health projects in terms of project effectiveness. The correlation was significant at 0.01 level of significance (two tailed). This shows that human resource capacity in M&E is very key and necessary in the effective implementation of projects and for the project to achieve the desired results. To a large extend these findings agree with, Ngatia's (2015) results which found a positive correlation between human resources use in monitoring and evaluation and performance of agribusiness projects.

4.6 Influence of Monitoring Information Systems Adopted on Performance of Non-Governmental MHPs in Bungoma South Sub-County.

The study sought to determine the extent to which how M&E information system adopted the three NGOs (AA, STC, and CREADIS) influence the performance of their

maternal health projects in Bungoma County. The study touched on the technology employed, efficiency and usability of the MIS system employed in M&E. The views and results of the respondents are discussed below.

4.6.1 Technology Used in M&E Activities.

The researcher was interested in finding out the technology adopted in M&E activities such as data collection, analysis, storage, and dissemination of data and information in the three NGOs in Bungoma South Sub-County. The results are discussed below.

4.6.1.1 Media Used for collection of M&E data

Respondents were asked to indicate the media used in collection of M&E data. The choices given were 1) hard paper questionnaires, 2) tablets/smartphones and 3) Both hard paper questionnaires and tablets/smartphones. A cross tabulation of organizations and media for data collection was performed to find out which media of data collection is used in each organization. The results were summarized the table 4.23 below.

Table 4.23 Showing a Cross Tabulation of Organizations and Media for Data Collection Used

Organization	Hard paper questionnaires	Tablets/smartphones	Both tables/smartphones and hard paper questionnaire.	Total
AA	19 (70.4%)		8 (29.6%)	27(33.3 %)
STC	3(14.3%)		21 (85.7%)	21(25.9 %)
CREADIS	26(75.8%)		8(24.2%)	33(40.7)
Total	**47(58.0%)**		**34(42.0%)**	**81(100%)**

From the table 4.23 above, 70.4% of the respondents in AA indicated they used hard paper questionnaires, while 29.6% said they used both hard paper questionnaire and tablets/smartphones as a media for data collection. In STC, 85.7% of the respondents said they use both hard paper questionnaires and tablets/smartphones while only 14.3% said they use hard paper questionnaires. As for CREADIS, 75.8% indicated they use hard paper questionnaires while 24.2% indicated they use both tablets/smartphones and hard paper questionnaires, as media for data collection of M&E data. From the three NGOs, no organization uses purely tablets/smartphones for their M&E data collection. The results show that apart from STC, which has totally embraced new technologies for data collection, the rest of the NGOs (AA and CRAEDIS) are yet to embrace and adopt modern technology in M&E data collection. This shows that even with the new technology, use of hard paper questionnaires cannot be ruled out completely because some situations demand

the use of hard paper questionnaires. This is explained by 42.0% of the respondent who say their organizations uses both hard paper and smartphones/tablets for data collection.

4.6.1.2 Technology Employed in Data Analysis

Respondents were asked about the technology used in data analysis in their organizations. Respondents were therefore asked to pick from the following choices given: 1) MS excel 2) MS Access, 3) SPSS software, 4) STATA software, and write any other technology that was not indicated. A cross tab of organizations and technology of data analysis is summarized in the table 4.24 below.

Table 4.24 showing a cross tabulation of organization and technology for data analysis.

Name of the organization	MS Excel	MS Access	SPSS software	STATA software	Other	Total
AA	26(96.3%)		1(3.7%)			27(33.3%)
STC	19 (90.5%)		2(9.5%)			21(25.9%)
CRAEDIS	33(100%)					33(40.7%)
Total	**78(96.3%)**		**3(3.7%)**			**81(100%)**

From the table 4.24 above, majority of the respondents (96.3%) were in agreement that their organizations use MS excel in data analysis with only 3.7% saying SPSS software is used in their organization. In AA, 96.3% said MS Excel is used while on 3.7% said SPSS is used with regard to data analysis. In STC, 90.5% of the respondents said MS Excel while only 9.5% saying SPSS software is used in data analysis. In CREADIS, all the respondents said their organization uses MS Excel in data analysis. From the results, it shows that all the NGOs (AA, STC, and CREADIS) are using basic data analysis technology of MS

Excel. That means the NGOs are yet to embrace advanced data analysis technologies like SPSS and STATA.

4.6.1.3 Storage of Project Data and Reports

The respondents were asked about how their organizations stores project data and reports. Respondents were asked to pick from: 1) paper files and cabinets, 2) office/personal computers, 3) central servers within their organizations, and 4) web-based servers (cloud). A cross tabulation of organization and method of data storage is shown in the table 4.25 below.

Table 4.25 showing a Cross tabulation of Organization and Data Storage Method

Org.	**1**	**2**	**3**	**4**	**12**	**13**	**14**	**S**
AA	9 (33.3%)	1 (3.7%)	1 (3.7%)	2 (7.4%)	10 (37.0%)	3 (11.1%)	1 (3.7%)	27 (33.3%)
STC	1 4.8%		20 95.2%					21 25.9%
CREADIS	22 66.7%	1 3.0%	2 6.1%		5 15.2%	3 9.1%		33 40.7%
Total	32 39.5%	2 2.5%	23 28.4%	2 2.5%	15 18.5%	6 7.4%	1 1.2%	81 100%

Key

1= paper files and cabinets, 2=office/personal computers, 3= central servers within the organization, 4=web-based servers (cloud)

From table 4.25 above, 39.5% of the respondents indicated their organization uses paper files and cabinets, 2.5% said office/personal computers, 28.4% indicated central servers within the organization, 2.5%indicated web-based servers with regard to storage of project data. 18.5% indicated both paper files and cabinets and personal computers, 7.4%

said both paper files cabinets and files and central servers within the organization, while only 1.2% said web-based servers. In AA, with regard to method of data storage, 33.3% said paper files and cabinets, 3.7% each said personal computers and central servers respectively, 7.4% said web-based servers (cloud), 37.0 indicated both paper files and cabinets and personal computers, 11.1% indicated both paper files cabinets and files and central servers within the organization, while 3.7% indicated web-based servers. In STC, 4.8% paper files and cabinets, 95.2% indicated central servers within their organization with regard to storage of project data and reports. In CREADIS, 66.7% of respondents indicated paper files cabinets and files, 3.0% said office/personal computers, 6.1% said central servers within the organization, 15.2% indicated both paper files and cabinets and personal computers, while 9.1% said both paper files cabinets and files and central servers within the organization with regard to storage of project data and reports. The results show that two NGOs (AA and CREADIS) largely use the old system of storage of data where paper files and cabinets are employed. This is a more insecure way and is prone to destruction, manipulation, and loss of vital information. Only STC has embraced a more secure way of project data storage where central servers have been developed in their organization. Use of Web-based in storage of data was minimally mentioned meaning the three organizations have not embrace that method of storage.

4.6.1.4 Dissemination of Project Data

Respondents were asked to indicate their organizations disseminate project data and information/reports. Respondents were to pick from the choices given as shown by the key below. The results were summarized in table 4.26.

Table 4.26 Showing A Cross Tabulation of Organization and its Method of Dissemination of Project Data and Information/Reports

Org.	**1**	**2**	**3**	**4**	**13**	**123**	**Total**
AA	5 (18.5%)		18 (66.7%)	1 (3.7%)	1 (3.7%)	2 (7.4%)	27 (33.3%)
STC			5 23.8%	16 76.2%			21 25.9%
CREADIS	2 6.1%	2 6.1%	22 66.7%		5 15.2%	2 6.1%	33 40.7%
Total	**7 8.6%**	**2 2.5%**	**45 55.6%**	**17 21.0%**	**6 7.4%**	**4 4.9%**	**81 100%**

Key

1= hard copy print outs, 2= manually using flash drives, and diskettes etc., 3= Emails, 4=any other method

From the table 4.26 above, 8.6% of the respondents indicated use of hard copy print outs, 2.5% indicated manually using flash drives, diskettes and other storage devices, 55.6% indicated use emails, 21.0% indicated other methods of data dissemination, 7.4% indicated both hard copy printouts and emails, while 4.9% indicated use of hard copy print outs, emails and other methods of data dissemination together with regard to data and information dissemination. In AA, 18.5% of respondents indicated use of hard copy print outs, 66.7% indicated use of emails, 3.7% each indicated use of other methods, identified

as power point presentations, and both hard copy print outs respectively, while 7.4% indicated use of hard copy print outs, emails and other methods of data identified as PowerPoint presentations, together with regard to data and information dissemination. In STC, majority of responds (76.2%) indicated use of other methods of data/information dissemination which included PowerPoint presentations and dashboards projections to targeted program staff. Only 23.8% of the STC respondents indicated use of emails in data dissemination. In CREADIS, majority of respondents (66.7%) indicated use of emails, 15.2% indicated us of both hard copy print outs and emails, while 6.1% each indicated use of hard copy print outs, manually using flash drives, diskettes and other storage devices and emails respectively. The results indicate the NGOs use emails to give feedback on the data and information generated, which shows that the three organizations have embraced use of technology in data dissemination. Use of emails, PowerPoint presentations, and dashboards are some of the modern technologies embraced by the three NGOs.

Strengthening the M&E system requires articulating an MIS concept, defining clear objectives and creating a vision to transform manual system into electronic (computerized) system focused on substantial improvement in the delivery of services (Khan, 2003). Use of ICT increases efficiency, speed and accuracy of data collection, storage and analysis (INTRAC, 2013). However, the findings indicate that the three NGOs (AA, STC, and CREADIS) are yet to fully embrace technology in their MIS. In data collection, the NGOs especialy AA and CREADIS, largely use hard paper questionnaires with only STC using both hard paper questionniares and tablets/smartphones. This means that a lot of time is consumed in data collection, data entry and verification, and data analysis before the information can be availed to decion makers. In data analysis all the three NGOs (AA,

STC, and CREADIS) use the basic data analysis software, MS excel, while advanced softwares such as SPSS and STATA which provide more accurate data analysis, better organization of data outputs and large number of options in data presentations were rarely mentioned. In data storage, only STC has secure servers within their organizations to store data, while in AA and CREADIS project data is still stored in paper files and cabinets, and office or personal computers. This expose project data to destruction or manipulation that may happen to them. This is in contrast to Lai, Hancock, & Muller-Praefcke (2012) which showed that NGO projects in South East Asia demonstrated the feasibility and utility of ICT technology by establishing MIS with capabilities for web-based data capture and communication across multiple project sites. However when it comes to data diseemination, all the three NGOs have embraced use of emails and other convenient methods such as dashboards. This methods avails project information to decision makers faster and on timely basis.

4.6.5 Efficiency of MIS Adopted

The researcher sought to find out how efficient the MIS adopted in the three NGOs (AA, STC, and CREADIS) is in providing timely information and use of little resources. Respondents were there asked to indicate how they agreed or disagreed with statements of on efficiency of MIS in their organizations. The results to the statements are summarized in the table 4.27.

Table 4.27 Showing Respondents Views on Efficiency Of MIS

Statements on Efficiency of MIS	Scale of measurement				
	SD	**D**	**NT**	**A**	**SA**
MIS uses little resources to collect, analyze and store data	5 (6.2%)	16 (19.8%)	24 (29.6%)	33 (40.7%)	3 (3.7%)
MIS in our organization enables faster communication of M&E data within the organization.		5 (6.2%)	10 (12.3%)	63 (77.8%)	3 (3.7%)
The current MIS in our organization needs improvement to make it more efficient.	1 (1.2%)	1 (1.2%)	14 (17.3%)	42 (51.9)	23 (24.8%)

Key SD=strongly disagree, D=disagree, NT= not sure, A=agree, SA=strongly agree, f=frequency, %=percentage

Table 4.27 above shows that cumulatively, 44.4% of the respondents agreed, 26.0% disagreed, while 29.6% were not sure, with the statement that MIS in their organization uses little resources to collect, analyze and store data. On the statement that MIS in their organizations enables faster communication of M&E data within the organization, cumulatively 81.5% of the respondents agreed, 12.3% were not sure, while 6.2% disagreed. On whether the current MIS in their organization need improvement to make it more efficient, cumulatively 80.3% of the respondents agreed, 17.3% were not sure, while only 2.4% disagreed. Although majority of respondents perceived MIS in their respective organizations as relatively fast in terms of its speed, majority (80.3%) still think that the MIS in their organization still has a room for improvement and make it better than it is currently is. This shows that performance of MIS in terms of delivering timely information is still below expectations. As pointed out by (INTRAC, 2013), investing more in simple,

relevant and current technologies in MIS such as DDG handheld devices such as smartphones and data pens can greatly improves data collection, analysis, and, providing instantaneous data access, centralized information management, improved decision making, and better designed interventions.

4.6.6 Respondents' Understanding of MIS in their Organizations

The researcher sought to find out how respondents understand their MIS in their organizations. Respondents were therefore asked to give their opinions by responding to the statements about their understanding of MIS in their organizations. The results are summarized in table 4.28.

Table 4.28 Showing Respondents' Understanding of MIS in their Organizations

Statement	**SD**	**D**	**NT**	**A**	**SA**	**T**
I have been well trained to understand the methods and tools of M&E data activities	3 (3.7%)	19 (23.5%)	15 (18.5)	34 (42.0%)	10 (12.3%)	81 (100%)
There is need for more training to understand M&E methods and tools				52 (64.2%)	29 (35.1%)	81(100%)

Key

SD=strongly disagree, D=disagree, NT= not sure, A=agree, SA=strongly agree, f=frequency, %=percentage, T=total

From the table 4.28, cumulatively 55.3% of the responds agreed, 27.2% of the respondents disagreed, while 18.5% of the respondents were not sure with the statement that, they have been well trained to understand the methods and tools of M&E data activities. However, with regard to the statement that, there is need for more training to

understand M&E methods and tools, all the respondents agree to that statement with 35.1% of them strongly agreeing. The results show even though majority of respondents have some training on the MIS in their organizations, they are not confident enough with the training they have received to perform their M&E duties well. This explain why all the respondents indicated that they need more training on the tools and methods of M&E data activities.

4.6.7 Usability of the MIS

The researcher wanted to find out the views of the respondents on how complex the MIS system to them for the three NGOs (AA, STC, and CREADIS). Respondents were asked to choose from three categories provided namely: 1) Takes time to understand and use, 2) Easy to use and understand, and 3) I don't know. The results for the three NGOs are summarized in table 4.29.

Table 4.29 showing respondents view on the complexity of MIS in their organizations

Scale of measurement	**Frequency (f)**	**Percentage (%)**
Takes time to understand and use	41	50.6
Easy to use and understand	36	44.4
I don't know	4	5.0
Total	**81**	**100**

From the table 4.29 above, majority of the respondents (50.6%) said the MIS in their organizations take times to understand and use, while 44.4% of the respondents said it is easy to use and understand in the M&E activities. Only 5.0% didn't know how complex the MIS was to them. The results show that the MIS in the three organizations needs to be adjusted to make it easier and understandable to all staff. It also means staff takes much time in understanding the MIS (tools

and methods) which may eat into project timelines and therefore delay project completion. These results are in agreement with Phiri (2015) on ISs of AVU which found out that database for the MNP was rather complicated, build in Microsoft Access, and required services of a consultant. Wherever any part of the IS is viewed as complex by the user, the more time it takes to operate which results to delay in decision making which relies on the information received. Kahura (2013) points out that it is not the complexity of the software that matters but the quality of the information generated by the system and the ability of the user to use the information to manage the project.

4.6.8 Challenges in MIS of MHPs in (AA, STC, and CREADIS)

The researcher sought to deeply understand challenges in MIS of the MHPs in the three NGOs (AA, STC, and CREADIS). Therefore, an interview was conducted with head of M&E units in the three NGOs. The results were summarized under the themes in table 4.30.

Table 4.30 showing insight into challenges in MIS of MHPs

Large number of M&E tools	***Inappropriate Usage of M&E tools***	***Insufficient Review of tools***	***Low technologic adoption in M&E***
There are a large number of tools used by staff for M&E activities some of which are not from M&E departments resulting to irrelevant data. There are so many reporting levels which may confuse staff on the tools to use when reporting different stakeholders.	Some staff don't know when to use tools: some tools are used monthly, some quarterly, some yearly yet staff are not aware.	Review of tools is rarely done meaning the tools used may not capture current information needs.	Due to little financ capital, ne technologies such a DDG devices, wel based storage server have not been full embraced. Some sta also have little IC skills which hinde them from using ne technologies in M&I

Table 4.30 above shows that large number of M&E tools was highly mentioned in challenges of MIS in MHPs. So many tools are used by staff for M&E activities some of which are not from M&E departments resulting to irrelevant data. In terms of inappropriate usage of M&E tools, some staff don't know when to use tools: some tools are used monthly, some quarterly, some yearly yet staff are not aware. In addition, there was insufficient review of tools which was rarely done meaning the tools used may not capture current information needs. And finally, low adoption of technology in M&E emerged where due to little financial capital, new technologies such as DDG devices, web-based storage servers, have not been fully embraced. Further, some staff have little ICT skills which hinder them from using new technologies in M&E.

4.6.8 Relationship MIS System Adopted and Performance of Maternal Health Projects

The researcher was interested in establishing whether there existed a relationship between MIS system adopted, and performance of projects in terms of project timeliness and to what degree. Respondents were therefore asked whether the MIS in their organizations ensures timely submission of project data and reports. They were to respond using 1) yes, 2) somewhat, and 3) no. Respondents were also asked to rate the performance of their projects in terms of project timeliness. A Spearman's correlation coefficient (*rho*) was then calculated. The results were summarized in the table 4.31.

Tabled 4.31 showing correlation between efficiency of MIS adopted and performance of maternal health projects based on project timelines

Correlations

			Efficiency of MIS adopted	Performance based on project timeliness
Spearman's rho	Efficiency of MIS adopted	Correlation Coefficient	1.000	.533**
		Sig. (2-tailed)	.	.000
		N	81	81
	Performance based on project timeliness	Correlation Coefficient	.533**	1.000
		Sig. (2-tailed)	.000	.
		N	81	81

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

From the table 4.34 above, a fairly strong correlation of coefficient of 0.533 was established between information system adopted and performance of maternal health projects for the three NGOs (AA, STC, and CREADIS). This implies that monitoring and evaluation information is a very key factor in performance of projects in terms of its

timeliness. The relation was significant at 0.01 level of significance. These findings agree with Kahura (2013) and Phiri's study findings which established positive relationships of 0.954 and 0.035 respectively between Project MIS and project performance.

4.7 Influence of Stakeholder Participation on Performance of Non-Governmental Based Maternal Health Projects in Bungoma South Sub-County.

The researcher was interested in examining how stakeholder participation in monitoring and evaluation influence performance of non-governmental based maternal health projects in Bungoma County. The views of respondents from the three NGOs (AA, STC, and CREADIS) are presented below.

4.7.1 Involvement of Stakeholders in Project M&E

Respondents were asked whether their organizations involve primary stakeholders (project beneficiaries) in any M&E activities. The results are summarized in table 4.35.

Table 4.35 showing involvement of project beneficiaries in M&E activities

Scale of measurement	**Frequency (f)**	**Percentage (%)**
Yes	79	97.5
No	2	2.5
Somewhat		
Total	**81**	**100**

Table 4.35 shows that 97.5% of the respondents said that their organization involves primary stakeholders in their M&E as opposed to 2.5% who said stakeholders were not involved. This shows that the three NGOs (AA, STC, and CREADIS) value

stakeholders' input in their project activities. this is in line with Simister (2009) views that involving stakeholder in M&E generate better M&E data and analysis.

4.7.2 Involvement of Youth and Women in M&E

The researcher was interested in finding out if the marginalized groups such as women and youth are involved in M&E activities. Respondents were therefore asked if women and youth are involved in M&E activities equally as much as men. The results were summarized in table 4.36.

Table 4.36 Showing women and youth in M&E activities

Scale of measurement	**Frequency (f)**	**Percentage (%)**
Yes	29	35.8
Not sure	32	39.5
No	20	24.7
Total	**81**	**100**

From the table 4.36 above, 39.7% of the respondents were not sure, 35.8% said women and youth are equally involved, while 24.7% said women and youth are not equally involved as much as men in M&E activities. Majority of the respondents 64.2% were both not sure, or said women and youth were not equally involved as much as men. This means that primary stakeholders are not equally represented when it comes to involvement of marginalized groups such as women and youth in M&E activities in the three NGOs (AA, STC, and CREADIS). These findings are in agreement with Were's (2014) findings which noted lower number of women in committee posisitons that managed NGO water projects in the region (lake Victoria Basin), and that their involvement did not necessarily translate into active participation in decision-making. These results show that the underlying cultural

issues that sideline women and youth in important issues that affect them still play when it comes to MHPs.

4.7.3 Involvement of other Stakeholders in M&E Activities of Maternal health Projects

The researcher sought to identify which other stakeholder were involved in the M&E activities in the three NGOs (AA, STC, and CREADIS). Respondents were asked to choose from the following: 1) other NGOs, 2) government, 3) government, 4) donors, 5) church, and 5) any other which were required to write. The results were summarized in table 4.37.

Table 4.37 Showing other Stakeholders Involved In M&E of MHPs in NGOs (AA, STC and CREADIS)

Scale of Measurement	Frequency (f)	Percentage (%)
Other NGO partners	5	6.2
Government	25	30.9
Donors	4	4.9
Church	0	0
12(other NGOs and govt)	9	11.1
23(government and donors)	13	16.0
34(donors and church)	1	1.2
123(NGOs, govt, and donors)	23	28.4
1234(NGOs, govt, donors, and church)	1	1.2
Total	**81**	**100**

From table 4.37 above, with regard to which other stakeholders are involved in M&E of their organizations, 6.2% of the respondents said other NGOs, 30.9% said

government, while 4.9% said donors. 11.1% indicated other NGOs and government, 16.0% indicated government and donors, 1.2% indicated donors and church, 28.4% indicated other NGOs, government and donors, while 1.2% indicated other NGOs, government, donors and the church. The results show that the three NGOs (AA, STC, and CREADIS) involve various stakeholders and was shown when majority of respondents (56.6%) indicated more than one stakeholder when choosing stakeholders involved in their M&E. This is in line with WHO (2006) observation that in order to ensure effective M&E for Maternal and Newborn Health (MNH), partnerships should be established with different stakeholders, including the communities as well as other non-health sectors.

4.7.4 Areas of Stakeholder Involvement in M&E

The researcher sought to find out from respondents which areas stakeholders were involved in M&E. Respondents were required to choose from the following areas by ticking every area that applies: 1) data collection, 2) data analysis, 3) data dissemination, 4) providing information, and 5) decision making. The results were summarized in table 4.38 below.

Table 4.38 showing respondents views on areas of stakeholder involvement in M&E

Scale of Measurement	Frequency (f)	Percentage (%)
Data collection	24	29.6
Data analysis	1	1.2
Data dissemination	2	2.5
Providing information	32	39.5
Decision making	0	0
Data collection and providing information	10	12.3
Data dissemination & decision making	4	4.9

Data collection, analysis & dissemination	1	1.2
Data collection, providing information and decision making	6	7.4
Data dissemination, providing information, decision making	1	1.2
Total	**81**	**100**

From table 4.38 above, with regard to areas that stakeholders are involved in M&E, 39.5% of the respondents indicated providing information, 29.6% said data collection, 2.5% indicated data dissemination, while 1.2% said data analysis. 12.3% of the respondents indicated that stakeholders were involved in both data collection and providing project information, 4.9% said both data dissemination and decision making, 1.2% said data collection, analysis, and dissemination, 7.4% indicated data collection, providing information and decision making, while 1.2% data dissemination, providing information, decision making, as multiple areas in M&E where stakeholders are involved. The results show that stakeholders are involved in multiple areas of M&E in the three NGOs (AA, STC, and CREADIS). However, the results show that stakeholders are largely involved in less technical areas such as providing information and few in data collection. Involvement of stakeholders reduces significantly when it comes to more technical areas such as data analysis, data dissemination, and decision-making areas of M&E. Because of the perceived lack of technical expertise among project stakeholders to conduct such activities, M&E officers believe that involving stakeholders in technical in technical areas of M&E might compromise the quality of M&E data. This view is in agreement with Simister's (2009) who believes that in developing more extractive tools or methodologies for data collection and analysis, service users can be used as passive providers of information during monitoring, review or evaluation processes.

4.7.5 Stakeholder Participation Influence on Implementation of M&E Activities

Respondents were asked to give their view on whether stakeholder involvement in M&E slows down implementation of M&E activities. Respondents were asked indicate how they agreed or disagreed with that statement. The views of the respondents are summarized in the table 4.39.

Table 4.39 Showing respondents view on influence of stakeholder participation on Implementation of M&E in the three NGOs (AA, STC, and CREADIS)

Scale of measurement	**Frequency (f)**	**Percentage (%)**
Strongly Disagree	3	3.7
Disagree	25	30.9
Not sure	6	7.4
Agree	31	38.3
Strongly Agree	16	19.8
Total	**81**	**100**

From the table 4.39, cumulatively, 58.1% of the respondents agreed, 34.6% disagreed while 7.4% of the respondents were not sure with the statement that stakeholder participation slows down implementation of M&E activities among the three NGOs (AA, STC, and CREADIS). The results show a mixed perception of respondents on the involvement of stakeholders in M&E activities. This means that stakeholders' participation

in M&E activities may or may not hinder effective implementation of M&E. This is in agreement with (Mugo & Oleche, 2015) findings that stakeholders' participation in implementation of M&E had a negative effect in the short run.

4.7.6 Need for stakeholder involvement in M&E activities in maternal health NGOs (AA, STC, and CREADIS)

The researcher sought to find out from respondents whether there was need to involve stakeholders more. Respondents were therefore asked to state whether stakeholder participation as was currently needed to improved. The results were summarized in table 4.40 below.

Table 4.40 Showing Need for Stakeholders' Involvement in M&E of Maternal Health Projects in The Three NGOs (AA, STC, & CREADIS)

Scale of measurement	Frequency (f)	Percentage (%)
Yes	69	85.2
No	12	14.8
Total	**81**	**100**

From table 4.40 above, 85.2% of the respondents think stakeholders' participation need to be improved while only 14.8% said no to improvement of stakeholders as currently is. The results show a strong need to involve stakeholders more in M&E activities as is currently done in their respective organizations, meaning that the three NGOs are missing valuable stakeholders' input in their M&E activities.

4.7.7 Challenges with Stakeholder Involvement in M&E of MHPs in (AA, STC, and CREADIS)

The researcher sought to understand deeply the challenges experienced with involving stakeholders in M&E of MHPs in (AA, STC, and CREADIS). The researcher held an interview with head of M&E units in the three NGOs. The results were summarized under the themes as shown in table 4.41 below.

Table 4.41 showing insight into challenges with stakeholder Participation in M&E of MHPs in AA, STC, and CREADIS

Delay in Data Submission	**Low commitment from project stakeholders**	**Low Education levels and capacities amongst stakeholders**	**Unreliable data generated by stakeholders**
Some stakeholders delay to release project data unless you pay them.	Some community members have private errands they run which can give divided attention to M&E project activities.	Some stakeholders have low education levels and therefore they can understand and interpret M&E tools appropriately. In addition, some stakeholders are too old to conduct M&E activities effectively.	Some community members forge data when they feel that the stipends they receive are too low and not worthy their time to conduct them.

From table 4.41 above, delay in data submission was highly mentioned with some stakeholders delaying to release project data unless you pay them. Further, some stakeholders offer low commitment to M&E work as some have private errands they run which can give divided attention to M&E project activities. Low education levels and capacities was also mentioned where some stakeholders could not understand and interpret M&E tools appropriately; others are too old to conduct M&E activities effectively. This is in agreement with UNFPA (2001), observation that community participation can be constrained by lack of literacy skills, insufficient time, the intensity of analytical work to be undertaken during the evaluation. Additionally, data generated by some stakeholder was deemed unreliable as some stakeholders forged data when they feel that the stipends they receive are too low and not worthy their time to conduct them. These revelations show that stakeholders involvement in M&E can sabotage project progress as a result of delays, poor quality data, and lack of commitments to M&E work.

4.7.8 Relationship Between Stakeholders' Participation and Performance of Maternal Health Projects (In Terms of Project Deliverables)

The researcher was interested in establishing whether a relationship exists between stakeholder participation in M&E activities and performance of project activities in terms of number of project deliverables. Respondents were therefore asked whether stakeholder involvement in M&E activities contribute to achievement of key project activities/milestones. Respondents were to respondent with 1) yes, 2) no, and 3) a little. Respondents were also asked to rate performance of projects in terms of number of deliverables us a scale of 1 to 5 with one being little performance and 5 being highest

performance. A spearman's coefficient correlation (*rho*) was then calculated. The results were summarized in table 4.42 below.

Table 4.42 Showing Correlation between Stakeholder Participation and Performance of Projects in the NGOs (AA, STC, & CREADIS)

Correlations

			Stakeholder involvement in M&E	Performance based on number of project deliverables
Spearman's rho	Efficiency of MIS adopted	Correlation Coefficient	1.000	-.489**
		Sig. (2-tailed)	.	.000
		N	81	81
	Performance based on project timeliness	Correlation Coefficient	-.489**	1.000
		Sig. (2-tailed)	.000	.
		N	81	81

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

From table 4.42 above, a moderate negative correlation coefficient of -0.489 was established indicating existence of a significant negative relationship at 0.01 level of significance. This shows that stakeholder participation negatively influences performance of projects in terms of achievement of major project milestones/deliverables. This means increasing stakeholder involvement would negatively affect the project in terms of achieving major milestones. These results confirm Mugo & Oleche (2015) stakeholders' participation in implementation of M&E had a negative effect in the short run, and that too much stakeholders' involvement could lead to undue influence on M&E functions thus reducing the likelihood of M&E system implementation.

4.9 Regression Analysis

The researcher was also interested in quantifying the relationship between M&E system and performance of maternal health projects in the three NGOs. The researcher therefore conducted a multiple regression with independent variables: knowledge of M&E plans, human resource capacity, MIS adopted and stakeholder participation and dependent variable: project performance based on project timeliness. A regression equation of ($Y = \beta0 + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \varepsilon$) was used. The results were summarized as shown in table 4.44 below.

Table 4.44 showing multiple regression analysis between variables in M&E system and performance of maternal health projects based on Number of deliverables

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.087	.351		11.641	.000
	knowledge of M&E plans	.073	.220	.034	.330	.074
	experience and skills in M&E	.225	.142	.176	1.590	.016
	MIS adopted	.282	.094	.330	2.988	.004
	stakeholder participation	-.297	.105	-.297	-2.833	.006

a. Dependent Variable: performance based on number of project deliverables

From table 4.44 above, the relationship of variables was illustrated in the following equation:

Y= 4.087 +0.073X1+0.225X2+-0.282X3+0.297X4

The regression equation indicates that, taking all the variables at a constant zero, performance of maternal health projects will be at 4.087. The equation also indicates that taking all independent variable constant at zero, a unit increase in knowledge of M&E work plans would lead to a 0.073 increase in performance of MHPs in terms number of deliverables. Further holding all other independent variables at a constant zero, a unit increase in human resource capacity would lead to a 0.225 increase in performance of maternal health projects in terms number of deliverables. Holding all other independent variables at a constant zero, a unit increase in MIS would lead to a 0.282 increase in performance of maternal health projects in terms number of deliverables. Finally, holding all other independent variables at a constant zero, a unit increase in stakeholder participation would lead to a -0.297 increase in performance of maternal health projects in terms number of deliverables. Therefore, all the variables had a significant influence of on performance of maternal health projects in NGOs Bungoma county with M&E plans having the least influence.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings, discussions on findings, conclusions and offers recommendations based on the findings and challenges of the study. The section also provides suggestions for further studies. Conclusions were made from the literature reviewed and findings of the study.

5.2 Summary of the Findings

The study assessed the influence of M&E work plans influence, human resource capacity for M&E, nature of MIS adopted, and stakeholder participation in M&E, on performance of non-governmental based maternal health projects in Bungoma County. Three NGOs (AA, STC, and CREADIS) were involved.

In reference to the profile of the respondents in terms of gender, sex, and position they hold in their organizations, out of 81(80.2%) of the respondents, majority of the respondents were male (54.3%) compared to 45.7% of women. Further, 61.7% of the respondents were cumulatively aged between 18-35, while 38.3 %% were above 35 years of age. In terms of positions they hold in their organizations, 55.6%, 13.6%, 11.1%, 11.1%, and 8.6% were field staff, M&E officers, volunteers, interns, and project/programme managers respectively.

5.2.1 Influence of M&E Plans on Performance of Non-Governmental Maternal Health Projects in Bungoma South Sub-County

The study found out that only 38.3% of respondents were well trained M&E plans. As a result, nearly half of the respondents claimed not to understand the components of the M&E plans. This explains why a fairly strong correlation (0.607) was established between knowledge of M&E plans and project performance. In this relationship, a unit increase in knowledge of M&E work plans would lead to a 0.073 increase in performance of MHPs, when all other independent variables are held at a constant zero. This means that increasing training of M&E plans among staff in MHPs would result to a stronger relationship which implies increased performance of MHPs in terms of project timeliness.

5.2.2 Influence of Human Resource Capacity in M&E and Performance of Non-Governmental Based Maternal Health Projects in Bungoma South Sub-County

The study found that three NGOs (AA, STC and CREADIS) had a qualified staff. However only 34.6% had special training in M&E while capacity development program on staff was very low averaging two trainings in a reporting period. A moderate correlation of 0.530 was established between human resource capacity for M&E and performance of MHPs in terms of project effectiveness. A unit increase in human resource capacity would lead to a 0.225 increase in performance of MHPs in terms number of deliverables when all other independent variables held at a constant zero.

5.2.3 Influence of Monitoring Information Systems Adopted on Performance of Non-Governmental Based MHPs in Bungoma South Sub-County

The results revealed that adoption of modern technology in M&E activities such data collection, data analysis, and data storage is yet to be fully embraced in the three NGOs

(AA, STC and CREADIS). There was consensus among the respondents that their current MIS needed improvement to make it more efficient. A significant correlation (0.533) between MIS adopted and performance of MHPs for the three NGOs (AA, STC, and CREADIS) was established in terms of project timeliness. Further, holding all other independent variables at a constant zero, a unit increase in MIS would lead to a 0.282 increase in performance of MHPs in terms number of deliverables.

5.2.4 Influence of Stakeholder Participation on Performance of Non-Governmental Based Maternal Health Projects in Bungoma South Sub-County

The results revealed inequity primary stakeholder involvement in terms of gender and age. Other NGOs, government ministries, and donors were also involved in M&E of the three NGOs (AA, STC, and CREADIS). Worth noting is that Project stakeholders are mostly involved in less technical areas of M&E such data collection and providing information, with low involvement observed in technical areas of M&E such as data analysis, dissemination, and decision making. This is because of the perceived low educational levels, divided attention and delays in M&E implementation when stakeholders are involved. However, there was strong need to involve stakeholders more in M&E in the three NGOs to enrich M&E data. A fairly strong correlation coefficient of 0.489 between stakeholder participation in M&E and performance of maternal health projects in terms of achievement of major project milestones/deliverables in the three NGOs (AA, STC, and CREADIS).

5.2.5 Influence of Monitoring and Evaluation systems and Performance of Non-Governmental Based Maternal Health Projects

A regression equation generated, quantified the relationship between M&E planning, human resource capacity, MIS adopted and stakeholder participation, and performance of MHPs as follows: Y= 4.087 +0.073X1+0.225X2+-0.282X3+0.297X4. In this equation, taking all the variables at a constant zero, performance of MHPs will be at 4.087.

5.3 Conclusion

The study concluded that M&E systems in the three NGOs (AA, STC, and CEADIS) has an influence influence on performance of MHPs. This was shown by a performance of 4.087 when all other independent variables are at a constant zero. Aspects of M&E such M&E plans, human resource capcaity in M&E, M&E information system and stakeholder particaption in M&E were shown to infuence performance of MHPs. A strong relationship (0.607) was established between M&E plans and performance of MHPs in terms of project timeliness. It was establsihed that a unit increase in knowledge of M&E work plans would lead to a 0.073 increase in performance of MHPs when all other independent variables at a constant zero. It means therfore that this relationship could be improved more emphasis being place staff training on M&E plans.

The study also concluded staff human resource capacity in M&E influences performance of MHPs. This was shown by a fairly strong coefficient correlation of 0.530 established between human resource capacity and performance of MHPs. A unit increase in human resource capacity would lead to a 0.225 increase in performance of MHPs in terms number of deliverables when other independent variables are held constant.

In addition, it was concluded that MIS adopted for M&E has an influence on performance of MHPs. With a strong correlation coefficient of 0.533, a unit increase in MIS would lead to a 0.282 increase in performance of MHPs in terms project deliverables when all the independent variables are at a constant zero. It follows therefore that performance of MHPs can be improved if the organizations can invest in modern technology in their M&E activities.

Finally, the study concluded that stakeholder involvement in M&E of MHPs had some negative influence on their performance (-0.489). A unit increase in stakeholder participation would lead to a -0.297 increase in performance of MHPs in terms number of deliverables when all other independent variables are held at a constant zero. This means that too much stakeholder involvement in M&E would slow down performance of MHPs in the NGOs (AA, STC, and CREADIS). Therefore, stakeholder involvement should be carefully managed so as to enrich quality of M&E data and also ensure that project delivery is not slowed down.

5.4 Recommendations for Policy and Practice

Based on the findings of the study, the following recommendations were generated:

- The study recommends that a programme/project managers of the MHPs in the three NGOs (AA, STC, and CREADIS) should engage the Bungoma County technical working group in health to train their staff on M&E plans, harmonize their activities and job descritpions to match their M&E plans, and ensure that activities are tailored to achievement of county maternal health goals.
- The programme/project managers should ensure that training on M&E roles and activities is increased from the current average of 2 trainings per reporting period

to at least twice a month. The training should include neglected areas such as data quality, data storage, analysis and use, and log frames and work plans. Further training should be placed staff attitude change towards M&E training beneficial to their execution of MHP activities.

- The study recommends that three NGOs conduct a routine data quality assurance (RDQA) in order to detect M&E areas that staff in their organizations have difficulties in and recommend relevant training in the areas. This will be vital in enhancing execution of project activites and generating quality, reliable and timely data.
- The study recommends that the three NGOs (AA, STC and CREADIS) invest in ICT in the MIS of their organizations. These include such DDG devices (smartphones and tablets) in data collection, advanced data analysis softawares (such as SPSS and STATA) and web-based servers (cloud) that will ensure accuracy, timeliness and security project data and information.
- To enrich the effectiveness of maternal health project activities using quality M&E data and information, the study recommends involvement of primary beneficiaries in key M&E areas such as data collection, M&E data dissemination, and decion making. This should be carefully be done, at least annually, so that their involvement does not hinder or delay project execution.
- The study recommends exchange visits amongst the three NGOs implementing maternal health projects in bungoma County so as they can learn best M&E best practices from each other.

5.4.1 Recommendations for further studies

The study recommends further inquiries in the following areas:

- Influence of donors priorities on performance of maternal health projects.
- Influence on organizational policies on performance of M&E systems in NGOs.

REFERENCES

Acevedo, G. L., Rivera, K., Lima, L., & Hwang, H. (2010). Challenges in Monitoring and Evaluation: An Opportunity to Institutionalize M&E Systems. *Fifth Conference of the Latin America and the Caribbean Monitoring and Evaluation (M&E) Network.* Washington D.C: World Bank.

Agutu, H. (2014). Factors Influencing Implementation of Monitoring and Evaluation of School Feeding Programs by Service Providers in Kenya, (A Case of Langata Sub-County). *Master's Thesis*, 44-45.

AHMED, Z. U. (2004). ACCOUNTABILITY AND CONTROL IN NON-GOVERNMENTAL – A CASE OF BANGLADESH. *Fourth Asia Pacific Interdisciplinary Research in Accounting Conference* (pp. 1-25). Manchester : UNIVERSITY OF MANCHESTER.

Biddix, D. J. (2016). *Instrument, Validity, Reliability.* Retrieved from Research Rundowns: https://researchrundowns.com/quantitative-methods/instrument-validity-reliability/

Bullen, P. B. (2014). *How to create a Monitoring and Evaluation System*. Retrieved from tools4development: http://www.tools4development.org/resources/how-to-create-an-monitoring-and-evaluation-system/

Carman, J. G. (2007). Evaluation Practice Among Community-Based Organizations. *American Journal of Evaluation*, 66-75.

Chaplowe, S. G. (2008). Monitoring and Evaluation Planning. *Guidelines on Monitoring and Evaluation Planning*(46).

CHILD SURVIVAL AND HEALTH GRANTS PROGRAM (CSHGP): Technical Reference materials: Monitoring and Evaluation . (2007). USAID.

Clark, J. (2000). *Civil Society, NGOs, and Development in Ethiopia A Snapshot View*. Washington D.C: World Bank.

Cleaver, F. (1999). Paradoxes of participation: Questioning participatory approaches to development. . *Journal of International Development*, 597-612.

Davies, R. (2001, April 12). *Monitoring and Evaluating NGO Achievements.* Retrieved from Monitoring and Evaluation NEWS: http://www.mande.co.uk/docs/arnold.htm

DFID. (2010). *Youth Participation in Development: A guide for Development Agencies and Policy Makers.* London: DFID–CSO Youth Working Group.

Emmanuel, Z. N. (2015, May 11). *The State of Monitoring and Evaluation of NGOs' Projects in Africa.* Retrieved from https://www.linkedin.com/pulse/state-monitoring-evaluation-ngos-projects-africa-yannick-emmanuel

FIMC. (2009). Strengthening Monitoring and Evaluation System (SMES) Project. *SMES Monitoring and Evaluation Training Manual*, 16-22.

Garbutt, A. (2013). Monitoring and Evaluation . *A Guide for Small and Diaspora NGOs*, 10-11.

Githika, M. S. (2013). Influence of Project Management Practices on Implementation f HIV and AIDS Projects: A Case of Civil Society Organizations in Imenti North Subcounty, Meru County Kenya. *Master's Thesis*, 1-96.

HENNET. (2014). *STRATEGIC PLAN 2014 - 2018.* Nairobi: HEALTH NGOs NETWORKS.

IFAD. (2010). Conducting performance monitoring and evaluation. In IFAD, *IFAD DECISION TOOLS FOR RURAL FINANCE* (pp. 61-69). Rome: U. Quintily.

IFRC. (2011). *Project/programme monitoring and evaluation (M&E) guide.* Geneva.

INTRAC. (2013). New technologies in monitoring and evaluation: can we push the boundaries? (55).

Kacapor-Dzihic, Z. (2011). *Monitoring and Evaluation Needs Assessment Report.* Sarajevo: Technical Assistance for Civil Society Organisations.

Kahura, M. N. (2013). The Role of Project Management Information Systems towards the Success of a Project: The Case of Construction Projects in Nairobi Kenya . *International Journal of Academic Research in Business and Social Sciences* , 104-115.

Kamau, C. G., & Mohamed, H. B. (2015). Efficacy of Monitoring and Evaluation Function in Achieving Project Success in Kenya: A Conceptual Framework . *Science Journal of Business and Management*, 82-94.

Karani, F. N., Bichanga, W. O., & Kamau, C. G. (2014). Effective use of monitoring and evaluation systems in managing HIV/AIDS related projects: A case study of local NGOS in Kenya. *Science Journal of Business and Management*, 67-75.

Kareithi, R. N., & Lund, C. (2012). Review of NGO performance research published in academic journals between 1996 and 2008. *Journal of Science*, 2-8.

Khan, K. (2003, June). *Strengthening of Monitoring and Evaluation System.* Islamabad.

Kimonyi, A. W. (2010). The Relationship between Monitoring and Evaluation and the Success of Projects: A Case of NGO-Funded Projects in Kenya. *Master's Thesis*, 31-34.

Kirsch, D. C. (2013). Accountability in Children's Development Organizations . *PH.D Thesis*, 1-50.

KNBS. (2010). *KENYA DEMOGRAPHIC AND HEALTH SURVEY 2008-09.* Nairobi: Government of Kenya.

Kothari, C. (2004). *Research Methodology.* Mumbai: New Age International (P) LTD Publishers.

Kyalo, N. D., Mulwa, A. S., & Nyonje, R. O. (2012). *Monitoring and Evaluation of Projects and Programs.* Nairobi: Aura Publishers.

Lahey, R. (2015, November). Common issues affecting monitoring and evaluation of large ILO projects: Strategies to address them. *i-eval THINK Piece*(9).

Lai, K., Hancock, J., & Muller-Praefcke, D. (2012). *Stocktaking of M&E and Management Information Systems Selected agricultural and rural development projects in South Asia.* Rome: FAO Investment Centre .

LASZLO, K. C. (2003). *Systems Theory.* Retrieved from Encyclopedia of Science and Religion: http://www.encyclopedia.com/topic/Systems_theory.aspx

Lewis, D., & Kanji, N. (2009). *Non-Governmental Organizations and Development.* London: Routledge Publishers.

Matafeni, T. (2009). *Definitions of an M&E System*. Retrieved from Monitoring and Evaluation News: http://mande.co.uk/blog/wp-content/uploads/2008/05/january-2009.pdf

Mbiti, V. M., & Kiruja, D. E. (2015). Role of Monitoring and Evaluation on Performance of Public Organization Projects in Kenya: A Case of Kenya Meat Commission. *International Journal of Innovative Development & Policy Studies*.

MEASURE EVALUATION. (2015). *Assessment of the Effectiveness of Malaria Monitoring and Evaluation Regional Workshops and Online Training Course.* Chapel Hill: MEASURE EVALUATION.

MOH-K. (2016). *One Monitoring and Evaluation Framework for the Health Sector in Kenya: The Kenya Health Data Collaborative Report.* Nairobi: Ministry of Health-Kenya.

MOH-Kenya. (2013). *Baseline Capacity Assessment Report on M&E Functions Division of Reproductive Health* . Nairobi: Ministry of Health Kenya.

Mugenda, O. M., & Mugenda, A. G. (2003). *RESEARCH METHODS: Quantitative and Qualitative Approaches.* Nairobi: Acts Press.

Mugo, P. M., & Oleche, D. M. (2015). Monitoring and Evaluation of Development Projects and Economic Growth in Kenya . *International Journal of Novel Research in Humanity and Social Sciences*, 59-60.

Muzinda, M. (2007). Monitoring and Evaluation Practices and Challenges of Gaborone Based Local NGOs Implementing HIV/AIDS Projects in Botswana . *Dissertation*, 12-142.

Ngatia, N. P. (2015). Influence of Monitoring and Evaluation Systems Use on Performance of Non-governmental Organizations: A Case of Agribusiness Projects in Murang'a County, Kenya. *Master's Thesis*.

NGO CONNECT. (2012, May 10). *Monitoring and Evaluation (M&E) System Overview*. Retrieved from NGO CONNECT enews: http://www.ngoconnect.net/documents/592341/0/Monitoring+Evaluation+system+Overview

Nielsen, S. K. (2012). The implementation of an information system in a non-profit organization in a developing country: Challenges and essential factors to take into consideration in the preliminary work and implementation process .

Nowduri, S. (2012). Management information systems and business decision making: review, analysis, and recommendations . *Journal of Management and Marketing Research* , 1-2.

Nyakundi, A. A. (2014). Factors Influencing Implementation of Monitoring and Evaluation Processes on Donor Funded Projects; A Case Of Gruppo Per Le Relazioni Transculturali -Grt Project in Nairobi, Kenya. *Master Thesis*.

Odhiambo, F. O. (2013, May 3). *THE 12 COMPONENTS OF M&E SYSTEMS.* Retrieved from MONITORING AND EVALUATION BLOG: https://evaluateblog.wordpress.com/2013/05/03/the-12-key-components-of-me-systems/

OECD. (2006). The Challenge of Capacity Development WORKING TOWARDS GOOD PRACTICE. *DAC Guidelines and Reference Series*.

Ooko, S. (2014). *NGOs and development in Africa: Lessons for donors.* Retrieved from Thompson Reuters Foundation News: http://news.trust.org//item/20140303151017-208vf/

Pathfinder International. (2016). Monitoring and Evaluation and Management Information Systems (MIS). *SERIES 2 ORGANIZATIONAL MANAGEMENT*, 1-28.

Payne, T. (2016). *What is a Pilot Study? - Definition & Example.* Retrieved from http://study.com/academy/lesson/what-is-a-pilot-study-definition-example.html

Pearce, J. A., & Robinson, R. B. (2004). *Strategic Management: Formulation, Implementation, and Control (Hardcover).* South Carolina: Irwin/McGraw-Hill.

Phiri, B. (2015). Influence of Monitoring and Evaluation on Project Performance: A Case Of African Virtual University, Kenya . *Master's Thesis*, 1-60.

Prabhakar, G. P. (2008). What is Project Success: A Literature Review. *International Journal of Business and Management*, 1-10.

Rahman, S. A., Parkhurst, J. O., & Normand, C. (2003). *Maternal Health Review Bangladesh* . Dhaka: Government of Repuplic of Bangladesh.

Rajalahti, R., Woelcke, J., & Pehu, E. (2005). Monitoring and Evaluation for World Bank Agricultural Research and Extension Projects: A Good Practice Note. *Agricultural and Rural Development Discussion Paper 20*.

Ramadan, M. A., & Borgonovi, E. (2015). Performance Measurement and Management in Non-Governmental Organizations. *IOSR Journal of Business and Management (IOSR-JBM)*, 70-76.

SFCG. (2010). *Monitoring and Evaluation Plan Module* . UKAID.

Shuttleworth, M. (2016, October 3). *Survey Research Design.* Retrieved from EXPLORABLE Think outside the Box: https://explorable.com/survey-research-design

Simister, N. (2015). M&E Plans. *INTRAC Publications*, 1-3.

Simister, N., & Smith, R. (2009). Developing M&E Systems for Complex Organisations: A Methodology. *International NGO Training and Research Centre*.

Sirker, K., WorldBank, & Ezemenari, K. (2010). Participatory Monitoring and Evaluation: Principles, Action Steps, Challenges. 4-22.

Srinivas, H. (2015, September 2). *Towards a Gender Analysis Framework to assist the application, adoption and use of Environmentally Sound Technologies.* Retrieved

from GDRC Reseaarch Output E-058: Global Development Research Center: http://www.gdrc.org/gender/gender-ests.html

Standards for a Competency-based Approach to Monitoring and Evaluation Curricula & Trainings . (2009). Geneva: UNAIDS.

Stetson, V. (2011). *Monitoring and Evaluation (M&E) Guide.* Baltimore. Retrieved from http://www.crsprogramquality.org.

SU, Y. (2010). The failure of the American ABC HIV prevention model in Botswana. *Studies by Undergraduate Researchers at Guelph*, 93-100.

Taylor, L. (2001). *Good Monitoring and Evaluation: Guidance notes.*

The National Council of NGOs. (2014). *Membership*. Retrieved from The National Council of NGOs Website: http://www.thengocouncilkenya.org/index.php/membership.html

Tulema, W. H. (2014). MONITORING AND EVALUATION PRACTICES AND CHALLENGES OF LOCAL IN ETHIOPIA. *Masters Thesis*, 81-84.

UNAIDS. (2009). 12 Components Monitoring & Evaluation System Assessment. *Guidelines to Support Preparation, Implementation and Follow-Up Activities* , 4-8.

UNAIDS. (2009). *Standards for a Competency-based Approach to Monitoring and Evaluation Curricula & Trainings.* Geneva: UNAIDS.

UNDP. (2009). HANDBOOK ON PLANNING, MONITORINGANDEVALUATING FOR DEVELOPMENT RESULTS. Retrieved from http://www.undp.org/eo/handbook

UNFPA. (2001). TOOL NUMBER 4: Stakeholder Participation in Monitoring and Evaluation. *The Programme Managers Monitoring and Evaluation Toolkit*, 3-10.

UNFPA Kenya. (2014, August 13). *Counties with the Highest Burden of Maternal Mortality* . Retrieved from UNFPA Kenya: http://kenya.unfpa.org/news/counties-highest-burden-maternal-mortality

United Nations. (2015). *The Millennium Development Goals Report* . New York: UN.

USAID. (2007). *CHILD SURVIVAL AND HEALTH GRANTS PROGRAM (CSHGP): Technical Reference Materials: Monitoring and Evaluation.* Maryland: Macro International Inc. .

USAID. (2016, September 18). *Project Starter: BETTER PROJECTS THROUGH IMPROVED MONITORING, EVALUATION AND LEARNING*. Retrieved from USAID PROJECT STARTER: http://usaidprojectstarter.org/content/project-me-plan

Walonick, D. S. (2011). *General Systems Theory.* Retrieved from Statpac Website: http://www.statpac.org/walonick/systems-theory.htm

Wanjiku, S. M. (2015). Monitoring and Evaluation Factors Influencing the Performance of Road Infrastructural Projects: A Case Study of Nyandarua County, Kenya.

Were, V. L. (2014). The Nexus of Nongovernmental Organization Water Projects, Monitoring and Evaluation, and Kenya's Water Law. *Dissertation*.

WHO. (2006). *Monitoring and Evaluation of Maternal and Newborn Health and Services at the District Level.* Geneva: WHO Press.

WHO. (2008). HEALTH INFORMATION SYSTEMS. *Toolkit on monitoring health systems strengthening*, 2.

WHO. (2014). *African Health Observatory: Country profiles*. Retrieved from Issues and challenges - Progress on the Health-Related MDGs: http://www.aho.afro.who.int/profiles_information/index.php/Botswana:Issues_and_challenges_-_Progress_on_the_Health-Related_MDGs

WHO. (2016, November). *Maternal Mortality*. Retrieved from World Health Organizations: http://www.who.int/mediacentre/factsheets/fs348/en/

World Bank. (2016, January). *Publications: Participatory Monitoring and Evaluation.* Washington D.C: World Bank. Retrieved from The World Bank Group.

Wyld, A. (2012, April 18). *Foreign aid cuts focus on accountability, Oda says.* Retrieved from CBCNEWS: http://www.cbc.ca/news/politics/foreign-aid-cuts-focus-on-accountability-oda-says-1.1165687

APPENDIX I: LETTER OF TRANSMITTAL

Dear Sir/Madam

My name is Nalianya Japheth Micah Currently pursuing my Master's Degree in Project Planning and Management at the University of Nairobi. The topic of my research is on Influence of Monitoring and Evaluation Systems on performance of Non-Governmental Based Projects in Kenya: A case of maternal Health projects in Bungoma South Sub-County.

I therefore humbly request you to participate in answering the questions in the questionnaire because you play a role in implementation of maternal health projects in your organization. Please read carefully and provide your honest opinion to the question asked. You may refuse to answer any questions that you feel uncomfortable with or withdraw any time you wish.

I assure you that the information collected is purely for academic purposes and would therefore be kept confidential. Thank you for your time.

Nalianya Japheth Micah

REG. NO. L50/82270/2015

Master Student, University of Nairobi

APPENDIX II: QUESTIONNAIRE

Dear respondent, this questionnaire is about monitoring and evaluation system in your organization and how the system influence performance of projects in your organization. Please answer all questions objectively and as honestly as possible. Your information will be kept private and confidential.

A. General Information

Organization Background

1. Name of organization_____

Please tick accordingly					
Demographic Information					
1. Age of respondent (years)	18-24	25-35	36-50	>50	
2. Gender of the respondent	M [ ]	F [ ]	Other_____		
3. Position in the organization	Program/project manager [ ]	M&E officer [ ]	Field staff [ ]	Volunteer [ ]	Intern [ ]

B Monitoring and Evaluation System

M&E Planning

4. Do you have an M&E plan in your organization?	Yes [ ]		No [ ]	Not sure [ ]	
5. Were you involved in the development of the M&E plan?	Yes [ ]		No [ ]		
6. Have you been trained on the components of the M&E plan?	Yes [ ]		No [ ]	A little [ ]	
7. Has your organization shared the M&E plan with you?	Yes [ ]		No [ ]		
Please indicate how you agree or disagree with the following statements (please tick accordingly)	**Strongly disagree (1)**	**Disagree (2)**	**Not sure (3)**	**Agree (4)**	**Strongly agree (5)**
8. I understand the various components of M&E plan.	[ ]	[ ]	[ ]	[ ]	[ ]
9. I require additional training to understand the M&E plan.	[ ]	[ ]	[ ]	[ ]	[ ]
10. Please indicate how you will describe the scope of M&E plan in your organization	Narrow scope [ ]		Wide scope [ ]	I don't know [ ]	

11. Please choose an appropriate reason for question (10) above.	a) Designed only guide activities and achieve project results only. [ ] b) Provides mechanism for training, data analysis and information use, learning mechanisms. [ ] c) I don't know [ ]				
12. My M&E work plan activities matches the in our organization's M&E plan.	**Strongly disagree (1)**	**Disagree (2)**	**Not sure (3)**	**Agree (4)**	**Strongly agree (5)**
13. How frequent are the M&E plans revised and updated?	**Quarterly [ ]**	**Semi-yearly [ ]**	**Yearly [ ]**	**Not sure [ ]**	
14. Would you say knowledge of M&E plans in place has helped you in execution of project activities? **Yes [ ] No [ ]** 15. On a scale of 1 to 5, 1 being little influence and 5 being high influence, please rate how knowledge of M&E plans have influenced your timely execution of project activities in your organization. **Rating [ ]**					

Human resource capacity in M&E (skills and working experience in M&E)

16. Please indicate your highest level of education	Primary [ ]	Secondary [ ]	Middle level college[ ]	University Degree [ ]	Master's & PH. D [ ]
17. Do you have special training in M&E apart from your academic qualification that you have personally undertaken?	Yes [ ]			No [ ]	
18. Please indicate how frequent your organization holds internal training on M&E roles and expectation.	Monthly [ ]	Quarterly [ ]	half-yearly [ ]	Yearly [ ]	Never [ ]
19. Please indicate the number of training received related to M&E received/provided to other staff during a recent reporting period (e.g. in Q1)	**Number of training _____**				
20. Areas covered in M&E training	a) Data collection tools and methods b) Data quality c) Data storage, analysis and use d) Log frames and M&E plans e) Data presentation, dissemination, and reporting f) Stakeholder partnerships and linkages				
• If yes, please describe the nature of training that you acquired:_____ _____					

_____ _					
21. Do you know your M&E roles that you are expected to perform?	Yes [ ]			No [ ]	
22. Are your M&E roles written and captured in your job descriptions?	Yes [ ]			No [ ]	
23. Do your M&E roles and activities match your job descriptions?	Yes [ ]			No [ ]	
24. Please indicate how many years of experience do you have in doing M&E work**:**	**_____years**				
25. Please indicate the number of organizations that you have served in with assigned M&E roles to you	**1 [ ]**	**2 [ ]**	**3 [ ]**	**4 [ ]**	5 or more [ ]
26. Has your working experience and skills in M&E helped you in effective execution of your project activities?	**Yes [ ]**		**No [ ]**	**A little [ ]**	

Monitoring Information system (MIS) adopted (*system for collecting, entry and analyzing, storing and dissemination of project data to decision makers***)**

27. Please select the media for collection of M&E data employed in your organization	Hard paper questionnaires [ ]		Tablets/ smartphones [ ]	Both paper and tablets/smartphones [ ]	
28. What technology is used in analysis of M&E data? (tick all that apply)	MS excel (1) [ ]	MS Access (2) **[ ]**	SPSS software (3) **[ ]**	STATA software (4) [ ]	**Other-** _____ _____ __
29. Please indicate how your organization stores project data/reports.	Paper files and cabinets [ ]	Office/personal computer [ ]	Central servers in the organization	Web-based servers (cloud)	
30. Please indicate how your organization disseminates project data/reports.	Hard copy Prints out	Manually using flash drives, diskettes etc.	Emails	Other_____ _____ _____ ____	

Please indicate how you agree or disagree with the following statements about MIS in your organization.	**Strongly disagree (1)**	**Disagree (2)**	**Not sure (3)**	**Agree (4)**	**Strongly agree (5)**
31. Information system adopted in my organization uses little resources to collect, analyze and store data.	[ ]	[ ]	[ ]	[ ]	[ ]
32. The Information system enables faster communication of M&E data within the organization.	[ ]	[ ]	[ ]	[ ]	[ ]
33. The current Information system in our organization needs improvement to make it more efficient.	[ ]	[ ]	[ ]	[ ]	[ ]
34. I have been well trained to understand the methods and tools of M&E data activities	[ ]	[ ]	[ ]	[ ]	[ ]
35. There is need for more training to understand M&E methods and tools.	[ ]	[ ]	[ ]	[ ]	[ ]

36. Please indicate how complex your MIS is using the following statements:

a) Takes time to understand and use
b) Easy to use and understand
c) I don't know

37. Do you think the MIS in your organization ensures timely submission of project reports of in your organization?
Yes [ ] Somewhat [ ] No [ ]

Stakeholder Involvement In M&E (*involvement of stakeholders such e.g. community members, government institutions, other NGOs and donors in project data collection, analysis, dissemination and decision making)*

	Please tick accordingly				
38. Does your organization involve project beneficiaries in any M&E activities?	Yes [ ]	No [ ]	Somewhat [ ]		
39. Are women and youth equally involved in M&E activities as men?	Yes [ ]	Not sure [ ]	No [ ]		
40. Which other stakeholders are involved in your project M&E?	Other NGO partners [ ]	Government [ ]	Donors [ ]	Church [ ]	Others-_____
41. Which areas of M&E are the stakeholders involved?	a) Data collection [ ] b) Data analysis [ ] c) Data dissemination [ ] d) Providing information [ ] e) Decision making [ ]				

Please indicate how you agree or disagree with the following statement	Strongly disagree [ ]	Disagree [ ]	Not sure [ ]	Agree [ ]	Strongly agree [ ]
42. Stakeholder involvement in M&E activities slows down implementation of M&E activities.					
43. Do you think stakeholders need to be involved more than are currently involved?	Yes [ ]		No [ ]		
44. Does stakeholder involvement contribute to achievement of key project activities/milestones?	Yes [ ]		No [ ]	A little [ ]	

C. PERFORMANCE OF MATERNAL HEALTH PROJECTS

Please rate the performance of projects in your organization, 1 being poor and 5 being very well, based on the following performance indicators:

Indicator	**Rank**	**Percentage (%)**
a) Timeliness		
b) Effectiveness		
c) Number of deliverables		

1. Do you think M&E system in your organization contributes to achievement of project of maternal health project goals and objectives?
   a) Yes, very much [ ]
   b) No [ ]
   c) A little [ ]

End.

Thank you for your participation in the study.

APPENDIX III: INTERVIEW GUIDE

I am interested in learning about the challenges in your M&E system employed in maternal health projects in your organization.

1. What are the challenges with M&E work plans in your organizations?

2. What challenges are experienced with staff capacity in M&E?

3. Which areas are the most challenges when it comes to M&E tools and methods of data collection?

4. What are the challenges with involvement of stakeholders in M&E?

Thank You