# INFLUENCE OF MONITORING AND EVALUATION TOOLS ON PROGRAM PERFORMANCE OF SELECTED NON-GOVERNMENTAL ORGANISATIONS IN NAIROBI COUNTY, KENYA

BY

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A Research Project Report submitted in partial fulfillment of the requirements for the award of the Degree of Master of Arts in Project Planning and Management of the University of Nairobi

## DECLARATION

This Research Project Report is my original work and has not been presented in any other university or institution of higher learning for examination or academic purposes.

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This Research Project Report has been submitted for examination with my approval as the university supervisor.

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### **DEDICATION**

This study is dedicated to my parents, Late Samwel Onyango and Dorice Onyango who graciously took me to school and perpetually motivated and inspired me to rise up to my full potential in life. To my late sister Martha Onyango whom we schooled together and incessantly urged me to the best I can be in this life. To the entire Oketch family who have supported me in various ways in my pursuit of education.

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	Page
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	V
LIST OF TABLES	viii
LIST OF FIGURES	X
LIST OF ABBREVIATIONS AND ACRONYMS	xi
ABSTRACT	xii
CHAPTER ONE: INTRODUCTION	1
1.1 Background to the Study	1
1.2 Statement of the Problem	9
1.3 Purpose of the Study	9
1.4 Objectives of the Study	9
1.5 Research Questions	10
1.6 Research Hypotheses	
1.7 Significance of the Study	11
1.8 Basic assumptions of the Study	11
1.9 Limitations of the Study	12
1.10 Delimitation of the Study	12
1.11 Definition of Significant Terms used in the Study	
1.12 Organization of the Study	13
CHAPTER TWO: LITERATURE REVIEW	14
2.1 Introduction	14
2.2 Logical Framework	14
2.3 Result Framework	
2.4 Earned Value Management	23
2.5 Performance Management Plan	27
2.6 Theoretical Framework	
2.7 Conceptual Framework	

## TABLE OF CONTENTS

2.8 Explanation of relationships of variables in the Conceptual Framework	34
2.9 Knowledge Gap	35
2.10 Summary of Literature Review	36
CHAPTER THREE: RESEARCH METHODOLOGY	37
3.1 Introduction	37
3.2 Research Design	37
3.3 Target Population	37
3.4 Sampling Procedures and Sample Size	38
3.5 Research Instruments	39
3.6 Data Collection Procedures	42
3.7 Data Analysis Techniques	42
3.8 Ethical Issues	43
3.9 Operationalization of Variables	43
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION	AND
DISCUSSION	46
4.1 Introduction	46
4.2 Questionnaire Response Rate	46
4.3 Profiles of the Respondents	46
4.4 Influence logical framework on program performance	49
4.5 Influence result framework on program performance	54
4.6 Influence Earned value management on program performance	58
4.7 Influence performance management plan on program performance	63
4.8 Program performance analysis	67
4.9 Correlational Analysis	68
CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION	AND
RECOMMENDATIONS	71
5.1 Introduction	71
5.2 Summary of findings	71
5.3 Conclusion	73
5.4 Recommendations	75
5.5 Suggestions for further research	76

REFERENCES	77
APPENDICES	
Appendix I: Transmitter Letter	84
Appendix II: Questionnaire on utilization of M&E tools	85

Table 2.1: Logframe Matrix	18
Table 2.2: Result Matrix	23
Table 2.3: Performance Management Plan Matrix	
Table 3.1: Sample Size	
Table 3.2: Operationalization of Variables	44
Table 4.1: Distribution of Respondents by Gender	47
Table 4.2: Distribution of Respondents by Age Group	47
Table 4.3: Distribution of Respondents by Level of Education	48
Table 4.4: Distribution of Respondents by Tenure of Service in the Organization	49
Table 4.5: Hierarchy narrative addresses the needs of the target group	
Table 4.6: Indicators describe how the achievement of the results will be measured	50
Table 4.7: Means of verification clearly helps track changes	51
Table 4.8: Baseline helps track changes	52
Table 4.9: Assumptions help clarify the risks	52
Table 4.10: Influence of logical framework on program performance	53
Table 4.11: Performance indicators and targets are clearly stated	54
Table 4.12: Baseline helps track changes	55
Table 4.13: Data acquisition helps track changes	56
Table 4.14: Analysed, used and reported data is utilized to improve progress	56
Table 4.15: Result framework influences program performance	57
Table 4.16: WBS contributes to schedule planning	59
Table 4.17: CBS contribute to cost tracking	59
Table 4.18: Variances forecasted and estimated at completion	60
Table 4.19: EVM performance indices contribute to acceptance of work completed	61
Table 4.20: Influence of Earned Value Management on program performance	61
Table 4.21: Performance indicators are clear to the project key stakeholders	63
Table 4.22: Data acquisition helps track changes	64
Table 4.23: Baseline data helps track changes	64
Table 4.24: Analysed, used and reported data is utilized to improve progress	65

## LIST OF TABLES

Table 4.25: Influence of Performance Management Plan on program performance	.66
Table 4.26: Program performance analysis	.67
Table 4.27: Correlation analysis for logical framework	68
Table 4.28: Correlation analysis for result framework	69
Table 4.29: Correlation analysis for Earned Value Management	69
Table 4.30: Correlation analysis for Performance Management Plan	70

## LIST OF FIGURES

Figure	1: Conceptual	Framework .				
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## LIST OF ABBREVIATIONS AND ACRONYMS

CBS	Cost Breakdown Structure
CSO	Civil Society Organisation
DoD	Department of Defense
EVM	Earned Value Management
INTRAC	International NGO Training and Research Centre
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
PMP	Performance Management Plan
USAID	United States Agency for International Development
WBS	Work Breakdown Structure

#### ABSTRACT

The purpose of this study was to examine the influence of M&E tools on the program performance of selected NGOs in Nairobi County. The study was guided by the following objectives: to assess the extent to which the use of logical framework as a M&E tool influence performance of programs of selected NGOs in Nairobi County; to assess the extent to which the use of result framework as a M&E tool influence the performance of the programs of selected NGOs in Nairobi County; to assess the extent to which the use of earned value management as a M&E tool influence program performance of selected NGOs in Nairobi County; and to assess the extent to which the use of performance management plan as a M&E tool influence program performance of selected NGOs in Nairobi County. The study adopted descriptive survey design. The data was collected through a self-administered structured questionnaire. The research instrument was piloted for validity through content related method and reliability through halfsplit criterion. A sample size of 97 NGOs was selected using stratified sampling from a target population of 3650 NGOs. The study used 194 respondents consisting of project managers and M&E staffs from the selected NGOs. Out of the 194 questionnaires that were administered, 160 questionnaires were duly filled and returned and therefore regarded as the responsive instruments and formed the basis for data analysis. This formed a response rate of 82.47%. Data was analyzed through the use of a computer software SPSS. The data collected was analyzed by descriptive statistics. Correlational analysis was conducted to determine the influence of the M&E tools on the program performance. Descriptive statistics such as frequencies and percentages were used to describe the data. The analyzed data was presented in form of tables. The study found out that logical framework is an invaluable tool for managing program performance with 81% giving a nod with a correlation coefficient of 0.983. The study also found out that result framework is a vital tool for managing program performance with 73% giving an affirmation with a correlation coefficient of 0.863. The study also found out that earned value management is a crucial tool for managing program performance with 77% asserting its significance and a correlation coefficient of 0.832. The study further revealed that performance management plan is a crucial tool for managing program performance with 71% attesting to this and a correlation coefficient of 0.967. Generally the study revealed that 73% of the respondents agreed that M&E tools influenced the program performance. However, 21% of the respondents felt otherwise. The study recommends that M&E officers and project managers be given inservice training to enhance their competencies and more resources allocated to M&E. The study further suggests that more research be carried out to determine the influence of donor demands, organisational culture, leadership skills and ICT on the program performance.

#### **CHAPTER ONE**

#### **INTRODUCTION**

#### **1.1. Background of the study**

The last decade has been marked by concerted efforts to make development programs more effective. This has seen the development community shift focus from processes to results. The development community is increasingly under pressure to account for the use of resources and to show that their policies are improving the living conditions of the program target groups. This has increased interest in the need to monitor and evaluate the results and impacts of all development programs both nationally and internationally. According to Cleland (2004) effective monitoring and evaluation require the use of M&E tools to help demonstrate results and impacts of programs. He argues that these M&E tools help program teams and other stakeholders know whether the objectives are being achieved.

These tools also provide government officials, development managers, and civil society with better means for learning from past experience, improving service delivery, planning and allocating resources, and demonstrating results as part of accountability to key stakeholders (Lock, 2007). The planning and control cycle continually offers the opportunity to change the elements of a project plan as the real situation changes once implementation commences. The management increasingly relies on the use of M&E tools to identify new information and incorporate it in the project plan. In fact, it is more important to identify, report, and respond to changes as it occurs than to get the initial estimates right. Yet there has been confusion about what M&E entails (Cleland, 2006).

Monitoring is the routine collection, analysis and use of information about ongoing development intervention (OECD, 2012). It aims to provide indications of the extent of progress and achievement by answering whether the project team is doing things right. It gives a clear picture of change that occurs during program implementation and helps respond with appropriate action. It covers activities, outputs, use of funds, indications on achievement of the objectives and unexpected effects or changes in the environment of the project (Gido, 2005). These sentiments are reinforced by Cleland (2006) argument that it provide project updates which serve as

snapshots of a moment in the project life cycle. This cascade of snapshots acts as the camera that captures reality to enhance program success.

Evaluation is the systematic and objective assessment of the achievement of an ongoing or completed project (OECD, 2012). It seeks to answer whether the project team is doing the right thing. It covers the rationale, design, implementation and results of the intervention. Thus, evaluation assesses the general framework, structure, process as well as the result (Leviton, 2003). Evaluation seeks to continually improve the delivery of the project; generally, it aims to determine whether the intervention was successful in terms of effectiveness, efficiency, relevance, impact and sustainability. Thus, it places value judgment on the information gathered in a project life cycle, including the monitoring data (Burke, 2003).

The M&E activities are reflective processes aimed at learning from the experience. The processes involve observation and collection of information, reflection (analysis and assessment of findings), decision making regarding new action to be taken. Thus, the moment program implementation begins it is the monitoring, evaluating and control processes that become the project drivers. Meredith et al. (2010) looks at M&E as the opposite side of project selection and planning.

However, monitoring differs from evaluation in a number of ways: monitoring checks whether the project implementation is on track while evaluation determines relevance, efficiency, effectiveness, impact and sustainability of the project; monitoring is continuous process with recurrent reflection cycles, while evaluation is periodic and reflection extents longer time intervals; monitoring focuses on use of funds, activities, and outputs while evaluation appraises outcomes and impacts; in complex programs monitoring takes place at each level while evaluation links the lesson learned across the different levels; monitoring is carried out by the implementation staff while evaluation is a responsibility of the senior management; and monitoring is carried out by individuals and organization implementing the program while evaluation is carried out in cooperation with external evaluators or entirely outsourced. In addition, monitoring serves as a basis for evaluation.

M&E process offer several benefits to the implementation of programs in that it steers the program by keeping track of progress besides checking whether program progress is being made

with regard to pre-established objectives and proposing measures for improvement when called for; promotes accountability by providing empirical evidence of the effectiveness of the program as well as assessing the performance of different stakeholders making them accountable to each other and to wider public (Leviton, 2003). It provides the information, in a structured and formalized manner, which allows scrutiny of the use of resources ; it focuses on causes of problems rather than the manifestation of problems thus, facilitate learning by drawing lessons from experience to continuously improve the relevance, effectiveness, efficiency, impact and sustainability of programs; encourage organizational development by engaging all members of the organization in the M&E process and sharing the responsibility for M&E and the lessons learned builds the competencies of the staff.

M&E enhances communication by identifying, clarifying, and conveying information on the project objectives and scope as well as providing numbers and facts that help explain the program logic; helps make an argument for the continuation, adjustment or termination of a programme (Lock, 2007). Poister (2003) adds that it provides the means for supporting or refuting arguments, clarifying issues, promoting understanding of the aims and underlying logic of policies, documenting programme implementation; makes it easy to garners support for the programme when important policy decisions affecting the programme must be made; and provides methods for quick visualization of difficult concepts, help determine the practicality of programs, and aid in the identification of time and resources requirements.

Despite numerous benefits, M&E still faces low prioritization compared to other activities due to limited resources which forces trade-off between using available funds for new projects activities versus conducting M&E of existing operations (Cleland, 2006). M&E also faces resistance from staff and middle management for imminent fear of negative consequences arising from admitting and revealing mistakes. Hatry & Newcomer (2010) adds that senior management similarly fears losing funding if being openly honest and transparent towards donors. The challenges are compounded by uncertainty of the overall goal of M&E as often than not, the intended use of M&E results remains vague and the goal of evaluation hazy. This causes tension between evaluations for accountability to donors against evaluations for organizational learning (World Bank, 2010). Furthermore, there is insufficient capacity to conduct comprehensive evaluations

and the difficulty of ensuring implementation of evaluation results. All these problems are contributed by often lack of basic M&E knowledge (Mackay, 2007).

Thus, the staff not only needs basic social science research skills but also encouraged to take M&E seriously. There is also need to instill a culture of transparency and openness about mistakes and failure (Mackay, 2007). Organizational cultures need to embrace the concept of failing forward which promotes learning. The donors need to clarify what types of evaluations they expect as well as encourage evaluations for learning not for demonstrating success. There is need to improve and diversify reporting formats so as to lessen tension of overall goal uncertainty. Furthermore, expert evaluators require training for their specific work contexts. The existing staff skills needs to be trained and additional capacity built for conducting evaluations and implementing results.

The M&E tools contain specific elements of performance, cost, and time that are to be controlled and establish exact boundaries within which control should be maintained. According to Pinto & Slevin (1999), the M&E tool is a direct linkage between planning and control. Thus, the M&E tools ensure that all parties interested in the project have available and on a timely basis, the information needed to exercise effective control over the project and the uncertainties that impact it. The tools give project managers the information they need to make informed, timely decisions that will keep project performance as close as possible to the project plan. Wholey, Hatry, & Newcomer (2010) recommend that the tools must collect and report information on significant elements of the plan, failure to which the control can be faulty or even totally missing.

The tools concentrate mainly on measuring various facets of output rather than intensity of activities. Thus, M&E tools are designed to: improve management of programs, projects and supporting activities to ensure programs are meeting targets, and are making optimum use of funds and other resources; help us to learn from and share experiences to improve the relevance, methods, and outcomes of programs; meet donor requirements to see whether resources are being used effectively, efficiently, and for agreed-on objectives; and provide information to enhance advocacy for policies, programs, and resources. In this study logical framework, result framework, earned value management and performance plan as M&E tools are discussed and their contribution to program performance determined.

Since the 1980s the number of NGOs has grown exponentially to the apex of the development arena. Some perceive them as the agents of service delivery in every aspect of human endeavour while for others they are just highly opinionated actors on the national and international political stage with nothing to show for their activities (Nuscheler, 2001). Despite the debate concerning the worth of NGOs, the number of NGOs has increased tremendously due to channeling of donors funds through the NGOs as oppose the traditional government-to-government aid; liberalization of markets and privatization of institutions to make them most efficient and effective for achieving economic growth; the rise of democratic space that give voice to the people in development planning (World Bank, 1997); numerous professionals including former government employees have moved to private sector and set their own NGOs due to availability of funds; and generally appealing nature of NGOs to the entire spectrum of politics.

The rise in the number of NGOs has been augmented by the comparative advantages that NGOs enjoy. The NGOs work at micro-level and are therefore; able to reach the most disadvantaged and marginalized groups who are sometimes by-passed by state agencies. In addition, they are less bureaucratic, cheaper and more cost-effective thus; provide services at relatively low cost and faster. The NGOs are also sensitive to the needs of the poor as they are embedded in their local culture. They can foster participatory approaches to development and contribute to the strengthening of civil society (INTRAC 2008). This increases ownership of the programs as the communities embrace the programs as homegrown to solve their problems.

The OECD (2012) describes NGOs as pillars of development and as indispensable actors in development cooperation. Most donors have come to channel large proportions of overall development assistance through the NGOs community. The Global perspective also shows that 10% to 15% of all aids to development countries are channeled through the NGOs (Askari, 2011). Currently, the amount of funds channeled through the NGOs is estimated to worth one trillion globally (Crawford, 2004). The NGOs have played a great role in providing basic social services such as infrastructure building, provision of basic education, undertaken agricultural extensions, raising public awareness on different development issues such as gender equity, environmental protection, filling development gap where government is short. However, there is a changing trend in the development approach globally, shifting from service provision to the

new right based approach. This international trends in NGOs-practice and donor priorities also shape the environment for local NGOs (World Bank, 2010).

United States of America and Europe have fully incorporated the principles and use of M&E tools in their programs. However, the situation is quite different in other parts of the world. For instant, in Central Asia, many Civil Society Organizations (CSOs) and specifically NGOs continue to employ experts to develop their objectives, indicators and data collection methodologies with very little participation of the beneficiaries (INTRAC 2008). In Yemeni, M&E functions of projects are carried out by the M&E department of a government agency responsible for M&E in several projects using national guidelines. Yet, the government agencies do not prioritize M&E for the projects and so the organizational structure continues to hinder effective adoption of M&E system (Furman, 2001). In Armenia, the NGOs are yet to adopt of M&E tools for the implementation of programs.

The significance of M&E has greatly increased in Africa due to stagnant and negative economic growth rates mainly linked to governance and reservations about the usefulness of development assistance. This is festered by the global demand for more accountable, responsive and efficient institutions for delivery of services to the public. Thus, M&E has become a mantra which is widely accepted by governments, Civil Society Organizations (CSOs) and donors alike. Consequently, NGOs are coming under greater pressure to review their use of both funds and private donations, and to make better use of their resources. It has become a major challenge to many NGOs to allocate their resources in a rational, cost-effective way, while ensuring that beneficial program impacts are maximized.

Less resources is generally available for the M&E of projects, often considered to be an administrative expense. As development assistance has come under greater scrutiny, increased attention has been given to the local impacts of development assistance. However, the impact of NGO projects on local communities and environments is not well understood. Many NGOs themselves are uncertain of how their projects affect the rural poor (Eckman, 1994). The development community does know enough about what is working and what is not working as well as the factors that enable or constrain success in NGOs-supported projects (Otto, 2003).

Although demand for evidence is increasing, monitoring is still predominant in NGOs M&E systems, the development of M&E systems focus mainly on inputs and outputs. Regrettably, M&E has been greatly influenced by donor demands. The M&E tools are principally designed to meet donor data requirements (OCED, 2004). However, the donor demand for M&E is mainly for accountability purposes rather than learning. Thus, there is absence of much in-depth evaluative linking actions to outcomes and impacts (Mackay, 2007). This is a clear indication that the results concepts do not yet permeate throughout the planning, budgeting and M&E systems. The conditions in which M&E are carried out vary widely, depending on the demand for information, the extent to which it is used to inform decision making and reliability of the systems that are in place to capture and transfer that information. Moreover, the information is irregular and often lacking in some cases. Due to suspicion associated with accountability, the lesson learnt is hardly incorporated to improve performance of future programs.

The use of M&E tools is gaining prominence across the continent. For instance, in Ghana, the government recognizes that M&E is essential ingredients in the planning and management of development and good governance. At present, monitoring is limited in scope and coverage (Koranteng, 2000). In Botswana, the local NGOs play a huge role by bringing the much needed services to the communities in which they operate (Hams, 2003). A lot of funds and other resources have been committed in the fight against HIV/AIDS. The donors and other stakeholders expect transparency, proper accountability and project performance from them. For example up to USD18million was approved and provided by the global fund to fight AIDS, Tuberculosis and Malaria (GFATM). This has demanded the use of M&E tools to enhance transparency and accountability as well as demonstrate results. Additionally, the influence of the NGOs has greatly increased over the years. They currently participate officially in government working groups, policy making and serve as watchdog.

The existence of NGOs in Kenya can be traced from the colonial times, where they mainly focused on welfare; however this later changed to accommodate political actions and advocacy (Kameri-Mbote, 2000). The NGOs Co-ordination Act of 1990 serves as the institutional and legislative framework for the registration and co-ordination of NGOs in Kenya (Kameri-Mbote, 2000). The NGOs are coordinated and regulated by the NGOs Coordination Board. They also operate under the National Council of NGOs. The NGOs operate in areas such as: legal aid;

agriculture; children; culture; disability; energy; education; environment and conservation generally; gender; governance; poverty eradication; health; housing and settlement; human rights; HIV/AIDS; information; informal sector; old age; peace building; population and reproductive health; refugees; disaster prevention, preparedness and mitigation; relief; pastoralism and the marginalized communities; sports; water and sanitation; animal welfare; youth. Thus, NGOs are created to enhance government efforts in developmental issues and supplement service delivery with funds received from multilateral organizations (donors). NGOs are contributing to the national development by more than Kshs 100 billion annually in addition to employing more than 100,000 people (Chesos, 2010).

According to the national survey of NGOs report (2009), NGOs received Kshs 68, 825,005,222.00 as funds to various projects in the year 2005/6, from different donors. Due to this huge sum of money, there have been concerns from various quarters for the NGOs to account for the use of funds as well as demonstrate impacts of their activities. This has forced different NGOs to intensify their efforts to develop M&E tools. Despite this sustained efforts, M&E is yet to reach its acceptable level. The M&E systems are mainly concerned with inputs and outputs rather than the outcomes and impacts. These M&E systems are inadequate and generally weak. Notably, M&E is driven by activists and donors who demand accountability. This has ensured that the M&E tools are specifically designed to capture inputs and outputs instead of outcomes and impacts. Furthermore, the qualified practitioners rarely exercise professionalism in carrying out M&E activities. Indeed, most of the evaluations lack characteristics of expert evaluation due to tendency of social science research approach. The problem is compounded by presence of few academically trained evaluators (Mackay 2007).

However, it is worth noting that there are concerted efforts by both donors and practitioners currently to institutionalize integrated M&E system through harmonization of M&E criteria. This will ensure that the tools not only capture inputs and outputs but also outcomes and impacts (Chesos, 2010). Moreover, the relevance of M&E for implementation of future programs will be realized through the use of lessons learnt from previous programs. Hence, there is not only need to educate policy-makers, program sponsors, program managers, and others who are non-experts in the field of evaluation but also have formal requirements for evaluation and a strong advocacy for the integration of M&E structures which is self-regulating and voluntary.

## **1.2.** Statement of the problem

Since 1990s the role of NGOs in the international development arena has greatly increased in all spheres of life with no indication of declining. Their influence can no longer be ignored by individuals or organizations involved in development including the governments. Their role has expanded from being mere service providers to policy formulators, pressurizers and agenda setters as well as agents of disseminating information. The NGO fraternity has become agent of building community structures. With increased roles, the total amount of funds being channeled through the NGOs has grown dramatically. In addition, the proportion of development aid going through NGOs relative to bilateral or multilateral agencies has also increased (World Bank, 2010). The increased funding has come with a growing concern to demonstrate the achievements of NGOs. This interest and concern over NGO performance has been emanating from all shareholders engaged in development such as NGO practitioners, governments, citizens, donors, policymakers and academics. A clear indication of NGO activities.

This emerging consensus comes from the backdrop of widespread displeasure with the performance of NGOs development programs in many countries today. Despite heightened activities by the NGOs, the poverty levels and living standards continue to worsen, malnutrition and ill health cases increase day by day among other challenges. These situations show that the expected results of various development programs have not been forthcoming (Chesos, 2010). Regrettably, even those programs with the appropriate technologies and sufficient funds still perform poorly (Kusek, et al, 2004). Various studies attribute these appalling situations to management negligence. Notably, the failure to realise that technology, capital and management complement each other (Kusek, et al, 2004). The management problem has continued to worsen putting the performance of development programs into jeopardy.

#### **1.3.** Purpose of the study

The purpose of the study was to examine the influence of M&E tools on the program performance of selected NGOs in Nairobi County.

#### **1.4.** Objectives of the study

This study sought to achieve the following objectives:

- i. To assess the extent to which the use of Logical Framework as a M&E tool influence performance of programs of selected NGOs in Nairobi County
- ii. To assess the extent to which the use of Result Framework as a M&E tool influence the performance of the programs of selected NGOs in Nairobi County
- iii. To assess the extent to which the use of Earned Value Management as a M&E tool influence program performance of selected NGOs in Nairobi County
- iv. To assess the extent to which the use of Performance Management Plan as a M&E tool influence program performance of selected NGOs in Nairobi County

### **1.5.** Research Questions

Based on the objectives of the study, the research questions were as follows:

- i. To what extent does the use of Logical Framework as a M&E tool influence performance of programs of selected NGOs in Nairobi County?
- ii. To what extent does the use of Result Framework as a M&E tool influence the performance of the programs of selected NGOs in Nairobi County?
- iii. To what extent does the use of Earned Value Management as a M&E tool influence program performance of selected NGOs in Nairobi County?
- iv. To what extent does the use of Performance Management Plan as a M&E tool influence program performance of selected NGOs in Nairobi County?

#### **1.6.** Research Hypotheses

In order to answer the research questions, the study tested for the following hypotheses

i. Null hypothesis - Ho: application of logical framework does not influence program performance.

Alternative hypothesis –  $H_1$ : application of logical framework influence program performance

ii. Null hypothesis - Ho: application of result framework does not influence program performance.

Alternative hypothesis –  $H_1$ : application of result framework influence program performance

iii. Null hypothesis - Ho: application of earned value management does not influence program performance.

Alternative hypothesis –  $H_1$ : application of earned value management influence program performance.

iv. Null hypothesis - Ho: application of performance management plan does not influence program performance.

Alternative hypothesis - H<sub>1</sub>: application of performance management plan influence program performance.

### **1.7.** Significance of the study

This study will help NGO's staffs, Government staffs, donor agencies and project managers to improve program success, ever increasing stakeholders' demands and provide valuable information in form of lesson learnt for future programs. It will inform policies towards integrating M&E tools in program implementation as powerful management tools to improve the way organizations and stakeholders can achieve greater accountability and transparency and above all to augment institutional capabilities.

Thus, the study is beneficial to NGOs, donor agencies, project managers and project management students involved in program planning and control. Although, the study is conducted within Nairobi County, it is also relevant to other areas involved with program planning and control. In addition, this study also contributes to the body of knowledge by filling knowledge gap that currently exists. The study can also be used as a reference material to researchers. The study has also identified areas related to M&E field that require more research, hence a basis for further research.

### **1.8.** Basic Assumptions of the study

The study was carried out under the following assumptions:

Respondents give accurate, truthful and honest responses to the items in the questionnaires;

Monitoring and evaluation tools are useful in controlling programs;

NGOs implementing programs utilize M&E tools; and

That the data collection instrument is valid and is measuring the desired constructs;

## **1.9.** Limitation to the study

The study had two limitations. First, accessibility and logistics constrained the study in terms of time and finance during data collection and hence, limited the scope of the study. Secondly, the high mobility of M&E staffs made some of the sample respondents inaccessible thus limiting the findings of the study on those who were available at the time of data collection.

## **1.10.** Delimitations of the study

The study was delimited to NGOs monitoring and evaluation programs using M&E tools in controlling the programs implementing programs in Nairobi County. The project managers and M&E staffs of these programs were the respondents of the study. Because of time and financial constraints, the study was delimited to only logical Framework, Result Framework, Earned value management and Performance Management Plan. Nairobi County has an area of 684 sq. km (tourist maps Kenya, 2010) and serves as the capital of Kenya. It is a cosmopolitan city with a population of 3,138,369 (Kenya census, 2009). It is an urban city with seventeen constituencies with diverse ethnic groups and nationalities.

## 1.11. Definitions of Significant Terms Used in the Study

**M&E tools:** tools used to objectively and systematically collect, analyze and use the information for program management.

**Logical framework:** is a methodology for conceptualizing projects and an analytic tool that allows a project developer/manager to detail a project clearly and understandably detailing the relationships among the resources, the activities, and project results to achieve.

**Results framework:** is a performance-based management tool that explicitly articulates the different levels, or chains, of results expected from a particular project, program, or development policy.

**Earned Value Management:** a program management tool that integrates the work scope, schedule, and cost parameters of a program for measuring performance

**The Performance Management Plan:** The Performance Management Plan (PMP) is a tool designed to assist in setting up and managing the process of monitoring, analyzing, evaluating, and reporting progress toward achieving of the programs.

**Program performance:** is the success level of a program based on the relevance, effectiveness, efficiency, impact and sustainability.

**Non-Government Organisation:** is a private voluntary association of individuals or other entities, not operated for profit or for other commercial purposes but which has organized itself for the benefit of the public at large and having as its objective the promotion of social welfare.

#### 1.12. Organization of the Study

This study is organized in five chapters. In the first chapter on introduction to the study, is the background of the study and the problem the study seeks to address are examined. The purpose of the study, research objectives, research questions and research hypothesis are then examined. This is followed by examining the significance, limitations, delimitations, basic assumptions and definition of significant terms in the study. The second chapter of this study examined the theoretical, empirical and conceptual framework. Theory of Change is examined in the theoretical framework. Empirical review is done to identify knowledge gaps on the relationships investigated in the study. Conceptual framework is designed to model the relationships in the study.

The third chapter of the study is research methodology. In this chapter the research design, target population, sampling procedures, data collection procedures, research instruments and data analysis techniques are examined. The fourth chapter is on data presentation, analysis, interpretation and discussion. Since the research design in the study was descriptive research design, descriptive analysis was used as per research objective. Chapter five of the study is on findings, conclusions, recommendations and suggestions for further research. References made in the study are appended in the Reference section of this research project. In addition, authorization letter to collect data and research instrument are appended in the Appendices section of this research project.

## CHAPTER TWO LITERATURE REVIEW

#### **2.1. Introduction**

This chapter presents relevant literature on the M&E tools under study. The chapter examines logical framework, result framework, earned value management and performance plan and their influence on Program performance. This chapter provides both theoretical framework and empirical review on the relationships under study with the aim of identifying the knowledge gaps from previous studies. Finally, the chapter concludes with a conceptual framework which forms the model that guides the relationships subjected to scientific study.

#### 2.2. Logical Framework and program performance

Logical framework approach was originally developed and applied in science by NASA and the private sector under management by objectives for the planning and management of complex projects. In 1970s it gained wide acceptance as a planning and management tool especially after its adoption by USAID. USAID advanced the use of logical framework mainly for its overseas development programs. The emergence of logical framework as vital M&E tool was a response to three systematic issues in development projects at the time. (OECD, 2004) records the problems as vague project planning (characterized by value logical connection of inputs and outputs as well as hazy criteria for assessing program performance), unclear management responsibility (blurred project scope and poorly identified program assumptions) and antagonistic evaluation process (no clear targets to evaluate the project against).

These required the need to professionalize and bring greater accountability to the development field (World Bank 2010; Wield, 2003). The answer to these issues required the logical analysis of programs as change agents. The outcome of the new perspective of looking at development programs was logical framework approach. Logical framework is a set of action-oriented interlocking concepts used together to develop a well-designed, objectively-described and evaluable project ((OECD, 2004). It is systematic and analytical process nature that aids the planning of projects, programmes as well as policies. Pollack (2007) view it as a participatory tool where one step feeds into the subsequent step and builds the knowledge base upon which a successful program is designed. Moreover, each step is iterative and can be revisited throughout the life of the project to bring the desired result applying the principle of cause and effect

relationship. According to Turner (1999) these steps include stakeholder analysis, problem analysis and strategy analysis.

However, there are other entry points such as defining the intended development goal(s) and identifying potentials and related obstacles to the program success. The stakeholders' analysis gives chance to all stakeholders to express their views. This increases understanding of the causes and effects of a problem based on real and perceived reasons as identified by stakeholders. Thus, increases the chances of achieving the program objectives as the stakeholders have a better understanding of program. Due to the steps involved, Dale (2003) emphasizes that logical framework is a diagnostic tool that help comprehend program status and the people as well as the organizations that have influence on the program status.

When used as a diagnostic tool, it helps identify the program logic in the results chain: inputs, processes, outputs, outcomes, and impact. At the same time, provides decision-makers with ample opportunity to ask fundamental questions and analyze assumptions and risks to justify the program logic as well as identify any weak linkages; it helps identify project weaknesses and enables decision-makers to make sound judgment based on their increased insights and knowledge. This enhances program performance as all the stakeholders have clear picture of the whole project. It also helps identify performance indicators at each stage in the result chain and risks within the project as well as outside the project environment which might derail the program In view of this, Rush & Ogborne (2001) asserts that logical framework improves quality of project and program designs.

The logical means-end relationship selected provides a roadmap for meaningful monitoring and evaluation plan, where the targets upon which the program performance is to be judged are made clear to all stakeholders. This helps clarify objectives of the project, program, or policy. It also provides a background for activity review, monitoring, and evaluation and assist prepare detailed work plan. However, the tool has been widely criticized in the literature that it stifles creativity and innovation for its rigid approach. It is viewed a rigid, blueprint, top-down planning approach (Dale, 2003). Never mind that it takes long to update hence not reflecting changes unfolding in the program. Occasionally, it requires training and follow-up for successful implementation; it is

only an expert's tool for controlling planning denying some stakeholders its full benefits due to training requirement and language limitation.

Mikkelsen (2005) claims that it is an output oriented as oppose to the process oriented. The logical approach focuses on problems to the disadvantage of potentials. Worse still, it offers little room for wide-ranging stakeholder participation, especially beneficiaries who are often pushed to the periphery. Also, it is policy neutral on such aspects as income distribution and gender. Since it only express logic of the program, Wield (2003) argues that it does not give the full picture of the program. He asserts that development projects and programs always operate in a complex environment which cannot be managed only on the basis of logical and rational analysis as they are out of locus of control of the management.

The logical framework is commonly prepared in a matrix format. The logical framework matrix popularly referred to as logframe. Picciotto (2011) defines logframe as a summary of the project strategy that helps plan and monitor project's outputs and outcomes. The matrix helps to provide a standardized summary of the project and its logic which is comprehensible across all the program stakeholders although the specific matrix formats and terms may be slightly different (Mark & Henry, 2004). The matrix enables the program teams to systematically organize objectives, results, outputs and activities into logical relationships and align all the efforts on the achievement of agreed goals.

This guides the logical program structure and the expected impacts and result. The matrix describes how exactly a program would practically work to achieve the target objective; identifies the much needed components to achieve the stated objectives; summaries the specific indicators that would be used to measure actual program performance. This according to Shaw (2000) provides a structured analysis of the existing situation which helps identify the desired impact and defines the processes needed to achieve that impact.

The logframe format includes four main elements, namely: goal, outcome, outputs and activities. Each related by a cause-and-effect relationship to the other; each component constitutes a necessary condition for achieving the next component. Rush & Ogborne (2001) affirms that this helps explain the logical flow of the program result chain and the linkages between each logic element so as to formulate a sound logical framework. This helps show clearly the linkages and

alignments among goal, outcome, outputs and activities. The program logic is divided into vertical logic and horizontal logic. The vertical logic identifies the program objectives and divulges the causal relationship between the different levels of the objective system (column 1) and the assumptions and risks (column 4) that are beyond the control of project management. It provides logical link between means and ends.

The logic hinges on the premise that: if inputs / means are provided, and the preconditions fulfilled, then activities can be undertaken; if activities are undertaken, and the assumptions hold true, then outputs will be produced; if outputs are produced, and the assumptions hold true, then outcomes will be achieved; if outcomes are achieved, and the assumptions hold true, then the project contributes to the development objective (goal). Thus, the activities are placed within the broader development environment that encourages thorough examination of the program risks. However, the oversimplification of program logic to a simple linear chain excludes other possible alternative strategies and fixes the program. This often proves dangerous and provides ground for project failure as the assumptions and risks are never fully analysed and exhausted.

The horizontal logic links the indicators and objectives (columns) intended for measuring and reporting the achievement of objectives. Thus, the relevant performance indicators (column 2) and the corresponding means of verification (columns 3) are clearly identified at different levels to help in the testing of the project description. Rush & Ogborne (2001) believes this enables review of the quality and validity of project objectives through iterative adjustment of the objectives before and during program execution. It also enables to ascertain whether the objectives are measurable and helps establish monitoring and evaluation framework. However, it is difficult to find measurable indicators for higher level objectives. Moreover, the logic focuses on available information and selected indicators. For successful implementation of programs, these essential elements are adequately planned accompanied with an assessment of the implementing organization capability and context as well as the program environment.

The logical framework also serves as a reference for project cycle management for identifying, preparing, appraising, implementing, monitoring and evaluating projects. The approach helps analyze the existing situation; establish a program logic between inputs, processes, outputs, outcomes and goal; define the assumptions on which the program logic builds; identify the

potential risks for achieving objectives and outcomes; establish a system for monitoring and evaluating program performance; establish a communication and learning process among the stakeholders (Bakewell & Garbutt, 2005). Thus, it improves the preparation of a program by clarifying the design and eases the measurement of progress about the expected results and objectives.

This makes the project transparent to donor, managers, cooperating agencies, and supporting organizations as well as enhancing accountability of the use of resources. The participation of stakeholders instills sense of ownership of the program which greatly promotes sustainability of the program. The logic approach also improves the relevance and quality of the project (Knowlton & Phillips, 2009). The logical approach establishes learning process which enhances the effectiveness and efficiency of the program. The thorough understanding of the strength and weaknesses of logical framework approach greatly help identify the much needed supplementary tools and procedures for successful implementation of programs.

Column 1		Column 2	Column 3	Column 4
Project	Hierarchy	Indicators and targets	Means of Verification	Assumptions
Narrative				
Goal				
Outcome				
Output				
Activities		Inputs	Budget	

 Table 2.1: Logframe Matrix

Source: International Services American Red Cross (2006)

## 2.3. The Results Framework and program performance

It is no secret that there is paradigm shift towards result oriented approach. There is increasing concern from various stakeholders to show the impact of development programs. This requires explicit expression of the intended results of a program (outputs, outcomes, and impacts) to be well understood. This has necessitated a result framework to promote program performance. A results framework is an explicit articulation of the different levels results (outputs, outcomes, and impacts) expected from a particular project, program, or development policy (USAID, 2012). It

is hinged on performance-based management approach which has gained prominence through encouraging results in planning, implementation, and monitoring as well as evaluation.

The Results Framework (RF) was developed by USAID in 1994 to plan the results at the policy, program or project level. This approach put emphasis on the results (outcomes and impacts) of both broader national policies and more specific organizational programs and projects. The results specified typically comprise the longer-term objectives and the intermediate outcomes and outputs that precede the desired change (impact). Thus, the results framework captures the expected cause-effect relationships among inputs, outputs, outcomes, and impact. These cause-effect linkages are the foundation of building of the result framework.

A results framework serves as a key tool in the development field, enabling practitioners to debate and establish strategic development objectives and then link programs to intermediate outcomes and results that directly relate to those objectives. Designing a results framework is an iterative process, with results at its foundational design. A results framework builds on the theory of change and at the same time helps clarify program causal pathways from the planned interventions to the intended outcomes; it a participatory process that engages the staff and other stakeholders in developing the theory of change supporting the program. This helps establish an evidence-based approach to monitoring and evaluation.

According to Sander (1997), its development starts with understanding both the problem to be addressed and the desired outcomes, specifying the program logic, building stakeholder consensus related to this theory of change and identifying critical assumptions and risks. This leads to selecting appropriate indicators to measure intended outputs and outcomes, setting baseline and target values, and examining the relevance of available data and data collection methods. It is difficult to know if a program has succeeded or failed unless the results are clearly articulated for easy understanding by all stakeholders. Thus, the framework clearly and precisely defines the results to keep them measurable and discernable. It views results as measurable development changes resulting from the program cause-and-effect relationship.

At the same time, it explicitly identifies how progress toward the desired impact will be measured. This helps monitor progress toward those results, and assists control and adjustments of program processes. Results are usually expressed in terms of a desired goal to give direction and focus to the program execution (Kerzner, 2003). To ensure this is achieved baselines are established, good performance indicators identified and defined and carefully estimated performance targets set. This directs the program processes towards impact, outcomes and outputs and aligns inputs and activities to achieve the results. Thus, the framework set course for managing results as execution of program processes advances and gauges results in terms of what has been achieved. Fleischer & Christie (2009) is of the same opinion that results are the basis of all projects planning and determine what activities are to be carried out. Therefore, the level of program success rests upon the results achieved i.e. outputs, outcomes and impact.

The framework captures and monitors project performance based on the results achieved. According to Kerzner & Saladis (2009), it is a tool of concurrent monitoring and evaluation where the outcome or goal is observed as implementation proceeds. It assesses and provides evidence of project results and allows early correction of deviation from the plan. This evidencebased approach ensures result management for better program performance. These results are clearly defined based on appropriate analysis and the program tailor-made to meet the needs of the beneficiaries. The results inform decision making, increase organizational knowledge repository, helps account for the resources used, improve practice through learning, improve program sustainability as well as help identify and manage risks (Andersen et al., 2004).

The results are conceptually presented in a chain (outputs, outcomes, and impacts) and are normally defined through indicators which are mostly quantifiable and measurable. Performance indicators are measures of inputs, processes, outputs, outcomes, and impacts for development projects, programs, or strategies (World Bank, 2010). These indicators help in setting performance targets at each level and assessing progress toward achieving them. Thus, the indicators set the groundwork for ongoing monitoring and evaluation by identifying baselines and targets to be achieved. This help to gauge the level of success of the program. When supported with sound data collection enable managers to track progress, demonstrate results, and identify problems early enough to allow corrective action to be taken.

This is supported by Richardson (2010) who defines results framework as a tool for guiding corrective adjustments to activities, reallocating resources, and reevaluating targeted objectives or underlying assumptions. The indicators also help determine whether an in-depth evaluation or

review is needed and facilitates benchmarking so as to deliver services in more efficient and effective manner. At the same time it generates knowledge regarding which indicators, baselines and data sources are best suited to monitoring progress in similar contexts.

The framework enables managers to control the program by providing evidence much need for decision making concerning program impact (especially negative) which can jeopardize the program sustainability. It also allows practitioners to assess what programs contribute most effectively to achieving specific development objectives. This provides practitioners with great opportunity to identify good practices for replication (Hatry, 2006). At the same time, it acts as a medium for communicating about the resources, activities, and outcomes to program staff, development partners, or other stakeholders through the defined causal relationships. No wonder Marsh & David (1999), view the framework as accountability tool for the program staff and other partners concerning the utilization of resources.

It is a participatory tool that provides opportunity to the program team to work with key stakeholders to build a consensus on the program implementation, agreeing on the expected results, highlighting and checking the underlying assumptions, and specifying needed resources. In addition, it enhances coordination and creates a sense of ownership. This guarantees sustainability of the program and strengthens harmony in program execution (Belassi & Tukel, 1996). The framework specifies all intermediate results needed to achieve the strategic objective, allowing partners to harmonize their efforts and to identify areas where additional program activities will be needed. It promotes benchmarking and performance analysis; emphasizes efficiency of the program processes; and moves from input focused to output oriented operations.

This offers an organized approach for program team to work backwards from the policies and to select most appropriate programs suitable for addressing the targeted problems (Whitty, 2013). This promotes better understand of programs and sound management decision-making. Its consultative nature guides a program team in establishing a valid targeted impact, assessing what intermediate outcomes and outputs are needed to achieve that desired change, and designing appropriate program aligned with the desired cause-and-effect linkages. This greatly improves effectiveness and efficiency of the programs.

Despite the numerous benefits, occasionally the indicators are poorly defined Perrin (1998). Additionally, there is the tendency to define too many indicators, worse even those without accessible data sources. As a result, the framework becomes bloated with vague and unwieldy performance indicators. This makes M&E tool costly, impractical, and largely underutilized. Reiss (1995) attributes this to the logical and rigorous process of establishing intended results, relevant indicators and data sources. Moreover, it fails to capture the unintended consequences which are largely ignored in the framework. This reality demands the need of key stakeholders to collaborate in developing and approving the results framework to ensure only desired indicators clearly defined are incorporated into the framework by which implementers will be held accountable.

Hence, the practitioners should be aware of the cost each indicator carries. Thus importance, relevance, cost, timeliness, and utility are crucial criteria for determining which set of indicators should be included (Feller, 2002). The framework requires setting objectives to be achieved; developing indicators; assigning periodicity, identifying source, assigning responsibility; putting baseline, milestone and target values of the indicators (Krause, 1996). A results framework is based on a clear theory of change that specifies how the planned program is expected to create an impact in the life of the target group. The theory of change model allows stakeholders to visualize and identify the proposed causal links among inputs, activities, outputs, and outcomes.

The theory of change recognizes the broader context, prior research and evaluation, level of risk of assumptions and change agents as the key elements to realise program performance. The framework explicitly shows the assumptions that underpin the program design (Weiss, 1997). In summary, a result framework reinforces strategic planning process and assists as an invaluable management tool. It promotes program ownership and consensus building, directs corrective actions, expedites the coordination of development endeavors, maps the course for achieving the intended impact, and finally serves as key accountability tool for evaluation.

 Table 2.2: Result Matrix

Performance Indicators			Data Acquisition				
Performance	Indicator	Sub-	Data	Method of	Schedule/	Responsible	Analysis,
Indicator	Definition	Indicators	Source	Data	Frequency	Person/	Use,
	and Unit of	(data		Collection		Organization	and
	Measurement	element)		or			Reporting
				Calculation			

Source: International Services American Red Cross (2006)

## 2.4. Earned value management and program performance

Earned-value management is a program management tool that integrates the technical, cost and schedule parameters of a program for efficient delivery of services (DoD, 2006). It serves as the missing link between cost reporting and cost control. Christensen (1998) defines EVM as a project management tool for measuring program performance and progress in an objective manner. The studies conducted by Kerby & Counts (2005) on benefits of EVM, confirm that it measure performance in cost, schedule, and technical areas as well as identify projects risks. It indicates how much of the budget should have been spent, in view of the amount of work done so far and the baseline cost for the task, assignment, or resources. The earned value measurement was introduced by the department of defense (DoD) of United States in 1960s to standardize requirements for reporting cost and schedule performance.

The EVM combines the scope, schedule and cost measurements into a single comprehensive performance baseline plan against which accomplishments are measured. Its success depends on the existence of a sound framework of planning and control. The EVM provides accurate forecasts of project performance project. Haughey (2004) complements that EVM show the current performance which is the best indicator of future performance. The EVM serves as a comprehensive trend analysis technique that furnishes trend data which makes it possible to forecast cost or schedule overruns at an early stage in a project. The work in progress indicates what will happen to work in the future (Christle, 2000).

In this regard, EVM acts as an early warning project management tool that enables managers to identify and control problems before they become insurmountable (Fleming & Koppleman,

2002). The same sentiments are echoed by Christensen (1998) who stresses that information of EVM is positive predictor of project success. In addition, EVM provides reliable quantitative data for project decision making (Fleming & Koppleman, 2002). It promotes the integration of work, schedule and cost using a WBS and creates a database of completed programs useful for comparative analysis. This helps compare the costs incurred for an accurately identified amount of work with the costs budgeted for that same work.

Marshall (2006) argues that EVM can be implemented in all projects no matter the size and complexity. Additionally, as a systematic project management process, it helps find variances in programs based on the comparison of worked performed and work planned. Thus, EVM contributes to preventing scope creep, improving communication and stakeholders' participation, reducing risks, enhancing efficiency, project forecasting, better accountability and performance tracking. Each data point value is based on the time or date an EVM measure is performed on the project. Christensen (1998) documents the following as the primary components EVM: earned value, EV (budgeted cost of work performed); planned value, PV (budgeted cost of work scheduled); and actual cost, AC (actual cost of work performed). From these primary measures other measures can be derived to successfully assess the project status and predict its future.

These measures include: cost variance, CV (the difference between the planned and actual costs of work completed); schedule variance, SV (the difference of work accomplished for a given period and the value of work planned); cost performance index, CPI (cost efficiency ratio of the earned value to actual cost); schedule performance index, SPI (planned schedule efficiency ratio of the earned value to planned schedule); Budget at Completion, BAC (sum total of the time-phased budget);Estimate to Complete, ETC (calculated value that represents the cost of work required to complete the remaining project tasks); Estimate at Complete, EAC (calculated value that represents the projected total final costs of work when completed; and the time variance, TV (is the difference in the time scheduled for the work that has been performed and the actual time used to perform it). Typically, variances are negative when the project is behind schedule and/or over cost. The PV is gotten from WBS and budget for the project tasks. However, the distribution of PV over the scheduled time for a task for comparison to EV for monitoring purposes is pegged to how each task's EV is going to be determined (Nagrecha, 2002).

It is useful at the level of individual tasks or activities and the data are usually rolled up for the whole project (Lock, 2007). The tool uses a number of conventions for estimating percent completion. These include: the 50-50 rule which assumes fifty percent completion at the start and the remaining 50 percent when the work is complete; the 0-100 rule which gives credit when the work is complete and highly conservative as the earned value line will always lag the planned value line on the graph; critical input use which assigns task progress according to the amount of critical input that has been used; and the proportional rule which use time or cost as the critical input (it divides actual task time-to-date by the scheduled time for the task or actual task cost-to-date by total budgeted task cost to calculate percent complete).

These rules are useful to individual activities though in few occasions can be applied to the project as whole. They help construct a graph of earned value which provides a basis for evaluating cost and performance to date. The chart divulges a lot of information regarding the progress of the program to the management about the use of resources. For instance, the top management can forego detailed analysis of individual tasks if the total value of the work accomplished balances with the planned (baseline) cost as well as its actual cost. Thus, the concept of earned value combines cost reporting and cumulative performance reporting into one all-inclusive chart. The chart also indicates the baseline cost to completion (BAC). Additionally, estimate cost at completion (EAC) which gives the actual cost to-date can also be projected to completion. The chart also helps identify cost and schedule variances (Cleland, 2006).

The variances can be used to produce program performance index. In this case, the variances are expressed as ratios rather than differences so that the cost variance becomes the cost performance index, CPI (the earned value to-date divided by the cost to-date) =EV/AC, the schedule variance becomes the schedule performance index, SPI (earned value divided by the planned value) =EV/PV which is crucial for identifying schedule problems when used with critical path method (Fleming and Koppelman, 2002) and the time variance becomes the time performance index (TPI) =ST/AT. Cumulative CPI is a predictor of the final cost of a project (Estimate at Completion) (Christensen, 1998) and serves as a benchmark for measuring project success. SPI serves as an early warning signal which helps forecast later cost problems. These indices help the organization to compare the performance of several projects (or project managers), or the same project over different time periods. If everything is going exactly according to plan the cost

performance index will be 1.0. An index less than 1.0 indicates that the value earned for the money being spent is less than that expected (Lock, 2007).

EVM also provides an index-based method to forecast the final cost of the project. The SPI and CPI when used together help estimate the Cost at Completion with minimal error (Christensen 1996). To-complete performance index, TCPI (the ratio of the remaining work to the remaining financial goal) shows the level of efficiency required for completing the project within the budget and helps assess the forecasted final cost (Christensen, 1998). The EVM also helps generate the periodic (weekly or monthly), these weekly or monthly CPIs help measure the cost performance trends at the detailed levels of the WBS (Fleming and Koppelman, 2002). Generally, the frequency and use of these indices depend on the level of management needs for effective control (DOD, 2006). At the same time, EVM applies management by exception principle to reduce information overload. This helps direct management attention to only the most critical problems (Christensen, 1998).

Earned Value differs from the usual budget and actual costs incurred model, in that it requires the cost of work in progress to be quantified. Christle (2000) argues that Earned Value is an improvement on the traditional accounting progress measures. Traditional methods focus on planned accomplishment (expenditure) and actual costs. Earned Value extends further to assess actual accomplishment. This gives managers greater insight into potential risk areas that need attention to ensure program success. With clearer picture, managers can create risk mitigation plans based on actual cost, schedule and technical progress of the work. The PMI (2005) documents that project plan, a valuation of planned work and predefined rules are the essential features of EVM.

The project plan includes a detailed work breakdown structure; a compatibly detailed cost coding system; timely and accurate collection and reporting of cost data; a method for monitoring and quantifying the amount of work done, including work-in progress. In EVM project baseline is an essential component and serves as reference point for all EVM related activities. The steps involved in EVM implementation according to Nagrecha (2002) involve defining the work to be accomplished in WBS, assigning value to each activity and defining the earning rules for each activity. Once the planning is completed the project is implemented to according to the plan and

the progress measured. Used according to this procedure, Dwivedi (2006) argues EVM helps measure project performance. Its usefulness has made it one of the important tools of project management.

Despite the overwhelming benefits of these indices, their accuracy and usefulness depend on the degree in which estimates of percent completion reflect reality. Notably the cost and schedule variances (or CPI and SPI) are very frequently used (Kerzner, 2003). Projects with fairly large number of activities, the error is generally inconsequential. However, project with few activities, rough measures can be deceptive. Christensen (1998) argues that EVM does not measure quality putting customer satisfaction in jeopardy. EVM requires quantification of project plan hence inapplicable to agile projects. Even though, the earned values analysis helps to forecast project schedules and costs, it does not guarantee that the forecasts will make it possible to correct malperformance.

Flemming et al (2002) noted that the chances of correcting a poorly performing project more than 15 percent complete were effectively nil The study concludes that if the beginning of project was underestimated and took longer and cost more than the plan indicated, there is little or no chance that the rest of the project would be estimated more accurately. Thus, careful risk analysis at the beginning of the project is crucial to avoid the embarrassment of notifying the client and senior management of the bad news.

#### 2.5. The Performance Management Plan and program performance

The Performance Management Plan (PMP) is a management tool designed for controlling programs. It was designed by the USAID in 1990s to guide the management process of monitoring, analyzing, evaluating, and reporting progress toward achieving of the programs. For USAID (2010), the PMP is a critical tool for planning, managing, and documenting data collection of the program. The PMP is a living document constantly updated as the implementation process advances to ensure that program remains relevant as well as achieve the desired results. This improves program performance and enables operating units to collect comparable data over time.

The PMP helps mitigate audit risks which greatly improve the sustainability of the program and helps organize tasks and data over the life of a program. This alerts staff to imminent tasks, such

as data collection, data quality assessments, and evaluation planning among others. It is no doubt that PMP is invaluable management tool that supports institutional memory documenting definitions, assumptions, and decisions about the programs. It also presents data in a way that facilitates decision making, influence budget allocations and program changes (USAID, 2010). At the same time, PMP precisely defines performance indicators that measure and track progress toward achieving results.

At the core of effective program operations is the performance management. Therefore, to measure program performance requires performance management plan. The PMP is normally developed from results framework since it requires clearly-defined goals and objectives, effective leadership, and participatory approaches. Clearly defined and well- reasoned objectives show the intended impact of the program as well as describe the program theory of change. Processes for developing PMP involve: assembling the team, developing a work plan, holding PMP working sessions, vetting the indicator, drafting the PMP, establishing baselines and targets and using the PMP.

According to USAID (2010), PMP is highly detailed to ensure that anyone who uses it clearly understands: what is being measured; the data collection methodology; the tasks and schedule associated with each indicator; and how data will be analyzed. These processes involve precise definition of indicators, unit of measure, data disaggregation, rationale, responsible office/ individual, data source, frequency and timing, budget implications, data collection method, method of data acquisition, data quality assessment procedures, data limitations and actions to address those limitations, data analysis issues, data use, and baselines and targets. This detailed analysis ensures that all the stakeholders are carried along which greatly improves program performance.

As a participatory tool, PMP seeks stakeholders' participation at various points in the process. The stakeholders are engaged right from the planning phase through monitoring of performance to the evaluation phase. Embedded in PMP is the belief that the stakeholders have important insights on data availability, the feasibility of collecting the data, and issues that should be considered in analyzing the data. Thus, the stakeholders' participation ensures that data produced by the PMP is useful to the various players in making decisions (USAID, 2010). Effective PMP

greatly contributes to the program performance by assuring that comparable data is collected on a regular and timely basis through sufficiently documenting indicator definitions, sources, and methods of data collection. It also documents the frequency and schedule of data collection as well as assigning responsibilities. This enables smooth operations even when the key personnel changes.

The use of performance management plan has been advocated for by the USAID due to a number of benefits. Performance management plan maximizes the impact of the programs. At the same time, it informs the project team whether the program plan is correct or needs adjustment. More importantly, it affords the opportunity to make these adjustments as necessary, improve knowledge, transparency of practice, and accountability. It also provides evidence that enables programs to withstand the scrutiny of foreign assistance managers, Congress, The Office of Management and Budget (OMB), and taxpayers. At the same time, it fulfills the requirements of the Government Performance and Results Act (GPRA) and helps justify the use of resources.

This evidence-based approach helps advocate for further funding of the programs as well as replicate the same programs in other areas. Despite the benefits of PMP, developing a practical and streamlined PMP has remained a great challenge. In most cases the PMP ends up with too many indicators which is just as problematic as having too few. The PMP, in such cases, becomes too cumbersome to maintain over the long term (USAID, 2010). PMP supports a culture of transparency and learning in examining both success and failure. Managing for results does not only check whether targets have or have not been met but also answer why they are met or not met. This enables program managers respond effectively to changing circumstances, unforeseen events, and changes in the program's underlying assumptions.

Element:	
Indicator Title:	
<b>Definition</b> :	
Rationale:	
Unit:	Disaggregate by:
Type: output/outcome	Direction of Change:
Data Source:	
<b>Measurement Notes:</b>	

Source: USAID (2010)

#### **2.6. Theoretical Framework**

Kothari (2004) defines theory as a set of properly argued ideas intended to explain a phenomenon by specifying variables of the laws that relate the variables to each other. Since projects are change agents, this study is guided by the theory of change.

## 2.6.1. Theory of change

Theory of change grew out of program theory which put emphasis on the theoretical foundations of programs. It is a clear expression of the linkages between the inputs and the results of a program showing how the program is intended to work (Funnell and Rogers 2011; Weiss 1995; Chen 1990). The theory of change first emerged in the mid-1990s in the wake of a number of challenges of evaluating the impact of development programs. Weiss (1995) associated the challenges to poorly articulated assumptions and stakeholders' vagueness on program logic. Consequently, little attention was paid to result chain with all the efforts directed at the program processes. This lack of clarity not only hindered the evaluation of programs but also limited the program performance as the important factors related to the long-term goal were ignored. He described it as a theory of how and why a program works. In response of the aforementioned challenges, Weiss (1995) coined the theory of change to help remedy the problems and make the programs more successful.

Weiss (1997) popularized the theory of change as a description of the set of assumptions that explain both the intended long-term impact and the logic chain of the program that occurs at each step of the way. Stein and Valters (2012) concurs that theory of change is a planning and management tool that extends the assumptions' box in the logframe to promote the understanding of the program context as well the expected benefits. These underlying assumptions clearly identify the risks associated with the program that are critical for the achievement of objectives and guarantee program sustainability. According to Vogel (2012) assumptions are the values, beliefs, norms and ideological perspectives, both personal and professional, of the stakeholders that guide their interpretations of the program. Thus, these assumptions establish the context for interpreting the result chain and create the linkage between the needs of the target group, program processes, and the desired outcomes.

The theory of change helps organizations to shift focus from the program processes to the intended outcomes and impacts of the program (James, 2011). It addresses the problems inherent in existing models of analyzing change by providing the complete picture of the program from the start to the end before implementation. The theory of change uncovers and critically interrogates the assumptions about how change happens. This ensures that the weak links in the change pathway are tested and identified earlier enough before the program is executed. The assumptions about how change happens are often illustrated in diagrammatic form, accompanied by some explanatory notes. According to Rush & Ogborne (1991) this guarantees that the pathway of change is based on sound cause-effect relationship as well as presents the program to a range of stakeholders in more comprehensible descriptions of how change happens.

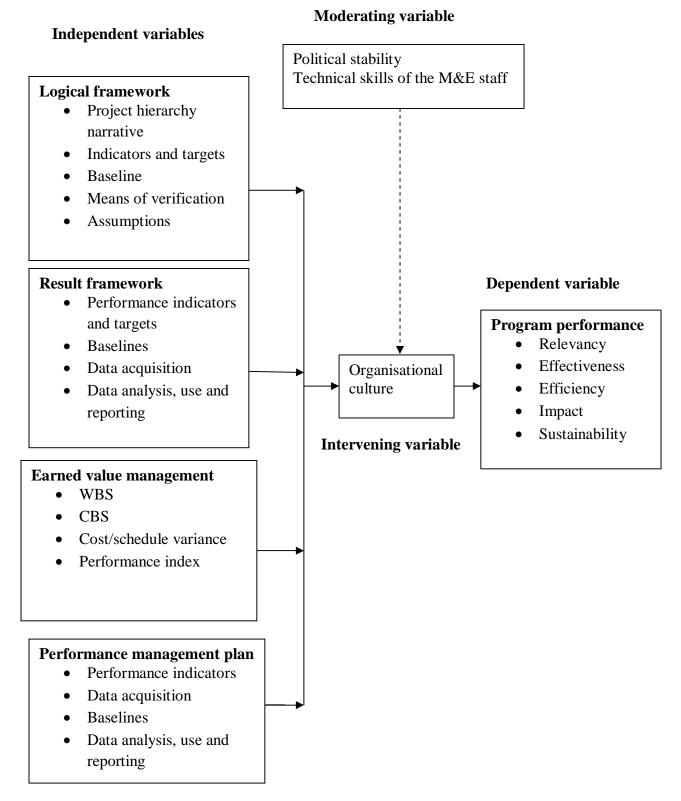
Thus, the theory of change presents information more comprehensible and accessible to different kinds of audiences in a clear and simple view that crystallize the processes into few steps that capture key aspects of the program. This is supported by James (2011) who emphasize that the theory of change facilitates the integration of data from broader evaluation requirements into simple understandable evaluation information that enhances program performance. This helps move stakeholders from being passive collectors and reporters of information to active users of information for program planning and M&E process.

Programs are never carried out in vacuum but in ever changing complex environments that require constant scanning. To help understand and unpack the multi-layered, nonlinear, and multi-contextual nature of change, the theory of change defines and determines the program context. Therefore, the theory of change according to Green (2013) forms the roadmap to the proposed change, highlighting the necessary conditions needed to make the intended change a reality. The theory of change captures the project's broad picture of change at once while shedding light on the causal relationship among the outputs, outcomes and impacts. The theory of change reveals whether activities are relevant for the intended goals; whether there are redundant activities which do not contribute to achieving objectives; depicts how activities and outcomes can be achieved; and how to measure impact. This according to Vogel (2012) makes clear the logic of change supporting the program processes which promote program performance.

According to Weiss (1998) the theory of change can be set at organizational levels, programme levels and even project levels. The theory of change also serves as a benchmark to measure organizational commitment as agents of change by steering change processes within a program towards the delivery of its results and the achievement of its objective. At the same time, the theory of change is used as a way to communicate programs more effectively to donors. This promotes accountability and advocacy, in the process, possibly win more funding for the same program or future programs for replication in other areas (USAID, 2010). Moreover, it promotes documentation and incorporation of experiences into the program as the execution advances promoting efficiency and effectiveness of program. Thus, the theory of change brings about program performance through the accomplishment of the changes sought. The theory of change can be developed for an intervention where objectives and activities can be identified and tightly planned in advance or where there is often developing issues as the implementation progresses (CARE 2012).

#### 2.7. Conceptual Framework

In this study, a conceptual framework is used as the study model to guide the relationship of the variables under study to keep the research work focused on the objectives of the study. A conceptual framework elaborates the research problem and summarizes the major variables in relation to relevant literature. The framework is summarized in a schematic diagram that presents major variables and their hypothesized relationships (Monina, 2009). In this study the independent variables are logical framework, result framework, earned value management and performance management plan while dependent variable is program performance. Political stability and technical skills of the M&E staff are considered as moderating variables while organisational culture is considered as intervening variables.



**Figure 1: Conceptual Framework** 

#### **2.8.** Explanation of relationships of variables in the Conceptual Framework

Cleland (2006) indicates that the essence for program implementation is performance. World Bank (2010) identifies relevance (a measure of how the program addresses the needs of the target group), effectiveness (a measure of how the program is achieving its objectives), efficiency (a measure of how well the program inputs are converted into outputs), impact (a measure of the changes in the life of the beneficiaries due to the program) and sustainability (a measure of how long the benefits of the program lasts) as the best indicators to measure program performance. This is supported by other authors as the best way to gauge program success (Kerzner, 2004; Harvey, 2004). Therefore, this study uses these indicators to determine program performance.

Picciotto (2011) argues that project hierarchy narrative, indicators and targets, means of verification and assumptions determine the logical framework effectiveness. Therefore, this study relies on these element: project hierarchy narrative (result chain); indicators and targets (measures of inputs, processes, outputs, outcomes, and impacts of programs); means of verification (data source); and assumptions (the conditions, events or decisions which could affect the progress or success of the project, but over which project managers have no direct control) as the indicators to determine its influence on program performance.

The result framework provides a way to understand and make decisions related program impact. Mikkelsen (2005) adds that the results are clearly defined based on appropriate analysis and the program tailor-made to meet the needs of the beneficiaries. Thus, its usefulness in managing program performance depends on clarity of performance indicators and targets, data acquisition and data analysis, use and reporting. These elements will serve as the indicators for this study. EVM serves as an early warning project management tool that enables managers to identify and

control problems before they become insurmountable (Lock, 2007). It is a predictor of project success and provides reliable quantitative data for project decision making. To provide early warnings EVM has clear WBS, CBS, project forecasts, baselines, Cost/schedule variance (schedule and cost deviations from a specific project plan) and Performance index (ratio of earned value to planned value). These elements will serve as the indicators for this study.

34

The Performance Management Plan (PMP) is a tool designed to assist in setting up and managing the process of monitoring, analyzing, evaluating, and reporting progress toward achieving of the programs. For USAID (2010) PMP is a critical tool for planning, managing, and documenting data collection of the program. The indicators used are performance indicators, data acquisition, data quality, and data analysis, use and reporting.

The moderating variables are the political stability and technical skills (Knowledge and proficiency in M&E field needed to accomplish specific task) of the program staff. According to Kerzner (2003) programs are never carried out in a vacuum, thus they are susceptible to the changes in the political landscape. When there is relatively stability in the landscape, the program has high likelihood of success. Cleland (2006) and Lock (2007) stress that the more competent the program staff is, the higher the performance of the program.

The intervening variable is the organisational culture. Schein (1997) defines organizational culture as the set of shared, implicit assumptions that a group holds and that determines how it perceives, thinks about, and reacts to its various environments. It is the glue that holds everyone together and the compass that provides direction. Therefore, organisational culture is to an organization what personality is to an individual. It influences employees' attitudes and behavior and a variety of organizational outcomes. Thus, it affects the program performance.

## 2.9. Knowledge Gap

Despite an increased interest in M&E, only relative handful studies have specifically examined the influence of M&E tools on the program performance. Barasa (2014) conducted a case study to determine the influence of the M&E tools on the completion of projects. A total of 120 respondents from CDF committee members, ministry of work and health officials, community leaders and other stakeholders in Kakamega County participated in the study. The results showed that M&E tools have influence on project completion (88.9% for strategic plan, 80.7% for logical framework, 80.8% for budget and 90.4% for stakeholders' analysis.

Khatiala (2013) conducted a case study to determine the influence of M&E tools and techniques on project delivery capability. 160 M&E officers implementing the HIV/AIDS interventions under the Total War Against HIV and AIDS (TOWA) Project in Nairobi and Nyanza regions participated in the study. The results of the study revealed that Earned Value Management, Variance Analysis, Performance Reviews and Project Management Software were prevalent in use among 51%, 49%, 65% and 45% of the interventions respectively. 80% of the respondents said that more extensive and better use of Earned Value Management would enhance Project Delivery Capability. 82% of the respondents said that Variance analysis positively influenced Project Delivery Capability, while 85% said the use of Performance Reviews would enhance Project Delivery Capability. Project Management Software was the least used tool and 70% of the respondents said that more extensive and better use of the tool would enhance Project Delivery Capability.

Mulandi (2013) conducted a case study to establish the factors influencing performance of monitoring and evaluation systems on NGOs in governance, case of Nairobi, Kenya. Forty program officers and five program managers in Nairobi participated in the study. The result showed that NGOs collect regular quality and timely data from both primary and secondary data, Program officers have necessary training in M&E either formally or through in-service, Project officers have knowledge of logical framework and is quite used, M&E information is regularly used and baseline information is satisfactory.

#### 2.10 Summary of Literature Review

It is surprising that so little empirical research has actually been conducted on the topic, especially from the perspectives of logical framework, result framework, earned value management and performance management plan is especially scarce. Moreover, these studies cannot be generalized for application in other locations as they are delimited to the target populations only. Whether the use of M&E tools has influence on the program performance of NGOs in Nairobi County however, remains an open question The scarcity of information on the on the benefits of M&E tools on program performance to NGOs in Nairobi County is regrettable because it is the sort of evidence that the project managers and other stakeholders require if they are to support program control policies. This survey study attempts to contribute to the knowledge base by examining the influence of M&E tools on program performance of NGOs in Nairobi County.

# CHAPTER THREE RESEARCH METHODOLOGY

## **3.1 Introduction**

Research methodology provides the steps adopted by the researcher to logically study a research problem. This chapter discusses the research design, target population, the sample size and sampling technique, research instrument, data collection procedure, data analysis technique, ethical consideration and operationalization of variables.

## 3.2 Research design

This study adapted survey descriptive design. Author Orodho (2004) observes that a descriptive survey involves collecting information about people's attitudes, opinions, and habits on a phenomenon by interviewing or administering a questionnaire to a sample of individuals. This point is espoused by Kothari (2004) who stress that descriptive survey is used to describe characteristics of a population or a phenomenon being studied. It is concerned with finding out who, what, where and how of a phenomenon (Mugenda & Mugenda, 2003). The purpose is to generalize from a sample to a population so that inferences can be made about some characteristics, attitude, or behavior of the population (Babbie, 1990). According to Locust (1984) descriptive research studies are designed to obtain facts about a phenomenon. In addition, the design is economical and has rapid turnaround in data collection. Since in this study the extent to which combination of variables influence the outcome of the dependent variable was desired for generalization purposes, descriptive survey was the most suitable for the study.

## **3.3.** Target population

A target population according to Kothari (2004) is a full set of cases from which a sample is taken. Cooper and Schindler (2006) called it a population of interest from which the individual participant or object for the measurement is taken. The target population is 3650 NGOs that are registered and operational within Nairobi County in different sectors monitoring and evaluating their programs (NGO Bureau Database, 2013). These NGOs are in the Agriculture, Education, Health, Human Rights, Youth and HIV/AIDS sectors. These sectors target larger population as their areas of operation address majorly basic needs and therefore intended to have great impact on the life of the target group.

## 3.4. Sample size and sampling procedure

In this survey study sample size was determined using Yamane formula and sampling procedure was carried out as described below.

#### 3.4.1. Sample Size

A sample is a subset or part of the target population in a study from which information is obtained. Due to practical difficulties with responses from large survey groups, a meaningful survey sample size was determined. In this study, a representative sample size was calculated at 95% confidence level and an error limit of 10%, based on the Yamane formula (1967). The formula used by Yamane (1967) is:

$$n = \frac{N}{1 + Ne^2}$$

Where:

n = required responses

 $e^2 = error limit$ 

N = sample size

Source: Yamane (1967)

The Yamane formula assumes a normal distribution. The selected NGOs were assumed to be normally distributed in terms of the parameters for interpretation of the influence of M&E tools on the program performance. The Yamane formula was therefore considered suitable for determining an appropriate sample size.

Table 3	<b>3.1:</b>	Sample	Size
---------	-------------	--------	------

NGO Sector	Population	Sample
Agriculture	341	9
Education	1154	31
Health	906	24
HIV/AIDS	718	19
Human Rights	58	1
Youth	473	13
Total	3650	97

Source: NGOs Co-ordination Board, online database (2013)

$$n = \frac{3650}{1 + 3650 (0.10)^2}$$
  
= 97 NGOs

#### **3.4.2. Sampling procedure**

According to Mugenda & Mugenda (2003), sampling is the process of selecting the subjects or cases to be included in the study as representative of the target population. The sample for this research study was selected using stratified random sampling method. The selected NGOs within Nairobi County were put in strata based on their sector of operation and then a sample units for the study selected from each stratum (Kothari, 2004). The sample size for this study was 97 NGOs which the researcher randomly picked from each stratum based on the size of the stratum. Two respondents (1 project manager and 1 M&E officer) were randomly sampled from each NGO, rather than the project managers and M&E staff.

Whereas individual staff members completed the questionnaires about project M&E practices, the focus was the NGOs practices; hence the NGOs rather than the projects were the subject of study. The respondents for the target population were the project managers and M&E staff in the projects. This is because they were responsible for many aspects of the projects, including the M&E tools. Therefore, they were better placed to provide the information required by this study. Sekaran (2003) argues that in stratified sampling, respondents from each homogeneous research category reduces sampling error and gives a sample size that is more representative than applying simple random sampling technique uniformly across the entire research population. This sampling procedure can also produce a weighted mean that has less variability than the arithmetic mean of a simple random sample of the entire population (Larry, 2013). The confidence level for this research was 95% with a margin of error of +/- 10% (Smith, 2013).

## 3.5. Research instruments

Researcher used questionnaire specifically designed for this study to gather information. The questionnaire consisted of items applying the Likert scale with the responses ranging from strongly agree, agree, neutral, disagree and strongly disagree on a 1,2,3,4,5 rating scale. The Likert scale tests the attitude of the respondents. To collect the information from the NGOs' project managers and M&E officers, questionnaires were personally administered to the respondents. The respondents were assured of anonymity. Creswell (2012) states that the questionnaire elicits information on appropriate area to which respondents respond objectively. Therefore, questionnaire was chosen as the most appropriate instrument for data collection as the

researcher intended to objectively determine the influence of M&E tools on program performance of selected NGOs in Nairobi County.

There was one questionnaire for project managers and M&E staffs in this study. The questionnaire consisted of two parts; I and II with a total of 34 items. Part I contained items which elicit responses on the background information such as gender, age, academic and professional qualification and project description. Part II items deal with M&E tools namely logical framework, result framework, earned value management and performance management plan as well as program performance.

#### 3.5.1 Pilot testing of the instrument

This involves checking for the suitability of the questionnaire. The quality of research instrument determines the outcome of the study (Alan & Emma, 2011). The questionnaires were administered to 10 project managers and 10 M&E officers in 10 NGOs monitoring and evaluating their programs in Nairobi County but not part of the sample. The selected individuals for piloting were expected to respond to the items in the questionnaires. Piloting established whether the instrument was able to measure the construct adequately; established whether the respondents found the items easy to respond to; established whether the instrument was comprehensive enough to elicit the intended information and the level of the respondent; and established whether the time allocated for the data collection was adequate. The respondents in the piloting exercise were not included in the final administration of the questionnaires.

#### **3.5.2.** Validity of the instrument

Testing the validity of research instruments helps the researcher to be sure that the items measure the desired constructs. Mugenda & Mugenda (2003) define validity as the accuracy and meaningfulness of the inferences which are based on research results. In other words validity is the degree to which results obtained from the data actually represents the phenomena under study. Validity can be assessed using both theoretical and empirical approaches (Bhattacherjee, 2012). Theoretical assessment of validity (translational validity) focuses on how well the theoretical construct is translated into operational measure. It has two subtypes (face and content validity) and typically assessed by a panel of experts. Face validity refers to whether an indicator seems to be a reasonable measure of its underlying construct on its face. Content validity is the assessment of how well a set of scale items matches with the relevant content domain of the construct it tries to measure. Empirical assessment of validity (criterion-related validity) is the empirical assessment of how well a given measure relates to one or more external criterion based on empirical observation. This assessment is based on quantitative analysis of observed data using statistical techniques such as correlational analysis, factor analysis among others. A measure then is said to possess construct validity to the degree that it conforms to predicted correlations with other theoretical propositions.

The instrument for this study was validated through application of content validity, which is determined by expert judgment. Content validity is a matter of judgment by the researcher and professionals, and has no specific formula for determination (Kothari, 2004). This test of validity method was selected because it is consistent with the objectives of the study and the research paradigm that sought to unearth the details of the contents in the M&E tools as well as their relevance, usefulness and appropriateness to enhance the program performance. To test for validity of the research instrument in this study, expert opinion from three experts in the project management field was sought. This study therefore established validity of the instruments by seeking the views of the researcher's supervisors as well as two M&E experts. While determining the validity of the items in the research instruments, the advice of two experts was followed as proposed by Kothari (2004).

## 3.5.3. Reliability of the instrument

Reliability is the degree to which an assessment tool produces stable and consistent results. Orodho (2004) defines reliability as the degree to which the particular measuring procedure gives similar results over a number of repeated trials. To establish the reliability of the instrument, the researcher used the split-half reliability method. The test was first divided into halves and administered to the total respondents in the pilot study and scored separately. The scores of one half of test were then compared to the scores of the remaining half to test the reliability (Kaplan &Saccuzzo, 2001). The method was chosen because it is a useful when it is impractical or undesirable to assess reliability with two tests or to have two test administrations (because of limited time or money) (Cohen &Swerdlik, 2001). Cronbach's Alpha ( $\alpha$ ) was used to test the reliability of the items in the instrument. Larry (2013) indicates that Cronbach Coefficient is used to test internal consistencies of items/traits of a construct when a research

instrument has Likert scales with multiple responses for data collection. Therefore, it was the most appropriate for this study since the instrument had Likert scale with multiple responses. Creswell (2012) indicates that a reliable research instrument should have a composite Cronbach Alpha,  $\alpha$  of at least 0.7 for all items under study. Thus, reliability coefficient,  $\alpha$ , of 0.7 was considered acceptable. The instrument was revised and had a composite  $\alpha$  of 0.8642 when going for field.

## 3.6. Data collection procedure

Donald & Delno (2006) indicate that both primary and secondary sources of data are permitted in research. The main focus was data obtained from primary sources through a self- structured administered questionnaire. The researcher obtained a letter from University of Nairobi allowing him to conduct the research. The researcher then sought permission from National Commission for Science, Technology and Innovation (NACOSTI) to conduct the research in the selected NGOs monitoring and evaluating their programs in Nairobi County. When granted the permission through a research permit, the research activity commenced. The researcher sought permission from the management of the selected NGOs monitoring and evaluating their programs. This was done by writing letters expressing the desire to undertake research in the selected NGOs stating the purpose of the research and its significance in respect to the program performance. After the management consent, the study then started and the researcher administered the questionnaires personally to the respondents who were given ample time to respond to the questions. This ensured the achievement of a good response rate and gave the respondents a chance to seek clarification on items which prove difficult to answer. Follow up was done through both telephone calls and emails.

#### **3.7. Data analysis techniques**

According to (Sharma, 2005) data analysis is the process of collecting, modeling and transforming data in order to highlight useful information, suggesting conclusions and supporting decision making. It involves examining what has been collected in a survey or experiment and making decision and inferences (Donald &Delno, 2006). The data collected through the use of questionnaires was analyzed descriptively. The data was then presented in percentages, frequencies and measures of central tendency. The simplest way to present data according to Brinker (1988) is in frequencies or percentage tables, which summarizes data about a single variable. Frequencies were converted to percentages so that they could be easier to interpret. In

view of the above, the researcher analyzed the data and represented the findings of the research in percentage, frequency tables. The analyzed data was then interpreted to determine the influence of M&E tools on the program performance of selected NGOs in Nairobi County. SPSS was used to do correlation analysis to determine the strength of the relationship between the use of the M&E tools and the program performance.

## **3.8. Ethical considerations**

Bhattacherjee (2012) defines ethics as norms or standards of behaviour that guide the moral choices about behavior and relationship among people. In this study, research ethics were considered to avoid any form of harm, suffering or violation. The researcher ensured that research ethics were strictly followed when developing and administering data collection tool and techniques. The authority to conduct the research was sourced via permit to conduct research from National Commission for Science, Technology and Innovation. (NACOSTI). This clarified the aim of the research and the nature of the study thus improving cooperation from the respondents during data collection. The respondents were informed that whatever they would say would only be used for research purpose. Research was carried without bias and the researcher respected the confidentiality of information from respondents. This was done by using the information without mentioning of the specific names of the people from whom the data was collected, the respondents were requested not to indicate their names on the questionnaires and disclosure of the findings will be availed on request. Further, the researcher committed to make compensations in the event of any damages to the organizations under study or individual respondents, especially reputational related, arising as a result of this research.

#### **3.9.** Operational definition of the variables

An operational definition is a definition that defines the exact manner in which variable is measured (Tuckman, 1978). The Table 3.1 below indicates the types of variables and how these variables are measured in the course of the research.

<b>Table 3.2:</b>	Operational	definition	of the	variables
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Objectives	Variables	Indicators	Measurement	Scale	Data	Data
					collection tool	analysis
	Dependent	Relevancy	The extended the needs are met	Ordinal	Questionnaire	Descriptive
	variable:	Effectiveness	The extent the objectives are achieved			analysis
	Performance	Efficiency	The extent inputs are converted into outputs			Correlation
	of programs		The extent of stakeholders participation			analysis
		Sustainability	The extent the program changes are benefiting the			
		Impact	beneficiaries			
To determine	Independent	Project hierarchy	The extent the project hierarchy narrative influence	Ordinal	Questionnaire	Descriptive
the extent	variable:	narrative	program performance			analysis
logical	Logical	Use of indicators	The extent indicators and targets influence program			Correlation
framework	framework	and targets	performance			analysis
influence		Means of	The extent data means of verification influence			
performance of		verification	program performance			
programs		Assumptions	The extent assumptions influence program			
			performance			
To determine	Independent	Use of	The extent performance indicators and targets	Ordinal	Questionnaire	Descriptive
the extent the	variable:	performance	influence program performance			analysis
result	Result	indicators and				Correlation
framework	framework	targets	The extent data acquisition influence program			analysis
influence the		Data acquisition	performance			

performance of			The extent data analysis, use and reporting			
the programs		Data analysis, use	influence program performance			
		and reporting	The extent baselines influence program			
		Baseline	performance			
To determine	Independent	Use of work	The extent the WBS influence program	Ordinal	Questionnaire	Descriptive
the extent	variable:	breakdown	performance			analysis
earned value	Earned value	structure (WBS)				Correlation
management	management	Use of CBS	The extent the CBS influence program performance			analysis
influence			The extent Cost/ schedule variance influence			
program		Cost/schedule	program performance			
performance		variance	The extent performance index influence program			
		Performance index	performance			
To determine	Independent	Performance	The extent the performance indicators influence	Ordinal	Questionnaire	Descriptive
the extent	variable:	indicators	program performance			analysis
performance	Performance	Data acquisition				Correlation
management	management		The extent data acquisition influence program			analysis
plan influence	plan	Data quality	performance			
program			The extent data quality influence program			
performance		Data analysis, use	performance			
		and reporting	The extent data analysis, use and reporting			
			influence program performance			

#### **CHAPTER FOUR**

# DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION 4.1 Introduction

This chapter is on data analysis, presentation and interpretation. The first section in this chapter is on the response rate of the respondents. The second section of this chapter presents the profiles of respondents. The third section in this chapter is on the analysis, presentation and interpretation of the relationships under investigation. The presentation and interpretation was in line with the study's objective. The findings are presented in the form of tables showing frequencies and percentages. Since descriptive research design was used in this study, descriptive analysis was carried out in this chapter. For each research objective, descriptive analysis was first done by use of the percentiles and frequencies.

#### 4.2 Questionnaire Response Rate

A sample size of 97 NGOs from a research population of 3650 NGOs was selected. Questionnaires were administered to a sample of 97 project managers and 97 M&E officers as respondents from each of the sampled NGOs in the seven selected sectors. Out of the 194 questionnaires that were administered, 160 questionnaires were duly filled and returned and therefore regarded as the responsive instrument and formed the basis for data analysis. This formed a questionnaire return rate of 82.47%. Saunders et al. (2003) indicate that 30 to 50 percent response rate is reasonable enough for statistical generalizations.

#### **4.3 Profiles of the Respondents**

This section profiles the respondents in respect to the organization where they work, gender, age, level of educational and duration of service in the organization. Profiling of the respondents was informed by the items in the research instruments used in the study.

#### 4.3.1 Distribution of Respondents by Gender

Data was sought on whether respondents were males or females. The study found it important to analyze gender distribution of the respondent so as to compare the level of participation in the utilization of M&E tools. The study gave no preferential consideration to none of the gender in the selection of respondents. Respondents were therefore asked to indicate their gender. The responses were as shown in Table 4.1

Gender	Frequency	Percentage
Male	102	64
Female	58	36
Total	160	100

Table 4.1: Distribution of Respondents by Gender

Table 4.1 indicates that 36% of the respondents were females while 64% were males. Thus, respondents in this study were skewed in respect to gender spread. There are more male (67%) involved in M&E activities due to the nature of work. M&E activities involve visiting the program sites and field work. Due to this, many women shy away from engaging in M&E activities due to many commitments at home. This leaves men with more opportunities to take more jobs in the M&E department.

# 4.3.2 Distribution of Respondents by Age Group

Respondents were asked to indicate their age group in years. This was done to understand the age distribution of the respondents since an individual's age was not a consideration in the selection of respondents in this study. This was because it could provide background for analysis of the influence of M&E tools on the program performance. Age groups were classified into eight categories: 21 - 25 years; 26 - 30 years; 31 - 35 years; 36 - 40 years; 41 - 45 years; 46 - 50 years; 51 - 55 years; and above 55 years. The responses were as shown in Table 4.2.

Age group	Frequency	Percentage
21 – 25 years	15	9
26 – 30 years	21	14
31 – 35 years	41	26
36 – 40 years	31	19
41 – 45 years	24	15
46 – 50 years	11	7
51 – 55 years	10	6
Over 55 years	7	4
Total	160	100

 Table 4.2: Distribution of Respondents by Age Group

Table 4.2 indicates that 9% of the respondents were between the ages of 21 and 25 years; 13% between 26 and 30 years; 26% of the respondents between 31 and 35 years; 19% of the

respondents between 36 and 40 years; 15% of the respondents between 41 - 45 years; 7% of the respondents between 46 and 50 years; 6% of the respondents between 51 and 55 years; while 4% of the respondents were above 55 years of age. That 96% of the respondents were 55 years and below implies that majority of the respondents were productive employees and therefore in respect to program performance, age of the respondents would be an insignificant factor.

### 4.3.3 Distribution of Respondents by Level of Education

The respondents were asked to indicate their highest level of education. Respondent's level of education was considered important in this study in respect to responding to the research instruments as well understanding the use of M&E tools. The options that were provided in this item were: high school; certificate; diploma; bachelor's degree; post graduate degree; and others. The responses were as shown in Table 4.3.

Highest education level	Frequency	Percentage
High School	10	6
Certificate	13	8
Diploma	24	15
Bachelor Degree	71	45
Post Graduate Degree	42	26
Other (specify)	0	0
Total	160	100

Table 4.3: Distribution of Respondents by Level of Education

The results in Table 4.3 indicate that 8% of the respondents had certificate. The level of education for the respondents was considered important in this study because the respondents were required to fill in the questionnaire individually. Therefore the data collection procedures used in the study were based on the assumption that the respondents were literate and had basic understanding of the importance of research and therefore they would willingly act as the respondents in the study. However, the study revealed that 100% of the respondents had relative understanding of the M&E tools and in addition, they could all individually fill in the questionnaires objectively.

#### 4.3.4 Distribution of Respondents by Duration of Service in the Organization

Respondents were asked to indicate how long they had worked in their organizations. The duration an individual had worked in the selected NGOs was considered important in appreciating the use of M&E tools. The study found it important to analyze the duration for which the respondent had worked. This was considered as important because the duration also determines the extent to which monitoring and evaluation is used on the projects. The data was clustered and categorized as shown in Table 4.4.

Duration of service	Frequency	Percentage
0-2 years	25	16
2-5 years	89	55
Over 5 years	46	29
Total	160	100

 Table 4.4: Distribution of Respondents by Tenure of Service in the Organization

The results in Table 4.4 indicate that 16% of the respondents had worked in their current organization for two years. This result implies that 29% of the respondents had worked in the organization for five years and above. Majority (71%) of the respondents had worked for five years or less in the organization. It is evident that in terms of the human resources the NGOs did not have experienced personnel at their disposal for the projects they implemented. Most of the sampled NGO projects relied on inexperienced personnel (employing staff with 5 or less years) as opposed to experienced personnel (employing staff with over 5 years). This is explained by the fact that most of the projects could not attract a lot of experienced personnel since they could not be able to adequately pay them because M&E budget is not always clear as many M&E functions and activities overlap with implementation and management activities. It is critical to include M&E cost in the management cost and so M&E cost should be stated clearly.

## 4.4 Influence logical framework on program performance

The study sought to determine the influence of the logical framework on program performance. The responses are presented in Table 4.5 to Table 4.10.

## 4.4.1 Project hierarchy narrative

Data was sought on whether project hierarchy narrative addresses the needs of the target group. The study found it important to analyze project hierarchy narrative so as to determine its influence on the project performance. The responses were as shown in Table 4.5

Project hierarchy narrative	Frequency	percentage
1	102	64
2	40	25
3	2	1
4	10	6
5	6	4
Total	160	100

 Table 4.5: Hierarchy narrative addresses the needs of the target group

The results in Table 4.5 indicate that 64% strongly agreed, 25% agreed, 1% were neutral, 6% disagreed, and 4% strongly disagreed. The findings showed that majority of the respondents (89%) acknowledged that that result chain do addresses the needs of the target group. This clearly show that the project hierarchy narrative clarify what is the purpose of the project. However, 1% of the respondents were unable to ascertain whether the result chain really addresses the priorities of the target group. 10% of the respondents argued that the result chain does not address the needs of the target group. This can be attributed to little involvement of the target group in the objective formulation.

#### 4.4.2 Use of indicators and targets

Data was sought on whether the indicators describe how the achievement of the results will be measured. The study found it important to analyze use of indicators and targets so as to determine its influence on the project performance. The responses were as shown in Table 4.6.

Use of indicators and targe	ets Frequency	percentage
1	101	63
2	46	29
3	2	1
4	7	4
5	4	3
Total	160	100

Table 4.6: Indicators describe how the achievement of the results will be measured

The results in Table 4.6 indicate that 63% strongly agreed, 29% agreed, 1% were neutral, 4% disagreed, and 3% strongly disagreed. Thus, a majority of respondents (92%) agreed that the indicators and targets help describe how the achievement will be measured. This shows that the

indicators and targets are clear. Thus, indicators enable managers to track progress, demonstrate results, and take corrective action to improve service delivery. The indicators allow consistent gathering of information on the program performance and the use of the results to improve administration and operation. However, more needs to be done as 7% of the respondents felt that the indicators are vague making it hard to gauge the success of the project. Participation of key stakeholders in defining indicators is important because they are then more likely to understand and use indicators for management decision-making.

## 4.4.3 Means of verification

Data was sought on whether means of verification clearly helps track changes. The study found it important to analyze use of means of verification so as to examine its influence on the project performance. The responses were as shown in Table 4.7

Means of verification	Frequency	percentage
1	92	58
2	49	31
3	4	2
4	10	6
5	5	3
Total	160	100

 Table 4.7: Means of verification clearly helps track changes

The results in Table 4.7 indicate that 58% strongly agreed, 31% agreed, 2% were neutral, 6% disagreed, and 3% strongly disagreed. This shows that means of verification is very important in tracking the progress of the project as supported by 89% of the respondents. Means of verification provides evidence for the measurement or verification of specified indicators used to measure progress. This means that the respondents can easily track progress and determine the program impact. Therefore, identifying the types of data and how to obtain them is essential for M&E tasks to be carried out. There is need to consider how the information will be collected (method), who will be responsible, and the frequency with which the information should be provided. This would ensure that the project implementers know whether the project is in the right track or not which would greatly improve project effectiveness.

## 4.4.4 Baseline Data

Data was sought on whether the baseline data helps track changes. The study found it important to analyze use of baseline so as to examine its influence on the project performance. The responses were as shown in Table 4.8.

<b>Baseline Data</b>	Frequency	percentage
1	91	57
2	53	33
3	2	1
4	9	6
5	5	3
Total	160	100

**Table 4.8: Baseline helps track changes** 

The results in Table 4.8 indicate that 57% strongly agreed, 33% agreed, 1% were neutral, 6% disagreed, and 3% strongly disagreed. A majority of the respondents (90%) concurred that baseline greatly help track progress. The findings reveal that the baseline helps track progress and determine the impact of the project. Thus program implementers can evaluate the level of progress achieved by any project. The baseline data acts as a benchmark for comparison and analysis with actual progress. Therefore, before the implementation of a project, baseline data must be collected to serve as the basis for monitoring and evaluation of the project.

#### 4.4.5 Assumptions

Data was sought on whether the assumptions help clarify the risks. The study found it important to analyze use of assumptions so as to examine its influence on the project performance. The responses were as shown in Table 4.9.

Assumptions	Frequency	percentage
1	99	62
2	48	30
3	1	1
4	8	5
5	4	2
Total	160	100

Table 4.9: Assumptions help clarify the risks

The results in Table 4.9 indicate that 62% strongly agreed, 30% agreed, 1% were neutral, 5% disagreed, and 1% strongly. With 92% of the respondents affirming that assumptions help clarify the risks. Assumptions help clarify the risks which improves project effectiveness and sustainability by facilitating the broader understanding of the external environment outside the management control. Identifying critical assumptions, assessing associated risks, and determining how they should be addressed is necessary for maintaining the progress towards the program goal. Assessing risk reduces the risks that can greatly hinder the project and greatly improve the project sustainability.

#### 4.4.6 Influence of logical framework

Data was sought on whether the logical framework influences program performance. The responses were as shown in Table 4.10.

Influence of logic	cal framework	Frequency	percentage
1		89	56
2		40	25
3		8	5
4		13	8
5		10	6
Total		160	100

Table 4.10: Influence of logical framework on program performance

The results in Table 4.10 indicate that 56% strongly agreed, 25% agreed, 5% were neutral, 8% disagreed, and 6% strongly disagreed. This indicates that logical framework is an invaluable tool for managing program performance with 81% giving a nod. However, 14% felt that other factors influence program performance with 5% unsure about the significance of logical framework on program performance. The study found out that logical framework greatly influence program performance. It creates relevancy and effectiveness by aligning the priorities and needs of the target group to the project objectives. This ensures sustainability of the project as well as impact of the project. The project logic helps show clearly the linkages and alignments among goal, outcome, outputs and activities. By defining the indicators, collecting baseline data and setting targets, the impact or changes due to the project can easily be determined. The means of verification provides prove for progress reported against each performance indicator at output and outcome level.

The assumptions column places the activities within the broader development environment that encourages thorough examination of the program risks. These findings confirm Bakewell & Garbutt (2005) that logical framework improves the preparation of a program by clarifying the design and eases the measurement of progress about the expected results and objectives. This makes the project transparent to donor, managers, cooperating agencies, and supporting organizations as well as enhancing accountability of the use of resources. The participation of stakeholders instills sense of ownership of the program which greatly promotes sustainability of the program. These findings reflect the findings by Barasa (2014) and Mulandi (2013) that logical framework is a participatory tool that serves as an integral part for successful program implementation. The logical framework directs and focuses the program activities towards result achievement thus, promoting program performance.

### 4.5 Influence result framework on program performance

The study sought to determine the influence of the result framework on program performance. The responses are presented in Table 4.11 to Table 4.15.

#### **4.5.1** Performance indicators and targets

Data was sought on whether the performance indicators are clear to the project key stakeholders. The study found it important to analyze use of indicators and targets so as to examine its influence on the project performance. The responses were as shown in Table 4.11.

Indicators and targets	Frequency	percentage
1	95	60
2	50	31
3	4	2
4	6	4
5	5	3
Total	160	100

 Table 4.11: Performance indicators and targets are clearly stated

The results in Table 4.11 indicated that 60% strongly agreed, 31% agreed, 2% were neutral, 4% disagreed, and 3% strongly disagreed. Thus, a majority of respondents (91%) agreed that the indicators and targets are clear. This means that all the stakeholders have greater understanding of the project. This promotes consensus building and ownership of the project. However, more

needs to be done as 7% of the respondents felt that the indicators are vague making it hard to gauge the success of the project. Therefore, it is important to involve the key stakeholders in developing the project logic for successful implementation of a project.

#### 4.5.2 Baseline Data

Data was sought on whether the baseline data helps track changes. The study found it important to analyze use of baseline so as to examine its influence on the project performance. The responses were as shown in Table 4.12.

Baseline Data	Frequency	percentage
1	100	62
2	43	27
3	1	1
4	13	8
5	3	2
Total	160	100

 Table 4.12: Baseline helps track changes

The results in Table 4.12 indicate that 62% strongly agreed, 27% agreed, 1% were neutral, 8% disagreed, and 2% strongly disagreed. The findings reveal that the baseline help determine the impact of the project with 89% agreeing. The findings reveal that the baseline helps track progress and determine the impact of the project. Hence, the program performance can be assessed if there is existing baseline data. The baseline data acts as a benchmark for comparison and analysis with actual progress. Therefore, before the implementation of a project, baseline data must be collected to serve as the basis for monitoring and evaluation of the project.

#### 4.5.3 Data acquisition

Data was sought on whether data acquisition helps track changes. The study found it important to analyze use of data acquisition so as to examine its influence on the project performance. The responses were as shown in Table 4.13.

Data acquisition	Frequency	percentage
1	100	62
2	42	26
3	1	1
4	13	8
5	5	3
Total	160	100

 Table 4.13: Data acquisition helps track changes

The results in Table 4.13 indicate that 62% strongly agreed, 26% agreed, 1% were neutral, 8% disagreed, and 3% strongly disagreed. This shows that data acquisition is very important in tracking the progress of the project as supported by 88% of the respondents. Data acquisition provides evidence for the measurement or verification of specified indicators used to measure progress. This means that the respondents can easily track progress and determine the program impact. Therefore, identifying the types of data, who to collect data and how to obtain data and the frequency with which the information should be provided is essential for M&E tasks to be carried out. This would ensure that the project implementers know whether the project is in the right track or not which would greatly improve project effectiveness.

## 4.5.4 Data analysis, use and reporting

Data was sought on whether the analysed, used and reported data is utilized to improve progress. The study found it important to analyze use of data analysis, use and reporting so as to examine its influence on the project performance. The responses were as shown in Table 4.14.

Data analysis, use and reporting	Frequency	percentage
1	112	70
2	32	20
3	3	2
4	8	5
5	5	3
Total	160	100

 Table 4.14: Analysed, used and reported data is utilized to improve progress

The results in Table 4.14 indicate that 70% strongly agreed, 20% agreed, 2% were neutral, 5% disagreed, and 3% strongly disagreed. Data acquisition makes no sense until it is utilized to

improve the performance of the project. The findings show that 90% of the respondents believe that utilization of the M&E information greatly enhance the success of the project. Therefore, the information from the M&E processes should be incorporated in the implementation for corrective action. However, this must involve the key stakeholders to eliminate any dissensions that might arise due to limited participation of key stakeholders.

## 4.5.5 Influence of Result Framework

Data was sought on whether the result framework influences program performance. The responses were as shown in Table 4.15.

Influence of Result Framework	Frequency	percentage
1	72	45
2	44	28
3	14	9
4	18	11
5	12	7
Total	160	100

 Table 4.15: Result framework influences program performance

The results in Table 4.15 indicate that 45% strongly agreed, 28% agreed, 9% were neutral, 11% disagreed, and 7% strongly. This indicates that result framework is a vital tool for managing program performance with 73% giving an affirmation. However, 18% felt that other factors influence program performance with 9% unsure about the significance of logical framework on program performance.

A results framework builds on the theory of change and at the same time helps clarify program causal pathways from the planned interventions to the intended outcomes. This helps establish an evidence-based approach to monitoring and evaluation. The study found out that performance indicators direct the program processes towards impact, outcomes and outputs and aligns inputs and activities to achieve the results. The findings concur with Fleischer & Christie (2009) that results are the basis of all projects planning and determine what activities are to be carried out. The framework set course for managing results as execution of program processes advances and gauges results in terms of what has been achieved. Thus, the indicators set the groundwork for

ongoing monitoring and evaluation by identifying baselines and targets to be achieved. This help to gauge the level of success of the program. When supported with sound data collection enable managers to track progress, demonstrate results, and identify problems early enough to allow corrective action to be taken.

The study revealed that baseline data greatly help track progress and help determine the impact of the project. Baseline provides a benchmark at different point of project implementation, for comparison and analysis with actual progress. These findings espouse view by USAID (2010) that baseline data should be used to monitor progress of projects. The study further revealed that data acquisition makes no sense until it is utilized to improve the project performance. This mirrors the USAID (2002) observation that if baseline information will not be subsequently used to improve the quality of activity implementation or to measure development results, then the reason for collecting the data should be seriously questioned. These findings also agree with the work of Rist, Boily & Martin (2011) that evaluation must be taken with the intention to use its results to meaningfully inform decision making processes, increase organizational knowledge repository, helps account for the resources used, improve practice through learning, improve program sustainability as well as help identify and manage risks. At the same time, the evaluation information should be available and accessible through reporting.

#### 4.6 Influence Earned value management on program performance

The study sought to determine the influence of EVM on program performance. The responses are presented in Table 4.16 to Table 4.20.

## 4.6.1 Work Breakdown Structure

Data was sought on whether WBS contributes to schedule planning. The study found it important to analyze use of WBS so as to examine its influence on the project performance. The responses were as shown in Table 4.16.

WBS	Frequency	percentage
1	108	67
2	44	28
3	1	1
4	5	3
5	2	1
Total	160	100

Table 4.16: WBS contributes to schedule planning

The results in Table 4.16 indicate that 67% strongly agreed, 28% agreed, 1% were neutral, 3% disagreed, and 1% strongly disagreed. With majority of respondents (95%) agreeing that WBS contributes to schedule planning. Thus, the WBS defines the total scope of the project and describes the durations of all the project activities. Therefore, the program duration can easily be determined. Thus, it keeps the project team focused on achieving project goal which improves project success. Therefore, in planning the project schedule, all the activities should be well described in the WBS and responsibility for achievement and performance allocated to monitor and control time, cost and content.

#### 4.6.2 Cost Breakdown Structure

Data was sought on whether CBS contribute to cost tracking. The study found it important to analyze use of CBS so as to examine its influence on the project performance. The responses were as shown in Table 4.17.

CBS	Frequency	percentage
1	110	68
2	46	29
3	1	1
4	2	1
5	1	1
Total	160	100

Table 4.17: CBS contribute to cost tracking

The results in Table 4.17 indicate that 68% strongly agreed, 29% agreed, 1% were neutral, 1% disagreed, and 1% strongly disagreed. With majority of respondents (95%) agreeing that CBS contributes to cost tracking. Hence, the cost of the project can easily be computed if there is

existing CBS. With CBS, program implementers can improve financial accountability for better program performance. Therefore, without a detailed CBS it is very hard to know how much it would cost to implement a certain project. In addition, it helps control the cost of the project during the implementation. With no clear CBS, a project can be under funded which may lead to project completion failure or over funded which may lead to wastage. Therefore, in planning the project schedule, all the activities should be well described and the associated cost shown.

#### 4.6.3 Variances

Data was sought on whether variances were forecasted and estimated at completion. The study found it important to analyze use of variances so as to examine their influence on the project performance. The responses were as shown in Table 4.18.

Variances	Frequency	percentage
1	94	59
2	47	29
3	4	3
4	9	6
5	4	3
Total	160	100

 Table 4.18: Variances forecasted and estimated at completion

The results in Table 4.18 indicate that 59% strongly agreed, 29% agreed, 3% were neutral, 6% disagreed, and 3% strongly disagreed. A majority of the respondents (88%) said they forecast and estimate the variances at completion. When the variances are forecasted and estimated at completion, they help determine whether the project is spending more money or less on a particular activity than what was budgeted as well as whether the project is behind schedule or on schedule. This enables the project management team to plan ahead and make the necessary adjustments to the project plan. This will enable them to predict how much more resources will be needed to complete the project or how much will be saved. This helps make the necessary early corrective action when deviating from the plan during the project implementation phase.

#### 4.6.4 EVM performance indices

Data was sought on whether EVM performance indices contribute to acceptance of work completed. The study found it important to analyze use of EVM performance indices so as to examine their influence on the project performance. The responses were as shown in Table 4.19.

EVM	Frequency	percentage
1	97	60
2	45	28
3	6	4
4	9	6
5	3	2
Total	160	100

 Table 4.19: EVM performance indices contribute to acceptance of work completed

The results in Table 4.19 indicate that 60% strongly agreed, 28% agreed, 4% were neutral, 6% disagreed, and 2% strongly disagreed. The findings reveal that a majority of the respondents (88%) acknowledge that performance indices contribute to acceptance of work completed. They help the organization to compare the performance of several projects (or project managers), or the same project over different time periods, provide an early warning signal and help forecast the final cost of the project. Hence, necessary corrective actions are taken to improve efficiency.

### 4.6.5 Influence of Earned Value Management

Data was sought on whether the Earned Value Management influences program performance. The responses were as shown in Table 4.20.

Influence of EVM	Frequency	percentage
1	75	47
2	48	30
3	9	6
4	17	10
5	11	7
Total	160	100

 Table 4.20: Influence of Earned Value Management on program performance

The results in Table 4.20 indicate that 47% strongly agreed, 30% agreed, 6% were neutral, 10% disagreed, and 7% strongly. This indicates that Earned Value Management is a crucial tool for

managing program performance with 77% asserting its significance. However, 17% felt that other factors influence program performance with 6% unsure about the significance of logical framework on program performance. The study revealed that Earned Value Management is a crucial tool for managing program performance. This confirms the Marshall (2007) preposition that EVM is a project management technique for measuring project performance and progress in an objective manner. EVM combines measurements of scope, schedule and cost into a single integrated system for accurate forecasts of project performance problems.

The WBS defines the total scope of the project which prevents scope creep and helps improves project success. This augment the study conducted by DoD (2006) that improved activity scheduling ensures optimum resource utilization and prevents unnecessary waste. It also saves time and leads to better project organization, thus enhancing program performance. The study also revealed that CBS contributes to cost tracking ensures that the project stays within budget and ultimately improve financial accountability for better program performance. At the same time, cost tracking helps compute the cost of the project. These findings strengthen the findings by Khatiala (2012) who concluded that CBS improves financial accountability and wins donors support. The study further found out that when the variances are forecasted and estimated at completion, they help determine whether the project is spending more money or less on a particular activity than what was budgeted as well as whether the project is behind schedule or on schedule. This enables the project management team to plan ahead and make the necessary adjustments to the project plan. Therefore, the study is in agreement with the findings by Fleming & Koppleman (2002) that variances act as early warning signals that enable managers to identify and control problems before they become insurmountable.

The study further revealed that performance indices contribute to acceptance of work completed. The performance indices provide an early warning signal and help forecast the final cost of the project. The indices also help the organization to compare the performance of several projects (or project managers), or the same project over different time periods. The performance indices are measures of efficiency. An index less than 1.0 indicates that there is project overrun or behind schedule. This ensures that necessary corrective actions are taken to improve efficiency. This confirmed the findings by Christensen (1998) that cumulative CPI is a predictor of the final cost of a project (Estimate at Completion) and serves as a benchmark for measuring project success.

Thus, EVM contributes to preventing scope creep, improving communication and stakeholders' participation, reducing risks, enhancing efficiency, project forecasting, better accountability and performance tracking.

#### 4.7 Influence performance management plan on program performance

The study sought to determine the influence of PMP on program performance. The responses are presented in Table 4.21 to Table 4.25.

#### 4.7.1 Performance indicators

Data was sought on whether the performance indicators are clear to the project key stakeholders. The study found it important to analyze use of indicators and targets so as to examine its influence on the project performance. The responses were as shown in Table 4.21.

Performance indicators	Frequency	percentage
1	107	67
2	41	26
3	1	1
4	7	4
5	4	2
Total	160	100

 Table 4.21: Performance indicators are clear to the project key stakeholders

The results in Table 4.21 indicate that 67% strongly agreed, 26% agreed, 1% were neutral, 4% disagreed, and 2% strongly disagreed. Thus, a majority of respondents (93%) agreed that the indicators and targets are clear. This means that the key stakeholders have greater understanding of the project. This promotes consensus building and ownership of the project. This shows that the project achievement can easily be determined and any corrective action undertaken where necessary. Therefore, it is important to involve the key stakeholders in developing the project logic for successful implementation of a project.

### 4.7.2 Data acquisition

Data was sought on whether data acquisition helps track changes. The study found it important to analyze use of data acquisition so as to examine its influence on the project performance. The responses were as shown in Table 4.22

Data acquisition	Frequency	percentage
1	109	68
2	45	28
3	2	1
4	3	2
5	1	1
Total	160	100

 Table 4.22: Data acquisition helps track changes

The results in Table 4.22 indicate that 68% strongly agreed, 28% agreed, 1% were neutral, 2% disagreed, and 1% strongly disagreed. This shows that data acquisition is very important in tracking the progress of the project as supported by 96% of the respondents. Data acquisition provides evidence for the measurement or verification of specified indicators used to measure progress. This means that the respondents can easily track progress and determine the program impact. Therefore, the project implementers must have data source, person responsible for data collection and frequency of data collection should be provided for M&E processes. This would ensure that the project implementers know whether the project is in the right track or not.

#### 4.7.3 Baselines Data

Data was sought on whether the baseline helps track changes. The study found it important to analyze use of baseline so as to examine its influence on the project performance. The responses were as shown in Table 4.23.

<b>Baselines Data</b>	Frequency	percentage
1	109	68
2	37	23
3	2	1
4	8	5
5	4	3
Total	160	100

 Table 4.23: Baseline data helps track changes

The results in Table 4.23 indicate that 68% strongly agreed, 23% agreed, 1% were neutral, 5% disagreed, and 3% strongly disagreed. The findings reveal that the baseline help determine the impact of the project as attested by 91% of the respondents. The findings reveal that the baseline

helps track progress and determine the impact of the project. The baseline data serves as the basis for project monitoring and evaluation and benchmark for comparison and analysis with actual progress. Therefore, before the implementation of a project, baseline data must be collected to serve as the basis for monitoring and evaluation of the project.

#### 4.7.4 Data analysis, use and reporting

Data was sought on whether the analysed, used and reported data is utilized to improve progress. The study found it important to analyze use of data analysis, use and reporting so as to examine its influence on the project performance. The responses were as shown in Table 4.24.

Data analysis, use and reporting	Frequency	percentage
1	78	49
2	72	45
3	1	1
4	7	4
5	2	1
Total	160	100

Table 4.24: Analysed, used and reported data is utilized to improve progress

The results in Table 4.24 indicate that 49% strongly agreed, 45% agreed, 1% were neutral, 4% disagreed, and 1% strongly disagreed. The findings show that 94% of the respondents believe that utilization of the M&E information greatly enhance the success of the project. The M&E information only make sense when they are used to improve program implementation. Therefore, the information from the M&E processes should be incorporated in the implementation for corrective action. However, this must involve the key stakeholders to eliminate any dissensions that might arise due to limited participation of key stakeholders.

#### 4.7.5 Influence of Performance Management Plan

Data was sought on whether the Performance Management Plan influences program performance. The responses were as shown in Table 4.25.

Influence of PMP	Frequency	percentage
1	69	43
2	46	29
3	15	9
4	20	13
5	10	6
Total	160	100

Table 4.25: Influence of Performance Management Plan on program performance

The results in Table 4.25 indicate that 43% strongly agreed, 29% agreed, 9% were neutral, 13% disagreed, and 6% strongly. This indicates that Performance Management Plan is a crucial tool for managing program performance with 71% asserting its significance. However, 19% felt that other factors influence program performance with 9% clueless about the significance of logical framework on program performance.

Performance Management Plan builds on result framework and at the same time helps clarify program causal pathways of a program. It establishes an evidence-based approach to monitoring and evaluation. The study found out that performance indicators direct the program processes towards impact, outcomes and outputs and aligns inputs and activities to achieve the results. The findings concur with Fleischer & Christie (2009) that results are the basis of all projects planning and determine what activities are to be carried out. When the performance indicators are monitored, they enable managers to track progress, demonstrate results, and identify problems early enough to allow corrective action to be taken. The data acquisition provides prove for progress reported against each performance indicator at output and outcome level.

The study revealed that baseline data greatly help track progress and help determine the impact of the project. This augments the USAID (2010) preposition that baseline data serves as the basis for carrying out program monitoring and evaluation. Moreover, USAID (2002) asserts that if baseline information will not be subsequently used to improve the quality of activity implementation or to measure development results, then the reason for collecting the data should be seriously questioned. The study further revealed that data acquisition makes no sense until it is utilized to improve the project performance. This finding reflects the views expressed by Rist, Boily & Martin (2011) that evaluation must be taken with the intention to use its results to meaningfully inform decision making processes, increase organizational knowledge repository, helps account for the resources used, improve practice through learning, improve program sustainability as well as help identify and manage risks. At the same time, the evaluation information should be available and accessible through reporting.

#### **4.8 Program performance analysis**

Data was sought on the program performance. This was done so as to determine the influence of M&E tools. The responses are presented in table 4.26.

Program performance	SA	A	Ν	D	SD
The performance of our organization is satisfactory	68	56	6	19	11
The outcome achieved benefit the target group	76	44	4	26	10
Quality outputs delivered on time	86	41	7	14	12
There are changes brought about by the program	75	53	5	18	9
The program performance is due to use of M&E tools	82	35	9	18	16
Total	387	229	31	95	58

### Table 4.26: Program performance analysis

The results in Table 4.26 show that 77% of the respondents agreed that performance of their respective institutions were satisfactory, 19% disagreed while 4% were not sure. The respondents based their rating on stakeholders' satisfaction by external evaluators and regular responses from the stakeholders. This could be attributed to the effectiveness of the projects which always gave satisfactory results. 76% of the respondents agreed that the outcome of the project benefited the target group, 22% disagreed while 2% were unable to ascertain the benefits of the projects. This shows that most of the projects were relevant to the needs and priorities of the target group and the method of delivery was appropriate to the development context as well as proper policy and regulatory frameworks were in place to support continuation.

This ensures sustainability of the project and promotes ownership of the project. This encourages stakeholders to be committed to provide continuing support. 79% of the respondents concurred that quality outputs were delivered on time, 17% disagreed while 4% were unsure. This means that the program implementation was efficient. This was based on the number of regularly received complaints from stakeholders especially the target group. 80% of the respondents agreed that the projects implemented brought about some changes, 17% disagreed while 3%

were unable to discern the changes. Given that majority of the respondents agreed that the projects were relevant to the target group's needs and priorities, the project impacts could easily be determined. The study further revealed that 73% of the respondents agreed that M&E tools influenced the program performance, 21% disagreed while 6% were neutral. It is no doubt that the uses of the M&E tools determine the program performance as attested by a larger proportion of the respondents. However, it is worth noting that 21% of the respondents felt otherwise. Thus, the success of the project could be attributed to other factors such as leadership skills of the project managers, organisational culture, political stability and availability of resources.

### **4.9 Correlational Analysis**

Correlational analysis using spearman rho was conducted to determine the influence of the M&E tools on the program performance as shown in Table 4.27 to Table 4.30.

#### 4.4.1 Logical Framework

Correlation analysis was conducted to determine the relationship between logical framework and program performance as presented in table 4.27.

	Correlation		Logframe	Performance
-	Spearman' rho	Logframe Correlation Coefficient	1.000	0.983*
		Sig. (2-tailed)	•	.017
		Ν	160	160
		Performance Correlation Coefficient	0.983*	1.000
		Sig. (2-tailed)	.017	•
		Ν	160	160

 Table 4.27: Correlational analysis for logical framework

\*. Correlation is significant at the 0.05 level (2-tailed).

The analysis shows that logical framework has correlation coefficient of 0.983. This is a strong relationship that shows that logical framework determines the level of program performance. Therefore, the null hypothesis is rejected and the alternative hypothesis accepted that application of logical framework influence program performance.

### 4.4.2 Result Framework

Correlation analysis was conducted to determine the relationship between result framework and program performance as presented in table 4.28.

Correlation			RF	Performance
Spearman' rho	RF	Correlation Coefficient	1.000	0.863*
	Sig. (2-	-tailed)		.137
	Ν		160	160
	Perform	nance Correlation Coefficient	0.863*	1.000
	Sig. (2-	-tailed)	.137	
	Ν		160	160

 Table 4.28: Correlational analysis for result framework

\*. Correlation is significant at the 0.05 level (2-tailed).

The analysis indicates that result framework has correlation coefficient of 0.863. This is a strong relationship that shows that result framework determines the level of program performance. Therefore, the null hypothesis is rejected and the alternative hypothesis accepted that application of result framework influence program performance.

### 4.4.3 Earned Value Management

Correlation analysis was conducted to determine the relationship between EVM and program performance as presented in table 4.29.

Correlation		EVM Per	formance
Spearman' rho	EVM Correlation Coefficient	1.000	0.832*
	Sig. (2-tailed)	•	.168
	Ν	160	160
	Performance Correlation Coefficie	ent 0.832 <sup>*</sup>	1.000
	Sig. (2-tailed)	.168	
	Ν	160	160

Table 4.29: Correlational analysis for earned value management

\*. Correlation is significant at the 0.05 level (2-tailed).

The analysis indicates that Earned Value Management has correlation coefficient of 0.832. This is a strong relationship that shows that Earned Value Management determines the level of

program performance. Therefore, the null hypothesis is rejected and the alternative hypothesis accepted that application of earned value management influence program performance.

### 4.4.1 Performance Management Plan

Correlation analysis was conducted to determine the relationship between PMP and program performance as presented in table 4.30 below.

Correlation		PMP Per	formance
Spearman' rho	PMP Correlation Coefficient	1.000	$0.967^{*}$
	Sig. (2-tailed)		.033
	Ν	160	160
	Performance Correlation Coefficie	ent 0.967 <sup>*</sup>	1.000
	Sig. (2-tailed)	.033	
	Ν	160	160

 Table 4.30: Correlational analysis for performance management plan

\*. Correlation is significant at the 0.05 level (2-tailed).

The analysis indicates that Performance Management Plan has correlation coefficient of 0.967. This is a strong relationship that shows that Performance Management Plan determines the level of program performance. Therefore, the null hypothesis is rejected and the alternative hypothesis accepted that application of performance management plan influence program performance.

#### **CHAPTER FIVE**

# SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

### **5.1 Introduction**

This chapter presents and discusses briefly the summary of findings, then offers a conclusion and recommendations from the findings, and finally gives suggestions for further research.

### 5.2 Summary of findings

The purpose of this study was to determine the influence of M&E tools on the program performance of selected NGOs in Nairobi County, Kenya. The research objectives were used to guide the collection of required data from the respondents. The study had four main objectives which were: to determine the extent to which the use of Logical Framework as a M&E tool influence performance of programs of selected NGOs in Nairobi County; to determine the extent to which the use of Result Framework as a M&E tool influence the performance of the programs of selected NGOs in Nairobi County; to determine the extent to which the use of Earned Value Management as a M&E tool influence program performance of selected NGOs in Nairobi County; and to determine the extent to which the use of Performance Management Plan as a M&E tool influence program performance Management Plan as a M&E tool influence program performance of selected NGOs in Nairobi County.

The use of logical framework as M&E tool for managing program performance was affirmed with 81% of the respondents giving a nod and a correlation coefficient of 0.983. This was contributed by the elements of the logical framework which address various aspects of the project management. A majority of the respondents (89%) acknowledged that that result chain addresses the needs of the target group. Further, (92%) of respondents agreed that the clear indicators and targets improve project effectiveness as any corrective action can easily be undertaken where necessary. 89% of the respondents showed that means of verification is very important in tracking the project progress and provides evidence for the measurement or verification of specified indicators used to measure progress. A majority of the respondents (90%) concurred that baseline greatly help track progress and help determine the impact of the project. 92% of the respondents affirming that assumptions help clarify the risks which improves project effectiveness and sustainability.

The study revealed that result framework is a vital tool for managing program performance with 73% giving an affirmation and a correlation coefficient of 0.863. This was attributed to the

components of the result framework. A majority of respondents (91%) agreed that the clear indicators and targets enhance understanding of the project by the key stakeholders. This promotes consensus building and ownership of the project. A majority of the respondents (89%) affirmed that baseline data greatly help track progress and help determine the impact of the project. 88% of the respondents showed that data acquisition is very important in tracking the project progress and provides evidence for the measurement or verification of specified indicators used to measure progress. Data acquisition makes no sense until it is utilized to improve the project performance as suggested by 90% of the respondents. This greatly enhances the success of the project as any corrective action can easily be undertaken where necessary.

The study revealed that Earned Value Management is a crucial tool for managing program performance with 77% asserting its significance with a correlation coefficient of 0.832. (95%) of the respondents agreed that WBS contributes to schedule planning. The WBS defines the total scope of the project which prevents scope creep and helps improves project success. Improved activity scheduling ensures optimum resource utilization and prevents unnecessary waste. It also saves time and leads to better project organization, thus enhancing program performance. The study also revealed that CBS contributes to cost tracking and ultimately improve financial accountability as attested to by 95% of the respondents. This helps compute the cost of the project. A majority of the respondents (88%) said they forecast and estimate the variances at completion.

Depending on whether the variances are negative or positive, the project implementers are able to determine whether the project is spending more money or less on a particular activity than what was budgeted as well as whether the project is behind schedule or on schedule. The study further revealed that a majority of the respondents (88%) acknowledge that performance indices contribute to acceptance of work completed. The performance indices provide an early warning signal and help forecast the final cost of the project. The indices also help the organization to compare the performance of several projects (or project managers), or the same project over different time periods.

The study indicates that Performance Management Plan is a crucial tool for managing program performance with 71% asserting its significance and a correlation coefficient of 0.967. This was

attributed to the components of the Performance Management Plan. A majority of respondents (93%) agreed that the clear indicators and targets enhance the understanding of the key stakeholders about the project. This promotes consensus building and ownership of the project. 96% of the respondents showed that data acquisition is very important in tracking the project progress and provides evidence for the measurement or verification of specified indicators used to measure progress. A majority of the respondents (91%) concurred that baseline greatly help track progress and help determine the impact of the project. Data acquisition makes no sense until it is utilized to improve the performance of the project as suggested by 94% of the respondents. This greatly enhances the success of the project as any corrective action can easily be undertaken where necessary.

### **5.3 Conclusion**

The study sought to determine the influence of M&E tools on the program performance of selected NGOs in Nairobi County, Kenya. The study examined four M&E tools and was guided by four objectives. Research objective one in this study was to determine the extent to which logical framework influence program performance. The study found out that logical framework influence program performance with a correlation coefficient of 0.983. The study found out that it creates relevancy and effectiveness by aligning the priorities and needs of the target group to the project objectives; it links and aligns goal, outcome, outputs and activities. Thus, the logical framework directs and focuses the program activities towards result achievement promoting program performance. The study further revealed that the indicators help determine progress. The baseline data helps track progress and forms the basis for monitoring and evaluation. The means of verification proves the extent of progress reported against each performance indicator at output and outcome level. The assumptions column places the activities within the broader development environment that encourages thorough examination of the program risks. However, stakeholders' participation is much needed to instill sense of ownership of the program which greatly promotes sustainability of the program.

Research objective two in this study was to determine the extent to which result framework influence program performance. The study found out that result framework influence program performance with a correlation coefficient of 0.863. The study found out that performance indicators direct the program processes towards impact, outcomes and outputs and aligns inputs

and activities to achieve the results. Thus, the indicators set the groundwork for ongoing monitoring and evaluation by identifying baselines and targets to be achieved. This help to gauge the level of success of the program. When supported with sound data collection enable managers to track progress, demonstrate results, and identify problems early enough to allow corrective action to be taken.

The study revealed that baseline data greatly help track progress and help determine the impact of the project. Baseline provides a benchmark at different point of project implementation, for comparison and analysis with actual progress. The study further revealed that data acquisition makes no sense until it is utilized to improve the project performance. Thus, the information from the result framework inform decision making processes, increase organizational knowledge repository, helps account for the resources used, improve practice through learning, improve program sustainability as well as help identify and manage risks.

Research objective three in this study was to determine the extent to which EVM influence program performance. The study found out that EVM influence program performance with a correlation coefficient of 0.832. EVM combines measurements of scope, schedule and cost into a single integrated system for accurate forecasts of project performance problems. The WBS defines the total scope of the project which prevents scope creep and helps improves project success. It also saves time and leads to better project organization, thus enhancing program performance. The study also revealed that CBS contributes to cost tracking and ensures that the project stays within budget and ultimately improve financial accountability for better program performance.

The study further found out that the project implementation team can use variances to plan ahead and make the necessary adjustments to the project plan. The study further revealed that performance indices serve as early warning signals and help forecast the final cost and schedule of the project. The indices also help the organization to compare the performance of several projects (or project managers), or the same project over different time periods. Thus, EVM contributes to preventing scope creep, improving communication and stakeholders' participation, reducing risks, enhancing efficiency, project forecasting, better accountability and performance tracking. Research objective four in this study was to determine the extent to which PMP influence program performance. The study found out that PMP influence program performance with a correlation coefficient of 0.967. The study found out that performance indicators direct the program processes towards impact, outcomes and outputs and aligns inputs and activities to achieve the results. This enables managers to track progress, demonstrate results, and identify problems early enough to allow corrective action to be taken. The data acquisition provides prove for progress reported against each performance indicator at output and outcome level. The study also revealed that baseline data greatly help track progress and help determine the impact of the project and serves as the basis for carrying out program monitoring and evaluation. The study further revealed that data acquisition makes no sense until it is utilized to improve the project performance. The M&E information informs decision making processes, increase organizational knowledge repository, helps account for the resources used, improve practice through learning, improve program sustainability as well as help identify and manage risks.

#### **5.4 Recommendations**

Based on the findings of this study and the conclusion made, the study makes the following recommendations for policy action by NGOs given that their monitoring and evaluation tools have a bearing on the program performance:

There is need to increase training and awareness on M&E processes and procedures. The M&E staff should have the M&E skills and knowledge as well as undergo in-service training to keep them updated in the field.

There is need to implement the existing structures and procedures. There is need to follow the laid down procedures and framework in carrying out M&E activities. Many NGOs do not adhere to the existing structures and procedures in carrying out M&E activities.

There is need to document and use lessons learned during the program implementation. Lessons learned serve as a reference point as the organization moves from project to project. They ensure improved implementation of future programs and some continuity in case a certain person leaves an organization.

There is need to customized M&E tools to local setting. Some M&E tools and techniques need to be adapted to suit the local setting and local projects.

The study recommends that M&E activities should be allocated enough resources and facilities so as to enhance program performance.

75

The study further recommends that the indicators should be well defined to avoid poor monitoring and evaluation.

The study recommends that there should be greater stakeholder's participation in the development and implementation of the M&E tools. This will reduce resistance from stakeholders and promote ownership.

The NGOs should ensure that there is adequate early planning for project M&E activities

## **5.5 Suggestions for further research**

The empirical study has specified a number of relevant issues that the research project did not investigate, but which might be important for further research on the influencing M&E tools on the program performance of NGOs. The following areas are suggested for further research:

The role of ICT support to project management

The influence of organisational culture on program performance

The influence of other M&E tools and techniques used in project management on program performance

The influence of leadership skills on program performance

The influence of donor demands on the effectiveness of M&E processes.

#### REFERENCES

- Andersen, E.S., Andersen, E., Grude, K.V. and Haug, T. (200). *Goal Directed Project Management:Effective Techniques and Strategies*, 3rd revised edition, Kogan Page Ltd.
- Babbie, E. R. (1990). The Practice of Social Resarch. Belmont: Wadsworth.
- Bakewell, O. and A. Garbutt (2005). *The Use and Abuse of the Logical Framework Approach*.Stockholm: SIDA.
- Barasa, R. (2014). Influence of monitoring and evaluation tools on project completion in Kenya:
  a case of constituency development fund projects in Kakamega County, Kenya
  (Unpublished master's thesis). University of Nairobi, Kenya.
- Belassi, W., &Tukel, O. I. (1996). A new framework for determining success/failure factors in projects. *InternationalJournal of Project Management*, 14(3), 141-151.
- Burke, Rory. (2003). 2nd edition. *Project Management. Planning and Control*. John Wiley & Sons, Chichester.
- CARE International UK. (2012). Defining Theories of Change. London.
- Chen, H. (2005). Practical program evaluation: Assessing and improving planning, implementation, and effectiveness. Thousand Oaks, CA: Sage Publications.
- Chesos R. (2010). Automated M&E system for NGOs. The Co-Ordinator, Issue No. 5., p. 1. Retrieved from: http://www.ngobureau.or.ke/Publications/Board%20Newsletter%20%28Issue%20No. %205%29.pdf
- Crawford, P, & Bryce P. (2003). *Project monitoring and evaluation: A method of enhancing the efficiency and effectiveness of aid project implementation*. International Journal of project management, 21(5):363-373.
- Creswell, J.W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River, NJ: Prentice Hall.
- Christensen, D. S., (1998) *The Costs And Benefits Of The Earned Value Management Process* (Online) Available: www.suu.edu retrieved 19.06.2015)
- Christle, Gary. (1994).*Implementation of Earned Value A Model Program Approach*. Office of the Under Secretary of Defense for Acquisition.
- Cleland, D. I. &Gareis, R. (2006). *Global project management handbook*. McGraw-Hill Professional.

 Dale, R. (2003) 'The logical framework: an easy escape, a straitjacket, or a useful planning tool?', *Development in Practice*, 13(1): 57-70.Department of Defense. (2006). C/SCSC White Paper. *DOD Joint Implementation Guide*. Washington, D.C.

Donald K.K & Delno, L.A. (2006). Proposal and Thesis writing. Paulines Publications. Africa.

- Dwivedi, U., (2006), Earned Value Management Explained (Online) Available: www.projectsmart.co.uk (retrieved 19.06.2015)
- Feller, I. (2002).Performance measurement redux.*American Journal of Evaluation*, 23(4), 435–452.
- Fleming, Quentin W. and Koppelman, Joel M. (2002). Earned Value Management: Mitigating Risks Associated with Construction Projects, *Project Manager*, March-April, 90–95.
- Fleming, Quentin W. and Joel M. Koppelman. (1996). *Earned Value Project Management*. Upper Darby, Pennsylvania: Project Management Institute.
- Fleischer, D., & Christie, C. (2009). Evaluation use: Results from a survey of U.S. American Evaluation Association members. *American Journal of Evaluation*, 30(2), 158–175.
- Funnell, S., & Rogers, P. (2011). Purposeful program theory: Effective use of theories of change and logic models. San Francisco, CA: Jossey-Bass.
- Gladys, L. A., Katia, R., Lycia, L. & Helena, H. (2010) Challenges in Monitoring and Evaluation: An Opportunity to Institutionalize M&E Systems.
- Gido, Jack. (2005). An Introduction to Project Planning. Industrial Press Inc., New York.
- GoK, (2009). Kenya National Bureau Statistics KNBS
- Goodpasture, John C. (2004). Quantitative Methods in Project Management. J. Ross Publishing.
- Harrison, F. L. &Lock, D. (2004). Advanced project management: a structured approach. Gower Publishing, Ltd.
- Hatry, Harry. (2006). *Performance Measurement: Getting Results*. 2d ed. Washington, DC: The Urban Institute.
- Haughey D., (2004), *What is Earned Value*? (Online) Available: <u>www.projectsmart.co.uk</u> (retrieved 17.06.2015)
- James, Cathy. (2011). *Theory of Change Review: A report commissioned by Comic Relief.* London.
- Jones, H. (2011). A guide to monitoring and evaluating policy influence: *ODI Briefing Note*.

- IFAD (International Fund for Agricultural Development). (2002). A Guide for Project M&E. IFAD, Rome.
- IFAD.2002. Practical Guide on Monitoring and Evaluation of Rural Development Projects. Rome.
- International Services American Red Cross. (2006). *Project Design & Proposal Writing Guide*. Washington, DC: American Red Cross International Services
- INTRAC. (2001). Practical guidelines for the monitoring and evaluation of capacity building: experiences from Africa. United Kingdom: INTRAC.
- Kameri-Mbote, P. (2000). The Operational Environment and Constraints for NGOs in Kenya: Strategies for Good Policy and Practice. IELRC Working Paper 2000-2. International Environmental House.
- Karen, H. (2006). Indicators: Definition and Use in a Results-Based Accountability System, Harvard Family Research Project.
- Kenya Social Protection Sector Review. (2012). Ministry of State for Planning, *National Development and Vision 2030*. Republic of Kenya
- Kerby J. G., & Counts S.M (2000). The Benefits of Earned Value Management from a Project Manager's Perspective (Online) Available http//cio.gsfc.nasa.gov (retrieved 19.06.2015)
- Kerzner, H. (2003). Project Management: A Systems Approach to Planning, Scheduling, and Controlling (8th Ed.). Wiley.
- Kerzner, H., &Saladis, F. P. (2009). *Value-driven Project Management*. The IIL/Wiley series in project management. Hoboken, N.J: Wiley.
- Khatiala, P. (2012). The influence of monitoring & evaluation tools and techniques on project delivery capability: a case of HIV/AIDS interventions in Nairobi and Nyanza regions, Kenya (Unpublished master's thesis). University of Nairobi, Kenya.
- Knowlton, L. W., & Phillips, C. C. (2009). *The logic model guidebook*. Thousand Oaks, CA: Sage.
- Koffi-Tessio B. (2002). Efficacy and efficiency of Monitoring-Evaluation (MES) for Projects Financed by the Bank Group. African Development Bank Group.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques* (2nd Ed.). New Delhi: New Age International limited.
- Krause, D. R. (1996). Effective program evaluation: An introduction. Chicago, IL: Nelson Hall.

- Kusek, Jody Zall, and Ray C. Rist. 2004. *Ten Steps to a Results-Based Monitoring and Evaluation System*. Washington, DC: World Bank.
- Larry, Hatcher. (2013). Advanced Statistics in Research: Reading, Understanding, and Writing Up Data Analysis Results. Publisher: Shadow Finch Media LLC (20.06. 2015).
- Leviton, L. C. (2003). Evaluation use: Advances, challenges and applications. *American Journal of Evaluation*, 24(4), 525–535.
- Lewis R. Ireland (2006). Project Management. McGraw-Hill Professional.
- Lock, D. (2007). Project management (9e Ed.). Gower Publishing, Ltd.
- Lipsey, M. W. (2000). Method and rationality are not social diseases. *American Journal of Evaluation*, 21(2), 221–223.
- Mackay, K. (2007), *How to Build M&E Systems to Better Support Government* (Washington: World Bank).
- Mark, M. M., & Henry, G. T. (2004). The mechanisms and outcomes of evaluation influence. *Evaluation*, *10*(1), 35–57.New York: Amacom Books.
- Marsh and David. (1999). *Results Frameworks & Performance Monitoring*. Westport, CT 06880; Washington, DC 20036.
- Mayne, J. (2009). Results management: Can results evidence gain a foothold in the public sector? In O. Reiper, F. Leeuw and T. Ling (Eds.), *The evidence book*. Piscataway, NJ: Transaction Publishers.
- Mikkelsen, B. (1995) 'Methods for development work and research: a guide for practitioners', Sage Publications.
- Meredith, Jack R., and Mantel, Samuel J. (2010). *ProjectManagement : A Managerial Approach* (7 Ed.). New York: John Wiley.
- Ministry of State for Planning, National Development and Vision 2030, National Intergrated Monitoring & Evaluation Systems. Available at http://www.monitoring.go.ke accessedon 07/12/2011.
- Mugenda, O. M & Mugenda, A.G. (2003). *Research method: Qualitative and Quantitative approaches*. Nairobi African centre for technology studies
- Mulandi, N. (2013). Factors influencing performance of monitoring and evaluation systems of non-governmental organizations in governance: a case of Nairobi, Kenya. (Unpublished master's thesis). University of Nairobi, Kenya.

- Myra, S. (2005). *HIV/AIDS Monitor: Tracking Aid Effectiveness: an overview of the Presidents Emergency plan for AIDS Relief*. New York: Center for Global Development.
- National Survey of NGOs Report. (2009). Report on the National Validation Survey of NGOs. NGOs Co-ordination Board.
- Nagrecha S. (2002). An introduction to Earned Value Analysis.
- Organisation for Economic Co-operation and Development (OECD) (2002).*Glossary of key terms in evaluation and result based management*. Paris, France: OECD.
- OECD. (2012). Performance Management in Government: Performance Management and Results Oriented Management. Occasional Paper Number 12, (OECD, Paris, 2012)
- Orodho A. J. (2004). *Technologies of writing Research proposals and report in Education and Social Science*. Nairobi: Masola publishers, Reata Prince.
- Patton, M. Q. (1994). Developmental evaluation. Evaluation Practice, 15(3), 311–319.
- Perrin, B. (1998). Effective use and misuse of performance measurement. *American Journal of Evaluation*, 19(3), 367–379.
- Picciotto, R. (2011). The logic of evaluation professionalism. Evaluation, 17(2), 165–180.
- Pinto, J. & Slevin, D. (1999). Project success: definitions and measurement techniques" Project Management Journal 19(1). 67-75.
- Poister, T.H. (2003). *Measuring performance in public and non-profit organizations*. Hoboken, NJ: John Wiley & Sons.
- PMI (2010). A Guide to the Project Management Body of Knowledge.
- PMI. *The Guide to the Project Management Body of Knowledge*, 3rd edition, Newtown Square,PA: Project Management Institute, 2004
- Project Cycle Management: Integrated Approach and Logical Framework, Commission of the European Communities Evaluation Unit Methods and Instruments for Project Cycle Management, No. 1, February 1993
- Project Planning in UNHCR: A Practical Guide on the Use of Objectives, Outputs and Indicators for UNHCR Staff and Implementing Partners. Second Ver. March 2002. 33
- Reiss, Geoff. (1995). Project Management Demystified. Today's Tools and Techniques.(2 Ed.). London: E & FN Spon.
- Richardson, G. L. (2010). Project Management Theory and Practice. CRC Press, Taylor & Francis Group.

- Rist, R. C., Boily M. H., & Martin F. (Eds). (2011). *Influencing change: building evaluation capacity to strengthen governance*. Washington DC, World Bank.
- Rush, B. and Ogborne, A. (2001). Program Logic Models: Expanding Their Role and Structure for Program Planning and Evaluation. *Canadian Journal of Program Evaluation*, 6:2.
- Sander, C. (1997). *Planning Monitoring and Evaluation of Programme Performance*. A Resource Book . Ontario: IDRC Evaluation Unit.
- Shao, T. (1999). *Marketing Research: an Aid to decision making*. Ohio: South Western College Publishing.
- Shaw, I. (2000). Evaluating public programmes: Contexts and issues. Burlington, VT: Ashgate.
- Stein, D. and Valters, C. (2012). 'Understanding 'Theory of Change' in International Development: A Review of Existing Knowledge'. JSRP Paper 1, London: JSRP and The Asia Foundation
- Simon, Frasier (1996). Monitoring and evaluation Massachusetts institute of technology. Web.mit.edu.../issues-tools/monitoring-eval.htm/ Accessed 20/06/2015.
- Turner, J.R. (1999) *Gower Handbook of Project Management*, 4th edition, Aldershot, UK: Gower Publishing.
- Schein, E. (1997), Organizational Culture and Leadership, San Francisco, CA, Jossey-Bass.
- USAID. (1996). "Selecting Performance Indicators." *Performance Monitoring and Evaluation Tips*. Washington, DC: Center for Development Information and Evaluation.
- USAID. (2010). Theories of Change and Indicator Development in Conflict Management and Mitigation.
- Uitto, J.A. (2004). *Multi country co- operation around shared waters: Role of monitoring And Evaluation*. Global environment change, 14(1): 5-14.
- Vogel, I. (2012). 'Review of the use of "Theory of Change" in international development' DFID, (April).
- Weiss, C.H. (1995).' Nothing as Practical as Good Theory: Exploring Theory-Based
  Evaluation for Comprehensive Community Initiatives for Children and Families', in J.
  Connell, A. Kubisch, L. Schorr and C. Weiss (Eds.) New Approaches to Evaluating
  Community Initiatives: Concepts, Methods and Contexts, New York: Aspen Institute (65-92).
- Weiss, C. H. (1997). 'Theory-based evaluation: Past, present, and future', New Directions for

Evaluation, 1997(76), 41-55.

- Weiss, C. H. (1998). *Evaluation: Methods for studying programs and policies* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- Whitty, B. (2013). 'Experiences of the Results Agenda : Draft findings for discussion from the crowd-sourcing survey', The Big Push Forward, ODI World Bank (2000). *The Logical Framework Handbook*, World Bank, <u>http://www.world</u> bank.org/evaluation/logfram/

World Bank (2000). Key Performance Indicator Handbook. Washington, D.C.

- Wholey, J.S., Hatry, H.P., & Newcomer, K.E. (2010). *Handbook of practical program evaluation*, Edition 3. Hoboken, NJ: John Wiley & Sons.
- Yamane, T. (1967). *Statistics: An Introductory Analysis*, 2nd Edition, New York: Harper and Row.

### **APPENDIX I: TRANSMITTAL LETTER**

October 10, 2015 University of Nairobi School of Distance Education Cell: 0726211745

### TO WHOM IT MAY CONCERN

I am a Master candidate at the University of Nairobi and currently conducting a research as partial requirement for the award of the degree of Master of Arts in Project Planning and Management. My research topic is "Influence of M&E tools on the program performance of selected NGOs in Nairobi County".

The purpose of this letter is to request you to participate as a respondent in this study by completing the attached questionnaire as accurately as possible. All information collected through this exercise will only be used for academic purposes.

Thank you in advance.

Yours faithfully,

Onyango Erick Ouma,

Reg. No. L50/68818/2013,

University of Nairobi, Department of Extra Mural Studies.

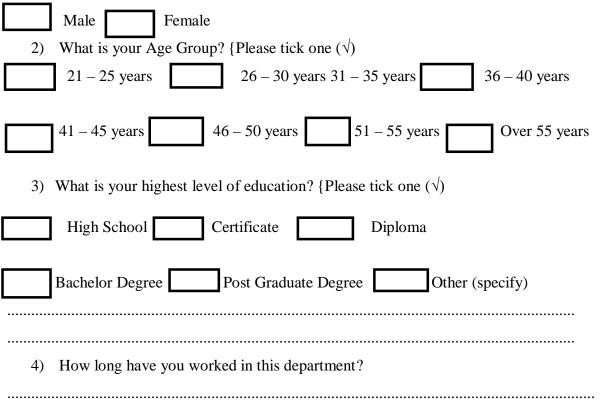
### APPENDIX II: QUESTIONNAIRES ON UTILIZATION OF M&E TOOLS

### Introduction

This questionnaire is a research instrument designed to collect information on the influence of M&E tools on the program performance of selected NGOs in Nairobi County. The information collected will be used for academic purposes only and it is expected that the findings from this study will make a significant contribution towards enhancing program performance in the Nairobi County. The information collected will be handled with confidentiality and with academic professionalism.

Kindly fill in the information as directed in the various sections provided.

1) What is your Gender? {Please tick one  $(\sqrt{)}$ 



## PART II: MONITORING AND EVALUATION TOOLS

Please answer the following questions

## SECTION A: LOGICAL FRAMEWORK

 Kindly rate the following factors / statements using a scale of Strongly Agree; Agree; Neutral; Disagree; and Strongly Disagree regarding utilization of logical framework.

Parameters	Strongly	Agree	Agree	Neutral	Disagree	Strongly Disagree
a) The project hierarchy narrative addresses the needs						
of the target group						
b) The indicators describe how the achievement of the						
results will be measured						
c) The baseline helps track changes						
d) Means of verification clearly helps track changes						
e) The assumptions help clarify the risks						
f) Logical framework influences program performance						

## **SECTION B: RESULT FRAMEWORK**

6) Kindly rate the following factors / statements using a scale of Strongly Agree; Agree; Neutral; Disagree; and Strongly Disagree regarding utilization of result framework.

Parameters	Strongly	Agree	Agree	Veutral	Disagree	Strongly Disagree
a) Result chain respond to the needs of the target group						
b) The baseline helps track changes						
c) The indicator is clear to the project key stakeholders						
d) Data acquisition helps track changes						
e) Utilization of M&E information improves progress						
f) Result framework influences program performance						

## SECTION C: EARNED VALUE MANAGEMENT (EVM)

 Kindly rate the following factors / statements using a scale of Strongly Agree; Agree; Neutral; Disagree; and Strongly Disagree regarding utilization of EVM.

Parameters						
	Strongly	Agree	Agree	Neutral	Disagree	Strongly Disagree
a) Changes to baseline are controlled						
b) When variances from plan occur, impacts are forecasted and estimates at completions are prepared						
c) WBS contribute to schedule planning						
d) CBS contribute to cost tracking						
e) EVM performance indices contribute to acceptance of work completed						
f) EVM influences program performance						

## SECTION D: PERFORMANCE MANAGEMENT PLAN (PMP)

13) Kindly rate the following factors / statements using a scale of Strongly Agree; Agree; Neutral; Disagree; and Strongly Disagree regarding utilization of PMP.

Parameters	Strongly	Agree	Agree	Neutral	Disagree	Strongly Disagree
a) Result chain respond to the needs of the target						
group						
b) The baseline helps track changes						
c) The indicator is clear to the key project stakeholders						
d) Data acquisition clearly helps track changes						
e) M&E information used to improve progress						
f) PMP influences program performance						

## SECTION E: PROGRAM PERFORMANCE

14) Kindly rate the following factors / statements using a scale of Strongly Agree; Agree;

Neutral; Disagree; and Strongly Disagree regarding program performance.

Parameters	Strongly	Agree	Agree	Neutral	Disagree	Strongly	Disagree
a) The performance of our organization is satisfactory							
b) The outcome achieved benefit the target group							
c) Quality outputs delivered on time							
d) Partners committed to provide continuing support							
e) There are changes brought about by the program							
f) The program performance is due to use of M&E tools							

## THANK YOU