

**ROLE OF MONITORING AND EVALUATION IN DEVELOPMENT OF  
SCHOOL INFRASTRUCTURE IN MARAKWET WEST SUB-COUNTY, KENYA**

**BY**

**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE  
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STUDIES IN THE DEPARTMENT OF SOCIOLOGY, PSYCHOLOGY, AND  
ANTHROPOLOGY SCHOOL OF ARTS AND SOCIAL SCIENCES  
MOI UNIVERSITY**

**2021**

## DECLARATION

### DECLARATION BY THE CANDIDATE

This research thesis is my original work and has not been presented for a degree in any other university. No part of this research thesis may be reproduced without the prior permission of the author and/ or Moi University.

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## **DEDICATION**

I would like to dedicate this thesis to my wife Agripina Kipngetich Lusimba and my brother Shadrack Kipkorir Chebet and the rest of my family members for encouragement and financial support.

## **ACKNOWLEDGEMENT**

I wish to acknowledge various people and institutions that made the completion of this research thesis possible. First, I wish to acknowledge the Almighty God for regenerating and rejuvenating my strength and motivation throughout the study. The word of God has taught me to be patient and resilient in life. I am obliged to register my sincere gratitude to my supervisors Prof. Omboto, Dr. Kipsang and Mr. Kuto for their guidance, support and constructive criticism during the writing of this thesis. Their wealth of knowledge, experience, immense wisdom and understanding contributed greatly to the completion of this thesis. In addition, I wish to relay my sincere gratitude to the schools and Head teachers in Marakwet West Sub-County who made it possible for me to administer the research instruments. Finally, special thanks to my brother Shadrack Kipkorir Chebet for financial support and my wife, Agripina Lusimba for allowing me time to concentrate with my studies. Thanks to all and God bless.

## ABSTRACT

Monitoring and evaluation is meant to influence decision-making, including decisions to improve, reorient or discontinue the evaluated intervention or policy; decisions about wider infrastructural projects. However, despite the existence of policies in place, initiation, implementation and completion of school infrastructural projects in Kenya remains a big challenge. The purpose of this study was to examine the role of monitoring and evaluation in development of school infrastructure. The objectives of the study were to; examine components of monitoring and evaluation (M&E) of infrastructure development projects in public schools, evaluate M & E policies that ensures transparency and accountability in the infrastructure development projects in public schools, establish the challenges faced in monitoring and evaluation of infrastructure development in public school projects and establish ways of improving M&E in infrastructure development in public schools. The study was conducted in Marakwet west Sub-county of Elgeyo Marakwet County and was guided by program theory by Terrence W Pratt. The study adopted descriptive survey research design using mixed methods approach. A target population of 110 head teachers from both from public secondary and primary schools in Marakwet West sub-county from which a sample of 86 respondents was obtained using Yamane formula. One member from each board of management, sub-county education offices, national government-constituency development fund, parents' association and non-governmental organizations funding school projects were selected through purposive sampling. Quantitative data was collected using structured questionnaire and was analyzed using descriptive and inferential statistics. Qualitative data was collected analyzed thematically through deriving explanations and making interpretations of the findings. Descriptive data was presented in frequency tables, charts and percentages while qualitative data was presented thematically in line with the objectives of the study. The results of the regression analysis indicated that there was a relationship between the variables (M&E plan and costs, Routine programme monitoring, human capacity for M&E, Supportive supervision and data auditing and Data dissemination and use) and development of School infrastructure and it indicated that these variables had positive significant influence on development of School infrastructure. This therefore indicated that there was significant positive relationship between Monitoring and Evaluation and development of School Infrastructure at  $p \leq 0.05$  significance level ( $r = 0.559$ ). The study therefore indicated that monitoring and evaluation influenced implementation of infrastructure development in public schools. Therefore, monitoring and evaluation needs to be strengthened for effective and successful school projects thus conducive learning environment. The study recommends that monitoring and evaluation be established for effective utilization of project funds; participation of stakeholders in monitoring and evaluation; project costing provide a clear and adequate funds for monitoring and evaluation events; that school infrastructural committee keeps minutes, payment receipts to ensure transparency and accountability.

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**ACRONYMS AND ABBREVIATIONS**

<b>AGOA</b>	-	African Growth and Opportunity Act
<b>BOM</b>	-	Board of Management
<b>CDF</b>	-	Constituency Development Fund
<b>DE</b>	-	Director of Education
<b>DFRD</b>	-	Development Fund for Rural Development
<b>ECD</b>	-	Evaluation Capacity Development
<b>EFA</b>	-	Education for All
<b>ELB</b>	-	Education Licensing Board
<b>ESP</b>	-	Economic Stimulus Projects
<b>IGAD</b>	-	Intergovernmental Authority on Development
<b>LASDAP</b>	-	Local Authorities Service Delivery Action Plan
<b>M&amp;E</b>	-	Monitoring and Evaluation
<b>MDG</b>	-	Millennium Development Goal
<b>MDGs</b>	-	Millennium Development Goals
<b>MOE</b>	-	Ministry of Education
<b>MP</b>	-	Member of Parliament
<b>NACOSTI</b>	-	National Commission for Science, Technology and Innovation
<b>NG-CDF</b>	-	National Government Constituency Development Fund
<b>NG-CDFC</b>	-	National Government Constituency Development Fund Committee
<b>NGOs</b>	-	Non Governmental Organizations

<b>OECD</b>	–	Organization for Economic Co-operation and Development
<b>PA</b>	-	Parents Association
<b>PASSIA</b>	-	Palestinian Academic Society for the Study of International Affairs
<b>PM&amp;E</b>	-	Participatory Monitoring and Evaluation
<b>PTA</b>	–	Parents Teachers Association
<b>RBM</b>	-	Results Based Management
<b>RBM&amp;E</b>	-	Results based Monitoring & Evaluation
<b>SIC</b>	-	School Infrastructural Committee
<b>SPSS</b>	–	Statistical Package for Social Science.
<b>UNDP</b>	-	United Nation Development Programs
<b>WB</b>	-	World Bank

## OPERATIONAL DEFINITION OF TERMS

**Accountability:** This is about being responsible to someone for actions taken; about being able to explain, clarify and justify actions.

**Assessment:** The action or an instance of making a judgment about something

**Completion:** The action or process of finishing something.

**Constituency Development Fund:** This is a fund designed to support constituency-level, grass-root development projects. It was aimed to achieve equitable distribution of development resources across regions and to control imbalances in regional development brought about by partisan politics

**Development Infrastructure:** This is the basic physical systems of a business or nations transport, communication, sewage, schools, water and electric systems. These systems tend to be high-cost investments and are vital to a country's economic development and prosperity.

**Evaluation:** This is a periodic but comprehensive assessment of the overall progress and worth of a 'project' (Woodhill & Robins 1998). The term is used to mean final assessment of whether the project has achieved its predefined objectives.

**Governance:** This is the establishment of policies, and continuous monitoring for proper implementation, by the members of the governing body of an organization. It includes the mechanisms required to balance the powers. The act of providing leadership to a project team as well as managing activities and project resources.

**Implementation:** This is the process of putting into practice an idea, program or set of activities that are new to people in an attempt to bring change.



**Infrastructure:** This refers to the basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise.

**Integrity:** This is the inner sense of "wholeness" derived from qualities such as honesty and consistency of character.

**Monitoring:** This is the collection of data by various methods for the purpose of understanding natural systems and features, evaluating the impacts of development proposals on such systems, and assessing the performance of mitigation measures.

**Performance:** This is the action or manner of carrying out an activity or piece of work. In this study performance will be measured by project end result achievement.

**Planning:** This refers to the management process, concerned with defining goals for institution future direction and determining on the missions and resources to achieve those targets.

**Policies:** These are principles, rules, and guidelines formulated or adopted by an organization to reach its long-term goals and typically published in a booklet or other form that is widely accessible.

**Project:** This is an individual or collaborative enterprise that is carefully planned and designed to achieve a particular aim.

**Stakeholder:** This is any person with an interest in a project initiative.

**Transparency:** This is the openness of the governance system through clear processes, procedures and access to public information and awareness in public service

through information sharing. It is clear disclosure of information rules, plans, processes and actions.

**Role:** The degree to which M&E contributes to success of infrastructure development projects in schools

## **CHAPTER ONE**

### **INTRODUCTION TO THE STUDY**

#### **1.0 Overview**

This chapter presents information on the role of monitoring and evaluation in development of school infrastructure. Moreover, it presents the background of the Study, statement of the problem, the principle purpose of the study, specific objectives of the study, research questions, significance of the study, scope of the study, limitations of the study, assumptions of the study, theoretical frame work, conceptual framework and organization of the thesis.

#### **1.1 Background of the Study**

According to Action Centre la Faim (ACF, 2011), M&E is described as an activity to support evidence-based decision-making processes for the achievement of project objectives. As a management function, the main task of M&E should be to make available information on programs in the right form, order and at the right time to contribute toward effective decision-making process (Connelly, 2004). M&E also supports project managers by providing them with accurate evidence-based information from data gathered from the field and stakeholders (IFRC, 2011). According to Shapiro (2006), the insights obtained from the information generated from M&E practices ensure the development of policies. This assertion was later confirmed by The ACF (2011), which indicated that undertaking effective M&E on projects provides a system that helps the project managers to achieve internal and external requirements by producing evidence-based results.

According to Jones (2012), establishing M&E systems in project management provides opportunities for the project implementing organization/agency to meet requirements of donors/financiers. This is so because it provides evidence on the project accomplishments. From the view of Herrero *et al.* (2012), undertaking continuous monitoring of projects ensures that the implementing staff should keep the project activities on schedule, they should review and update the project plan and costs as necessary and they should review timelines and deliverables, which will help clarify any differences that are not in line with the original project plan. Thus, M&E provides the managers with early warning signs in relation to delays and cost of variances and provides them with evidence. The UNDP (2002a, b) described M&E as a major management responsibility of the project manager; hence, it is a good management tool that can be relied upon to improve the way governments and organizations attain their results on the projects they pursue. Despite the advantages of undertaking M&E, many organizations fail to carry it out and its impact is felt in the failure of projects among other things.

Throughout the world countries are actively using monitoring and evaluation systems to keep track of the development projects undertaken. Increase in the usage of monitoring and evaluation findings has been successful due to increased World Bank (WB) support on Evaluation Capacity Development (ECD), (Kusek *et al.*, 2004). With the advent of globalization, there is growing pressure on government and organization around the world to be more responsive to the demands of internal and external stakeholders for good governance, accountability and transparency, greater development effectiveness, and delivery of tangible results. Governments, parliaments, citizens, the private sector,

non-governmental organizations, civil society, international organizations, and donors are among the stakeholders interested in better performance (Peerbhoy,2007). The governments and NGOs therefore need to focus on greater accountability and real results in development interventions. The success of development interventions funded by donor community, governments and other private sector entities rests upon the need for enhanced results based monitoring and evaluation of policies, programs, and projects for sustainable development to be achieved (Kusek *et al*, 2004).

The process of monitoring and evaluation is considered to be a relatively recent phenomenon. However, planned social evaluation has been documented as dating as far back as 2200BC (Shadish, *et al*, 1991).Evaluation became particularly relevant in the U.S.A in the 1960s during the period of the Great Society social programs associated with the Kennedy and Johnson administrations. Extraordinary sums were invested in social programs, but the impacts of these investments were largely unknown (Rossi *et al*, 2004). Reforms have been a feature of the education sector ever since Kenya attained independence. Some of these reforms have been aimed at addressing the overall goals of the National Economic Recovery Strategy (ERS) as well as international development commitments such as Millennium Development Goals (MDGs), Education for All (EFA) as well as delivery on policies set out in Sessional Paper No. 1 of 2005 on policy framework for education, training and research, among others.

In Africa, the successful completion of projects across different sectors and industries is one of the most important factors that determine the development and growth of many nations (Maylor *et al.*, 2006). Monitoring and evaluation (M&E) is important for the successful management of projects (Nyonje *et al.*, 2012). Decades ago, M&E practices

were determined by placing emphasis on prudent utilization of resources (Rogers and Williams, 2006). However, many organizations and institutions, as well as project managers in the modern era, regard M&E practices as a requirement for success rather than a management tool used for project appraisals, identifying and correcting problems in planning and implementation of projects (Armstrong and Baron, 2013). According to Cleland and Ireland (2007) project management was formally recognized as a distinct field in the late 1950s when much emphasis was placed on M&E of projects as a result of the discontentment of stakeholders. Shapiro (2007) defined M&E as a systematic collection and an analysis of information and the processes to determine the extent to which goals and milestones are being met and analyzed for any discrepancies. According to Kusek and Rist (2004), M&E is one of the most relevant tools that influence the performance and successful completion of projects. Shapiro (2007) further reiterated that M&E always aims at improving the efficiency and effectiveness of a project. M&E is discrete, yet complementary, and is closely linked to functions in projects (Crawford and Bryce, 2003).

In Kenya one such initiative was the launch and implementation of Free Primary Education (FPE) which saw the abolition of fees and levies in public primary schools. This move significantly lessened the burden of financing education on households which led to increased enrolment in public primary schools (UNESCO, 2005). Increased enrolment in primary schools meant that it was only a matter of time before secondary schools experience an influx of children graduating from primary schools. Majority of the children from poor families opted for free day secondary education resulting to emergence of many day secondary schools whose enrolment has grown at a faster rate. In

response to this development, the government aimed at increasing the percentage of those transiting from primary to secondary schools from 70% to 100%. This resulted to pressure on existing infrastructure facilities in public schools (Ohba, 2009). The Constituency Development Fund was created by the Constituency Development Fund Act, 2003 with the primary objective of addressing poverty and overall development at grass root level by dedicating a minimum of 2.5% of the government ordinary revenue to grassroots development and the reduction of poverty. Subsequently the constituency development fund is compelled by the same Act to allocate 46.2% to education sector (GOK 2003).

An increase in the pupil/student population in schools has a direct attraction of an increase in the number of facilities required for day to day operation or longterm operations. This includes classrooms, laboratories, offices, sanitation buildings like latrine and waste disposal sites, water and water drainage structures and many more (Onderi & Makori, 2013). According to Olembo, Wanga and Karagu (2012), construction projects in schools are a key milestone towards the realization of Kenya's vision2030 which envisages construction of social infrastructure such as schools, health centers and roads. In 2000, governments around the world committed themselves to improving human development in the areas of health, education and gender equality. The Millennium Development Goals (MDGs) and the Education for All (EFA) goals were key targets set and committed to by governments to ensure that their citizens had an improved quality of life by 2015 and specifically that children would have access to quality education (Ochieng and Tubey, 2013). These two international commitments hold

all signatories, both for developed and developing country governments, for accountable for the achievement of these targets within the agreed time frame.

However, infrastructural development in schools has not been growing in tandem with these targets and commitments though quality learning takes place in a well erected learning facilities. This has put a heavy pressure on the existing infrastructure facilities in schools. The Government and other partners such as Non-governmental organizations have stepped in and invest heavily by allocating huge sums of money to fund school development projects through NG-CDF, MOE etc. It is against this back drop that the researcher sought to investigate the role of monitoring and evaluation in these interventions to ascertain for accountability, transparency, efficiency and effectiveness on the use of these resources in development of school infrastructure in Marakwet West Sub-County. Globally, Monitoring and Evaluation (M&E) is an important tool for achieving environmental, economic and social sustainability (Behn, 2003). M&E assists those involved with projects to assess if progress is being achieved in line with expectations.

According to Rodgers (2009) monitoring is the ongoing collection and analysis of data that informs project managers if progress toward established goals is being achieved. On the other hand evaluation is a comprehensive appraisal that looks at the long-term impacts of a project and exposes what worked, what did not work, and what should be done differently in future (Hettmut, 2002). M&E are essential components of Results-Based Management (RBM).



Thus, both M&E are critical to a projects success. In order to play its role, M&E requires a budget, highly trained personnel, multi-stakeholder dialogues, transparency and accountability. Given the sorry state and inadequacy of infrastructure in most public primary and secondary school in Marakwet West Sub-county, it would be impossible to relate whether that there exists a clear monitoring and evaluation policy that could ensure transparency and accountability in infrastructure development in these institutions in the Sub-county, neither is it possible to tell whether the personnel charged with the monitoring and evaluation of infrastructure development have been adequately trained and equipped with monitoring and evaluation skills.

## **1.2 Statement of the Problem**

Infrastructural development of schools is critical to effective teaching and learning worldwide. National government spends colossal sums of money on infrastructural development in an effort to improve the quality of education in public schools. In Kenya, the introduction of Free Primary Education (FPE) (2003) and later Free Day Secondary Education (FDSE) in public primary and secondary schools respectively saw a marked increase in enrolment at primary schools and transition rates of students from primary to secondary increase at a faster rate than the expansion of physical facilities like classrooms, science laboratories, playground, dormitories and administration facilities. This has posed a serious challenge to management of public schools and threatens to lower the quality of education being offered in public schools. In an effort to deal with this challenge, the government of Kenya through the NG-CDF and MOE together with its development partners like the NGOs has invested heavily in infrastructural development in public primary and secondary schools. However, more recently, the sight of many stalled projects, poorly constructed class rooms, libraries, dormitories, dining halls,

ablution blocks ,science laboratories, administration block e.t.c. have raised serious doubts as to whether the funds provided by the government and its development partners are being put to good use.

According to Behn 2003, M&E plays an important role taking progress towards goals and in influencing policy and practice. M&E helps those involved with projects to assess if progress is being achieved in line with expectations. Thus, if M&E process is done well, infrastructure development projects in public primary and secondary schools is likely to succeed, and if it is not done well or ignored then problems of failure are likely to arise which could lead to lack of adequate infrastructure in schools. Quality Assurance reports as well as casual observation reveal a poor state as well as inadequate infrastructure that are likely to compromise quality of education in Marakwet West Constituency. This leaves many questions as to whether funds provided for infrastructural development in schools in the constituency is being utilized efficiently which brings to question, the role of M&E in infrastructural development in the constituency. The purpose of this study was to investigate the role of M&E in development of school infrastructure in Marakwet West Sub-county Kenya.

### **1.3 Purpose of the Study**

The purpose of the study was to examine the Role of Monitoring and Evaluation in Development of School Infrastructure Projects in Kenya with emphasis on Marakwet West Sub-County.

### **1.4 Specific objectives of the Study**

The study sought to achieve the following specific objectives.

- i. To examine components of monitoring and evaluation of infrastructure development projects in public schools in Marakwet West Sub-County.
- ii. To evaluate M & E policies that ensures transparency and accountability in the infrastructure development projects in public schools within Marakwet West Sub-County.
- iii. To establish the challenges faced in monitoring and evaluation of infrastructure development in public schools projects within Marakwet West Sub-County.
- iv. To establish ways of improving M&E in infrastructure development in public schools in Marakwet West Sub-County.

### **1.5 Research Questions**

The study sought answers to the following research questions

- i. What are the components of monitoring and evaluation of infrastructure development projects in public schools in Marakwet West Sub-County?
- ii. What are the M & E policies that ensure transparency and accountability in the infrastructure development project in public schools within Marakwet West Sub-County?
- iii. What are the challenges faced in monitoring and evaluation of infrastructure development in public school projects within Marakwet West Sub-County.
- iv. What are the ways of improving M&E in infrastructure development in public schools in Marakwet West Sub-County?

#### **1.5.1 Hypothesis of the study**

**H<sub>01</sub>:** There is no statistically significant relationship between Monitoring and Evaluation and Development of School Infrastructure in Marakwet West Sub-County.

**H0<sub>2</sub>:** There is statistically significant relationship between Monitoring and Evaluation and Development of School Infrastructure in Marakwet West Sub-County.

### **1.6 Significance of the Study**

The findings of the study will create knowledge which might be useful for training of the school administrators in areas that need improvement. The findings will help the management and other stakeholders in identifying some of the factors they would need to consider to enhance success of school projects. The school heads and the management team will get first-hand information on the role of M&E in projects and the issues surrounding the success of M&E and how these issues can be handled and be bettered further. The findings may be used by the department of policy analysis and formulation in the Ministry of Education in formulating capacity building programmes to empower education managers. The research therefore will help the government get part of the solutions to the issues facing M&E. This is by understanding the factors influencing the process and how these factors be handled so that the school projects in Kenyan public schools are implemented well. Scholars will also benefit from this research study since it will contribute to the scholarly dialogue concerning the factors influencing school principals in implementation of school projects in Kenya. Also, it is hoped that the findings of this study will benefit the county governments that of late are pumping in resources to the E.C.D and polytechnics school projects, the CDF boards and the donors who will get the first-hand information on M&E and later on get part of the recommendations on how to reinforce some of the researched-on findings for better M&E process in the schools

### **1.7 Scope of the Study**

The study was carried out in Marakwet West Sub-County, Elgeyo Marakwet County, Kenya. The choice of Marakwet West Sub-County was informed by various school projects funded by government through NG-CDF, MOE and NGOs funds, but many projects fail to meet expectation and standards set out due to challenges in monitoring and evaluation. The study therefore sought to examine components of M&E, evaluate policies that ensure transparency and accountability of school projects, establish the challenges that confront monitoring and evaluation of school projects as well as establish ways of improving the use of M&E in development of school infrastructure. The researcher targeted personnel at Constituency development fund, Head teachers, B.O.M, PA, Sub-County official and NGO official who are directly or indirectly involved in implementation of school development projects. The researcher used quantitative and qualitative research methods. The researcher used questionnaires and interview schedule to collect primary data.

### **1.8 Limitations of the Study**

The study was carried out in Marakwet West Sub-County and confined to public primary schools and secondary schools, NG-CDF personnel, B.O.M, PA, NGO and Sub-County official. The findings therefore would not be generalized to private schools. The escarpment and rugged terrain of the study area slowed the research. More time was therefore allocated to allow coverage of schools within such topography. Suspicion from the respondents especially Head teachers, NG-CDF personnel, and representative of BOM posed a challenge. The researcher overcame these by persuading the respondents that their responses would be used for the sole purpose of academic research and information would not be used against them and that it would be kept confidential.

### **1.9 Assumptions of the Study**

The study made the following assumptions: that the information obtained from respondents was true and up to date and finally that the respondents (head teachers & members of BOM, NG-CDF personnel, B.O.M, PA, NGO member, Sub-County official) answered all questions honestly and to the best of their knowledge.

### **1.10 Theoretical Frame Work**

This study was guided by program theory by Terrence W Pratt (1968). Program Theory guides monitoring and evaluation by identifying key program elements and articulating how these elements (inputs, activities and outputs) are expected to relate to each other (Donaldson and Lipsey, 2003). Data collection plans are then made within the framework in order to measure the extent and nature of each element's occurrence. Once collected, the data are analyzed within the framework. First, data that have been collected by different methods or from different sources on the same program element are triangulated (Donaldson and Lipsey, 2003). Stake (1967) presented a model that calls for describing the intended antecedents (whatever needs to be, before a program is operational) transactions (activities and outputs), and outcomes of a program. The data on the program in operation are compared to what was intended and to what the standards are for that kind of program.

Another early proponent of this theory, Weiss (1972) recommended using path diagrams to model the sequences of steps between a programs' intervention and the desired outcomes. This kind of casual model helps the evaluator identify the variable to include in the evaluation, discover where in the chain of events the sequence breaks down, and

stay attuned to changes in program implementation that may affect the pattern depicted in the model.

Program theory is defined in evaluation practice today as the construction of a plausible and sensible model of how a program is supposed to work (Pilcher, 2012) or a set of propositions regarding what goes on in the black box during the transformation on input to output, that is, how a bad situation is transformed into a better one through treatment of inputs (Lipsey, 1993). It is also looked at as the process through which program components are presumed to affect outcomes. Rossi (2004) cited by Pilcher (2012) describes program theory as consisting of the organizational plan which deals with how to garner, configure, and deploy resources, and how to organize program activities so that the intended service system is developed and maintained. The theory also deals with the service utilization plan which looks at how the intended target population receives the intended amount of the intended intervention through interaction with the programs service delivery system. Finally, it looks at how the intended intervention for the specified target population brings about the desired social benefits (impacts).

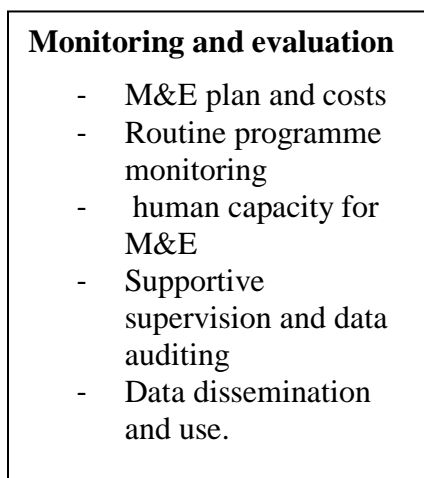
Monitoring and evaluation are intimately linked project management functions and as a result there is lot confusion in trying to make them work on projects (Crawford and Bryce, 2003; Patton, 2008). Monitoring and Evaluation are distinct but complementary. Therefore, this theory plays several important roles in evaluation practice. Such theory and prior research can be very informative for initial needs assessment and program design. A careful examination of available literature, including primary studies, may turn up knowledge about effective strategies for dealing with the problems of concern, lessons

learned about what does not work which may save program designers and evaluator's time and resources.

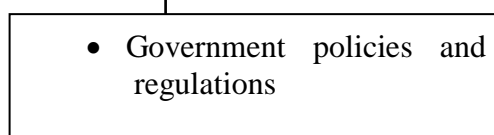
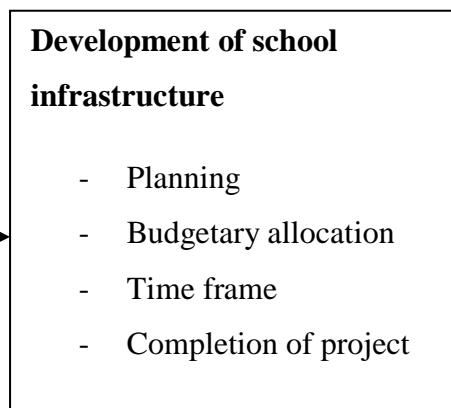


## 1.11 Conceptual Framework

### Independent Variables



### Dependent Variables



### Intervening Variables

**Figure 1.1 Conceptual Framework**

**Source: researcher, (2017)**

The conceptual framework depicts the relationship among variables in a study (Mugenda & Mugenda, 2003). The variables defined in figure 1.1 are the independent variables, the dependent variables and the intervening variables. The independent variable is presumed to influence the dependent variable but through the intervening variables in the above conceptual framework, the independent variables are defined as components of M&E, polices put in place to ensure transparency and accountability, challenges facing M&E and ways of improving M&E while the dependent variables are defined as planning, budgetary allocation and timeframe. The intervening variables are government policies and regulations. The conceptual framework hence presupposes that M&E influences development of school infrastructure in public secondary and primary schools. This

conceptual framework is related to Program Theory which guides monitoring and evaluation by identifying key program elements and articulating how these elements inputs which are monitoring and evaluation activities as independent variables while output which is development of school infrastructure as dependent variable.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Overview**

This literature review examines current and previous scholarly work on monitoring and evaluation. It consists of analyses of books, journals, articles, conference proceedings, periodicals, government documents, scientific abstracts, legislative documents, textbooks, newsletters, thesis and internet sources. The review is meant to exemplify the key concepts of the information on project monitoring and evaluation, and to see whether it affects the development of school projects. It provides the basis of critical review and a clearer understanding of the problem. The literature is presented thematically. The review is divided into different sub-sections under the following headings.

#### **2.1 Concept of Development of School Infrastructure**

School infrastructure is a key base for learning in schools. School infrastructure include classrooms, laboratories for the science practical, the halls and open fields for games, games equipment, dormitories, sanitation facilities and others. It is in the classrooms that the day to day formal teaching and learning take place. In the libraries, learners get the opportunity to conduct their own personal studies or research as the resource materials are found therein. Extra-curricular activities take place at the fields. Learners and teachers need to be housed in the school and at the same time need sanitation facilities like toilets, waste disposal services and clean water. For this reason, school infrastructure is a very important component in ensuring successful education. Classrooms should be spacious, well-ventilated allowing natural lighting and breeze. A school should be built keeping various facilities like well-equipped labs, halls, open fields, games equipment, dormitories and sanitation facilities in mind. Libraries, provisions for different labs like

physics, chemistry, computer science and biology are a must. Art and craft workshops, playgrounds, assembly area, multimedia rooms boost the overall development of the child. In addition to all this, another very important factor is architectural design of the school. Buildings and classrooms should be designed in such a way that students can move in and out of the classroom freely. There should be provisions for transportation and parking of personal vehicles like scooters and bicycles. (Webster M, 1985).

Classrooms are the backbone of any school infrastructure. There should not only be adequate number of classrooms for students, but each and every classroom should be pleasant and well-designed. They should be carefully decorated and painted with some light colors. Each and every classroom should be well-lit in all corners and ventilated enough to be comfortable even during power failures. Seats and tables should be ergonomically designed and provide comfort to the students. There should be enough desk storage space, in addition to built-in cupboards for keeping school material; apparatus (Webster M, 1985). Library is a central point for all kinds of reading, cultural activities, access to information, knowledge building, deep thinking and lively discussion. Collection of sources of information and similar resources, made accessible to a defined community for reference or borrowing. It provides physical or digital access to material, and may be a physical building or room, or a virtual space (Webster M, 1985).

A dining room is a room for consuming food. In modern times it is usually adjacent to the kitchen for convenience in serving, although in medieval times it was often on an entirely different floor level. Historically the dining room is furnished with a rather large dining table and a number of dining chairs; the most common shape is generally rectangular

with two armed end chairs and an even number of un-armed side chairs along the long sides.

Computer Lab is a space which provides computer services to a defined community. Computer labs are typically provided by libraries to the public, by academic institutions to students who attend the institution, or by other institutions to the public or to people affiliated with that institution. Users typically must follow certain user policy to retain access to the computers. A dormitory a building primarily providing sleeping and residential quarters for large numbers of people, often boarding school, college or university students. In the US it is common for residents (typically two) to share a bedroom. In the US these buildings are often single sex, or sexes are accommodated on separate floors. (William R, 2009). Ablution Block is a building in a public area (such as a park or campground) with facilities for washing and one or more toilets. Sports and games play a vital role in the development of any child. So, invariably a school infrastructure should have provision for a well-maintained playground. There should be facilities for both indoor and outdoor stadiums. Playground is not just a medium to develop physical strength and balance, they are an opportunity to develop social skills, thinking and problem solving skills (Proudlock, K., Ramalingam, B. and Sandison, P, 2009). Not just students, the school infrastructure should also focus on facilities for teachers.

There should be a proper staffroom, where teachers can prepare for their classes, do corrections and interact with each other. This room should also have lockers where they can safeguard their instructional materials, books and personal belongings. Apart from the staff room, the school infrastructure should create special provisions for the

administrative block. Not only should the school office be centrally located, but also should be easily accessible to visitors, students or teachers. On the whole, the school infrastructure if planned properly will be one of the key factors in effective teaching and learning. It will also play as a stimulator for increased student attendance and staff motivation. (Proudlock, K., Ramalingam, B. and Sandison, P, 2009).

## **2.2 Implementation of NG-CDF projects in schools**

The Constituency Development Fund was created by the Constituency Development Fund Act, 2003 with the primary objective of addressing poverty at grassroots level by dedicating a minimum of 2.5% of the government ordinary revenue to grassroots development and the reduction of poverty. In Kenya, studies show that, there has been a steady growth in the number of basic education learning institutions. The number of pre-primary learning centres increased from 41,779 in 2017 to 46,530 as at 2019. At the primary education level, the number of schools increased to 32,344 as at 2019 from 31,449 in 2017. On the other hand, the number of secondary schools increased from 8,958 in 2017 to 10,487 in 2019. Public pre-primary centres had the highest increase, largely due to the investment by county governments. Overall, public institutions still account for the largest share of basic education learning institutions, with 61%, 70% and 85% for pre-primary, primary and secondary education levels, respectively, as at 2019 (GoK, 2019).

On enrolment, there were 2.7 million learners in pre-primary centres as at 2019. The comparison with previous years could not be made due to inclusion of learners aged 3 to 5 years under ECDE, unlike in 2019, which captured learners aged 4 to 5 years only. At primary school level, there were 10.1 million pupils as at 2019, compared to 10.39

million in 2018 and 10.29 million in 2017. An increase in the pupils/students population in schools has a direct attraction of an increase in the number of facilities required for day to day operation or long term operations. This includes classrooms, laboratories, offices, sanitation buildings like latrine and waste disposal sites, water and water drainage structures and many more (Onderi & Makori, 2013).

According to Olembo, Wanga and Karagu (2012), construction projects in schools are a key milestone towards the realization of Kenya's vision 2030 which envisages construction of social infrastructure such as schools, health centers and roads. In 2000, governments around the world committed themselves to improving human development in the areas of health, education and gender equality. The Millennium Development Goals (MDGs) and the Education for All (EFA) goals were key targets set and committed to by governments to ensure that their citizens had an improved quality of life by 2015 and specifically that children would have access to quality education (Ochieng and Tubey, 2013). These two international commitments hold all signatories, both developed and developing country governments, accountable for the achievement of these targets within the agreed time frame.

There are several projects initiated in schools in Kenya and other countries funded by the devolved fund; In Kenya such projects are funded by NG-CDF which was established by Constituency Development Fund Act, 2003 published in Kenya Gazette Supplement No. 107 (Act No. 11) 9<sup>th</sup> January 2004. Subsequently the constituency is compelled by the same Act to allocate 46.2% to education sector (GOK 2003). The Board of Managements (BOM) are involved in sourcing and utilization of resources by ensuring that school funds are prudently managed (Everend and Burrow, 1990) thus, Education Act Cap. 211.

Education Act Cap. 211 and Sessional Paper No. 1 of 2005 states that the Boards of Managements should manage human and other resources in schools so as to facilitate smooth operations, infrastructural development and provision of teaching and learning materials (MOEST, 2005; Kamunge, 2007). The BOM is also responsible for the management of the projects sponsored by Constituency Development Fund (NG-CDF) kitty. Most public Kenyan schools are under the constituency development fund and have the same management programme as adopted from the National management committee (NMC). The schools have legally mandated and constituted BOM's according to the Education Act, Cap 211 (GOK, 1987). Several factors influence the BOM while managing NG-CDF projects such as influence of board of managements on project costing, influence of interests on management of NG-CDF projects, community participation and its influence on NG-CDF projects management, how management of funds influence NG-CDF projects management and the influence of project implementation committees on management of NG-CDF projects. The BOM lacks training on project funds management which leads to inefficiency and the BOM appointment is coupled with political interference which leads to appointing incompetent people (Gok, 2008). The Board of Managements (BOM) are involved in sourcing and utilization of resources by ensuring that school funds are prudently managed (Everend and Burrow, 1990) thus, Education Act Cap. 211. Education Act Cap. 211 and Sessional Paper No. 1 of 2005 states that the Boards of Managements should manage human and other resources in schools so as to facilitate smooth operations, infrastructural development and provision of teaching and learning materials (MOEST, 2005; Kamunge, 2007). The BOM is also responsible for the management of the projects sponsored by Constituency Development Fund (NG-CDF) kitty. The role of the BOM is to manage the funds economically,



efficiently and effectively for the purposes of the school in accordance with the financial memorandum by the Directorate of Education or by the Education Licensing Board. The BOM must have a three-year financial plan approved by the DE or the ELB for the school; containing expenditure within the annual budget approved for the school and ensures that expenditure is monitored and controlled during the financial year.

Mwangi (2005) and Ravallion (2005) expressed that, a community development project starts with the identification of a need or the realization that there is a need. This concurs with the NG-CDF policy on project identification, as section 23 (2, 3 &4) of the NG-CDF Act, 2003 revised 2007 provide guidelines on how to identify a project. The Act requires that location meetings be held and the forum used to select projects to be submitted to the NG-CDFC before onward transmission for funding. This allows sharing of the vision through need assessment, followed by group discussion analysis. Kerote (2007) stated that this will not only confirm the need for change, but also clarify the scope of the problem at hand and the resource-based available. Project identification and costing lays squarely with the BOMs and PMCs and the beneficiaries after identifying the project then the PMCs cost the project by preparing Bill of Quantities (BQ) and forward the same to NG-CDFC in accordance with NG-CDF Act (2007). The PMCs then forward minutes of certified documents for approval and ratification to local NG-CDF office (MOE, 2007). This ascertains that the proposed project is a viable and also that there are adequate funds for the same. According to NG-CDF Act, 2003, it provides the needs for costing and evaluating projects in schools on continuous basis, in which the BOM is mandated to cost all projects and avail financial records related NG-CDF projects, tender the project and provide all bank transactions and project implementation report. According to Henny (2012), project implementation is found to be more challenging than any other activity in

the project work. He noted that, as the elite spend more resources suggesting the potential projects to be implemented; the actual implementers are conspicuously ignored leading to lack of project ownership which subsequently translates into poor project implementation. In conformity to the ideas of Henny.

### **2.3 Monitoring and Evaluation**

Monitoring and evaluation (M&E) has become an increasingly important tool within the global efforts in achieving environmental, economic and social sustainability. At national and international scales, the sustainability criteria and indicators for M&E are very crucial in defining, monitoring and reporting on ecological, economic and social trends, tracking progress towards goals and influencing policy and practices (Behn, 2003). Monitoring and evaluation (M&E) helps those involved with projects to assess if progress is being achieved in line with expectations. Monitoring is the on-going collection and analysis of data that informs project managers if progress toward established goals is being achieved (Rogers, 2008). Evaluation is a comprehensive appraisal that looks at the long-term impacts of a project and exposes what worked, what did not, and what should be done differently in future projects. When planning for M&E, it is vital to consider whether appropriate funds and staff time can be allocated to it, since M&E is an on-going process and requires a significant commitment. Another key consideration is stakeholder participation in design and execution of M&E. While external professionals may bring needed expertise, involving community partners is an excellent strategy for demonstrating accountability (Hettmut, 2002).

Evaluations need to be undertaken by individuals with the relevant skills, sound methods and adequate resources as well as transparency in order to secure their

quality (Jones *et al*, 2009). This implies the need for the personnel to be highly trained in order to secure the effectiveness of monitoring and evaluation. Further, budgetary allocation is required to provide adequate resources for the evaluation. A monitoring and evaluation budget need to be developed and included in the overall project budget in order to provide the monitoring and evaluation function its due recognition in its place in project management (Gyorkos, 2003; McCoy *et al*, 2005). Apart from the framework provided, politics is also a major element to put into consideration in projects. Rogers (2008) advocates for multi-stakeholders dialogues in the data collection, hypothesis testing as well as in intervention in order to secure greater participation. Monitoring is linked to the project management function and as such is a complex issue which result to confusion in trying to apply them on projects (Crawford and Bryce, 2003). Monitoring as such enhances the project management decision making during the implementation phase thus securing the success of the project (Gyorkos, 2003; Crawford and Bryce, 2003).

Further, monitoring puts an emphasis on transparency and accountability in the use of resources to the stakeholders such as donors, beneficiaries and the wider community where the project is implemented. Chambers (2009) argue that the starting point in politics as an element of evaluation involves asking who would gain lose and how. This also involves how the results make a difference to the various stakeholders. Evaluation on the other hand provides an assessment of the effectiveness of the project in achieving the goal and the relevance and sustainability of the on-going project (McCoy, 2005). Evaluation compares the impact of the project as set to be achieved by the project plan (Shapiro, 2004).Monitoring and

evaluation (M&E) are essential components of results based management (Rist, Boily & Martin, 2011). Results-based management involves deliberately gathering empirical evidence in order to know the extent to which intended results are being achieved so that modifications to the design and delivery of activities can be made to improve and account for performance in achieving intended outcome. Furthermore, organizations successfully adopting RBM will need to have appropriate systems and procedures in place that collectively constitute an RBM regime (Mayne, 2007).

The increased level of emphasis given to results (outcomes), as opposed to activities and output, has also brought some major changes in the focus, approach and application of monitoring and evaluation systems whereby, as focus of management changes from activities to results, focus of M&E also changes from the traditional M&E system, which focuses on assessing inputs and implementation process (progress monitoring) to results-based M&E system, which emphasizes assessment of the contributions of interventions to development outcomes. Building and sustaining a result based monitoring and evaluation system is admittedly not an easy task for it requires continuous commitment, champions, time, effort and resources. In addition, it may take several attempts before the system can be tailored to suit a given governmental or organizational policy, program or project; but it is doable (Kusek, 2004).

According to IFAD, (2008) annual report on results and impact, recurrent criticisms against M&E systems include: limited scope, complexity, low data quality, inadequate resources, weak institutional capacity, lack of baseline surveys and lack of use. Moreover, the most frequent criticism of M&E systems in IFAD projects

relates to the type of information included in the system. Most of the IFAD projects collect and process information on the project activities. However, the average IFAD project did not provide information on results achieved at the purpose or impact level. The M&E system of the Tafilalet and Dades Rural Development project in Morocco for example only focused on financial operations and could not be used for impact assessment (Rogers, 2008).

Kelly (2008) argues that good M&E systems for civil society programs are ones which are: dynamic, participative, reflective and evolving. First, dynamic systems encourage `practical learning and promote regular ways of seeking dynamic feedback from multiple sources about the benefits, problems and impacts of the intervention. Secondly, participative and gender sensitive systems actively seek to overcome barriers of gender, age, power, culture and other issues which limit the participation of all stakeholders in the monitoring and assessment process. Thirdly, reflective systems encourage staff, partners and stakeholders to create regular space and time for analyzing information and reflecting back on underlying assumptions or `theories of change which underpin the interventions. Fourthly, evolving systems are adapting and changing in order to keep them as light and simple as possible while providing `real timely information which informs on-going improvement of the intervention.

Due to the importance attached to M&E in projects implementation, studies have been done across the world to focus on some issues influencing their success. From the global angle for example, China has been known and is still known today to be among the best performing countries in their M&E process as a tool of performance in both the public

and private sector (UNDP, 2015). According to PASSIA (2013) in their report on the performance of sanitation projects construction in central elementary schools in China, a number of factors determined their success. Among the major cited factor was the M&E process as implemented by the government management bodies, the contractors and the school leaders. In Africa, though the concept of M&E is new and, in many occasions has not been accepted fully as an integral part of the operations in organisational projects, a number of communities, firms and companies have copied the idea recently (Crawford & Bryce, 2010). Ayarkwa, Ayirebi & Amoah (2010) did a research on the external factors influencing the success of M&E on projects in 15 tertiary colleges and 25 secondary schools in Libya that was analyzed by use of ANOVA and the results showed that, factors like stakeholders involvement, support and perceptions of M&E had a great influence, sources of financial resources and the amounts allocated had an influence, the government policies and external conditions tied to donors, training and education for the employees and many more. Buertey, Adjei-Kumi & Amoah (2011) continue to show that financial resources can be used to give incentives to employees in organisations so that they can internalize M&E, money can be used to hire qualified personnel for M&E, and money can hire quality M&E education for the projects handlers and many more.

Regionally, Rwanda has been cited as one of the best performing country in east Africa by the World Bank in its internalization of M&E in the projects' success in every sector of the economy. While studying the role of M&E in the completion of NGOs funded projects in the health and education sector in Kigali, level of expertise of the personnel handling the construction projects, the availability of the personnel, the attitudes and perception of the projects handlers on M&E, the financial resources and geographical locations had an influence (Dansoh & Amoah, 2010). Ayarkwa, Dansoh & Amoah

(2010) did a research on the Barriers to implementation of EMS in construction industry in Ghana and Rwanda and argued that, factors like financial resources, organisational structures, organisational culture, stakeholders and many more have an influence and greatly determine plus giving the direction of the success of the M&E process. Another study done in 6 high schools offering the international curriculum in Rwanda that interviewed 69 respondents in total who included the constructors, school managers and donor managers in 2012, a number of factors were cited to have influenced the implementation of M&E process. These factors were not limited to, employees' expertise and perceptions, financial resources, projects locations, level of technology, policies and legal procedures of M&E etc. (Pilcher, 2012).

#### **2.4 Monitoring and Evaluation Systems**

Monitoring and Evaluation Systems are management toolkits that enable decision-makers to track progress and demonstrate the impacts of a given programme/ project. In the long run, the toolkits help organizations make decisions on the success, failure, relevance, efficiency and effectiveness of their programmes. Monitoring and Evaluation Systems requires twelve main components in order to function effectively and efficiently to achieve the desired results (Kusek 2004). These twelve M&E components i.e. Organizational Structures with M&E Functions, Human Capacity for M&E, Partnerships for Planning, Coordinating and Managing the M&E System, M&E frameworks/Logical Framework, M&E Work Plan and costs, Communication, Advocacy and Culture for M&E, Routine Programme Monitoring, Surveys and Surveillance, National and Sub-national databases, Supportive Supervision and Data Auditing, Evaluation and Research and Data Dissemination and Use, (Kusek, *et al*, 2004).

Any slack in either component automatically leads to derailing of progress in managing of programmes and projects. Monitoring and Evaluation Systems provide important feedback on the progress of programmes/projects. That is, the success or failure of projects, programmes and policies throughout their respective life cycles. These systems constitute a powerful, continuous management tool that decision makers can use to improve performance and demonstrate results. Monitoring and Evaluation Systems (especially Results-based) have a special capacity to add to the learning and knowledge process. These systems provide for learning and knowledge, since by providing continuous feedback to managers, they promote organizational learning through a cycle involving the reflection on progress, learning and allows for adjustments in the course of programmes or projects where need be, (Kusek, *et al*, 2004:140). These systems have been designed to monitor and evaluate at all levels: macro and micro levels, which can roughly be translated to policy, programme and project levels respectively.

Information supplied by Monitoring and Evaluation Systems is used as a crucial management tool in achieving results and meeting specific targets. Such information, which reveals the level of progress, performance and problems, is crucial to managers striving to achieve results. As Baum, *et al*, (1985) argue, these systems are actually one of the “techniques” for managing programme/ project implementation, especially because they provide an early warning to project management about potential or actual problems. Subsequently, when problems are identified, questions about assumptions and strategy behind a given programme or project may be raised. This way, they aid development managers make choices and decisions on running projects



and programmes. Monitoring and Evaluation Systems can also aid in promoting greater transparency and accountability within organizations and government (Rubin, 1995).

## **2.5 Components of Monitoring and Evaluation.**

### **2.5.1 Cost**

The project budget should provide a clear and adequate provision for monitoring and evaluation activities. A monitoring and evaluation budget can be clearly delineated within the overall project budget to give the monitoring and evaluation function the due recognition it plays in project management (McCoy, 2005; Gyorkos, (2003). A monitoring and evaluation budget should be about 5 to 10 percent of the total budget (AIDS Alliance, 2006; Kelly & Magongo, 2004; IFRC, 2001). Inadequate resources lead to poor quality monitoring and evaluation. To ensure effective and quality monitoring and evaluation, it is critical to set aside adequate financial and human resources at the planning stage. The required financial and human resources for monitoring and evaluation should be considered within the overall costs of delivering the agreed results and not as additional costs (UNDP, 2009). Financial resources for monitoring and evaluation should be estimated realistically at the time of planning for monitoring and evaluation. While it is critical to plan for monitoring and evaluation together, resources for each function should be separate.

In practice, each project should have two separate budget lines for its monitoring and evaluation agreed in advance with partners. This will help UNDP and its partners be more realistic in budgeting. It will also reduce the risk of running out of resources for evaluation, which often takes place towards the end of implementation (UNDP, 2009).

Monitoring and evaluation costs associated with projects can be identified relatively easily and be charged directly to the respective project budgets. Sourcing and securing financial resources for monitoring and evaluation of outcomes or programmes can pose additional challenges, as there is not one project where these costs can be directly charged (UNDP, 2009). According to the UNDP handbook for monitoring and evaluation the most commonly observed financing mechanism is to draw resources together from relevant projects. Another way is to create a separate monitoring and evaluation fund, facility or project associated with an outcome or a programme to which all the constituent projects would contribute through transfer of some project funds. This facility could be located in the same entity that manages the outcome or programme. Another way is to mobilize funds from partners directly for an outcome or programme monitoring and evaluation facility. Another alternative is to allocate required funds annually for each outcome on the basis of planned costs of monitoring and evaluation from overall programme budget to the facility or fund.

### **2.5.2 Human Capacity**

Numerous researches have been conducted across the world in relation to the human capital, expertise, and training and how this influences the success or failure of M&E on various projects/programs across the globe. According to World Bank (2013) for example, human capital, with proper training and experience is vital for the production of M&E results. There is need to have an effective M&E human resource capacity in terms of quantity and quality, hence M&E human resource management is required in order to maintain and retain a stable M&E staff. This is because incompetent employees are also a major constraint in selecting M&E systems (Koffi-Tessio, 2002 as cited by Katia *et al.* 2010). M&E being a new professional field, it

faces challenges in effective delivery of results. There is therefore a great demand for skilled professionals, capacity building of M&E systems, and harmonization of training courses as well as technical advice (William, 2009).

The M&E system cannot function without skilled people who effectively execute the M&E tasks for which they are responsible. Therefore, understanding the skills needed and the capacity of people involved in the M&E system (undertaking human capacity assessments) and addressing capacity gaps (through structured capacity development programs) is at the heart of the M&E system Gorgens & Kusek, (2010:95). In its framework for a functional M&E system, UNAIDS (2008) notes that, not only is it necessary to have dedicated and adequate number of M&E staff, it is essential for the same staff to have the right skills for the work. Moreover, M&E human capacity building requires a wide range of activities, including formal training, in-service training, mentorship, coaching and internships. Lastly, M&E capacity building should focus not only on the technical aspects of M&E, but also address skills in leadership, financial management, facilitation, supervision, advocacy and communication.

Building an adequate supply of human resource capacity is critical for the sustainability of M&E system and is generally an ongoing issue. Furthermore, it needs to be recognized that “growing” evaluators requires far more technically oriented M&E training and development than can usually be obtained with one or two workshops. Both formal training and on-the-job experience are important in developing evaluators with various options for training and development opportunities which include: the public sector, the private sector, universities,

professional associations, job assignment, and mentoring programs (Acevedo *et al.*, 2010:24).

### **2.5.3 Scope**

The shared assumptions (beliefs and values) among a firm's members influence opinions within that firm or community. Farson and Keyes (2002), suggests that fostering failure tolerance is a crucial way of promoting an innovation enabling culture in communities for effective monitoring and evaluation of projects. However, to foster failure tolerance requires the associated leaders to be engaged and express interest in people's work by asking pertinent questions, express support and give feedback, and are collaborative rather than controlling. In many communities, members identify risks and opportunities based on their own perceptions of the project's internal and external environment, integrate resources, and bring in new individuals to help them understand creative and innovative ventures which can enhance monitoring and evaluation (Sternberg, Kaufman & Pretz, 2003; Mumford & Licuanan, 2004, & Chen; 2007). Bounded delegation leaders enhance implementation and evaluation by developing a sharing community culture that facilitates interaction and sharing of information among individuals across the community (Damanpour, 1991; Ahmed, 1998; McDermott, 1999; Menzel *et al.*, 2008).

These interactions and information sharing are great means of allowing community members opinions and views to be expressed concerning the project. These activities also help in sharing of knowledge among the members (Menzel *et al.*, 2008). Damanpour (1991) notes internal communication as crucial to community innovativeness, and McDermott (1999) added that it is important in developing

existing knowledge of the communities to facilitate understanding and information sharing on projects being implemented in their areas. A sharing culture makes communication, interaction, and knowledge transfer possible (Menzel *et al*, 2008), in turn supported exploratory behaviour and learning. The culture of a community is expected to be supportive of and consistent with the projects being implemented (Johnson & Scholes, 1999).

#### **2.5.4 Indicators**

Input indicators are quantified and time-bound statements of resources to be provided. Information on these indicators comes largely from accounting and management records. Input indicators are often left out of discussions of project monitoring, though they are part of the management information system. A good accounting system is needed to keep track of expenditures and provide cost data for performance analysis of outputs. Input indicators are used mainly by managers closest to the tasks of implementation, and are consulted frequently, as often as daily or weekly. Examples: vehicle operating costs for the crop extension service; levels of financial contributions from the government or co-financiers; appointment of staff; provision of buildings; status of enabling legislation. Process indicators measure what happens during implementation. Often, they are tabulated as a set of contracted completions or milestone events taken from an activity plan. Examples: Date by which building site clearance must be completed; latest date for delivery of fertilizer to farm stores; number of health outlets reporting family planning activity; number of women receiving contraceptive counseling; status of procurement of school textbooks.

Output indicators show the immediate physical and financial outputs of the project: physical quantities, organizational strengthening, initial flows of services. They include performance measures based on cost or operational ratios. Examples: Kilometers of all-weather highway completed by the end of September; percentage of farmers attending a crop demonstration site before fertilizer top-dressing; number of teachers trained in textbook use; cost per kilometer of road construction; crop yield per hectare; ratio of textbooks to pupils; time taken to process a credit application; number of demonstrations managed per extension worker; steps in the process of establishing water users' associations. Impact refers to medium or long-term Development. (Some writers also refer to a further class of outcome indicators, more specific to project activities than impact indicators, which may be sectoral statistics, and deal more with the direct effect of project outputs on beneficiaries). Measures of change often involve complex statistics about economic or social welfare and depend on data that are gathered from beneficiaries. Early indications of impact may be obtained by surveying beneficiaries' perceptions about project services. This type of leading indicator has the twin benefits of consultation with stakeholders and advance warning of problems that might arise. Examples of impact: (health) incidence of low birth weight, percentage of women who are moderately or severely anemic; (education) continuation rates from primary to secondary education by sex, proportion of girls completing secondary education; (forestry) percent decrease in area harvested, percent increase in household income through sales of wood and non-wood products. Examples of beneficiary perceptions: proportion of farmers who have tried a new variety of seed and intend to use it again; percentage of women satisfied with the maternity health care they receive.

Exogenous indicators are those that cover factors outside the control of the project but which might affect its outcome, including risks (parameters identified during economic, social, or technical analysis, that might compromise project benefits); and the performance of the sector in which the project operates. Concerns to monitor both the project and its wider environment call for a data collection capacity outside the project and place an additional burden on the project's M&E effort. A recent example of a grain storage project in Myanmar demonstrates the importance of monitoring risk indicators. During project implementation, policy decisions about currency exchange rates and direct access by privately owned rice mills to overseas buyers adversely affected the profitability of private mills. Management would have been alerted to the deteriorating situation had these indicators of the enabling environment been carefully monitored. Instead, a narrow focus on input and process indicators missed the fundamental change in the assumptions behind the project. The relative importance of indicators is likely to change during the implementation of a project, with more emphasis on input and process indicators at first, shifting to outputs and impact later on. This is a distinction between indicators of implementation progress and indicators of Development results.

### **2.5.5 Transparency and Accountability of School Infrastructure**

Transparency is generally regarded as a key feature of good governance, and an essential prerequisite for accountability between states and citizens. At its most basic, transparent governance signifies 'an openness of the governance system through clear processes and procedures and easy access to public information for citizens awareness in public service through information sharing, which ultimately ensures accountability for the performance of the individuals and organisations handling resources or holding public office' (Suk Kim *et al*, 2005: pg649). According to Transparency International, transparency is a

‘characteristic of governments, companies, organisations and individuals of being open in the clear disclosure of information, rules, plans, processes and actions’ (Transparency International 2009: pg44).

By general consensus, accountability ideally involves both answerability which is the responsibility of duty-bearers to provide information and justification about their actions and enforceability which is the possibility of penalties or consequences for failing to answer accountability claims (Goetz & Jenkins 2005). In fact, much of what we call accountability reflects only the weaker category, answerability. While citizen led or public initiatives often involve ‘soft’ peer or reputational pressure, they rarely involve strong enforceability. In theory, private markets allocate goods and services among individuals efficiently in the sense that no waste occurs and that individual tastes are matching with the economy's productive abilities ‘ceteris paribus’ that is if all other factors are constant (McNeil & Lemmer, 1988). If private markets provide efficient outcomes and distribution of income is socially acceptable, then there was little or no scope for public finance in the government (Barro and Grilli, 1994). But the conditions for private market efficiency in practice are violated where the market failure occurs due to externalities, public goods, informational advantages, strong economies of scale, and network effects.

This makes the private markets not to allocate goods or services efficiently. The existence of private market failure provides an efficiency-based rationale for collective or governmental provision of goods and services. Public provision via a government, however, is subject to other inefficiencies, termed as government failure (Atkinson & Stiglitz, 1980). The government can pay for spending by borrowing, for example, with



government bonds, although borrowing is a method of distributing tax burdens through a time-span rather than replacement for taxes (Stiglitz, 2000).

Public finance is closely connected to issues of income distribution and social equity which could only be championed by politics, because government can reallocate income through transfer payments or by designing tax systems that treat high-income and low-income households differently (Musgrave, 2008). The public choice approach to public finance seeks to explain how self-interested voters, politics, and bureaucrats actually operate, rather than how they should operate (Stiglitz, 2000). Public financing of education, transfers wealth to families with children in these schools such as the ones in which public primary school buildings are being constructed in Kenya (Musgrave, 2008). Financial accounting is an efficient tool for decision making by school management committees. Proper use of fiscal records enables the school managers to know the precise cost of operation and to discover wastes. A major shortcoming in school administration is failure to utilize enough of the accepted accounting principles in financial record keeping (School procurement guide, 2009). Budgeting is financial management function that includes fiscal planning, accounting and revenue, procurement and expense controls. Budgeting requires specific planning, a thorough understanding of objectives and future programmes, a sixth sense of economic conditions and realities, and a hunch for predicting the unpredictable (McNeil & Clemmer, 1988). Public finance is the revenue and expenditure of government public authorities (Barro and Grilli, 1994).

Public Finance Management (PFM) basically deals with all aspects of resource mobilization and expenditure management in government institutions such as prioritization of programmes, the budgetary process, efficient management of resources

and exercising controls (Musgrave and Musgrave, 1973). The rising aspirations of people are placing more demands on proper accountability of public financial resources and the emphasis of the citizenry on value for money makes public financial management increasingly vital (Musgrave, 2008). Managing finances is a critical function of management in any organization so public finance management is an essential part of public project's governance process (Musgrave and Musgrave, 1973).

## **2.6 Challenges in Monitoring and Evaluation**

If the evaluation is initiated late in the program, there may be no baseline data on the conditions of the target group before the intervention began (Bamberger *et al.*, 2004). Another possible cause of data constraints is if the data have been collected by program staff and contain systematic reporting biases or poor record keeping standards and is subsequently of little use). Another source of data constraints may result if the target groups are difficult to reach to collect data from - for example homeless people, drug addicts, migrant workers, et cetera (Bamberger *et al.*, 2004). Data constraints can be addressed by reconstructing baseline data from secondary data or through the use of multiple methods. Multiple methods, such as the combination of qualitative and quantitative data can increase validity through triangulation and save time and money. Additionally, these constraints may be dealt with through careful planning and consultation with program stakeholders. By clearly identifying and understanding client needs ahead of the evaluation, costs and time of the evaluative process can be streamlined and reduced, while still maintaining credibility.

All in all, time, monetary and data constraints can have negative implications on the validity, reliability and transferability of the evaluation. The shoestring approach has

been created to assist evaluators to correct the limitations identified above by identifying ways to reduce costs and time, reconstruct baseline data and to ensure maximum quality under existing constraints (Bamberger *et al.*, 2004).

The purpose of this section is to draw attention to some of the methodological challenges and dilemmas evaluators are potentially faced with when conducting a program evaluation in a developing country. In many developing countries the major sponsors of evaluation are donor agencies from the developed world, and these agencies require regular evaluation reports in order to maintain accountability and control of resources, as well as generate evidence for the program's success or failure (Bamberger, 2000). However, there are many hurdles and challenges which evaluators face when attempting to implement evaluation on a program which attempts to make use of techniques and systems which are not developed within the context to which they are applied (Smith, 1990). Some of the issues include differences in culture, attitudes, language and political process (Ebbutt, 1998, Smith, 1990).

### **2.6.1 Influence of Training**

Training is a process by which individuals gain knowledge, skills and attitudes that are helpful in shaping man's destiny in life. Through the acquired knowledge, abstract theoretical constructs are tested with courage real life challenges, hence the educated always take control of events with courage, Lanin (2001). Education and training are viewed as aspects of life that mould behaviour of individuals into desired state; impart skills and knowledge for solving emerging problems and offer opportunities for innovation and creativity necessary in addressing future challenges, Zawadi (2004). Education provides an individual with a stock of knowledge that is applied to deal with

business issues as they arise. Even if circumstances remain difficult to predict, education has the capacity to offer a continuum of suitable remedies that prove equal to the tasks, Tremory (2004). He advises that a business entrepreneur should engage in challenging training experiences which offer knowledge and skills in full richness.

Denny (2006), warns business persons dealing in primary products to guard against selling such commodities in their basic raw forms. She argues that raw materials fetch “raw pay” and the one who processes them reaps the benefits including that which should have gone to the original producer. In the light of this reality, training in knowledge and skills for value addition must be emphasized. According to Jarya (2007), training and education offer the greatest asset to an enterprise. Investing in human capital with the requisite skills and knowledge prove a worthy undertaking because workers with a wealth of knowledge make resources more productive. Whereas some organizations may choose to invest heavily in non-human resources, in business, one must realize that success begins with resource deployment, and therefore resources must be allocated based on thoroughly throughout plans, which can effectively be done by trained personnel, Karaga *et al* (2005).

### **2.6.2 Influence of Stakeholder Involvement**

Stakeholders are groups of people, organization and institutions that will affect or maybe affected by the project. These stakeholders include the community-men, women and youth; project field staff, program managers, donors, government and other decision makers’ supporters, critics, government and NGO’S (Davies *et al* 2006). Best practice example demonstrates that a central factor facilitating update of evaluations is stakeholder involvement. This involvement must be brought in at the early stages of the

evaluation process, include the support of high profile champions and attract political agents interested in learning or using instruments to demonstrate effectiveness (Jones, 2009 as cited in Musomba *et al*, 2013). Forss and Carlsson (1997) says that the growing need for efficiency, cost effective and results means that it is essential for stakeholders to have skills which enable them to perform to their best.

Engaging stakeholders in discussions about the what, how and why of program activities is often empowering for them and additionally, promotes inclusion and facilitates meaningful participation by diverse stakeholders groups (Donaldson and Lipesy, 2003). Stakeholder participation means empowering development beneficiaries in terms of resources and needs identification, planning on the use of resources and the actual implementation of development initiatives (Chitere and Ileri, 2004). In their study on 10 school construction projects in Australia in 2005 to 2009 Proudlock, Ramalingam and Sandison (2009) found out that the whole process of impact evaluation, and particularly the analysis and interpretation of results, can be greatly improved by the participation of intended beneficiaries, who are after all the primary stakeholders in their own development and the best judges of their own situation. However, stakeholder involvement needs to be managed by care, too much stakeholder involvement could lead to undue influence on the evaluation, and too little could lead to evaluators dominating the process (Patton, 2008).

In May 2000, an IFAD (2002) workshop on impact achievement stated that, participation means more than just beneficiary contribution to the project execution, rather, it should encompass all stakeholders and be formalized at all stages of the project cycle. This clearly includes monitoring and Evaluation systems. So, developing participatory

monitoring and evaluation meant that, once the basics of M&E are understood, participatory M&E is defined and ways are worked out to introduce it. This is done by providing key stakeholders with the information needed to guide the project strategy towards achieving the goal and objectives; provide early warning of problematic activities and processes that need corrective action; help empower primary stakeholders by creating opportunities for them to reflect critically on the projects direction and help decide on the improvements; build understanding and capacity amongst those involved in the project; motivate and stimulate learning amongst those committed to making the project a success and assess progress and so enable accountability requirements to be met (OECD, 2012). IFAD (2002) as cited by Jones *et al.* (2011) also continue to recognize the role of stakeholders by indicating the grassroots organizations, at community and higher levels as important partners. They provide invaluable insights on priorities and appropriate processes during the project's design phase, and undertake some of the implementation and M&E activities of the projects. One of their most valuable roles is in facilitating participatory process during implementation such as through participatory baseline survey, local impact assessment or annual project reviews. Working with them increases local ownership of the project and thus the likelihood of a sustained impact.

In another study entitled, 'stakeholders' participation and implementation of monitoring and evaluation of school feeding programs' by Indiana Department of Education (2001) cited by OECD (2010), it mentions of three major functions and roles that three categories of stakeholders performed in the success of an M&E exercise in the schools. This includes, identifying the M&E resources, allocation of the resources, training the relevant staff, formulating policies, culture and putting in place the structures for M&E programs. The department continues to show that, school; parent and community

partnerships have been described as being involved in the continuous planning, participation, and evaluation of activities that enhance the success of projects implemented in schools in both the developed and developing countries.

A similar study by International Finance Corporation [IFC] (2011) in 110 schools development projects in India, Pakistan, Kenya, Tanzania and Mauritius in 2008 to 2010 shows that, involvement of school staff, parents, students and community members like the local leaders, elected leaders and board of management will be required for a successful M&E in various school programs. In many instances in India and north eastern Kenya for example, parents volunteer to operate school feeding programs, check the progress of various projects that they feel are owned by them, allocate some required resources like finances through paying school levies and contributions etc. Therefore, Programs that involve parents, staff and students in the operation and management often have greater success; however, care must be taken to ensure that abuses do not occur. In summary, a number of scholars like Gyorkos (2003), Katia *et al* (2010) and many more have argued that the M&E exercise in school projects in any organisation need to be tied to stakeholders who are the primary recipients of the effects and the outputs of such projects. In a school setting for example, they talk of stakeholders like the school boards, the government, the school staff, the parents and the contractors to be important people since they are the ones who identify the resources required for M&E, allocate the resources, formulate the M&E policies, mission, and culture and finally embrace the process.

In the light of the need to attain social, economic and political development of the people, this reality features a fundamental dilemma which can only be unlocked by extensive

engagement of the efforts of the local communities to take actions through community based development projects. Across the world today, common challenges are approached through collective efforts and several such outfits include: European Union, African Union, and AGOA, IGAD, ECOWAS, EAC as well as grass root groupings. The degree to which community NG-CDF Funded projects could be sustained depends, among other factors, on the extent to which group members are involved and participate in decision making. Participation involves people taking part in decision making relating to their development and welfare, Draft of the national policy on community development (2010). It is vital to observe that where participation is low, people are rarely consulted, nor given information; they are merely told what to do. The agency plans and implements its programmes which reduces people identification with it as well as poor maintenance and high mortality of projects. Where it is high, people gain control of the process, they are guided by an agency to identify their problems and make key decisions. Otieno (2007) argued that the District Focus for rural Development (DFRD) strategy could not achieve much as most projects were identified, implemented and monitored by the government while local people were only used as “rubber stamps” by assembling them and informing them of their problems.

Harvey and Reed (2006) observed that participation can take different forms, including the initial expression of the demand for water, the selection of the technology and its siting, the provision of labour and local materials, cash contribution to project cost, selection of management type and even the water tariffs to levy. In concurrence with this view, Ouma (2009), found out that grass root participation encourages the community to learn and make informed decisions on the implementation of the projects. He further



observes that involvement enhances ownership and hence empowerment of the community. He recommends that community based development organization's internal structures be strengthened to be accommodative of the efforts of as many stakeholders as possible. In his study, Ogotu (2010) notes that community involvement and participation in the NGO water projects is fundamental at different stages of the project cycle. He points out that community participation facilitates capacity building for sound management of water projects by the community members on sustainable manner.

### **2.6.3 Influence of Accessibility of Information**

Awareness creation is the fundamental phase in community mobilization that sets the tempo for engaging a community into sustainable action. It is a process of raising people's consciousness through conscientization, that is, the quest for self-awareness and critical awareness. Self-awareness entails the examination and understanding of personal state of an individual on the basis of needs and problems while critical awareness demands suitable actions that address such conditions. NG-CDF Funded projects therefore provide impetus for addressing people's development needs. Development is a process by which members of a society inspire themselves and the institutions in ways that enhance their ability to mobilize and manage resources sustainably to produce sustainable and justify improvements in their quality of life consistent with their aims and aspirations (Kabanda, 2007).

Accessibility to information leads to fostering commitment of the members to embrace ownership and sustainability of the NG-CDF projects by assessing suitability of local resources in conducting community activities; while at the same time seek external supplements. Sustainability of rural development projects must include the promotion of

indigenous knowledge systems and practices, rural resource management and enhancement, and the use of natural resources in production systems, Richard Cardwell (2008). He adds that the concepts have to be introduced early through creation of awareness in a manner that will ensure participation in resource management in the long term.

#### **2.6.4 Influence of Time Allocation in the Implementation of M&E**

Projects implementation entails the process of seeing the proposed projects being effectively and efficiently completed within the structured time frames, budgets, and other structured limited resources. In the world, nothing stands like the influence of time in any activity, be it, development oriented, destructive oriented or problem solution oriented. Just like everything in the world is influenced by time, studies by a number of scholars in Asia, USA, Europe, Africa and many more have shown that the implementation and integration of proper M&E in projects is closely tied to the time allocated for the activity and how this time is planned in order to achieve the said results (OECD, 2011).

According to OECD (2011), in Paris France for example, a number of elementary and high schools introduced integrated voluntarily M&E in the schools' course work with the aim of trying to assess how better the tutors/teachers, managers, board of management and other schools' stakeholders were coordinating in order to produce results that could be better than their counterparts in the country side who were rated to be doing well. In the study that used a regression analysis to analyze the data gotten from 912 respondents in the fields showed a strong value indicating that there is a relationship between time and the success of M&E in school development programs in the country. This has been

confirmed by World Bank (2012) that argues that in M&E, since properly allocated time means that there is a properly structured avenue of sourcing for resources, proper structured channel of communication that is tied to specific time, proper personnel will be developed naturally to match given activities and with enough time, the team can get detailed information as it related to M&E.

In a study by UNEP (2009) in five sub Saharan democratic countries where Kenya was included, a number of factors interacted to influence the M&E. According to the report/study, inadequate resources lead to poor quality monitoring and evaluation. Resources were categorized in 3 parts that included: human capital resources, financial and other material resources, and, the time factor as a major resource. To ensure effective and quality monitoring and evaluation, it is critical to set aside adequate financial and human resources at the planning stage, factor in time as a resource too and finally break down the work as per the various time frames. The required time resources for monitoring and evaluation should be considered within the overall costs of delivering the agreed results and not as additional costs that could shrink time and other related issues.

### **2.6.5 Influence of Governance**

There exist a relationship between the nature of project team and the implementation of NG-CDF Funded development projects. In the light of this possibility, it might be tempting to believe that the extent, to which project output are obtained, is largely determined by the degree to which adequate governance is provided. Governance entails a display of vision and integrity, perseverance and courage, hunger for innovation and willingness to take risks. Effective leaders have the ability to read the forces that shaped their times and seize on the resulting opportunities, Mayo (2005). In the views of Bwisa

(2009), good governance must be a priority as it is the single most important factor which will determine the rate at which the country will eradicate poverty. Governance, as enshrined by the guiding principles of leadership and integrity in the new Kenyan Constitution (2010, 2c) entails selfless service based solely on the public interest demonstrated by: honesty in the execution of public duties; accountability to the public for decisions and actions; and discipline and commitment in service to the people. On account of such leadership perceptions, it is apparent that adequate community leadership is pivotal to the sustainability of community based development projects.

#### **2.6.6 Influence of Resources**

Running a project initiative heavily depends on availability of varied resources to facilitate execution of tasks to accomplish organizational goals, Jean (2002). A project intervention is established on the platform of availability of resources invested with the sole purpose of gaining interest; hence resource mobilization is a fundamental requirement for project success, Prusona (2003). According to Jared Ogari (2001), no project venture can operationalize any superior competitive project idea at a resource disadvantage, for ideas may just remain so, if there are no resources to set them in a motion. Business success is not only determined by other factors of production, but with sound resource base, an organization is good to go.

Examining the relationship between resource mobilization and implementation of small scale community projects in Trinidad and Tobago in the West Indies Islands, Mijean (2007), noted that productivity of an enterprise was a direct consequence of availability resources. He further enumerated the resource types that influence business success as, fixed assets, operating cash and skilled personnel. He cautions that business persons with

sound financial base should not take holiday that once funds are accessed, business will automatically grow, but must be concerned about the effective utilization of such resources by engaging competent personnel, in key business tasks. Shamala S. (2006) pointed out, in her study on factors influencing viability of brick making projects in Busia County that bricks remained the most popular building material in Kenya, yet lack of resources to transport those products to competitive markets exposed them to exploitation by the brokers whose prices were poor.

### **2.6.7 Culture**

Culture is defined by Ebbutt (1998) as a “constellation of both written and unwritten expectations, values, norms, rules, laws, artifacts, rituals and behaviours that permeate a society and influence how people behave socially”. Culture can influence many facets of the evaluation process, including data collection, evaluation program implementation and the analysis and understanding of the results of the evaluation (Ebbutt, 1998). In particular, instruments which are traditionally used to collect data such as questionnaires and semi-structured interviews need to be sensitive to differences in culture, if they were originally developed in a different cultural context (Bulmer & Warwick, 1993). The understanding and meaning of constructs which the evaluator is attempting to measure may not be shared between the evaluator and the sample population and thus the transference of concepts is an important notion, as this will influence the quality of the data collection carried out by evaluators as well as the analysis and results generated by the data (Bulmer *et al*, 1993).

### **2.6.8 Language**

Language also plays an important part in the evaluation process, as language is tied closely to culture. Language can be a major barrier to communicating concepts which the evaluator is trying to access, and translation is often required (Ebbutt, 1998). There are a multitude of problems with translation, including the loss of meaning as well as the exaggeration or enhancement of meaning by translators (ibid). For example, terms which are contextually specific may not translate into another language with the same weight or meaning. In particular, data collection instruments need to take meaning into account as the subject matter may not be considered sensitive in a particular context might prove to be sensitive in the context in which the evaluation is taking place (Bulmer & Warwick, 1993). Thus, evaluators need to take into account two important concepts when administering data collection tools: lexical equivalence and conceptual equivalence (ibid). Lexical equivalence asks the question: how does one phrase a question in two languages using the same words? This is a difficult task to accomplish, and uses of techniques such as back-translation may aid the evaluator but may not result in perfect transference of meaning (ibid). This leads to the next point, conceptual equivalence. It is not a common occurrence for concepts to transfer unambiguously from one culture to another (ibid). Data collection instruments which have not undergone adequate testing and piloting may therefore render results which are not useful as the concepts which are measured by the instrument may have taken on a different meaning and thus rendered the instrument unreliable and invalid (ibid).

Thus, it can be seen that evaluators need to take into account the methodological challenges created by differences in culture and language when attempting to conduct a

program evaluation in a developing country. There are three conventional uses of evaluation results: persuasive utilization, direct (instrumental) utilization, and conceptual utilization. Persuasive utilization is the enlistment of evaluation results in an effort to persuade an audience to either support an agenda or to oppose it. Unless the 'persuader' is the same person that ran the evaluation, this form of utilization is not of much interest to evaluators as they often cannot foresee possible future efforts of persuasion. Evaluators often tailor their evaluations to produce results that can have a direct influence in the improvement of the structure, or on the process, of a program. For example, the evaluation of a novel educational intervention may produce results that indicate no improvement in students' marks. This may be due to the intervention not having a sound theoretical background, or it may be that the intervention is not run according to the way it was created to run. The results of the evaluation would hopefully lead to the creators of the intervention going back to the drawing board and re-creating the core structure of the intervention, or even changing the implementation processes (Rossi, P. Lipsey, M. W., & Freeman, H.E. 2004).

But even if evaluation results do not have a direct influence in the re-shaping of a program, they may still be used to conscientize people with regards to the issues that form part of the concerns of the program. Going back to the example of an evaluation of a novel educational intervention, the results can also be used to inform educators and students about the different barriers that may influence students' learning difficulties. A number of studies on these barriers may then be initiated by this new information.

Quoted directly from Rossi *et al.* (2004); Evaluators must understand the cognitive styles of decision makers; Evaluation results must be timely and available when needed; Evaluations must respect stakeholders' program commitments; Utilization and dissemination plans should be part of the evaluation design; Evaluations should include an assessment of utilization. The choice of the evaluator chosen to evaluate the program may be regarded as equally important as the process of the evaluation. Evaluators may be internal (persons associated with the program to be executed) or external (Persons not associated with any part of the execution/implementation of the program). (Division for oversight services, 2004). The following provides a brief summary of the advantages and disadvantages of internal and external evaluators adapted from the Division of oversight services (2004), for a more comprehensive list of advantages and disadvantages of internal and external evaluators, see (Division of oversight services, 2004).

Potter (2006) identifies and describes three broad paradigms within program evaluation. The first, and probably most common, is the positivist approach, in which evaluation can only occur where there are “objectives”, observable and measurable aspects of a program, requiring predominantly quantitative evidence. The positivist approach includes evaluation dimensions such as needs assessment, assessment of program theory, assessment of program process, impact assessment and efficiency assessment (Rossi, Lipsey and Freeman, 2004). The second paradigm identified by Potter (2006) is that of interpretive approaches, where it is argued that it is essential that the evaluator develops an understanding of the perspective, experiences and expectations of all stakeholders. This would lead to a better understanding of the various meanings and needs held by stakeholders, which is crucial before one is able to make judgments about the merit or



value of a program. The evaluator's contact with the program is often over an extended period of time and, although there is no standardized method, observation, interviews and focus groups are commonly used.

Potter (2006) also identifies critical-emancipator approaches to program evaluation, which are largely based on action research for the purposes of social transformation. This type of approach is much more ideological and often includes a greater degree of social activism on the part of the evaluator. Because of its critical focus on societal power structures and its emphasis on participation and empowerment, Potter argues this type of evaluation can be particularly useful in developing countries. Despite the paradigm which is used in any program evaluation, whether it be positivist, interpretive or critical-emancipator, it is essential to acknowledge that evaluation takes place in specific socio-political contexts. Evaluation does not exist in a vacuum and all evaluations, whether they are aware of it or not, are influenced by socio-political factors. It is important to recognize the evaluations and the findings which result from this kind of evaluation process can be used in favor or against particular ideological, social and political agendas (Weiss, 1999). This is especially true in an age when resources are limited and there is competition between organizations for certain projects to be prioritized over others (Louw, 1999). "There has been enormous progress in impact evaluation of Development interventions in the last five years. The 2006 CGD report *When Will we ever Learn?* Claimed that there was little rigorous evidence of what works in Development. But there has been a huge surge in studies since then. By our count, there are completed and on-going impact evaluations of socio-economic Development interventions in low and middle-income countries. But this increase in numbers is just the start of the process of

‘improving lives through impact evaluation’, which was the sub-title of the CGD report and has become vision statement.

## **2.7 Ways of Improving Monitoring and Evaluation**

The technical capacity of the organization in conducting evaluations, the value and participation of its human resources in the policymaking procedure, their incentive to impact resolutions, that can be enormous determinants of how the evaluation’s lessons are made, conveyed and perceived (Vanessa and Gala, 2011). Human capitals on the project should be given clear job allocation and designation befitting their skill, if they are insufficient, then training for the necessary skills should be set. For projects using staff that are referred out in the field to carry out project activities on their own there is need for constant and intensive onsite support to the field staff (Ramesh,2002). Individual of the larger aspects of developing employee’s skills and abilities is the actual organizational focus on the employee to turn out to be better, either as a individual or as a contributor to the firm. The responsiveness by the organization coupled with increased expectations following the opportunity can lead to a self-fulfilling prophecy of enhanced output by the employee, (Pearce and Robinson, 2004).

The project costing should provide a clear and adequate provision for monitoring and evaluation events. Monitoring and evaluation budget can be obviously delineated within the overall project costing to give the monitoring and evaluation function the due recognition it plays in project running, (Gyorkos, 2003 and McCoy, 2005). Monitoring and evaluation costing should be about 5 to 10 percent of the entire budget, (Kelly and Magongo, 2004, IFRC, 2001and AIDS Alliance, 2006), According to Constituencies Development Act (2003), at the Constituency Level, a maximum of 3% of each

constituency's annual allocation may be used for administration, 15% for an education bursary scheme, 2% for sports activities and 25% for environmental actions. Though NG-CDF does not cover recurrent costs it also allows 3% of the constituency's annual allocation to be used for recurrent expenses of motor vehicles, equipment and machinery since they constitute projects development under the NG-CDF Act. The act fails to factor in funds for M&E of projects, thus the projects end up incomplete and others fail to meet the set standards.

Time dimension of assessing project success is the most common aspect brought out in the literature review. Pretorius *et al* (2012) found out that project management organizations with mature time management practices produce more successful projects than project management organizations with less mature time management practices. Project time is the absolute time that is calculated as the number of days/weeks from start on site to practical completion of the project. Speed of project implementation is the relative time (Chan, 2001). Peterson & Fisher (2009) established that construction firms are usually interested in monitoring project time variance and verifying contractor progress payments requests. Kariungi,(2014) expressed that energy sector projects were completed on time due to factors such as efficient procurement procedures, favorable climatic factors, timely availability of funds and proper utilization of project planning tools.

Project completion within scope is considered as one of the success factor. The project charter or statement of work requires the implementers to develop a scope of work that was achievable in a specified period and that contained achievable objectives and milestones, (Bredillet,2009). Monitoring gives information on where a policy, program,

or project is at any given time (and over time) relative to respective targets and outcomes. It is descriptive in intent. Evaluation gives evidence of why targets and outcomes are or are not being achieved. It seeks to address issues of causality. Of particular emphasis here is the expansion of the traditional M&E function to focus explicitly on outcomes and impacts (Channah Sorah, 2003).

Providing support and strengthening of M&E team is a sign of good governance. Providing support and strengthening of M&E team will also play a key role in ensuring that the M&E team adds value to the organizations operations (Naidoo, 2011). A motivated team usually achieves high performance (Zaccaro *et al*, 2002). This implies that the more a team is strengthened, the better the performance and value addition to the organization. This also applies to the monitoring and evaluation teams in project management. Interestingly Pretorius *et al* (2012) observed that there was no significant association between the maturity of quality management practices in project management organizations and the results of the projects that they produce. Nevertheless it is the view of the researcher that managers should indeed aspire to achieve quality in all the aspects and processes, including quality monitoring team, so as to achieve project success.

These aspects include: Financial availability, number of monitoring staff, monitoring staff skills, frequency of monitoring, stakeholders representation, Information systems (Use of technology), Power of M & E Team and teamwork among the members (Naidoo, 2011; Ling *et al*, 2009; Magondu, 2013; Hassan, 2013; Georgieva & Allan, 2008; Gwadoya, 2012) evaluation is at its maximum. The execution stage is the most risky stage where the probability of not achieving project success is at its peak due to

numerous project activities. It is during this stage that the project M&E team should be most active in monitoring and providing timely feedback.

Finally, during closing down the monitoring and evaluation just like other management activities is less intensified as compared to the execution stage.

Most of the monitoring activities during this stage involves reporting on the project outcome and preparing for future projects (Kyriakopoulos, 2011; Chin,2012; Pinto and Slevin, 1988; Müller and Turner, 2007; Khang and Moe, 2008). Managing development projects require an operational M&E system. The M&E system is the set of planning, information gathering and synthesis, reflection, and reporting processes, along with the necessary supporting conditions and capacities required for the outputs of M&E to make valuable contributions to decision making and learning. A well-functioning M&E system manages to integrate the more formal, data-orientated side commonly associated with the task of M&E together with informal monitoring and communication, such as project field staff sharing impressions of their fieldwork with each other and their managers over lunch (or coffee).Clear definition of the purpose and scope of the intended M&E system helps when deciding of issues such as budget levels, number of indicators to track, type of communication needed and so forth.

### **2.7.1 Identify and Strengthen Processes to Ensure That Evidence is Used in Policy**

Studies are not an end in themselves, but a means to the end of better policy, programs and projects, and so better lives. We are starting to document cases in which impact evaluations have, and have not, influenced policy to better understand how to go about this. DFID now requires evidence to be provided to justify providing support to new

programs, an example which could be followed by other agencies (Bamberger, *et al.* 2004).

### **2.7.2 Institutionalize Impact Evaluation**

The Development community is very prone to faddism. Impact evaluation could go the way of other fads and fall into disfavor. We need to demonstrate the usefulness of impact evaluation to help prevent this happening, hence my first point. But we also need take steps to institutionalize the use of evidence in governments and Development agencies. This step includes ensuring that ‘results’ are measured by impact, not outcome monitoring (Bamberger, *et al.* 2004).

### **2.7.3 Improve Evaluation Designs to Answer Policy-relevant Questions**

Quality impact evaluations embed the counterfactual analysis of attribution in a broader analysis of the causal chain, allowing an understanding of why interventions work, or not, and yielding policy relevant messages for better design and implementation. There have been steps in this direction, but researchers need better understanding of the approach and to genuinely embrace mixed methods in a meaningful way (Bamberger, *et al.*, 2004).

### **2.7.4 Make Progress with Small Impact Evaluations**

We all accept that we should be issues-led not methods led, and use the most appropriate method for the evaluation questions at hand. But the fact is that there is far more consensus for the evaluation of large n interventions, in which experimental and quasi-experimental approaches can be used, then there is about the approach to be used for small interventions. If the call to base Development spending on evidence of what works

is to be heeded, then the Development evaluation community needs to move to consensus on this point (Bamberger, *et al*, 2004).

### **2.7.5 Expand Knowledge and Use of Systematic Reviews**

Single impact studies will also be subject to criticisms of weak external validity. Systematic reviews, which draw together evidence from all quality impact studies of a particular intervention in a rigorous manner, give stronger, more reliable, messages. There has been an escalation in the production of systematic reviews in Development in the last year. The challenge is to ensure that these studies are policy relevant and used by policy makers (Bamberger, *et al*, 2004).

## **2.8 Research Gap**

It has been shown that a number of factors interact to influence the success or failure of the newly introduced M&E in projects be it mega or medium projects across the country and in the whole world. Projects have existed for long but a number fail due to poor M&E (World Bank, 2012) or some fail because the M&E has not been well adopted and faithfully integrated into the system. The research focused on four major objectives that made the themes of discussion and this included: time, human resources, financial resources and stakeholders'. Throughout the world, people are demanding better and more services from national and local governments to maintain or improve the quality of people's lives. Local government has an important role to play in improving communities' lives by providing and delivering basic services, including providing access to potable water, proper sanitation, a sustainable electricity supply, and regular waste removal. It is thus vital that different spheres of government work together to improve service delivery to constituencies by safeguarding livelihoods and enhancing

local democracy. To keep track of how successful they are in improving service delivery, government must design and implement comprehensive M&E systems.

Monitoring is also important to ensure that activities are implemented as planned and evaluation is equally important in ensuring that factors which hinder proper performance of the project are identified and corrected in time for the project to progress according to initial plan. This helps the project managers to measure how well they are achieving their targets. Based on the reports, the Monitoring and Evaluation team will be able to come up with an evaluation check list which would guide its assessment for each project visited. Evaluation tools include a pre-set template format used by ministry of planning and national development. Adequate allocations and timely disbursements of funds: NG-CDF should allocate funds adequate to complete projects. The allocations should as well be informed by consultations with public works and other relevant institutions so that quality projects can be developed, completed and put into use. In as far as the funding of NG-CDF projects to completion is concerned; the PMC should stop funding any new projects and in turn allocate funds to complete all the projects which are incomplete. Handing over plans should be handled in a manner which allows continuity.

Due to the importance attached to M&E in projects implementation, studies have been done across the world to focus on some issues influencing their success. From the global angle for example, China has been known and is still known today to be among the best performing countries in their M&E process as a tool of performance in both the public and private sector (UNDP, 2015). According to PASSIA (2013) in their report on the performance of sanitation projects construction in central elementary schools in China, a number of factors determined their success. Among the major cited factors was the M&E



process as implemented by the government management bodies, the contractors and the school leaders. In the report, over 230 teachers filled a questionnaire that required them to break down some of the factors they felt had an influence on the M&E process.

## **CHAPTER THREE**

### **RESEACH DESIGN AND METHODOLOGY**

#### **3.1 Overview**

This chapter describes the methodology of the study that was applied in carrying out the research study. It is organized under the following sections: Research design, study area, target population, sample size, sampling procedure, research instruments, pilot study, validity and reliability, data collection procedure, data analysis and presentation and finally ethical consideration.

#### **3.2 Research Design**

A research design is the blueprint for the collection, measurement and analysis of data. (Cooper and Schindler, 2001). It provides the ‘glue’ that holds all the elements in the research as the scheme, out-line or plan that is used to generate answers to the research problems (Kombo & Tromp, 2006). The research design that was used in this study is descriptive research design employing mixed method approach. This research design allows the researcher to gather information in a manner that reduces the cost of data collection. Also, a carefully constructed descriptive design allows the researcher to study the phenomenon in its natural setting, eliminates bias and maximises the reliability of the data collected (Kothari, 2004) and because it is an empirical enquiry that investigates contemporary phenomena within its real-life context. The findings would be generalized as being applicable in the rest of the sub- Counties. The study sought to carry out an investigation on the role of M&E in infrastructure development of schools in Marakwet West Sub-County, Kenya.

### **3.3 Study Area**

The study was conducted in Marakwet West Sub-County located in Elgeyo Marakwet County in North Western part of Rift valley Kenya (see Appendix VIII). Geographically, it lies between latitude  $0^{\circ} 51^1$  N to  $1^{\circ} 19^1$  N and longitude  $35^{\circ} 29^1$  E to  $35^{\circ} 43^1$  W and occupies an area of  $1588 \text{ km}^2$  and has a population of 140,629 according to 2009 Census. The area is divided into three main geographical zones, which run parallel to each other in a north - south direction. These are the highland plateau which rises gradually from an altitude of 2,700 to 3,350 metres above sea level. The Elgeyo Escarpment is the intermediate zone that rapidly gives way to the Kerio-Valley. The valleys are situated at 1000 meters and are formed by a narrow and long strip of approximately 80 Km and by maximum 10 Km wide (Chebet & Dietz, 2000). The Sub-County is suitable for the study because it benefits from national government constituency development fund (NG-CDF), NGOs Projects, PA Projects, Economic Stimulus Projects, Ministry of Education funding and County funded school projects.

### **3.4. Target Population;**

This refers to the group of individuals, persons, objects or items from which samples are taken for measurements (Kothari, 2006). A target population is that population to which a researcher wants to generalize the results of a study (Mugenda & Mugenda, 2003). The study targeted 80 head teachers from the public primary schools and 30 head teachers from public secondary schools benefiting from infrastructural development funding.

Beside the 110 head teachers, 10 chairpersons of BOM of secondary schools from Sub-county category level and primary schools from the zones were targeted. This is because they immensely benefitted from NG-CDF funding. Further, 10 chairpersons of PA of primary and secondary schools from the zones that benefitted from NG-CDF and NGOs

funding were also targeted. More so, 5 NG-CDF personnel, 8 Sub-county education officers, and 5 NGOs members were also targeted. This is because they were believed to have experience and knowledge on monitoring and evaluation of school development projects hence provided an in-depth understanding of the issues of concern for the study.

### 3.5 Sample Size

The Yamane formula (1967) for calculating sample size was used to get this number of respondent head teachers.

$$n = \frac{N}{1 + N(e)^2}$$

Where: n = Sample size

N = Population size

e = Level of precision (0.05 or 95% confidence level)

Using this formula the sample size was calculated as follows:

$$n = \frac{N}{1 + N(e)^2}$$

$$\begin{aligned} n &= 110 / 1 + 110(0.05)^2 \\ n &= 110 / 1 + 110 \times 0.0025 \\ n &= 110 / 1 + 0.275 \\ n &= 110 / 1.275 \\ n &= 86.27 \\ n &= 86 \end{aligned}$$

Thus, the sample size obtained was 86 respondents which represented 78.2% of the target population. This information is shown in table 3.1

### **3.6 Sampling Procedure**

According to Webster (1985), sampling is the act, process or techniques of selecting a representative part of a population for the purpose of determining parameters or characteristics of the whole population. Sampling is also the process of selecting the sample in a way that it represents the accessible population from which it is selected (Cooper & Morgan, 2008; Kothari, 2004; Mugenda & Mugenda, 2003). Sampling makes it possible to draw valid inferences or generalizations on the basis of careful observation of variables with a relatively small proportion of the population (Kothari, 2004). Simple random sampling involves choosing elementary units in such a way that each unit in the population has an equal chance of being selected. The resultant sample is free from sampling bias (Lapin, 1988). This study employed stratified simple random sampling to select 86 respondents from the target population.

Purposive sampling is obtained according to the discretion of the researcher who is familiar with the relevant characteristics of the population Webster (1985). The 5 BOM chairpersons and 5 PA chairpersons were picked through purposive sampling in the ratio of 3:2 from schools at the zones that benefitted from infrastructure funding. This is due to the fact that they had served for long as chairpersons of BOM and PA respectively and had a lot of experience on implementation of school infrastructural development projects. Similarly, 1 NG-CDF manager, 1 Sub-County personnel in-charge of school infrastructure developments and 1 director of NGO funding school development project were sampled through purposive sampling technique. Generally, all the key informants who participated in the interviews were chosen based on the fact that they had previously participated in overseeing the implementation of school infrastructure projects funded by

various stakeholders and that they had wealthy of experiences and were knowledgeable about M&E in schools. Other informants i.e. PA chair is also a member of SIC.

**Table 3.1 *Sampling Matrix***

<b>Description</b>	<b>Population</b>	<b>Method of selection</b>	<b>Sample size</b>
School Head teachers	110	Stratified Simple Random sampling	86
<b>Key informants</b>			
i. BOM chairpersons	10	Purposive	5
ii. Sub-County education officers	8	Purposive	1
iii. NG-CDF members	5	Purposive	1
iv. PA chairpersons	10	Purposive	5
v. NGO members	5	Purposive	1

**Source: Researcher, 2017**

### **3.7 Research Instruments**

The instruments used for data collection were the questionnaires and the interview schedule.

#### **3.7.1 Questionnaire**

The questionnaires were used to collect quantitative data from head teachers. Questionnaires are useful instruments of collecting primary data since respondents can read and then give responses to each item and it can also be used to reach a large number of subjects (Orodho, 2004) (see appendix I). The researcher chose self-administration of questionnaires because it was quicker and cheaper to administer over a geographically widely dispersed region besides facilitating easy derivation of information from respondent (Kothari, 2004). Questionnaires were prepared on the basis of the objectives as outlined in chapter one and as discussed in the literature review. They were all closed ended. Likert Scale of (1-5) were employed on closed ended questions; where 5 stood for strongly agree (SA), 4 stood for Agree (A), 3 stood for Undecided (UD), 2 stood for

disagree (DA) and 1 stood for Strongly Disagree (SDA). The use of this method enabled the researcher to obtain a wider coverage of descriptive data at comparatively low cost in terms of time, money and effort. Besides, since it is a standard research instrument, it allowed for uniformity in the manner in which questions were asked and made it possible to be compared across respondents (Kothari, 2006). The choice of questionnaires was guided by the nature of the data to be collected and the objectives of the study and covered variables that would not be directly observed. Further, questionnaires enabled collection of a lot of information that provided opinion judgement regarding study variables (Kothari, 2004).

### **3.7.2 Key Informant Interviews**

According to Nyamongo (2002), key informants constitute the oral source of information. They are repositories of knowledge from which researchers retrieve information from selected responses based on their nature of the training and knowledge. This method was used to obtain information from each purposively picked informants i.e., NG-CDF, NGOs, BOM, PA and Sub-County education officer (see appendix II and III). The method enabled the researcher to gather information from experienced individuals who were selected purposively. Interviews provide in-depth data that is not possible to get using questionnaire alone (Mugenda & Mugenda, 2003). According to Oso and Onen (2005) interview is a method of collecting data that involves presentation of oral verbal stimuli and reply in terms of oral verbal responses. It also provides a true picture of opinions and feelings. However, they are time consuming, expensive to conduct and may have sincere answers to please the interviewer.

### 3.9 Reliability and Validity

#### 3.9.1 Reliability of the Research Instrument

The reliability of a study has to do with the degree to which the measuring instruments used in the study yield consistent results or data after repeated trials (Mugenda & Mugenda, 2003). Reliability is the degree of consistency of a research instrument and the accuracy of the target attributes (Kombo & Tromp, 2008). The reliability of an instrument is usually expressed as a correlation coefficient with values ranging between 0.0 and 1.0. A coefficient of 1.0 indicates perfect reliability, which is practically never attained while a rating of 0.0 indicates no reliability. Reliability coefficient shows the extent to which an instrument is free of error of variance. The closer the reliability coefficient obtained to 1.0 the more the instrument is free of error of variance and is hence a measure of the real differences among the subjects in the dimensions assessed by the instrument. According to Cohen *et al.* (2007), a reliability level is acceptable at 0.7 and above. In this study, reliability was tested by use of internal consistency technique. The researcher computed the Cronbach's Coefficient alpha ( $\alpha$ ) K- R20 internal consistency coefficient. This coefficient allows for the assessment of consistency of research items in measuring the research variables. The questionnaire yielded Cronbach's alpha internal consistency coefficients of 0.823 which was considered reliable

The following Cronbach's Coefficient alpha ( $\alpha$ ) K- R20 formula was employed:

$$(\alpha) K- R_{20} = \frac{(K) (S^2 - \sum s^2)}{(S^2) (K-1)}$$

Where:  $KR_{20}$  = Reliability coefficient of internal consistency

K = Number of items used to measure the concept



$S^2$  = Variance of all scores

$s^2$  = Variance of individual items

Hence the correlation of 0.823 was obtained indicating that there was a high degree of reliability in the data collected.

### **3.9.2 Validity of the Research Instrument**

The term validity refers to the accuracy of measuring instruments in measuring the variable that it is intended to measure (Monette, *et al* 1990: pg. 113). The validity of an instrument is defined as the degree to which it measures accurately what it is purported to measure, mainly the data anticipated for collection based on the objectives of the study (Mugenda & Mugenda, 2003). According to Cohen *et al.* (2007), there are two types of validity; internal and external validity. Internal validity comprises face, content, construct and criterion validity while external validity focuses on the extent to which study findings can be generalized.

Face validity refers to the extent to which an instrument seems to cover concepts it purports to measure. This was established through the review of literature on the variables being studied to determine their appropriateness. Content validity refers to the degree to which the research instrument appropriately represents the content domain it is intended to measure, thus adequately covers the topic under study. The comments and criticism of the supervisors were considered and incorporated in the final draft of the questionnaire so as to ensure content validity. When an instrument is judged to have high content validity, its content is considered to be congruent with the testing purpose and with prevailing notions of the subject matter being tested (Borg & Gall, 1989). Through literature review, this study was able to verify that variables under study were adequately

covered. In order to ensure that the sets of questionnaires for this study were valid, supervisors from the School of Business and Economics, Development Studies Department were given questionnaires for constructive criticism and guidance.

### **3.10 Data Collection Procedure**

Before proceeding for data collection, the researcher sought clearance from the then Dean, School of Human Resource and Development Studies (see Appendix VII) then authorization to conduct research from the National Commission for Science, Technology and Innovation (NACOSTI) at the ministry of Higher Education and Technology (see Appendix IV). Accordingly, copies of the research permits were presented to the Sub-County commissioner and Sub-County Director of Education, Marakwet West Sub-County who gave authorization for the research to be conducted (see Appendix V and VI). Thereafter, the researcher visited the various selected schools for data collections. The Head teachers and the key informants were prior notified in writing and their co-operation sought before the study. The researcher made two separate visits to the schools, during the first visit the researcher distributed the questionnaires to the respondents and made arrangements with them on the convenient date and time to collect the dully filled questionnaires. In the second visit the researcher collected the filled questionnaires. To ensure that all the questionnaire items were answered, each respondent's questionnaire was cross-checked and where items had been left out, the respondents were requested to respond to them. The filled questionnaires were collected for data analysis. Appointments for the key informants were booked and interviews conducted on separate days.

### **3.11 Data Analysis and Presentation**

According to Mugenda & Mugenda (2003), data analysis is the process of bringing order and meaning to raw data collected. It is also a way towards bringing structure and significance to the mass of data gathered (Orodho & Kombo 2002). The dully filled and returned questionnaires were first of all checked, cleaned, edited and coded for accuracy, completeness and uniformity. (Moser and Kalton, 1979).

The data collected in this study were analyzed both quantitatively and qualitatively. Qualitative analysis involved deriving explanations and making interpretations of the findings based on the objectives of the study. Quantitative analysis on the other hand involved deriving statistical description and interpretation of data by use of descriptive statistics. Accordingly, the quantification of Likert Scale categories was done by assigning numerical values to the various ratings in order to facilitate statistical representation of data (Peter, 1994).

In particular, the five responses were symbolized and ranked in the following manner: strongly agree (SA) denoted by numerical value 5; Agree (A) denoted by numerical value 4; Undecided (UD) denoted by numerical value 3; Disagree (DA) denoted by numerical value 2 and Strongly Disagree (SDA) denoted by numerical value 1. After coding numerated data in the questionnaires, it was entered into SPSS computer package for processing and analysis. Data analysis involved the use of descriptive statistics from which statistical frequencies and percentages were computed to facilitate comparison of the proportions of responses made by head teachers that was affecting monitoring and evaluation. The data was organized and presented in form of tables and a summary of the findings indicated after each table, tabular layout was important to establish the

distribution of respondents by performance. The use of tabular layout would enable desired figures to be located quickly and more easily. This layout makes it possible to reveal patterns within figures which cannot be seen in narrative form.

### **3.12 Ethical Consideration**

Despite the high value of knowledge gained through research, knowledge was not pursued at the expense of human dignity. The researcher in this study observed ethical consideration by taking several steps. First the respondents were assured that their responses would be kept confidential and that they would be used for the purpose of academic research only (see Appendix IV). Secondly, the researcher informed the respondents not to disclose their identity anywhere on the questionnaire. Thirdly the research was only conducted after the consent of the respondents had been obtained. The researcher also took individual responsibility for the conduct and consequences of the research by adhering to the time schedule agreed upon with the key informants and school administrators. The researcher was open and honest when dealing with respondents. The respondents were also assured of getting the feedback from the research if they needed after the study. This was aimed at securing co-operation from them. Lastly, the researcher was very open and considerate during the research and those who participated in the study did so voluntarily.

## CHAPTER FOUR

### DATA ANALYSIS, INTERPRETATION AND DISCUSSION

#### 4.0 Introduction

The chapter present results based on the findings from the study on the role of monitoring and evaluation in development of school infrastructure in Marakwet west sub county. The dependent variable was development of school infrastructure and the independent variable was monitoring and evaluation.

#### 4.1 Return Rate

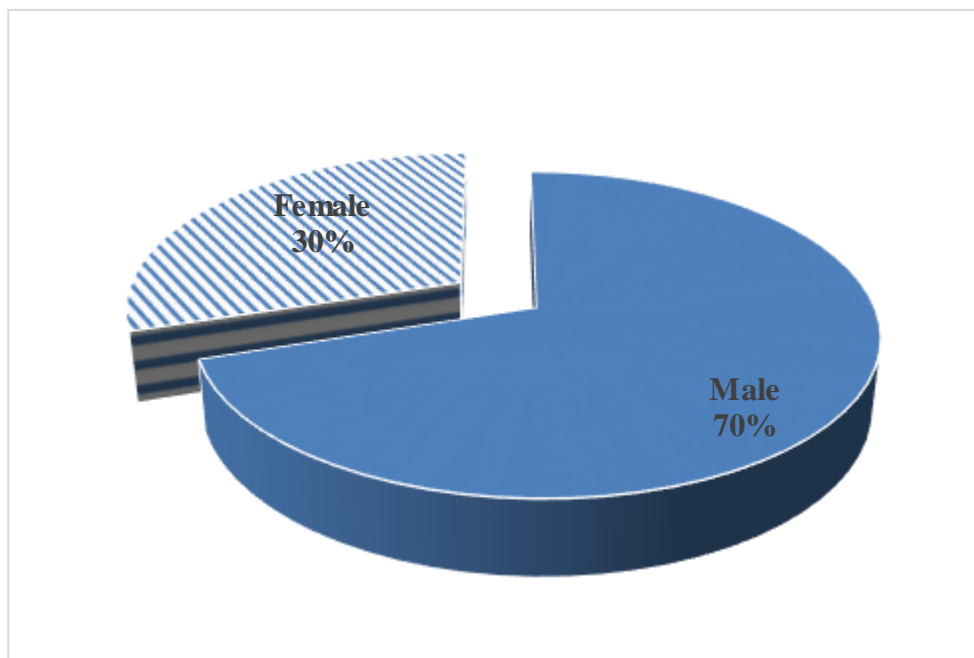
A total of 86 questionnaires were administered to the respondents and 80 were filled correctly and found usable for the study while 6 questionnaires were rejected due to incompleteness. Hence the response rate was 93.02%. All the key informants turned out for the interview making a return rate of 100%. This response rate was excellent to make generalization for the study as it was representative. According to Mugenda & Mugenda (2003) a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent.

#### 4.2 Demographic Information of the Respondents

The study sought to determine the bio-data of respondents, gender, age, educational level, and working experience of the respondents and the results below were reached upon. The responses are presented in the following sub-section.

##### 4.2.1 Gender Information

The study sought to establish the gender composition of the respondents and the results are as shown in the figure 4.1 below were arrived at:



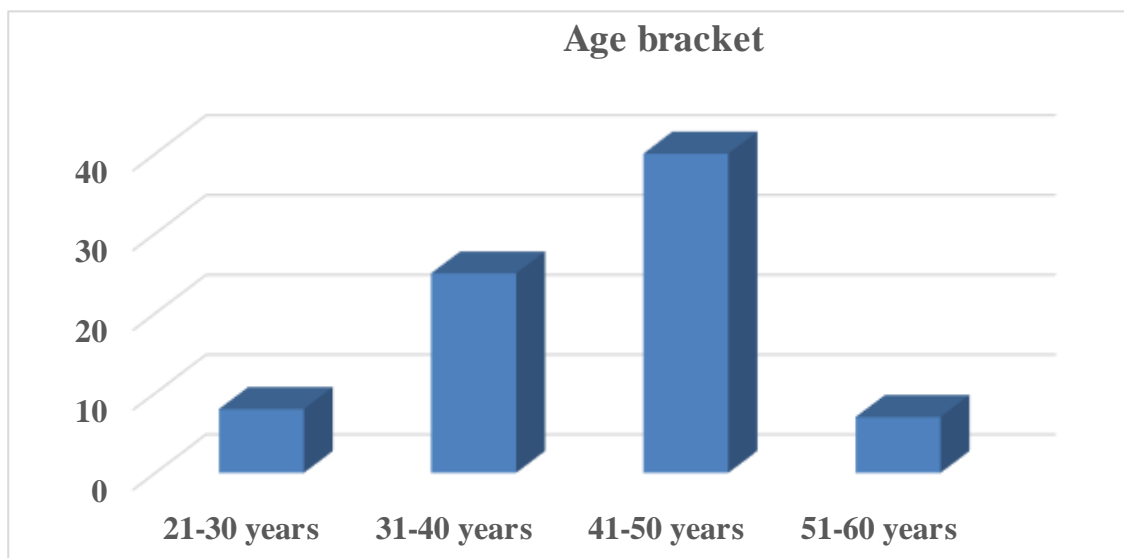
**Figure 4.1 Gender Information**

**Source:** researcher, (2017)

As indicated in figure 4.1 the findings revealed that male respondents were the majority while the female were the minority. Male respondents made majority of the respondents at 70% while the female respondents who participated in the study made 30%. This shows that most headships roles are taken by the male who are more empowered than their counterparts (female) which is also in relation to delegation of duties given to females in terms of monitoring and evaluation.

#### **4.2.2 Age Distribution**

The study sought to find out the age brackets of the respondents and the results were as shown in Figure 4.2.



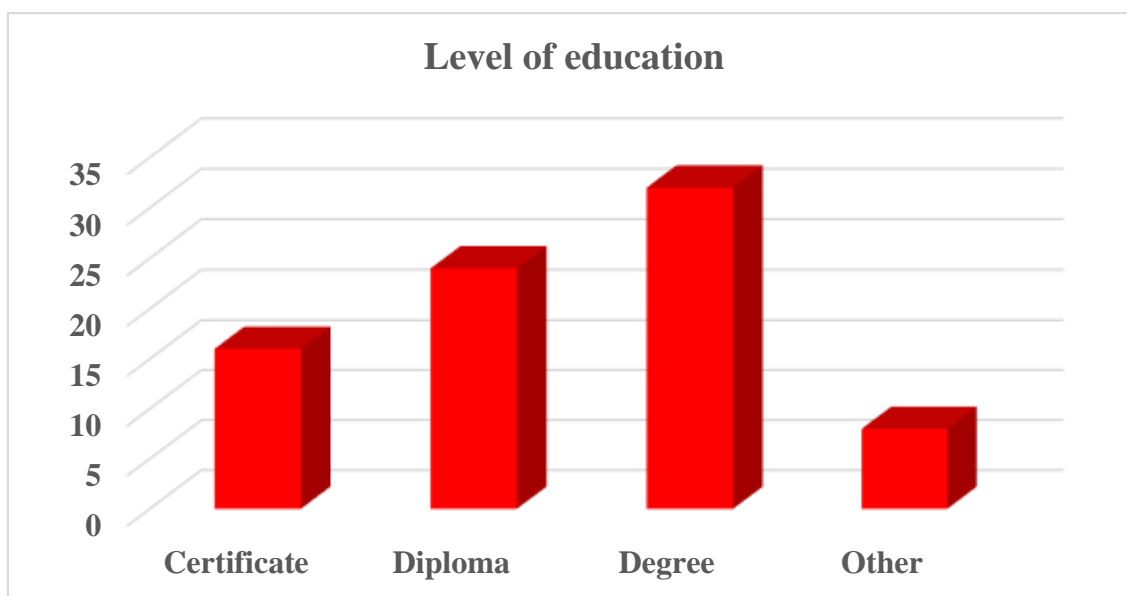
**Figure 4.2 Age Distribution**

**Source: researcher, (2017)**

From figure 4.2, 40(50%) of the respondents were between 41-50 years of age were the majority, those of the age between 31-40 years with 25(31.3%), those between 21-30 years were 8(10%), and those with ages 51-60 years were 7(8.8%). This implies that majority of the respondents were of age between 41 and 50 years and that they are experienced enough to carry out their duties, responsibilities and take over monitoring and evaluation roles.

#### **4.2.3 Distribution of Respondents by their Level of Education**

The study investigated the distribution of respondents by their level of education and the results were as shown in figure 4.3



**Figure 4.3 Distribution of Respondents by their Level of Education**

**Source: researcher, (2017)**

Figure 4.3 shows that 32(40%) of the respondents had obtained degree, 24(30%) of them had diploma, 16(20%) had certificate and 8(10%) had other qualifications which included Masters Degree and Doctorate. This implies that majority of the respondents had higher academic qualification levels and that they were in a position to give credible information relating to monitoring and evaluation. According to Murphy and Myers (2004), education level determines the respondents' ability to comprehend the survey questions. Through the acquired knowledge abstract theoretical constructs are tested with courage, hence the educated always take control of events with courage. (Lanin, 2001).

#### **4.2.4 Responsibility for Monitoring and Evaluation**

It was important for the study to find out who was responsible in carrying out monitoring and evaluation of school projects. The findings are shown in table 4.1



**Table 4.1 Responsibility for Monitoring and Evaluation**

		Frequency	Percent
Valid	Head teacher	16	20.0
	Board of Management	33	41.3
	SIC	24	30.0
	PA	7	8.8
	Total	80	100.0

**Source: researcher, (2017)**

Findings in table 4.1 showed that 33(41.3%) agreed that the board of management were the ones responsible in monitoring and evaluation of school projects, 24(30%) said it was the SIC, 16(20%) of them said the head teacher and 7(8.8%) said the PA members. The results showed that board of management were the ones responsible for monitoring and evaluating the development projects in schools, this implies that for any failure or success there would be someone held accountable and responsible.

#### **4.2.5 Frequency of Monitoring and Evaluation**

The study found it necessary to investigate the frequency of monitoring and evaluation carried out in the school project. The findings are shown in table 4.2:

**Table 4.2 Frequency of Monitoring and Evaluation**

		Frequency	Percent
Valid	Weekly	8	10.0
	Monthly	24	30.0
	Quarterly	40	50.0
	Annually	8	10.0
	Total	80	100.0

**Source: Researcher, (2017)**

Findings in table 4.2 shows that 40(50%) of the respondents said monitoring and evaluation was done on quarterly basis, 24(30%) said it was done monthly, 8(10%) agreed on annually and 8(10%) said weekly. The results indicated that it took three months for evaluation to take place in the school therefore it gave the study to find out timing necessary for evaluation to be carried out. The findings on the interviews showed that majority of the respondents agreed that they did there monitoring and evaluation monthly and on quarterly basis.

### **4.3 Findings on Specific Objectives**

The study set to investigate the role of monitoring and evaluation in development of school infrastructure. The specific objectives of the study were: to examine the components of monitoring and evaluation, policies ensuring transparency and accountability, establish challenges facing M&E and finally ways of improving the use of M&E. These findings are presented in the sub-sections below;

### 4.3.1 Components of M&E

Information was obtained on components of M&E. The Likert responses were Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (SD), rated 5-1 in that order. Descriptive analysis was used to calculate mean to explain the results of this objective.

**Table 4.3: Components of M&E**

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Mean
	F	%	F	%	F	%	F	%	F	%	
M&E plan and costs	0	0	40	50	8	10	32	40	0	0	3.100
Routine programme monitoring	0	0	56	70	8	10	0	0	16	20	4.100
Human capacity for M&E	0	0	40	50	0	0	0	0	40	50	4.500
Supportive supervision and data auditing	0	0	47	58.8	16	20	9	11.3	8	10	3.675
Data dissemination and use	17	21.3	15	18.8	16	20.0	15	18.8	17	21.3	2.888

**Key: F=Frequency**

**Source: Researcher, (2017)**

Table 4.3 shows that 40(50%) agreed, 32(40%) disagreed that plan and costs are components of M&E and 8(10%) were undecided on the statement but none of them either strongly disagreed or strongly agreed. Further, 56(70%) agreed, 16(20%) strongly disagreed that routine programme monitoring was a component of M&E, 8(10%) of them remained undecided but none of them either disagreed or strongly agreed. 40(50%) of the respondents agreed that human capacity for M&E was a component of M&E, 40(50%) strongly disagreed with the statement but none of them strongly agreed, disagreed or

were undecided. Furthermore, 47(58.8%) agreed that supportive supervision and auditing of projects was a component of M&E, 20(11.3%) disagreed, 8(10%) of the respondents strongly disagreed with the statement and 16(20%) were undecided but none of them either disagreed or strongly disagreed. Similarly, 17(21.3%) of the respondents strongly agree that data dissemination and use was a component of M&E, 15(18.8%) of them agreed, but 15(18.8%) disagreed and 17(21.3%) strongly disagreed, while 16(20%) remained undecided.

The highly rated and accepted component of M&E was human capacity for M&E with the highest mean of 4.500. This implied that M&E plan and costs, routine programme monitoring, human capacity for M&E, supportive supervision and data auditing, and data dissemination were components of M&E. According to qualitative findings informant 1 & 3 said

*“We incorporate M&E work plan and costs, routine programme monitoring, human capacity for M&E, supportive supervision and data auditing and data dissemination in our project M&E.”*

These findings agrees with Kusek *et al* (2004) who stated that components of M&E included M&E plan and costs, routine monitoring, human capacity for M&E, supportive supervision and data auditing, and data dissemination among others were components of M&E.

#### **4.3.2 Policies to Ensure Transparency and Accountability**

It was necessary to investigate the policies that ensure transparency and accountability. The Likert responses were strongly agree (SA), agree (A), undecided (U), disagree (D) and strongly disagree (SD) rated 5-1 in that order.

**Table 4.4 Policies to Ensure Transparency and Accountability**

Statements	Strongly disagree		Disagree		Undecided		Agree		Strongly agree		Mean
	F	%	F	%	F	%	F	%	F	%	
Preparation of M&E work plans for the development project	0	0	8	10	8	10	41	51.3	23	28.8	3.988
The SIC holds regular meetings on project M&E	0	0	24	30	24	30	24	30	8	10	3.200
Keeping minutes for the meetings held in relation to project M&E & payment receipts	0	0	0	0	16	20	48	60	16	20	4.000
Auditing of books of accounts periodically	0	0	16	20	16	20	48	60	0	0	3.400
Stakeholders and responsible parties having access of all the records on school project	0	0	24	30	15	18.8	41	51.3	0	0	3.213

**Key: F=Frequency**

**Source: researcher, (2017)**

The findings in Table 4.4 shows that 23(28.8%) strongly agreed that the SIC prepares development work plans, 41(51.3%) of them agreed, 8(10%) of the respondents was undecided and 8(10%) disagreed but none of them strongly disagreed. 8(10%) of the respondents strongly agreed that the SIC holds regular meetings on project monitoring and evaluation, 24(30%) agreed with the statement, 24(30%) of them were undecided, and 24(30%) disagreed with the statement but none of them strongly disagreed. According to whether the SIC keeps minutes for the meetings held in relation to project M&E & payment receipts, 16(20%) of the respondents strongly agreed, 48(60%) agreed while 16(20%) were undecided but none of them strongly disagreed or disagreed.

Further, 48(60%) of the respondents agreed that the BOM ensures books of accounts are audited periodically, 16(20%) were undecided on the statement while 16(20%) of them disagreed but none of them either strongly disagreed or strongly agreed with the statement. With regards on whether stakeholders and responsible parties have access of all the documents on school project, 41(51.3%) of the respondents agreed with statement, 15(18.8%) of them were undecided and 24(30%) disagreed with the statement but none of them strongly disagreed or strongly agreed.

The results also indicated that keeping minutes for the meetings held in relation to project M&E & payment receipts was the most agreed by majority of the respondents as the policy governing transparency and accountability. This implies that in rating and measuring the progress it is easy to check by looking at whether the BOM holds and keeps minutes for the meetings held and payment receipts in relation to project monitoring and evaluation. It was also important to analyze the findings on the interviews, whereby informant 2 said

*“The board of management in their school has ensured that they should hold a meeting twice a month concerning the school projects and in this meeting minutes should be written and reviewed every time they have a meeting and verification of payment receipts”*

Informant 4&11 also said,

*“They have policy governing their progress to ensure accountability, they check on the books of accounts also the project money has different account where they have three signatories and every time the account statement is reviewed together with the progress of the project every time they have meetings”*

These findings emphasized the second objective on the policies used to ensure transparency and accountability; this was indicated by the use of meetings and keeping the minutes and also ensuring verification of each payment done.

### 4.3.3 Challenges Faced in Monitoring and Evaluation

The study sought to examine on the challenges faced in monitoring and evaluation and the findings were summarized in table 4.5. The Likert responses were strongly agree (SA), agree (A), undecided (U), disagree (D) and strongly disagree (SD) rated 5-1 in that order.

**Table 4.5 Challenges Faced in Monitoring and Evaluation**

Statements	Strongly disagree		Disagree		Undecided		Agree		Strongly agree		Mean
	F	%	F	%	F	%	F	%	F	%	
Time	0	0	32	40	8	10	40	50	0	0	3.100
Cultural Practices	0	0	40	50	8	10	32	40	0	0	2.900
Lack of demand by stake holders	0	0	7	8.8	41	51.3	32	40	0	0	3.313
Insufficient funds	0	0	0	0	0	0	40	50	40	50	4.500
Lack of political champion	0	0	8	10	16	20	48	60	8	10	3.700
Lack of human capacity	0	0	16	20	8	10	48	60	8	10	3.600

**Key: F=Frequency**

**Source: researcher, (2017)**

Table 4.5 shows that in monitoring and evaluation there are challenges, as shown by the studies, 40(50%) agreed that time was a challenge, 8 (10%) of them were undecided and 32(40%) disagreed with the statement but none of them strongly disagreed or strongly agreed. Moreover, 32(40%) of the respondents agreed that cultural practices was a challenge to monitoring and evaluation process 8 (10%) were undecided and 40(50%) of

them disagreed with the statement but none of them either strongly agreed or strongly disagreed.

Similarly, 32(40%) of the respondents agreed that lack of demand by stake holders was a challenge to monitoring and evaluation process, 41(51.3%) were undecided, 7(8.8%) disagreed with the statement but none of them strongly agreed or strongly disagreed. Further, 40(50%) of the respondents strongly agreed that insufficient funds was a major challenge affecting monitoring and evaluation process and 40(50%) agreed with the statement but none of the respondents was against the statement or undecided. However, 8(10%) of the respondents strongly agreed that lack of political champion is a challenge to the process, 48(60%) agreed with the statement, 16(20%) were undecided, 8(10%) disagreed but none of them strongly disagreed.

With regards to lack of human capacity on M&E, 8(10%) of the respondent strongly agreed. 48(60%) of them agreed, 8(10%) of the respondents were undecided while 16(20%) of the respondents disagreed with the statement. The study established that there were many challenges facing monitoring and evaluation and the major challenge affecting monitoring and evaluation according to the study was insufficient funds, lack of political champion, and lack of human capacity this is in relation with the highest mean of 4.5, 3.7 and 3.6 respectively.

This implied that financial aspect affected M&E and subsequently successful implementation of the school development project. Lack of political champion resulted to lack of political will of M&E of school infrastructure project. The findings were further



obtained from the qualitative methods, whereby the respondents were interviewed.

According to challenges, informant 8 said

*“Doing monitoring and evaluation may not be easy as it seems to be, though we do all our best to ensure monitoring of the school projects is carried out, there are challenges like insufficient funds and time, sponsors take long to release sufficient funds which make the project take longer than its projected time or slow the progress which makes the projects be monitored & evaluated in the beginning and its final stage.”*

These findings proved that monitoring and evaluation of the school development projects was challenging especially on finances, political champion, human capacity and time.

#### **4.3.4 Ways of improving the use of M&E**

The objective of the study was to investigate the role of monitoring and evaluation on development of school projects, therefore it was necessary to analyze ways in which M&E on school projects development can be improved. The findings are shown below;

The Likert responses were strongly agree (SA), agree (A), undecided (U), disagree (D) and strongly disagree (SD) rated 5-1 in that order.

**Table 4.6** *Ways of Improving the Use of Monitoring and Evaluation*

Statements	Strongly disagree		Disagree		Undecided		Agree		Strongly agree		Mean
	F	%	F	%	F	%	F	%	F	%	
The management should ensure there is constant feedback on school projects.	0	0	0	0	0	0	56	71.3	23	28.8	4.288
Management should ensure there is supervision so as to identify any potential problems at an early stage.	0	0	0	0	0	0	47	58.8	33	41.3	4.413
Incorporation of the views of the stakeholders in the project.	0	0	16	20	7	8.8	49	61.3	8	10.0	3.613
Establishment of best practices for monitoring & evaluation.	0	0	16	20	16	20	48	60	0	0	3.400
Transparency & accountability to ensure value for the money invested	0	0	0	0	0	0	48	60.0	32	40.0	4.400

**Key: F=Frequency**

**Source: researcher, (2017)**

The findings in table 4.6 according to ways of improving M&E in school development projects shows that 23(28.8%) of the respondents strongly agreed that the Board of management should ensure there is constant feedback i.e. communication on school projects, 56(71.3%) agreed but none of them was undecided or disagreed and strongly disagreed. 33(41.3%) of the respondents strongly agreed that the responsible parties should ensure there is frequent supervision so as to identify any potential problems at an early stages and 47(58.8%) agreed but none of them was undecided or strongly disagreed

and disagreed. 8(10%) strongly agreed that there should be incorporation of the views of the stakeholders in the project, 49(61.3%) agreed, but 7(8.8%) undecided with the statement while 16(20%) disagreed with the statement but none of them strongly disagreed. 48(60%) of the respondents agreed that M&E should establish best practices of honest & integrity in M&E and implementation of school projects, 16(20%) of them were undecided but 16(20%) of them disagreed but none of them either strongly disagreed or strongly agreed.

According to whether there should be transparency & accountability to ensure value for the money invested, 32(40%) of the respondents strongly agreed, 48(60%) of them agreed but none of them either disagreed, strongly disagreed or undecided. According to the means observed in the findings, there are measures that would improve M&E hence ensure successful implementation & completion of school projects. As shown by the high means the most agreed measure was that; BOM were responsible parties and they should ensure there is supervision so as to identify any potential problems at an early stage, also there should be transparency & accountability to ensure value for the money invested.

This implied that supervision, transparency and accountability play a big role in successful completion of school projects.

According to ways of improving monitoring and evaluation; informant 7&12 said

*“The government and the sponsors should release finances at the right time, also transparency & accountability should be emphasized in school project to ensure quality work.”*

Informant 10 said,

*“Regular checkups should be done on the school projects with utmost seriousness it deserves.”*

These findings show that the projects should be monitored and evaluated frequently and as planned. This allows for sufficient and informed decision making processes. This also reduces wastage of resources and time since corrective measures can be applied to where there are hitches in project implementation on time.

Informant 5&6 said,

*“Funds be allocated for M&E process in the overall project so as to increase rate of implementation of school projects”*

Informant 9&13

*“Projects stall due to lack of integrity by the steering committee hence funds are embezzled and utilized ineffectively resulting to stalled projects in the long run”*

The findings show that there are measures that would help in improving the use of monitoring and evaluation in ensuring success of school development projects. This is indicated by the respondents as use of regular checkups, early release of funds over a short period of time to reduce time taken in accomplishing the project, also embezzlement of project funds should be checked through audit of books of accounts and payments made to ensure there is transparency and accountability. The project costing should provide a clear and adequate provision for M&E events. M&E budget should be obvious delineated within the overall project costing to give the M&E function the recognition it plays in project running, Gyorkos, (2003) and Mccoy, (2005), monitoring and evaluation costing should be about 5% and 10% of the project budget (Kelly, Magongo, 2004)

#### 4.4. Relationship between Monitoring and Evaluation and Development of School Infrastructure

The hypothesis of this study stated that:

**H0<sub>1</sub>:** There is no statistically significant relationship between Monitoring and Evaluation and Development of School Infrastructure in Marakwet West Sub-County. **H0<sub>2</sub>:** There is statistically significant relationship between Monitoring and Evaluation and Development of School Infrastructure in Marakwet West Sub-County. Pearson Correlation Coefficient (simply  $r$ ) was used to establish the potential relationship between monitoring and evaluation and school infrastructure development. Where when  $r = (+) 1$ , it indicated perfect positive correlation and when it is  $(-) 1$ , it indicated perfect negative correlation, meaning thereby that variations in independent variable (x) explain 100% of the variations in the dependent variable (y). This implied that for a unit change in independent variable (monitoring and evaluation) and there happens to be a constant change in the dependent variables (Development of School Infrastructure) in the same direction, then correlation is termed as perfect positive. But if such change occurs in opposite direction, the correlation is termed as perfect negative. The value of ' $r$ ' nearer +1 or -1 indicates high degree of correlation between the two variables. The results of the analysed information are presented in Table 4.7.

**Table 4.7: The Correlation Coefficient Between Monitoring and Evaluation and Development of School Infrastructure**

Variables	Pearson Correlation Coefficient
Monitoring and Evaluation School Infrastructure	$r = 0.559^{**}$

$P \leq 0.05$ ; N=80

Source: Field data, 2017

The results of Pearson Correlation Coefficient used for data analysis as shown in Table 4.7 suggested that there is a significant positive relationship between Monitoring and Evaluation and Development of School Infrastructure at  $p \leq 0.05$  significance level ( $r=0.559$ ). This finding is similar to the findings by Tache, F, (2011) who noted that Monitoring and evaluation when carried out correctly and at the right time and place are ensures the success of many projects. This meant that there is a positive relationship between monitoring and evaluation and development of infrastructure and therefore Null hypothesis was rejected and alternative hypothesis accepted.

#### **4.5 Regression Analysis**

Regression analysis was employed to test the relationships in the study. The regression method was used to test the relationship between Monitoring and Evaluation and Development of School Infrastructure. The term "independent" variables and "dependent" variables are derived from the mathematical expression;

$$y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where,

y= Dependent variable

$\alpha$ = regression constant,

$\beta_1 - \beta_5$  = Regression coefficients (change in y for every unit change in X)

$X_1$  = M&E plan and costs

$X_2$  = Routine programme monitoring

$X_3$  = Human capacity for M&E

$X_4$ = Supportive supervision and data auditing

$X_5$ = Data dissemination and use

e = Error term

The regression coefficient  $\alpha$  is the Y intercept: while  $\beta_1, \beta_2, \beta_3, \beta_4,$  and  $\beta_5$  are the net change in y for each change of either of the variables (factors),  $X_1, X_2, X_3, X_4$  and  $X_5$ . M&E plan and costs, Routine programme monitoring, human capacity for M&E, Supportive supervision and data auditing and Data dissemination and use. The main aim of this research was to determine the relationship between Monitoring and Evaluation and Development of School Infrastructure in Marakwet West Sub-County. Regression analysis combined selected independent variables (M&E plan and costs, Routine programme monitoring, human capacity for M&E, Supportive supervision and data auditing and Data dissemination and use) with and Development of School Infrastructure being the dependent variable. This was to determine any significance for the assumed relationships based on the magnitude and direction of the relationship. The  $R^2$  characterized the degree of inconsistencies in and Development of School Infrastructure that is accounted for by the predictors (independent variables).

From the model, ( $R^2 = .847$ ) shows that all the predictors account for 84.7% variation in the relationship between selected monitoring and evaluation and school infrastructure development in public schools in Marakwet West Sub County. Therefore, the predictors used in the model have captured the variation of monitoring and evaluation.

The adjusted  $R^2$  gave the idea of how well the model simplifies and ideally, its value would be the same or very close to  $R^2$ . In our case the value of adjusted  $R^2$  is .845, showing that if the data was derived from the population rather than the sample it accounts for approximately 84.5% variance in Development of School Infrastructure. The change statistics were used to test whether the change in  $R^2$  is significant using the F ratio as indicated in Table 4.8.

**Table 4.8: Regression Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Change	F Change	df1	df2	Sig. F Change
1	.920 <sup>a</sup>	.847	.845	.31358	.847	429.005	3	233	.000

a. Predictors: (Constant), M&E plan and costs, Routine programme monitoring, human capacity for M&E, Supportive supervision and data auditing and Data dissemination and use

b. Dependent Variable: Development of School Infrastructure

**Source: Field data, 2017**

Table 4.8 shows the ANOVA results for the computed determinants of School infrastructure development, and the table shows that independent variables (M&E plan and costs, Routine programme monitoring, human capacity for M&E, Supportive supervision and data auditing and Data dissemination and use) significantly predict the dependent variable (Development of School Infrastructure) since the p value was <0.05.

**Table 4.9: ANOVA for Development of School Infrastructure**

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	126.557	3	42.186	429.005	.000 <sup>b</sup>
1	Residual	22.912	233	.098		
	Total	149.469	236			

a. Dependent Variable: Development of School Infrastructure

b. Predictors: (Constant), M&E plan and costs, Routine programme monitoring, human capacity for M&E, Supportive supervision and data auditing and Data dissemination and use

**Source: Field data, 2017**



The regression coefficients for the model in Table 4.9 predicts the relationship between the variables (M&E plan and costs, Routine programme monitoring, human capacity for M&E, Supportive supervision and data auditing and Data dissemination and use) and Development of School Infrastructure and it indicates that these variables had positive significant influence on Development of School Infrastructure. This is due to the fact that the precision level was less than the threshold of  $p < 0.05$ . This concludes that all the variables had a positive influence on Development of School Infrastructure and they were significant.

This suggests that the higher the level of stakeholder's involvement towards monitoring and evaluation (effectiveness of monitoring and evaluation) in their schools, the higher the level of Development of School Infrastructure, and vice versa. This agrees with findings by Idoro (2012) who noted that monitoring and evaluation ensures that projects are implemented successfully to create the needed job opportunities, provide the needed health, educational and economic infrastructure, satisfaction of stakeholders, value for money, achieve project quality budget, and schedule and to contributes to the socio-economic development of nations, M&E must be appreciated and implemented holistically throughout the life cycle of project delivery.

#### **4.6 Coefficients of Monitoring and Evaluation and Development of School Infrastructure**

The estimates of  $\beta$  values and gives an individual contribution of each predictor to the regression model. The  $\beta$  value tells us about the relationship between School infrastructure development with each predictor. Positive  $\beta$  values indicate a positive

relationship between the predictors and the outcome whereas a negative coefficient represents a negative relationship. The  $\beta$  values for all the three components (M&E plan and costs, Routine programme monitoring, human capacity for M&E, Supportive supervision and data auditing and Data dissemination and use) were all positive indicating a positive relationship as indicated in Table 10.

**Table 4.10: Monitoring and Evaluation and Development of School Infrastructure**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig. (0.05)
	$\beta$	Std. Error	$\beta$		
(Constant)	.059	.143		.414	.680
M&E plan and costs	.234	.044	.163	5.337	.000
Routine programme monitoring	.654	.028	.741	23.241	.000
Human capacity for M&E	.149	.035	.143	4.274	.000
Supportive supervision and data auditing	.332	.048	.187	5.228	.000
Data dissemination and use	.623	.029	.681	20.31	.000

a. Dependent Variable: Development of School Infrastructure

**Source: Field data, 2017**

As indicated in table 4.10, the coefficients for each of the variables indicates the amount of change one could expect in Development of School Infrastructure in schools given a one-unit change in the value of that variable, given that all other variables in the regression model are held constant. The constant is .059, and this is the predicted value

when all the independent variables equals zero. The standardized regression coefficients for the three variables are all positive indicating a positive relationship. The beta coefficients are the coefficients that would be found if the results and predictor variables were all transformed to standard scores, also called z-scores, before running the regression. From the results in Table 4.10, this study model can then be specified as: -

$$y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon$$

This equation shows that if all factors were held constant, then for every increase in M&E plan and costs there would be an increase of 23.4% in Development of School Infrastructure, for every increase in Routine programme monitoring there would be an increase of 65.4% in Development of School Infrastructure, for every increase in human capacity for M&E there would be an increase of 14.9% in Development of School Infrastructure, for every increase in Supportive supervision and data auditing there would be an increase of 33.2% in Development of School Infrastructure and for every increase in Data dissemination and use there would be an increase of 62.3% in Development of School Infrastructure. This implies that frequent monitoring and evaluation improves school infrastructure development and vice versa.

This finding agrees with Mwangi, A., & Iravo, M.A(2015) who noted that Studies have shown a plethora of benefits derived from the effective monitoring and evaluation of projects. Implementation of monitoring and evaluation seeks to guarantee ultimate project success through the achievement of immediate project outcomes such as conformity to standards and the achievement of budget and schedule as well as long-term objectives such as fit for purpose (impact). The collective achievement of all immediate

outcomes indicates that monitoring and evaluation are effective and therefore the success of the project is achieved.

#### **4.7 Further interpretations and Discussions on Objectives**

The study further provided interpretations and discussions which were guided by four objectives as discussed below;

##### **4.7.1 Components of Monitoring and Evaluation of School Projects**

The study intended to investigate the components of monitoring and evaluation of school development projects, the results showed that monitoring and evaluation was carried out in school development projects and by the board of management. The study established that the components of M&E in infrastructure development in schools included: M&E plans and costs, routine programme monitoring, human capacity for M&E, supportive supervision and data auditing and data dissemination and use. These components were important as they determined the contents and hence effectiveness of M&E process in infrastructure development. Monitoring and Evaluation Systems requires twelve main components in order to function effectively and efficiently to achieve the desired results (Kusek 2004). These twelve M&E components i.e. Organizational Structures with M&E Functions, Human Capacity for M&E, Partnerships for Planning, Coordinating and Managing the M&E System, M&E frameworks/Logical Framework, M&E Work Plan and costs, Communication, Advocacy and Culture for M&E, Routine Programme Monitoring, Surveys and Surveillance, National and Sub-national databases, Supportive Supervision and Data Auditing, Evaluation and Research and Data Dissemination and Use, (Kusek, *et al*, 2004).

Any slack in either component automatically leads to derailing of progress in managing of programmes and projects and thus they need to be enhanced for successful project implementation and performance. Monitoring and Evaluation components make up an M&E System that provides important feedback on the progress of programmes/projects. That is, the success or failure of projects, programmes and policies throughout the project life cycle. These M&E system constitute a powerful, continuous management tool that decision makers can use to improve performance and demonstrate results. Monitoring and Evaluation Systems (especially Results-based) have a special capacity to add to the learning and knowledge process. These systems provide for learning and knowledge, since by providing continuous feedback to managers, they promote organizational learning through a cycle involving the reflection on progress, learning and allows for adjustments in the course of programmes or projects where need be, (Kusek, *et al*, 2004:140). These systems have been designed to monitor and evaluate at all levels: macro and micro levels, which can roughly be translated to policy, programme and project levels respectively.

#### **4.7.2 Policies that Ensures Transparency and Accountability of School Projects**

For the second objective which was to investigate the policies put in place to ensure transparency and accountability the study found out that there were many policies put across to boost the transparency and accountability so as to achieve successful execution of school projects. The study established that the committee should keep minutes for the meetings held in relation to project monitoring and evaluation and payments receipts for accountability purposes

Accessibility to information by stakeholders leads to fostering commitment of the members to embrace ownership and sustainability of the projects by assessing suitability of local resources in conducting community activities; while at the same time seek external supplements. Sustainability of rural development projects must include the promotion of indigenous knowledge systems and practices, rural resource management and enhancement, and the use of natural resources in production systems, Richard Cardwell (2008). He adds that the concepts have to be introduced early through creation of awareness in a manner that will ensure participation in resource management in the long term.

At its most basic, transparent governance signifies ‘an openness of the governance system through clear processes and procedures and easy access to public information for citizens awareness in public service through information sharing, which ultimately ensures accountability for the performance of the individuals and organizations handling resources or holding public office’ (Suk Kim *et al* 2005: pg649). According to Transparency International, transparency is a ‘characteristic of governments, companies, organizations and individuals of being open in the clear disclosure of information, rules, plans, processes and actions’ (Transparency International 2009: pg44).

By general consensus, accountability ideally involves both answerability the responsibility of duty-bearers to provide information and justification about their actions –and enforceability –the possibility of penalties or consequences for failing to answer accountability claims (Goetz & Jenkins 2005). In fact, much of what we call accountability reflects only the weaker category, answerability. While citizen led or public initiatives often involve ‘soft’ peer or reputational pressure, they rarely involve

strong enforce ability. In their study on 10 school construction projects in Australia in 2005 to 2009 Proudlock, Ramalingam and Sandison (2009) found out that the whole process of impact evaluation, and particularly the analysis and interpretation of results, can be greatly improved by the participation of intended beneficiaries, who are after all the primary stakeholders in their own development and the best judges of their own situation. However, stakeholder involvement needs to be managed by care, too much stakeholder involvement could lead to undue influence on the evaluation, and too little could lead to evaluators dominating the process (Patton, 2008).

In May 2000, an IFAD (2002) workshop on impact achievement stated that, participation means more than just beneficiary contribution to the project execution, rather, it should encompass all stakeholders and be formalized at all stages of the project cycle. This clearly includes monitoring and Evaluation systems. So, developing participatory monitoring and evaluation meant that, once the basics of M&E are understood, participatory M&E is defined and ways are worked out to introduce it. This is done by providing key stakeholders with the information needed to guide the project strategy towards achieving the goal and objectives; provide early warning of problematic activities and processes that need corrective action; help empower primary stakeholders by creating opportunities for them to reflect critically on the projects direction and help decide on the improvements; build understanding and capacity amongst those involved in the project; motivate and stimulate learning amongst those committed to making the project a success and assess progress and so enable accountability requirements to be met (OECD, 2012). IFAD(2002) as cited by Jones *et al.* (2011) also continue to recognize the role of stakeholders by indicating the grassroots organizations, at community and higher levels as important partners. They provide invaluable insights on priorities and

appropriate processes during the project's design phase, and undertake some of the implementation and M&E activities of the projects. One of their most valuable role is in facilitating participatory process during implementation such as through participatory baseline survey, local impact assessment or annual project reviews. Working with them increases local ownership of the project and thus the likelihood of a sustained impact.

In another study entitled, 'stakeholders' participation and implementation of monitoring and evaluation of school feeding programs' by Indiana Department of Education (2001) cited by OECD (2010), it mentions of three major functions and roles that three categories of stakeholders performed in the success of an M&E exercise in the schools. This includes, identifying the M&E resources, allocation of the resources, training the relevant staff, formulating policies, culture and putting in place the structures for M&E programs. The department continues to show that, school; parent and community partnerships have been described as being involved in the continuous planning, participation, and evaluation of activities that enhance the success of projects implemented in schools in both the developed and developing countries.

#### **4.7.3 Challenges Faced in Monitoring and Evaluation of School Projects**

The study further established that finances is a major challenge affecting school development projects, delays in disbursing the funds causes slow or no progress at all. The findings are in line with Jones (2009), who argues that evaluations need to be undertaken by individuals with the relevant skills, sound methods and adequate resources as well as integrity in order to secure the projects quality. Crawford and Bryce, (2003) further states that monitoring puts an emphasis on transparency and accountability in the use of resources to the stakeholders such as governments,



donors, beneficiaries and the wider community where the project is implemented. The challenge of insufficient funds for monitoring and evaluation can be overcome by factoring budget to give monitoring the due recognition. Projects implementation entails the process of seeing the proposed projects being effectively and efficiently completed within the structured time frames, budgets, and other structured limited resources. In the world, nothing stands like the influence of time in any activity, be it, development oriented, destructive oriented or problem solution oriented. Just like everything in the world is influenced by time, studies by a number of scholars in Asia, USA, Europe, Africa and many more have shown that the implementation and integration of proper M&E in projects is closely tied to the time allocated for the activity and how this time is planned in order to achieve the said results (OECD, 2011).

According to Constituencies Development Act (2003), at the Constituency Level, a maximum of 3% of each constituency's annual allocation may be used for administration, 15% for an education bursary scheme, 2% for sports activities and 25% for environmental actions. Though NG-CDF does not cover recurrent costs, it also allows 3% of the constituency's annual allocation to be used for recurrent expenses of motor vehicles, equipment and machinery since they constitute projects development under the NG-CDF Act. The act fails to factor in funds for M&E of projects, thus the projects end up incomplete and others fail to meet the set standards.

According to OECD (2011), in Paris France for example, a number of elementary and high schools introduced integrated voluntarily M&E in the schools' course work with the aim of trying to assess how better the tutors/teachers, managers, board of management and other schools' stakeholders were co-ordinating in order to produce results that could be better than their counterparts in the country side who were rated to be doing well. In the study that used a regression analysis to analyse the data gotten from 912 respondents in the fields showed a strong value indicating that there is a relationship between time and the success of M&E in school development programs in the country. This has been confirmed by World Bank (2012) that argues that in M&E, since properly allocated time means that there is a properly structured avenue of sourcing for resources, proper structured channel of communication that is tied to specific time, skilled personnel will be developed to match given activities and with enough time, the team can get detailed information as is related to M&E.

In a study by UNEP (2009) in five sub Saharan democratic countries where Kenya was included, a number of factors interacted to influence the M&E. According to the report/study, inadequate resources lead to poor quality monitoring and evaluation. Resources were categorized in 3 parts that included: human capital resources, financial and other material resources, and, the time factor as a major resource. To ensure effective and quality monitoring and evaluation, it is critical to set aside adequate financial and human resources at the planning stage, factor in time as a resource too and finally break down the work as per the various time frames. The required time resources for monitoring and evaluation should be considered within the overall costs of delivering the agreed results and not as additional costs that

could shrink time and other related issues.

#### **4.7.4 Ways of Improving the Use of M&E in School Development Infrastructures**

On the last objective the study found out that supervision and total accountability are critical to ensure successful completion of development projects in school. Pretorius *et al*, (2012) found out that project management organizations with mature time management practices produce more successful projects than project management organizations with less mature time management practices. These findings further agrees with Odhiambo (2007) while referring to Feuerstein (1986) explained that locally managed and controlled funds have great potential to bring about positive development outcome at the local level especially if community participation is sufficiently enhanced and political interference reduced. From these findings it shows that project that is properly monitored and evaluated for financial oversight and compliance with sound management and performance principles may very well achieve its goals and objectives.

The technical capacity of the organization in conducting evaluations, the value and participation of its human resources in the policymaking procedure, their incentive to impact resolutions, that can be enormous determinants of how the evaluation's lessons are made, conversed and perceived (Vanessa and Gala, 2011). Human capitals on the project should be given clear job allocation and designation befitting their skill, if they are insufficient, then training for the necessary skills should be set. For projects using staff that are referred out in the field to carry out project activities on their own there is need for constant and intensive onsite support to the field staff (Ramesh, 2002). Individual of the larger aspects of developing employee's skills and abilities is the actual organizational focus on the employee to turn out to be better, either as an individual or as

a contributor to the firm. The responsiveness by the organization coupled with increased expectations following the opportunity can lead to a self-fulfilling prophecy of enhanced output by the employee, (Pearce and Robinson, 2004).

The project costing should provide a clear and adequate provision for monitoring and evaluation events. Monitoring and evaluation budget can be obviously delineated within the overall project costing to give the monitoring and evaluation function the due recognition it plays in project running, (Gyorkos, 2003 and McCoy, 2005).

To ensure effective and quality monitoring and evaluation, it is critical to set aside adequate financial and human resources at the planning stage, factor in time as a resource too and finally break down the work as per the various time frames. The required time resources for monitoring and evaluation should be considered within the overall costs of delivering the agreed results and not as additional costs that could shrink time and other related issues.

Monitoring and evaluation costing should be about 5 to 10 percent of the entire budget, (Kelly and Magongo, 2004, IFRC, 2001 and AIDS Alliance, 2006). According to Constituencies Development Act (2003), at the Constituency Level, a maximum of 3% of each constituency's annual allocation may be used for administration, 15% for an education bursary scheme, 2% for sports activities and 25% for environmental actions. Though NG-CDF does not cover recurrent costs it also allows 3% of the constituency's annual allocation to be used for recurrent expenses of motor vehicles, equipment and machinery since they constitute projects development under the NG-CDF Act. The act fails to factor in funds for M&E of projects, thus the projects end up incomplete and others fail to meet the set standards.

Project completion within scope is considered as one of the success factor. The project charter or statement of work requires the implementers to develop a scope of work that was achievable in a specified period and that contained achievable objectives and milestones, (Bredillet,2009). Monitoring gives information on where a policy, program, or project is at any given time (and over time) relative to respective targets and outcomes. It is descriptive in intent. Evaluation gives evidence of why targets and outcomes are or are not being achieved. It seeks to address issues of causality. Of particular emphasis here is the expansion of the traditional M&E function to focus explicitly on outcomes and impacts (Channah Sorah, 2003). Providing support and strengthening of M&E team is a sign of good governance. Providing support and strengthening of M&E team will also play a key role in ensuring that the M&E team adds value to the organizations operations (Naidoo, 2011). A motivated team usually achieves high performance (Zaccaro et' al, 2002). This implies that the more a team is strengthened, the better the performance and value addition to the organization. This also applies to the monitoring and evaluation teams in project management. Interestingly Pretorius et' al (2012) observed that there was no significant association between the maturity of quality management practices in project management organizations and the results of the projects that they produce. Nevertheless, it is the view of the researcher that managers should indeed aspire to achieve quality in all the aspects and processes, including quality monitoring team, so as to achieve project success.

These aspects include: Financial availability, number of monitoring staff, monitoring staff skills, frequency of monitoring, stakeholders representation, Information systems (Use of technology), Power of M & E Team and teamwork among the members (Naidoo, 2011; Ling et' al, 2009; Magondu, 2013; Hassan, 2013; Georgieva & Allan, 2008;

Gwadoya, 2012)evaluation is at its maximum. The execution stage is the most risky stage where the probability of not achieving project success is at its peak due to numerous project activities. It is during this stage that the project M&E team should be most active in monitoring and providing timely feedback.

Finally, during closing down the monitoring and evaluation just like other management activities is less intensified as compared to the execution stage. Most of the monitoring activities during this stage involves reporting on the project outcome and preparing for future projects (Kyriakopoulos, 2011; Chin,2012; Pinto and Slevin, 1988; Müller and Turner, 2007;Khang and Moe, 2008).

Managing development projects require an operational M&E system. The M&E system is the set of planning, information gathering and synthesis, reflection, and reporting processes, along with the necessary supporting conditions and capacities required for the outputs of M&E to make valuable contributions to decision making and learning .A well-functioning M&E system manages to integrate the more formal, data-orientated side commonly associated with the task of M&E together with informal monitoring and communication, such as project field staff sharing impressions of their fieldwork with each other and their managers over lunch (or coffee).Clear definition of the purpose and scope of the intended M&E system helps when deciding of issues such as budget levels, number of indicators to track, type of communication needed and so forth.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS ND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents summary of the study on the main findings presented in chapter four by relating them to the objectives of the study, it also reflects on the methodologies used to obtain and analyze data. From the findings, conclusions are drawn and recommendations are made. The chapter ends with suggesting an area for further research.

#### **5.2 Summary of the Study**

The purpose of the study was to assess the role of M&E in development infrastructure of public schools in Marakwet West Sub-county, Kenya. The specific objectives of the study were: to examine components of monitoring and evaluation of infrastructure development projects in public school in Marakwet West Sub-County; to evaluate policies that ensures transparency and accountability in the infrastructure development project in public school within Marakwet West Sub-County; to establish out the challenges faced in monitoring and evaluation of infrastructure development in public school projects within Marakwet West Sub-County and to establish ways of improving M&E in infrastructure development in public schools in Marakwet West Sub-County.

##### **5.2.1 Components of M&E in Infrastructure Development in Schools**

The findings from the regression analysis revealed that M&E plan and costs, Routine programme monitoring, human capacity for M&E, Supportive supervision and data auditing and Data dissemination and use had positive significant influence on Development of School Infrastructure. Further, based on the findings from the results of

Pearson Correlation Coefficient, the study found out that there was a significant positive relationship between Monitoring and Evaluation and Development of School Infrastructure at  $p \leq 0.01$  significance level ( $r=0.559$ ). This means that monitoring and evaluation has an impact on school infrastructure. This study therefore concluded that effective use of monitoring and evaluation tools leads to desired goals on school infrastructure and vice versa.

### **5.2.2 Policies that Ensure Transparency and Accountability in Development of School Infrastructure**

The study found that keeping of minutes of meetings on project M&E, preparation of work plans for project, periodical auditing of books of accounts and holding regular meeting for M&E on on-going school infrastructure development projects. These would ensure that integrity is upheld in the management of public resources and that the project managers are held responsible and accountable.

### **5.2.3 Challenges Facing M&E of Infrastructural Development Projects in Public Schools**

Insufficient funds, lack of political champion, lack of trained personnel, lack of demand for M&E by stakeholders, time and culture practices were cited as challenges facing M&E in infrastructural development in public schools. Effective and timely handling of these challenges was important in achieving project success.

### **5.2.4 Ways of Improving M&E in Infrastructure Development in Public Schools**

The study found out that the ways of improving M&E included; constant feedback, supervision, transparency and accountability, identification of problems and correcting them at an early stage, incorporation of views of all stakeholders in the project, and establishment of best practice for implementation of future projects. These measures if



put in place as part of M& E, would ensure successful development of school infrastructure and hence improve quality of teaching and learning in schools.

### **5.3 Conclusions**

Based on the above findings, the study concluded that M&E played a key role in influencing infrastructural development in public primary and secondary schools. This is achieved mainly through the components of M&E, policies put in place to ensure transparency and accountability, recognizing and dealing with challenges facing M&E and the ways to improve M&E in infrastructure development in public schools.

### **5.4 Recommendations**

Arising from the foregoing conclusions the study makes the following recommendations:

1. Since M&E influences infrastructure development through reports that influence policy and decision making, there is need to enhance the components of M&E to ensure they are precise and comprehensive enough. This will make M&E effective in influencing infrastructure development in public secondary and primary schools.
2. In relation to policies put in place to ensure transparency and accountability, there is need to enhance these policies to ensure that school infrastructure committees are held accountable for the funds entrusted to them. These will ensure that money invested in projects is spent wisely and quality work is done to improve quality of education in public schools.
3. A monitoring and evaluation budget should always be included in the overall project budget. Care should be taken to ensure the M&E budget is adequate to make the process effective.

4. On ways of improving M&E the study recommends that all stakeholders should be involved in decision making on projects, identification, supervision and management. The constituent should play a major role in decision making as they are the main beneficiaries of the projects.

### **5.5 Suggestions for Further Research**

- i. Another study could be conducted on political influence on M&E in infrastructure development in public secondary schools in Kenya.
- ii. Since the study was conducted in one sub-county Marakwet West Sub-county it is recommended that a similar be carried out in other sub-counties in Kenya for comparison.

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## APPENDIX I: QUESTIONNAIRE FOR HEAD TEACHERS

My name is Wesley Kipnetich Chebet, a post graduate student at Moi University, pursuing Masters of Science Degree in Development Studies. As a part of the requirements for the course, I am conducting a research on the Role of Monitoring and Evaluation in Development of School Infrastructure in Marakwet West Sub-county. I am kindly requesting your co-operation in responding to these questions which will enable the researcher to accomplish the research. This research investigates ways of improving the use of monitoring and evaluation in school development infrastructure projects and also ways of making monitoring and evaluation an invaluable tool of management of school projects. Any information provided will remain confidential and will be used only for the purpose of this research. In responding to the provided questionnaire, there is no right or wrong choices. There are choices for variety opinions only and since your name will not be indicated anywhere in the questionnaire Please, feel free by responding to the questions as honestly as possible. In case of any questions regarding this research, please feel free to contact me on cell phone No. **0720170537**. Please accept my sincere appreciation in anticipation of your valued participation.

Thank you in advance for your co-operation.

### PART A: DEMOGRAPHIC DATA

Please put a tick where appropriate.

1. What is your gender?

a) Male

b) Female

2. Your age bracket?

a) 21-30

b) 31-40

- c) 41-50
- d) 51-60
- e) Above 61 years

3. What is your highest professional qualification?

- a) Certificate
- b) Diploma
- c) Degree
- d) Other (specify) .....

4. Is monitoring and evaluation of school projects done?

- a) Yes ( )                      b) No ( )

If YES, who does it?

- a) Head teacher ( )
- b) Board of Governors ( )
- c) Project Management Committee ( )
- d) Constituency Development Fund committee ( )

5. How frequent is monitoring done?

- Weekly ( )
- Monthly ( )
- End of term ( )
- Annually ( )

### Part B: Components of Monitoring and Evaluation

Rate the following according to the Likert Scale 5 – 1

Representing 5 = Very Satisfied, 4=Satisfied, 3= Neutral, 2= Dissatisfied, 1 = Very Dissatisfied

6. Kindly rate the level of satisfaction on the following components as used to measure progress

Statements	5	4	3	2	1
M&E plan and costs					
Routine programme monitoring					
Human capacity for M&E					
Supportive supervision and data auditing					
Data dissemination and use					

### Part C: Policies that Ensure Transparency & Accountability

Rate the following according to the Likert Scale 5 – 1

Representing 5 = Strongly Agree, 4=Agree, 3= Undecided, 2= Disagree, 1 = Strongly Disagree

Kindly rate the following statements in relation to transparency and accountability of school developments

Statements	5	4	3	2	1
Preparation work plans for the project					
Regular meetings on project monitoring and evaluation					
Keeping minutes for the meetings held in relation to project M&E &					

payment receipts					
Auditing of books of accounts					
Stakeholders and responsible party have full access of all the documents on school project					

### Part C: Challenges Faced in Monitoring and Evaluation of School Projects

Rate the following according to the Likert Scale 5 – 1

Representing 5 = Strongly Agree, 4=Agree, 3= Undecided, 2= Disagree, 1 = Strongly Disagree

Kindly rate the following statements on challenges faced in monitoring and evaluation of school projects

Statements	5	4	3	2	1
Time					
Cultural Practices					
Lack of demand by stake holders					
Insufficient funds					
Lack of political champion					
Lack of human capacity					



### Part D: Ways of Improving the Use of Monitoring and Evaluation

Rate the following according to the Likert Scale 5 – 1

Representing 5 = Strongly Agree, 4=Agree, 3= Undecided, 2= Disagree, 1 = Strongly Disagree

Kindly rate the following statements on ways of improving M&E in school development projects

Statements	5	4	3	2	1
The management should ensure there is constant feedback on school projects					
The management should ensure there is supervision so as to identify any potential problems at an early stage					
There should be incorporation of the views of all the stakeholders in the project					
Establishment of best practices for future implementation of similar projects					
Transparency and accountability to ensure value for the money invested					

What other ways do you think can improve monitoring and evaluation of school development projects?

.....

**APPENDIX II: INTERVIEW SCHEDULE FOR THE SUB-COUNTY DIRECTOR  
AND NG-CDF PERSONNEL**

1. Do you carry out monitoring and evaluation of projects?

Yes ( )

No ( )

2. If yes, how frequent do you carry out?

.....

3. What are components of M&E in development infrastructure of school projects?

.....

.....

4. Do you have policies in place that checks transparency and accountability of the projects in schools?

Yes ( )

No ( )

If yes, how do you ensure that the project management committees are held accountable in schools?

.....

.....

5. Is it a challenge to monitor and evaluate school projects?

Yes ( )

No ( )

6. What are the challenges facing monitoring and evaluation of school projects

.....

.....

7. What do you think can be done to improve M&E in school development projects?

.....

**APPENDIX III: INTERVIEW SCHEDULE FOR THE PA AND BOM  
MEMBERS**

a. Do you carry out monitoring and evaluation of projects?

Yes            ( )

No             ( )

b. If yes, how frequent do you carry out?

.....

c. Do you hold meetings concerning school development projects?

Yes            ( )

No             ( )

What are the components of M&E in school development projects?

.....

d. What kind of policies are in place to ensure that there is transparency and accountability of the projects in schools?

.....

.....

e. Is it a challenge to monitor and evaluate school projects?

Yes            ( )

No             ( )

f. What are the challenges facing monitoring and evaluation of school projects

.....




.....

g. What do you think can be done to improve M&E use in school development projects?

.....

.....

**APPENDIX IV: RESEARCH PERMIT FROM NACOSTI**

<p>PAGE 2</p> <p>THIS IS TO CERTIFY THAT:</p> <p>Prof./Dr./Mr./Mrs./Miss <u>WESLEY KIPNGETICH</u>  <u>CHEBET</u></p> <p>of (Address) <u>MOI UNIVERSITY</u>  <u>P.O BOX 3900, ELDORET</u></p> <p>has been permitted to conduct research in .....          ..... Location,  <u>KEIYO &amp; MARAKET</u> ..... District,          ..... RIFT VALLEY Province,          on the topic <u>Assessment of monitoring</u>  <u>and evaluation as an instrument</u>  <u>to sustainable development of</u>  <u>school projects in Elgeyo</u>  <u>Marakwet County</u></p> <p>for a period ending <u>30th MAY</u>, 20 <u>12</u></p>	<p>PAGE 3</p> <p>Research Permit No. <u>NCST/RCD/14/012/24</u>          Date of issue <u>3rd FEBRUARY 2012</u>          Fee received <u>KSHS. 1000</u></p> <div style="text-align: center;">  <p style="margin-left: 100px;"><i>Wesley Kipngetich</i></p> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Applicant's Signature</p> </div> <div style="text-align: center;">  <p>Secretary National Council for Science and Technology</p> </div> </div>
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Source: NACOSTI, 2012

**APPENDIX V: LETTER FROM DISTRICT EDUCATION OFFICER,  
MARAKWET WEST SUB-COUNTY**

**MINISTRY OF EDUCATION**

Telegrams: "EDUCATION", Kapsowar  
Direct Telephone: (053) 361530  
Telephone: (053) 361545  
Fax: (053) 361545



DISTRICT EDUCATION OFFICE  
MARAKWET WEST DISTRICT  
P.O. BOX 102,  
KAPSOWAR

When replying please quote

Ref No. MKT/4/1/VOL.1/235

5<sup>TH</sup> MARCH,2012

TO WHOM IT MAY CONCERN

**RE: WESLEY KIPNGETICH CHEBET TSC NO.509000**

The bearer of the above named is a student at Moi University and is pursuing masters in Development Studies. He has been granted permission from this office to carry out research in various learning institutions within the District.

Any assistance accorded to him will be highly appreciated.

**DISTRICT EDUCATION OFFICER  
MARAKWET DISTRICT  
P.O. Box 102, KAPSOWAR**

*Paul K. Ongoi*  
PAUL K. ONGOI  
FOR DISTRICT EDUCATION OFFICER  
MARAKWET

**Source: DEO Marakwet West, 2012**

**APPENDIX VI: LETTER FROM DISTRICT COMMISSIONER, MARAKWET  
WEST SUB-COUNTY**

REPUBLIC OF KENYA  
OFFICE OF THE PRESIDENT  
PROVINCIAL ADMINISTRATION AND INTERNAL SECURITY

Telegrams: "Districter" Kapsowar  
Telephone: 053-361555  
Fax: 053-361555  
E-mail: dcmarakwetwest@yahoo.com



DISTRICT COMMISSIONER  
MARAKWET WEST DISTRICT  
P.O BOX 1  
**KAPSOWAR**

**Date:** 5<sup>th</sup> March, 2012

When replying please quote:  
Ref: PUB.24/9/VOL.II/30

ALL DISTRICT OFFICERS' (DOs)  
**MARAKWET WEST**

**RESEARCH AUTHORIZATION**

**MR. WESLEY KIPNGETICH CHEBET NCST/RCD/14/012/24**

This is to inform you that the above named person has been authorised to carry out research in Marakwet West district on "Assessment of monitoring and evaluation as an instrument to sustainable development of school projects in Elgeyo-Marakwet County".

Kindly accord him the necessary support.

E.CHELANGA  
FOR DISTRICT COMMISSIONER  
**MARAKWET WEST**

DISTRICT COMMISSIONER  
MARAKWET DISTRICT  
KAPSOWAR

**Source: DC Marakwet West, 2012**

**APPENDIX VII: RECOMMENDATION LETTER FROM THE UNIVERSITY**

**MOI UNIVERSITY**  
**SCHOOL OF HUMAN RESOURCE DEVELOPMENT**  
**DEANS OFFICE**

P.O. Box 3900  
ELDORET  
KENYA.

Fax254-053-43153/43620 Ext.2448

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**REF: MU/SHRD/PG/77**

6<sup>th</sup> January 2012

**TO WHOM IT MAY CONCERN**

**RE: WESLEY KIPNGETICH CHEBET - SHRD/PGD/12 /09**

This is to confirm that the above named is a postgraduate student in the department of Development Studies, School of Human Resource Development taking an M.Phil course in Development Studies.

He has successfully finished his coursework, submitted his proposal for examination entitled "***Assessment of Monitoring and Evaluation as an instrument to sustainable Development of School Projects in Elgeyo Marakwet County***" and is waiting for defense of the same.

He is expected to finish and graduate later.

Any assistance accorded to him will be highly appreciated.

  
**PROF. J. KWONYIKE**  
**DEAN, SCHOOL OF HUMAN RESOURCE DEVELOPMENT**

**APPENDIX VIII: MAP OF THE STUDY AREA**

Source: KNBs (2009) National Population and Housing Census and KNBS

Projections