

**MONITORING AND EVALUATION PRACTICES, COMMUNITY
PARTICIPATION AND PERFORMANCE OF PUBLIC FUNDED HEALTH
FACILITIES CONSTRUCTION PROJECTS IN KIRINYAGA COUNTY,
KENYA**

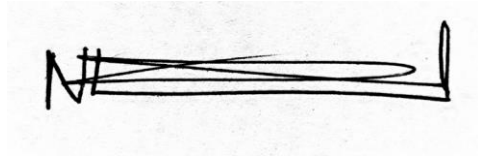
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**A Thesis Submitted in Fulfillment of the Requirements for the Award of
Doctor of Philosophy Degree in Project Planning and Management of the
University of Nairobi**

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DECLARATION

This doctoral thesis is my original work and has not been presented for an academic award in any other university.

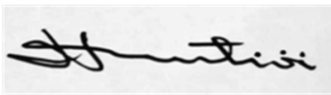


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DEDICATION

This thesis is dedicated to my late wife Priscilla Njeri Ngondo, who encouraged me to pursue this course immediately after completing the Masters Programme. Special dedication goes to my wife Catherine Wakini Ngondo for her valuable encouragement.

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ABBREVIATIONS AND ACRONYMS

GDP	Gross Domestic Product
GOK	Government of Kenya
IP-ERS	Implementation of the Economic Recovery Strategy
KHPF	Kenya Health Policy Framework Paper
MDP	Ministry of Devolution and Planning
M&E	Monitoring and Evaluation
MED	Monitoring & Evaluation Directorate
MOH	Ministry of Health
NACOSTI	National Commission for Science, Technology and Innovation
NHA	National Health Accounts
NHSSP	National Health Sector Strategic Plan
MOH	Ministry of Health
NHA	National Health Accounts
NHSSP	National Health Sector Strategic Plan
NIMES	National Integrated Monitoring and Evaluation System
OECD	Organisation for Economic Co-operation and Development
PFCP	Public Funded Construction Projects
THE	Total Health Expenditure
WB	World Bank

ABSTRACT

After enacting the new Kenya Constitution in 2010, the implementation of all public funded health facilities construction project was devolved to the counties, and hence county governments were to plan and execute development projects as independent organisations. To improve the performance of the projects, the counties were expected to embrace monitoring and evaluation, while incorporating community participation. In Kirinyaga County, only a few planned health facilities projects were successfully completed at the end of the 2014 - 2019 period. The purpose of this study, therefore, was to investigate the relationship between monitoring and evaluation practice and performance of the health facilities projects in the County under the moderating influence of community participation. A correlational survey design methodology was used to carry out this investigation. The data required for the study was collected using questionnaires and interviews from the monitoring and evaluation staff, the community representatives and officials of the County Government. To ensure appropriateness, meaningfulness and usefulness of the questionnaire, a pilot study was carried out in Nairobi County prior to use of the measuring instrument on the main study. Data collected in the main study was analysed, presented and interpreted in line with the objectives and assumptions. Correlation analysis technique was carried out to establish the relationship between monitoring and evaluation practice and performance of health facilities projects in the county. Multiple regression analysis was carried out to establish the moderating effect of the community participation. The study established that monitoring and evaluation practices linearly related to the Performance of Health Facilities Projects in Kirinyaga County, ($r(112) = 0.749, P < 0.05$). It was established by the study that Community Participation had an insignificant moderating influence on the relationship between monitoring and evaluation practices and performance of Health Facilities Projects in the county ($r(112) = -0.520, P < 0.05$). The study concluded that community participation was the lowest predictor for performance of public funded facilities construction projects in Kirinyaga County among all the independent variables considered separately, with the highest being budget allocation, followed by staff capacity building and M&E implementation, in that order. To improve the performance of health facilities projects in the county, the study recommended that no monitoring and evaluation implementation activities are conducted without developing a detailed and inclusive implementation plan. Furthermore, a capacity building programme be developed by the county government for the monitoring and evaluation Staff. A further study was recommended to establish the reasons around the inability of community participation inability to improve or strengthen the relationship between monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

According to Basheka and Byamugisha (2015), in terms of its evolution, M&E practices were mostly predominant and incorporated in project planning first in the United States of America. Over the years, public funded health organisations worldwide have considered, with earnest intent, and included monitoring and evaluation (M&E) practices so as to improve their project performance. However, how M&E is practiced makes all the difference in its effect on any project's performance.

Monitoring and evaluation practices have improved over the years. Consequently, many performing organisations have arrived to a conclusion that M&E is an integral part of their project implementation programmes. Government projects have occupied the function of essential development providers during the last few years (Ashbaugh, 2012). Performance standards and indicators as drivers of M&E are vital for project management, strategic goals placing, influencing policy and Institutional improvement practices nationally and internationally (Margoluis & Salafsky, 2010). Monitoring and evaluation are usually approached together in project management as a function which provides a real perspective upon the state of projects in order to make all the adjustments necessary in projects' implementation practice (Sialala, 2016). In public funded health facilities construction projects in county governments, M&E should be planned as an interweaved participatory exercise where all partners are involved. This must also include the local population. (Charles & Mohamed, 2015).

The primary purpose of managing public funded health facilities construction projects is to complete them on time, within cost and must conform to stakeholder requirements and specifications (De Marco & Narbaev, 2013; Pewdum, Rujiranyong, and Sooksatra, 2009). To achieve the above objective, extra effort must be exerted to management of the intervention. This will not be possible without carrying out effective and thorough monitoring and evaluation of all the activities going into the implementation of the intervention (Ade, Aftab, Ismail & Ahmad, 2013; Cleland and Ireland, 2007). Project monitoring and evaluation practice makes it possible to determine the progress of the project and foretell what might happen in the future if the status

continues. Pringle, (2011) opines that M&E enables evaluation of effectiveness, assessment of efficiency, outcomes assessment, provides learning curve and benchmarking with similar interventions.

Standard practice of monitoring relevant Sustainable Development Goal (SGD) indicators is by use of already existing data or through proxy indicators with efforts made to invest in the production of data for nationally relevant indicators. National statistical offices are the main data producers, supported by other government institutions. Efforts to monitor and evaluate progress on the SGD indicators should make use of existing systems where possible to reduce reporting burdens. SGD indicators implementation strategies should be subject to their own monitoring and evaluation processes.

The performance of public funded health facilities construction projects has come under scrutiny by governments due to recorded low performance levels and increasing public outcry related to poor projects outcomes. Ahmed & Bamberger (2011) indicate that governments have continued to allocate huge amounts of money to construction of health facilities. However, most of the governments have failed to lay emphasis on the performance outcome of these projects hence they are continually challenged by their project management systems (Kameraho & Basheka, 2015). Low performance of the projects is reportedly due to unavailability of adequate materials, inadequate funds, inadequate skills of project managers and monitoring and evaluation staff and low engagement of the community (Ade, Aftab, Ismail & Ahmad, 2013). Although such challenges exist, research has attributed the global phenomenon of poor project performance to ineffective monitoring and evaluation especially in public funded health facilities construction projects. Public funded health Organisations all over the world have revolutionised their operations by adopting M&E practices as a way of enhancing their project performance (Hansen & Jacobsen, 2016).

Performance of public funded health construction projects can be estimated and assessed utilising an extensive number of markers that could be identified with stakeholders' requirements based on three-phases of the project life cycle: procurement stage, performance or implementation phase and phasing-out stage. The stakeholders in this case would comprise: client, consultant, contractor, supplier, end-user, (Takim R and Akintoye A, 2002). According to Mbugua, Harris, Holt, and

Olomolaiye (1999), performance indicators, performance measures and performance measurement have different meanings. During a project implementation, planned activities are usually evaluated and conclusions made on whether the desired results are met. If only evidence exists towards this end to suggest that the desired results are met, then these are called performance indicators. However, when these indicators are measured precisely and without any ambiguity, then these are referred to as measures. Measures are numerical and quantifiable indicators. Put differently, when it is not possible to obtain a precise measurement, then it is necessary to refer this as performance indicators. Inputs and outputs in project implementation are evaluated and measured continually during the project cycle. This systematic way is referred to as performance measurement practice

Community participation in broader terms is with reference to community's involvement as a group, individual members or both. In this study, community participation in public funded health facilities construction projects refers to the voluntary participation of the people themselves and partnering with the governmental authorities to improve the economic, social, culture and health conditions of that community. When the community is encouraged to participate in planning and decision-making in the public funded health construction projects, they are more likely to be interested in the maintenance and management of their surroundings, infrastructure and services.

Organisations, such as Organisation for European Cooperation and Development (OECD), and other development countries have many years of experience in M&E (Umugwaneza & Kule 2016). Mrosek, Balsillie & Schleifenbaum, (2006), opines that monitoring and evaluation in Spain has turned into an inexorably essential apparatus toward accomplishing commendable project execution.

The American traditional methods for M&E practice have greatly influenced the status of research in the field. In France, the steady growth of monitoring and evaluation has given the relevant agencies in the country to consider M&E and group the practices in distinct phases. This goes to show how M&E ideas have grown and evolved over the years, (Roger & Tim, 2008). In his research, Angus & Mohammed (2014), reports that China, has developed special officers in the government to control the duties of monitoring and evaluation, showing how important M&E has been regarded in this part of the world.

Sweden, The Netherlands, Great Britain, Germany, Denmark, Norway, France and Finland are currently topping the list of the countries in Europe where the level of professionalism of evaluation is in steep growth. New rankings show impressive evolution of the field in Switzerland, Japan, Spain, Italy, Israel and Africa.

In the African continent, Ghana established the first and the oldest evaluation association in 1997. The period between 2000 and 2004 marked the highest intensity of M&E practices in Africa and this formed the basis of the establishment of the first African Evaluation Association. Mertens and Russon (2000:275) in their study assert that, a 500% increase of M&E associations were recorded in a span of 5 years from a number of 5 in 1995 to an impressive number of 30 in year 2000, this was recorded mostly in developing countries.

Developing countries are performing some kind of regular M&E activities, ranging from comprehensive national evaluation systems in countries such as India and Malaysia to basic monitoring of selected projects in many countries in Africa and the Middle East (Arazi & Mahmoud & Mohamad, 2011). In most of the developing countries, monitoring and evaluation of public funded health facilities construction projects is yet to reach an acceptable level of operation that can successfully lead to assistance in projects improved performance. Performance of such projects presents risks as huge projects in these countries are performed at relatively high costs and if performance measurements of these projects are not carried out, consequently the performance of these projects is always recorded as below expectations. New techniques are rarely employed in future projects due to lack or inadequacy of M&E practice. This means that overall performance is not always measured that allows you to come up with techniques for fostering enhancements in future projects, (Khan, 2012).

According to Karani, Bichanga and Kamau (2014), the importance of the M&E function within public funded health facilities construction projects has been magnified by the growing voice of the civil society that has brought the question of good governance and efficient public administration to the limelight. The global drift towards more accountable, reactive and efficient government-managed projects has bolstered the demand for effective M&E capacity development

that has been the key focus of efforts to better governance in the context of an all-inclusive development framework.

Mark (2007) asserts that most governments in the Sub-Saharan Africa are working towards entrenching M&E in their economic governance system that will enhance performance of construction projects. This could provide room for scrutiny of the progress of the projects, analysis and propositions for future M&E criteria. Evidence from literature points out that in Sub-Saharan Africa, substantial M&E achievements on the ground are rare. As noted by Kameraho & Basheka (2015), within public funded projects, divergences from the original plan usually occur. Project M&E has always been inbuilt within the project implementation as a control measure for completing projects within acceptable time and budget through monitoring the actual output, reports and taking of corrective actions. Khan (2012) asserts that performance in public funded projects remains a major challenge to most of the governments and organisations. Also, literature on the extent to which the practices of M&E influences performance of public funded projects is scanty, and the available literature does not demonstrate how community participation could play a role in M&E and project performance. It is on this backdrop that this study envisaged investigating into practices of monitoring and evaluation functions and performance of public funded health facilities construction projects.

1.1.1 Performance of Public Funded Health Facility Construction Projects

The increasing pace of change in healthcare technologies and policies has generated increased interest in the future adaptability in the physical infrastructure that supports health services, not just in buildings, but also in the practices too. The key to economic and social growth in both developed and developing countries is better project management in all sectors: agriculture, industry, public works, education, public health, and government (Aftab, 2012). Proper planning and anticipating the problem areas is all part of the project management practice. There is growing awareness of the need to improve both the productivity and quality of projects. Successful performance in a construction project helps to deliver good products to the client. The quality of finished project, construction cost and construction time were the most important project priorities of performance criteria within the client perspective in Malaysia (Arazi, 2011). Delays in project completion and poor performance in the construction industry has been experienced and has led

to failure in achieving effective time and cost performance. This delay is a common phenomenon that occurs especially where the government projects are concerned in Malaysia (Tawil, 2013).

In Pakistan, the issue of project delays as a result of unsuccessful project overall performance is a reality in the construction industry (Haseeb, 2011). Low performance is continually measured and is costly to all parties involved very often resulting in conflict, claims, general desertion and giving trouble to the feasibility studies slowing down the construction field. Budgetary and payment issues, flawed planning and poor site organisation, inadequate experience, lack of materials and equipment are elements that bring about delays. Abdelhak (2012) makes similar observations of low project overall performance in the area of construction.

Analysis of causes of deadline slippage in construction projects completed in several regions of Morocco were identified as errors made in the initial budget assessment, volatility of the architecture and engineering programme (multiple modification requests) and construction site hazards (Borvorn, 2011). In Kenya, Nyika (2012) noted that only 20.8 per cent of the projects were implemented on time and budget, while 79.2 per cent exhibited some form of failure. The major causes of failures were identified as insufficiency, diversion or misappropriation of project funds, insufficient implementing staff capacity, poor project approaches, weak project design and improper timelines planning and overruns. The above would be mitigated by appropriate and effective M&E.

Public funded health facilities construction projects occupy a prominent position in promotion of healthcare amongst residents. Properly constructed health centers contribute to enhanced GDP levels in developing countries in terms of employment technology, provision of critical market for items and merchandise produced by other sectors of the economy (Torres, Raymond, 2011). Khan (2008) argues that construction activity and economic growth are related to economic development.

In Kenya, health facilities construction projects are undertaken by the National and County governments. In most cases because of the requirement of huge capital which is lacking in the country, the government supplements its development budget with aid from international agencies

and other development partners. According to Shen *et al.* (2010), addressing the infrastructural needs especially in view of the current economic pressures in developing countries requires government agencies and construction industry stakeholders to find more efficient and effective ways of delivering the capital projects while controlling the costs. However, project implementing and managing agencies have faced several challenges in search of appropriate mechanism of enhancing the performance of public funded health facilities construction projects. This study therefore examined how practices of monitoring and evaluation affect project performance in public funded health facilities construction projects via the intervening power of community participation.

In 2010, Kenya adopted a new constitution which created devolved governments which established 47 counties which are governed by their own governments and have a relatively high degree of autonomy when it comes to budget allocations. According to the Kenya Public Expenditure Review of 2017/2018 fiscal year, the Government of Kenya allocated to Ministry of Health 57% of the national budget. This goes to show the seriousness the Kenya Government attaches to the health facilities projects. Also, The Government of Kenya (GOK) has taken measures to increase the share of public health expenditure in primary healthcare and introduced the Health Sector Services Fund (HSSF) to increase the amount of funding for primary healthcare and to ensure a timely flow of resources to the facilities. It is of paramount importance therefore that practices of monitoring and evaluation activities used for health facilities onstruction projects be considered as central in appraising the performance of those projects.

The Kenya Government, through Ministry of Health and Decentralization (county governments) has developed a policy and implemented elaborate plans to provide quality healthcare that is acceptable, affordable and accessible to all. The public health system is organized as a hierarchical pyramid. Village dispensaries (Level 1) and health centers (Level 2) in that order which are the highest in number and lowest in level of care. They comprise the lowest level of the pyramid. Sub-County hospitals (Level 3 and 4) and county referral hospitals (Level 5) are fewer and higher on the pyramid. At the top of the pyramid one can find the Kenyatta National Hospital, the largest (public) hospital.

The Ministry of Health provides policy support, technical guidance, prioritizes national health facilities construction programmes, stays in charge of the national referral hospitals and remains responsible for human resource in general health facilities (university teaching hospitals, public universities and medical schools).

In principle, the devolved system is supposed to bring more ownership and decision power to the local level. Though there exists a policy and guidelines on how the health facilities construction projects are to be managed in the various counties, county project managers adopt different project management approaches sometimes in an effort to run the hospitals in a business-oriented way and inevitably running into challenges. In order to harmonise and align the various management methodologies used in Kirinyaga County, this study envisaged investigating practices of monitoring and evaluation functions, community participation and performance of public funded construction health facilities projects in Kirinyaga County, Kenya with a view of harmonising the county practices with the international M&E standards.

1.1.2 Monitoring and Evaluation Practices

Monitoring and evaluation are vital parts in the management cycle during initial project conceptualisation, planning and implementation of any development project (Everitt and Mare, 2012). Gyorkos (2013) noticed that project organisers ought to incorporate a clearly described and delimited monitoring and evaluation plan as a fundamental and essential part of the overall project implementation plan.

A clearly thought out monitoring, control and evaluation implementation plan, can assist substantially with development. In detail, any strategic projects programmes outline objectives, plan activities, and hence arrive at a conclusion whether or not the project is the most appropriate to implement in the circumstances. According to United Nations Development Programme of 2012, monitoring and evaluation (M&E) is portrayed as a procedure that helps project directors in improving execution and accomplishing timely results. The objective of M&E is to improve the present and future administration to achieve high results and experience the desired end effect. Ballard et al. (2010) declares that the monitoring and evaluation practice helps programme

implementers settle on educated choices with respect to programme activities, project administration, programme adequacy and objective achievement.

Project monitoring is a continuous practice of collecting information on ongoing projects or programmes concerning the nature and level of their performance (Nyonje, Ndunge & Mulwa, 2012). Mulwa (2008) describes monitoring as a practice of collecting and managing project data that provides feedback as pertains to the progress of a project. Mulwa (2008) adds that the practice involves measuring, assessing, recording and analysing the project information on a continuous basis and communicating the same to those concerned. In construction realms, project monitoring entails the practice where the construction resources of same project are managed through the best methods and techniques so that the client does not suffer the losses when carrying out the project activities. It is considered to be a managerial practice which aims to generate information to support decision making, stimulate cost reduction, value improvement and continuous improvement in the organisation.

Project evaluation, on the other hand, is a practice that involves systematic collection, analysis and interpretation of project related data that can be used to understand how the project is functioning in relation to its objectives (Nyonje, Ndunge, Mulwa, 2012). Monitoring and evaluation (M&E) need to be designed as an intertwined participatory exercise where all stakeholders are involved. M&E ensures that project resources and inputs are put into the intended use and that the project addresses what it initially intended to do. It also makes sure that the project renders its services to the targeted population. The lack of M&E has been suggested as the main reason why most public funded projects lack quality and eventually collapse soon after establishment. According to Arazi, Mahmoud & Mohamad (2011), evaluation is the tool for providing knowledge for continued implementation. Ex-post evaluation may be used for impact assessment. Jody and Ray (2014) identify the complementary roles of the two functions. Information from monitoring feeds into evaluation in order to understand and capture any lessons in the middle or at the end of the implementation with regard to what went right or wrong for purposes of redesigning the project. According to Nyonje, Ndunge and Mulwa (2012), project M&E is important to different people for various reasons. M&E is important to project managers and their stakeholders (including donors/government and the general public) because they need to know the extent to which their

projects are meeting the set objectives and attaining the desired effects. M&E upholds greater transparency and accountability in the use of project resources which is particularly required by funders or development partners. Third, information developed through the M&E practice is vital for improving decision making. M&E strengthens project implementation, improves quality of project interventions and enhances performance (Ameh & Osegbo, 2011).

In Kenya, the M&E practice is carried out through the Ministry of Devolution and Planning by MED (Monitoring & Evaluation Directorate). The Directorate coordinates the M&E activities in the country through the county governments and oversees M&E through the National Integrated Monitoring and Evaluation System (NIMES). NIMES is conceptualised as the mechanism for the Government of Kenya to monitor the implementation of the Economic Recovery Strategy (IP-ERS) (Muiga, 2015). A study by Mutunga (2010) revealed that public funds have been going into waste because public funded projects stall in spite of the Kenyan government continually pumping more funds into the kitty. Mutunga (2010) further demonstrates that in some counties most of the projects have either stalled or failed to kick off. In others, shoddy performance by the contractor and the monitoring and evaluation teams have been noted leading to poor project performance. A report by Mars Group (2012), reveals that there are projects that were initiated between 2009 and 2013 amounting to over 12 billion where most of them are yet to be completed. This is despite the creation of MED and NIMES in the ministry.

From Kirinyaga County Profile (2014), it is evident that a monitoring and evaluation framework had been proposed for implementation as an effective public management item that can be used to help policymakers and choice-makers track development and display the impact of a given project, programme or policy. It was meant to help develop harmonised standards to guide appraisals, planning and monitoring and evaluation of projects. The county government has been operational to date and has had ongoing projects undergoing monitoring and evaluation. In this regard, this study sought to answer a key question: have the monitoring and evaluation practices used during implementation been operationalised and if in the affirmative, does that monitoring and evaluation so proposed play a significant role in achieving the desired results in the performance of health facility construction projects in the county? In order to answer these questions, this study contemplated evaluating practices of monitoring and evaluation functions, community

participation and performance of public funded construction health facilities projects in Kirinyaga County, Kenya.

1.1.3 Community Participation

In the global north, around the 19th century, the work of the Welsh early socialist thinker, Robert Owen (1771–1851), sought to create a more perfect community at New Lanark and at later communities such as Oneida in the USA and the New Australia Movement in Australia. Groups of people came together to create utopia or international utopia communities with little or no success. In his article, *The Peaceful Revolutionist*, Josiah Warren (1798 – 1874), attributed this to lack of ownership of the communal activities. Communities were assembled, projects identified for them and implementation carried out without any participation in decision making when operationalising the project management practices.

The Gulbenkian Foundation (1986) was a key funder of commissions and reports which influenced the development of community developments in the UK from the latter sixties to the 80's. This included recommending that there be a national institute or centre for community development able to support, practice and to advise government and local authorities on policy. This was formally set up in 1991 as the Community Development Foundation. In 2004 the Carnegie UK Trust established a Commission of Inquiry into the future of rural community development examining such issues as land reform and climate change. Carnegie funded over sixty rural community development action research projects across the UK and Ireland and national and international communities of practice to exchange experiences. This included the International Association for Community Development. According to Spence, (1996), this model was tried and resulted to total failure in Kenya. Development projects were developed by the colonial government without any community involvement in the early stages of decision making, and hence the failure of projects implementation.

In 1999, a United Kingdom wide organisation responsible for setting professional training standards for all education and development practitioners working within local communities was established and recognised by the Labour Government. The organisation was named after Paulo Freire. It was called PAULO - the National Training Organisation for Community Learning and Development. It was formally recognised by David Blunket, the Secretary of State for Education

and Employment. Its first chair was Charlie McConnell, the Chief Executive of the Scottish Community Education Council who had played a lead role in bringing together a range of occupational interests under a single national training standards body including community education, community development and development education. The inclusion of community development was significant as it was initially uncertain as to whether it would join the social care. The Community Learning and Development represented all the main employers, trades unions, professional associations and national development agencies working in this area across the four nations of the United Kingdom.

Early operationalisation of community development models had challenges. White (1999) notes that early results from among international development agencies funded projects were such that after the community had a requirement and the development aid given, the development agency lost interest leaving the programme to collapse. This perception re-awakened interest in the notion of local management of resources and decisions. The participatory development movement led by Chambers (1983) and others was important in applying these ideas directly to small scale development. Their focus was on finding methods that would allow the poor to be informed respondents in developmental assistance with external agents mainly acting as sources of funds and facilitation. Supporting this was the increasingly strong and articulate critique of development from academic social scientists such as Escobar (1995) and Scott (1998) attempting to demonstrate how top-down perspectives were both dis-empowering and ineffective? At the same time, projects like the Self-Employed Women's Association in India, the Orangi Slum Improvement Project in Pakistan, and the Iringa Nutrition Project in Tanzania were acquiring fame because they were perceived as highly successful instances of community driven development (Krishna et al, 1997). It was believed that these approaches could provide important lessons for bilateral and multilateral donors. This gave birth to community driven development.

In Kenya, Vision 2030 was launched in 2008 as a vehicle for accelerating transformation of the country into a rapidly industrialising middle income nation by the year 2030. In working towards the strategic vision on democracy and public participation, a people-centered and politically engaged open society was to be the main driving force towards achieving the promotion of peaceful coexistence of all communities in the country and county and respecting the new Kenyan Constitution including devolution leadership, ethics and integrity.

A community strategy was to be developed in order to enhance communities' awareness of the preventive and promotive aspects of health in order for them to adopt positive health seeking behavior. The strategy was to be operationalised to promote the participation of individuals and communities to take charge of their health. Moreover, the government was to put in place strategies to fast track implementation of the MOH community strategy by training community based health workers on preventive and promotive health care.

1.2 Statement of the problem

Kirinyaga County developed a 5-year public funded health facilities construction projects plan in 2014. The summarised current status of the performance of these projects is as shown in Appendix VII. In ideal situations, county governments are expected to complete about 80% of all scheduled development projects. From this status report, only 30% of these projects were complete in Kirinyaga County. The rest were either ongoing, behind schedule or stalled completely.

A study carried out by the Ethics and Anti-Corruption Commission has provided evidence on this deplorable situation in the county. An audit of the CDF by the National Taxpayers Association between 2006 and 2008 of Othaya, Embakasi, Butula, Makueni, Kirinyaga Central and Mbooni constituencies indicated a total of Kshs. 35 million was wasted on badly built projects and Kshs. 45 million was missing and unaccounted for. Kirinyaga Central had the highest proportion of money wasted on badly built projects (Kshs. 9 million; 18% of its total allocation) followed by Othaya (Kshs. 8 million; 11% of its total allocation). Embakasi constituency had Kshs. 22 million missing and unaccounted for (31% of its total allocation) while Butula and Mbooni each lost Kshs. 10 million of its allocated taxpayer's money.

Kirinyaga County embraced M&E practice and has a full fledged M&E office, Kirinyaga County Profile (2014). The County has a proposed M&E framework or model as of 2014 requiring all sectors to get committed to establish a strong M&E culture that supports projects' effectiveness. It is observed, however, that performance of public funded health facilities construction projects remains poor. Muiga (2015) states in his study that among many reasons for this poor state concerning Kenya's public funded projects in general are lack of professionalism on the part of practitioners and few evaluators with the required adequate training contribute significantly to this status. Also, those who carry out evaluations are sometimes influenced by previously acquired

traditional methodology instead of modern M&E practices and hence evaluations in some cases are carried out inadequately. In some cases, there is lack of baseline data for projects or insufficient time to develop baselines as well as to complete projects. Project staff lack commitment to monitoring leading to delays in the implementation and limited availability of M&E information by project managers. Participatory M&E methods are not employed through public participation because of limited capacity or lack of commitment. Hence, the practices of M&E while implementing health facilities construction projects in Kirinyaga County needs to be examined to guide the implementation of M&E activities. Also, the current monitoring and evaluation framework in the county needs to be investigated for effectiveness whose absence limits performance of public funded health facilities construction projects. Therefore, this study intended to fill the gap by establishing the practices of monitoring and evaluation, community participation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to establish monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County in Kenya with the moderating effect of community participation.

1.4. Objectives of the study

This study was guided by the following objectives:

- i. To determine the extent to which M&E budgetary allocation practice influences performance of public funded health facilities construction projects in Kirinyaga County, Kenya.
- ii. To determine the influence of M&E staff capacity building on performance of public funded health facilities construction projects in Kirinyaga County, Kenya
- iii. To determine the influence of M&E implementation on performance of public funded health facilities construction projects in Kirinyaga County, Kenya.
- iv. To determine the combined influence of M&E practices on performance of public funded health facilities construction projects in Kirinyaga County, Kenya

- v. To determine the extent to which community participation in M&E activities influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya
- vi. To establish the moderating effect of community participation on the relationship between monitoring and evaluation practices and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

1.5 Research Questions

This research answered the following questions:

1. To what extent does M&E budgetary allocation influence the performance of public funded health facilities construction projects in Kirinyaga County, Kenya?
2. To what extent does M&E staff capacity building influence the performance of public funded health facilities construction projects in Kirinyaga County, Kenya?
3. To what extent does M&E implementation influence the performance of public funded health facilities construction projects in Kirinyaga County, Kenya?
4. To what extent does monitoring and evaluation practices (M&E implementation, budgetary allocation and staff capacity building combined), influence the performance of public funded health facilities construction projects in Kirinyaga County, Kenya?
5. To what extent does the community participation in M&E activities influence the performance of public funded health facilities construction projects in Kirinyaga County, Kenya?
6. To what extent does Community participation moderate the relationship between M&E practice and the performance of public funded health facilities construction projects in Kirinyaga County, Kenya?

1.6 Research Hypotheses

This research was guided by the following Null Hypotheses:

- H₀₁** There is no significant relationship between M&E budgetary allocation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.
- H₀₂** There is no significant relationship between M&E staff capacity building and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

- H₀₃** There is no significant relationship between M&E implementation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.
- H₀₄** There is no significant relationship between combined M&E implementation, budgetary allocation and staff capacity building (monitoring and evaluation practice) and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.
- H₀₅** There is no significant relationship between community participation and the performance of public funded health facilities construction projects in Kirinyaga County, Kenya.
- H₀₆** The Community participation in monitoring and evaluation does not significantly moderate the relationship between monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

1.7 Significance of the Study

The outcomes of this study were expected to contribute immensely and positively to the health facilities construction industry in Kenya. The economic development of the country will be enhanced as the outcome of this study will assist project managers and performing organisations in addressing the issues that negatively influence effective implementation of construction projects in general. Construction Industry in any country plays a key role in economic development and hence effective implementation of construction projects contributes significantly to the economy. When this is done, then the high number of stalled public funded health facilities construction projects will lower. Experiences of cost overruns and extended construction periods beyond the original completion dates will cease to be felt or noticed. This will save the country from unnecessary loss and wastage of the much needed financial resources which are in scarce supply.

Project monitoring and evaluation agencies will use the knowledge gained from this study by evaluating performance of public funded health facilities construction projects and making appropriate decisions for future projects. Other than merely declaring a project as successful or not, they will be able to describe performance in terms of how good or bad it is, based on different performance indicators recommended after the outcome of this study.

In addition, results of this study will enable the County Government of Kirinyaga as well as other counties in Kenya to assess, monitor, evaluate, report the progress of health facilities construction projects in their course and act on the report for future similar projects. Further, the project implementing agencies can use the performance evaluation recommended practices for allocation of appropriate resources to the county governments with a view to realising desired performance on public funded health construction projects.

1.8 Delimitations of the Study

This study was delimited to Kirinyaga County in Kenya and did not include other counties in the country. Delimitation of the study included the community within Kirinyaga County. Population of the neighboring counties was not considered. Secondly, data from projects in the County not related to health facilities construction was not considered. The study also delimited to those projects listed and approved in Kirinyaga County Integrated Development Plan 2013-2017, and subsequent review of this document.

1.9 Limitations of the Study

Responses from the community will be from a sample taken from the entire population of Kirinyaga County. The ideal situation would be getting responses from each member of the county population, but this would not be practical. Thus the sample size used for the data collection was, therefore, a limitation.

Limitations of this study included insecurity while accessing the respondents. To minimise the impact of this limitation, data was collected during the day only and community security arrangements utilized during the data collection.

Time period for collecting data for this study was a concern. To minimise this, detailed and relevant questionnaires were designed to collect data from M&E staff, relevant stakeholders and the community. Direct interviews were conducted on a key number of senior management staff so as to capture the data from the decision makers of the County. Integration of these study timelines

and the researcher's other tasks (competing timelines) were also a constraint. To minimise this, detailed and realistic time scheduling were developed with this study being on the critical path.

Suspicion and resistance from M&E staff and County staff were a limitation to this study. To minimise this, consent of the respondents was obtained prior to issuance of the questionnaire and explanation as to the need for the research in the selected field made. Inadequate funds to carry out this study were a limitation to the study. To minimise the cost, relevant data only was collected and no extraneous or excess data collection was done. Also, field assistants were used by the researcher to help in distributing the questionnaires and collection of the same especially in far flung areas

1.10 Assumptions of the Study

The researcher assumed that the individuals working in the County were well versed with the information required for the study. Also, homogeneity of the participants' characteristics across the County was assumed in the study. It was also assumed that the sample taken was a **fair** representation for the entire population. An assumption was made that all the current information or required data was also available in the records of the Kirinyaga County data base.

1.11 The Definitions of Significant Terms Used in the Study

Community Participation-Refers to the participation and influence of the community in the project activities during community needs assessment, project identification, project goal setting, project planning and implementation.

Evaluation practices- Refers to the practices that involve determination of intended impact by systematic review and analysis of completed projects in view of achievement of the intended objectives.

Health facility- Reference to an area where the general health of a community is taken care of.

Health facility construction project- Refers to construction of building, equipping and furnishing a health facility, ready for operations.

Monitoring implementation- Refers to how monitoring activities are to be carried out during the period of collecting data and information on ongoing projects or programmes concerning the nature and level of their performance at various stages in the project cycle

Practice of budgetary allocation on M&E- The effectiveness of the methodology used budgeting, timely financial remittance, timelines to activities and budget integration in the overall project budget.

Monitoring and evaluation practices- Refers to the performance of monitoring and evaluation to produce the desired or intended end outcome when appropriate methodologies are used.

M&E staff capacity building- Refers to M&E staff having requisite level of education, experience, technical literacy and adequate human resource to carry out result oriented M&E activities so as to produce the desired or intended end result.

Performance of public funded health facilities construction projects- Refers to how the project adheres to the implementation plan as far as the approved budget, scope, specified quality and complete achievement of the stakeholders' intended goal is concerned

1.12 Organisation of the Study

The study was organised in five chapters. Chapter One provides details on the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, limitations and delimitations, basic assumptions of the study and definition of terms used. Chapter Two outlined a review of the relevant literature on practices of monitoring and evaluation on performance of public funded health facilities construction projects, theoretical and conceptual framework. Chapter Three covered research methodology that was applied to source, practice and requisite data. Chapter Four covered data analysis, presentation and interpretation of the study results. This was followed by Chapter Five which contained summary of results, conclusions and recommendations as well as further research.

References and appendices are at the back of this research document.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter succinctly expressed the essential features of literature review for the monitoring and evaluation practice, community participation and performance of public funded health facilities construction projects in Kirinyaga County Kenya. The literature was reviewed in order to identify opinions, results and information from various studies and people on the area of study. The main areas presented here included reviews related to the topic area from previous studies, theoretical literature, empirical literature and conceptual framework envisaged for this study. The sections were structured such that they provide insights on what other researchers had done previously on practices of monitoring and evaluation functions and how these functions have been shown to influence the performance of projects. This was helpful as it showed the conceptual and contextual gaps that this study sought to address.

2.2 Performance of Public Funded Health Facilities Construction Projects

Performance of projects particularly construction of public funded health facilities is critical to achieving health development growth in the local communities across the world (Olatunde and Alao, 2017). It is also understood that monitoring and evaluation of projects is fundamental if the project objectives and performance success is to be achieved. Monitoring and evaluation of project improves overall efficiency of project planning, management and implementation. Various projects are initiated to transform social, political, economic and healthy wellbeing of citizens in a particular country. UNDP (2009) reports that there has been a growing demand for development effectiveness to improve people's lives. Therefore, effective utilisation of monitoring and evaluation results for continuous improvement and quality of performance in organizations can't be more emphasised, (Alves, Botelho and Mendes, 2017).

The failure of any construction project is mainly related to its poor implementation. Das and Ngacho (2017) carried out a study to identify critical success factors (CSFs) influencing the performance of development projects based on their key performance indicators. Results revealed that individual items constituting these factors represent six CSFs namely project related, client

related, consultant related, contractor related, supply chain related and external environment related factors. The study also stated that the construction field overall performance issues in growing economies can be divided in three layers' troubles of shortages or inadequacies in industry infrastructure (especially supply of stocks), issues related to clients and consultants and problems as a result of contractor incompetence/inadequacies. Arain (2013) also opined that inadequate budgetary and time control contributes immensely in low performance of construction initiatives.

A study was conducted by Mensah, Dansoh and Amoah (2011) to determine the performance of projects funded and managed by public organisations in Ghana. The study followed pair-wise analysis to test for differences between the performances of projects using independent test in building projects of three funding organisations. The study found out that time and quality performances of one organisation were better than the other two organisations. The organisation's practices of establishing a budget for a particular project and making payments from that budget at defined stages could explain the differences in the performances. However, the study was limited in its analysis for using only pair wise analysis hence the results could have been biased. The study did not establish the criteria used in the selection of projects whose performance was measured. Aziz and Abdel-Hakam (2016) was of the opinion that execution issues emerge in development initiatives because of numerous reasons for example, inexperienced architect's/construction workers, poor estimation, change of executives, social and innovative issues, site related issues and inappropriate procedures and methodologies. In Brazil, Alves, Botelho and Mendes (2017) in their investigation expressed that the fundamental execution issue can be because of improbable target setting (milestones) and causes starting from the implementation of the development project (as a rule the reasons for deviation begin from the two sources).

Ojha & Pandey (2017) did a study on 'Performance Driven Management of Government Projects' in India which concluded that so as to maximise on project overall performance, public funded government projects require a cautiously crafted and structured approach towards financing. This would be in aid of facilitating flexible decision making, building core competencies, coping with and sharing project risks, enabling the budget needed for innovation, and customising in-house project governance methodologies. Further, they commented that one of the major reasons behind the constructions poor execution has been due to poor selection of materials acquisition. Burgess,

Jedwab, Miguel & Morjaria (2013) in their paper, *Evidence from Road Building in Kenya*, pointed out three significant structures which underline successful performance of projects. These are: implementation structures, including feedback methodologies during implementation (monitoring and control), feedback on productivity (evaluation) and final integration with the other departments (depending on organisational internal structure).

According to Thorton (2011), the main factors attributed to successful performance of any project would be narrowed down to financial stability, work progress, (as measured by work schedule), work quality, project and consultants/contractors, sub-contractors, client's managements relationships, performing organisation management capabilities, claim and contractual issues. In addition, Thorton noted that construction time plays a central role as this is used as a benchmark for measuring the efficiency and performance of the project.

A study by Bengtson, Havila and Åberg (2018) identified project performance categories such as people, cost, time, quality, safety and health, environment, client satisfaction, and communication as key indexes in measuring the performance of any construction project. Also, Ng and Wong (2016) noted that a control system is an important element to identify factors affecting construction project effort. For each of the project goals, one or more Project Performance Indicators (PPI) is needed. Laursen (2018) noted that human factors played an important role in determining the performance of a project. Bengtson, Havila and Åberg (2018) remarked that both Early Contractor Involvement (ECI) and Early Supplier Involvement (ESI) would minimise constructability related performance problems including costs associated with delays, claims, wastages and rework. The most important of practices' relating to scope management are controlling the quality of the contract document, quality of response to perceived variations and extent of changes to the contract. It was recommended for foreign firms to adopt some of the project management practices highlighted to help them to achieve better project performance (Alves, Botelho and Mendes, 2017)

2.3 Monitoring and Evaluation Practices

Effective monitoring and evaluation practices were considered together as an integral component in the performance of public funded health facilities construction projects. A study carried out by Dewlaney and Hallowell (2012) has noted that project planners should include a delineated

monitoring and evaluation plan as an integral part of the overall project plan that includes monitoring and evaluation activities, persons to carry out the activities, frequency of activities, sufficient budget for activities and specification of the use of monitoring and evaluation results. A study carried out by Nedwek and Neal (2014) revealed clearly that there is a consensus that good monitoring and control throughout the project is essential, and also that it is frequently inadequate in poor performing projects. It has been shown that blueprint projects which are finalised at preparation are less likely to be successful than flexible projects which can adjust to experience gained as the project develops. This implies that there must be a regular and reliable programme of measuring, recording and reporting the progress. This in turn means that there must be close contact with the beneficiaries and defined indicators of performance (Doloi, Sawhney and Iyer, 2012).

A study conducted by Abdel Aziz (2008) reported that most previous evaluation studies show that it is very common for insufficient attention to be given at project preparation and the lack of a clearly laid out monitoring plan encouraging project staff to give it low priority. It is the impression that field staff think of returns and reports as being unwelcome chores that interrupt the real work. The present position is that it has become customary to pay lip service to the importance of monitoring but there is room for making it happen more effectively. The information to be gathered and reported varies from project to project. A study done by Dunlap (2008) asserts that questions which every project should be regularly asking are: is progress satisfactory? If not, what are the difficulties which need to be addressed? What new ideas are emerging? And which ideas may suggest changes to the project? If new technology is being introduced, the beneficiary reaction and uptake needs to be closely monitored in case the technology needs modification or can be improved (Dewlaney and Hallowell, 2012).

Raimondo (2016) shows that when it comes to monitoring and evaluation, few agencies feel that they have the resources to evaluate every project and so evaluation particularly ex-post evaluation tends to be biased towards projects with problems. Also, small agencies particularly are reluctant to use the time of project staff on evaluation when they could be getting on with the next project. The larger agencies which have separate evaluation units face the difficulty that the independence of these units makes them less able to influence the operational departments., Otonde and Achayo

(2014) showed that there are several different approaches to evaluation reporting. The study found out that to some extent, termination reports presented in most project cases by project staff are often biased by frustrations and difficulties and tend to be more of a catalogue of problems than a balanced account of performance. Ultimately, poor performance of construction projects is reported as has been the case of public funded health facilities construction projects in Kenya (Pretorius *et al.*, 2012).

Omran (2015) points out that monitoring and evaluation of public funded initiatives must be implemented by transparent and well-trained personnel with adequate and valid skills. Adequacy of staff and sound methods are prerequisite to any M&E implementation.

Echeme and Moneke (2016) opine that budgetary allocation is needed to provide adequate resources for M&E implementation. The study argues that a realistic budget must be drawn and considered holistically with the overall project budget. This would give M&E its rightful position and recognition in Project Management.

According to Yusuf, Otonde and Achayo (2017), project and national politics plays a major role in project implementation and hence should be considered early in project planning. Multi stakeholders' discussion on M&E activities complete with community participation which is considered important in greatly improving the overall performance of public funded health facilities construction projects.

A study by Maalim and Kisimbii (2017) asserts that monitoring emphasises 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. Callistus and Clinton (2016) study argues that the starting point in politics as an element of evaluation involves asking who would gain or 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 ongoing project. Evidence from literature point out that in Sub-Saharan Africa substantial M&E achievements on the ground are rare (UNICEF, 2009).

In Kenya, the Ministry of Planning and National Development commissioned work in 2005 on the design of an appropriate framework for Monitoring and Evaluation (M&E) in the National Development Programme. This was a collective effort by the government, private sector and civil societies. Literature has shown that this proposed M & E framework has not been fully operational hence public funded health facilities construction projects have recorded poor performance outcomes over time in Kenya particularly in Counties. Recent studies have advocated strong participatory M&E component in the management of projects to ensure expected performance outcomes are achieved. This view is supported by Mulwa (2007) study which indicated that monitoring and reporting should be strengthened and deepened in all public funded projects. Mbaabu (2012) argues that the M&E of decentralised development in Kenya has not been systematic, has failed to adopt the M&E requirements and the information generated is not usually timely and accurate. This points out that all real variables that determine practices of M&E of construction projects may not have been identified by the already in place policy measures. Therefore, the interest of this study is to look into practices of the monitoring and evaluation functions and their influence on performance of public funded health facilities construction projects.

2.3.1 M&E Budgetary Allocation and Performance of Public Funded Health Projects

Adequate and timely funding is essential for project success. Inadequate and untimely funding may interfere with implementation schedule of projects. Zagorsky (2010) has identified contractors' financial difficulties as major causes of delays in government sponsored construction projects. He also defines contractors' financial difficulties as the contractor not having adequate finances to complete the development works, materials and equipment procurement, staff remuneration and all other incidentals. Thornton (2011) in his study found out that late certificate payments, unrealistic profit margins and excessive debt are considered as the major contractors' financial inadequacies and hence contribute to the overall poor project performance.

The project budget should provide a clear and adequate provision for monitoring and evaluation activities. A monitoring and evaluation budget can be delineated within the overall project budget to give the monitoring and evaluation function the due recognition it plays in project management. A monitoring and evaluation budget should be about 5 to 10 percent of the total budget (Hassan, 2013). 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). A study carried out by Gwadoya (2012) showed that it is essential for financial resources for monitoring and evaluation to be estimated realistically at the time of planning for monitoring and evaluation. A general principle guideline is that the monitoring and evaluation financial plan ought not to be so little as to negatively affect the M&E data accuracy and reliability and neither should it be unrealistically large as to divert the main project resources and finally negatively impact the performance of the project. (Chaplowe, 2008). Monitoring and evaluation should be planned together. However, the budget for each function should be discrete, this is due to the fact that monitoring is virtually complete at the practical completion of the project whereas evaluation activities continue way ahead after project handover, (Burgess, Jedwab, Miguel and Morjaria, 2013).

Financial resources for monitoring and evaluation should be estimated realistically at the time of planning for implementation of monitoring and evaluation (UNDP, Handbook on planning, monitoring and evaluating for development results. 2009). According to the handbook, the most commonly observed financing mechanism is to draw resources together from relevant projects. The availability of finances will determine what can be achieved as far as implementation, strengthening and sustainability of monitoring and evaluation system is concerned (UNAIDS, 2008a). According to Magondu, A. (2013), a key function of planning for monitoring and evaluation is to estimate the costs, staffing and other resources needed for monitoring and evaluation work. It is important for monitoring and evaluation specialists to weigh in on monitoring and evaluation budget needs at the project design stage so that funds are allocated specifically to the implementation of key monitoring and evaluation tasks (Chaplowe, 2008).

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. Alternatively, funds could be mobilized from partners directly for an outcome or programme monitoring and evaluation facility. Other possibility would be 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. Through all these proposed

means of funding, monitoring and evaluation can be made more efficient in order to generate the expected performance outcomes in construction projects. In Kenya, Wanjiku (2012) concedes that financial issues, human resources conditions, site characteristics and design quality aspects are factors influencing performance of government funded health facilities building projects.

2.3.2 M&E Staff Capacity Building and Performance of Public Funded Health Projects

Monitoring and evaluation needs to be undertaken by individuals with the relevant skills, sound methods and adequate resources as well as transparency in order to secure quality (Jones, 2009). Skills are of paramount importance to an effective monitoring and evaluation. The staff need to be trained on the basics of evaluation (Bailey and Deen, 2002). This implies that there is the need for the personnel to have a high monitoring and evaluation capacity in order to secure the effectiveness of monitoring and evaluation. A study by Isaac & Navon (2013) shows that managing communications, managing stakeholders, Motivating, and knowledge transfer are essential knowledge areas for effective M&E implementation. Planning, testing and monitoring the progress of the project work are some of the key practices used to manage the project work (Georgieva & Allan, 2008). Management and staff competence, commitment to the project, communication and cooperation with the project teams has a significant contribution towards the success of a healthcare facilities construction project. These factors were found to be of significance in an assessment for Malaysian construction industry (Yong and Mustaffa, 2012). Staff commitment is a key aspect when it comes to the implementation of monitoring and evaluation since they are key decision makers in an organisation (Magondu, 2013).

Under normal circumstances the project managers implement any project as guided by government rules and regulations, organisations requirements, stakeholder's preferences and client location. It is important that management confirms the completion of promised deliverables. Performance during monitoring is compared against the original plans created during the first days of a project and measurements must be against revised and relevant baseline plans (Kahilu, 2010). It is the role of the M&E staff to facilitate monitoring and evaluation of the projects in a satisfactory manner. Human resource management is very important in project management and very crucial for an effective monitoring and evaluation. The technical capacity and expertise of staff in conducting evaluations, professional capacity of human resource, the value and participation of the human

resource in an organisation during the decision making practice as well as their motivation in implementing the decision can hugely impact on the evaluation (Vanessa and Gala, 2011).

According to Kyriakopoulos (2011), staff capacity should not be just about mere training of staff by undertaking a learning approach of which are best practices have a positive effect on the evaluation practice within an organisation but rather the staff carrying out monitoring and evaluation should be competent enough in order to deliver expected results within the allocated project timelines. Ling, Low, Wang and Lim (2009) study has shown that literature identifies the various aspects which are used in assessing staff capacity which is perceived to be one of the factors influencing project success. These aspects include number of monitoring staff, monitoring staff skills, frequency of monitoring, stakeholder's representation, and proficiency in latest information systems (use of latest technology), influence, role and teamwork among the members of M&E team on project implementation.

2.3.3 Monitoring and Evaluation Implementation and Performance of Public Funded Health Projects

Project monitoring and evaluation implementation success and effectiveness depends on the utilised models. A number of various models are found in various project management literature. These models are widely used by performing organisations depending on the experience gained over time. Some of the common models include but not limited to: basic research, effectiveness measurements and status assessments. Absence of monitoring and evaluation structures affect project performance negatively.

The balanced scorecard is another model that can be employed in evaluating projects. Balanced score card evaluates projects on the basis of four perspectives which are the financial perspective, customer perspective, Internal business practice, and learning & growth. Alhyari, Alazab, according to Venkatraman and Alazab (2013) balanced score card model fitted very well with monitoring and measuring the performance of public funded health facilities construction projects, and also in evaluating their success in project investments.

Logical framework (Log frame) is one of the most common models used in project management for both planning and monitoring of projects. Log frame matrix is a tool that is applicable for all

organisations both government and nongovernmental that are engaged in development activities (Martinez, 2011). Hummel Brunner, (2010) further confirms the continued use of Log frame despite several criticisms. He asserts that the Log Frame Model has not been fundamentally weakened by critics. Even though many donors acknowledge its limits and weaknesses, they still maintain its use as a planning and monitoring tool. Myrick (2013) expresses that a pragmatic model to M&E is ideal. However, in the real world, practitioners may be limited by constraints that will prevent their continued use. He further explains that whatever the model used at least the basic principles for M&E which are measurable objectives, performance indicator, target and periodic reporting should be used in a reporting tool.

From a study carried out by Al-Tmeemy, Abdul-Rahman& Harun (2011), other models used for monitoring and evaluation include stochastic methods, Fuzzy logic model, and miscellaneous methods. Of all the models, the Earned Value Analysis (EVA) has remarkable advantages in accuracy, flexibility and adaptability for project complexity. This may have contributed to many governments decision to implement EVA to enhance the level of project management for their countries (Abdul-Rahman, Wang, & Muhammad, 2011).

2.3.4 Community Participation and Performance of Public Funded Health Projects

Community Participation in M&E of projects is crucial in order to enhance project performance. Their engagement in discussions concerning how monitoring, control and evaluation programme activities are carried out is often a learning experience for them. It promotes inclusion and facilitates meaningful participation by diverse community groups (Mungai, 2009). Ivana (2010) study found out that the whole practice 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.

Literature on project management systems acknowledges that the community usually has a stake in knowing how project activities are being implemented within their localities. A study by Majid & Ugwu & Doran (2008) reveals that community participation is paramount in development projects especially when the community is given room to provide their opinions concerning a

certain project. Although minor decisions and emergency situations are generally not appropriate for community participation, a complex situation with far-reaching impacts warrant community involvement and when done proactively, rather than in response to a problem, helps to avoid problems in the future (Wambugu, 2012). The focus of community participation is usually to share information with and gather input from members of the public who may have an interest in a project. The Constitution of Kenya 2010 gives citizens the right to take part in activities that have a direct bearing on their lives (Mbaabu, 2012). This has great impact on the performance of a public funded construction project. Lawal & Onohaebi (2010) opined that impact evaluation practice particularly the analysis and interpretation of results can be improved by the participation of intended beneficiaries who are the primary stakeholders in their own development and the best judges of their own situation.

When the community is involved in monitoring and evaluation, it suggests that they have taken an interest in the project and given administration support and added to decision making practice (Nabulu, 2015). Their ideas are bound to be adequate and pertinent to the rest of the populace being served by the project. This simplifies resource mobilization during project execution. Populace interest in discussing the why, how and what of interventions is a tremendous way of empowerment to them and enhances ownership of the project by the different interested groups (Donaldson, 2003). Also, involving the diverse interested groups in the decision making empowers them during the entire project cycle. (Remon Fayek, 2013).

Professional practices worldwide dictates that a focal factor for assessing the effectiveness of evaluation is involving the group of people living in the particular area having same attitudes and sharing common interests. It must be noted that local inhabitants' involvement must be brought in at the very beginning of populace needs assessment through to project implementation and evaluation. (Jones, 2011).

A study conducted by Waihenya (2011) suggests that although the community needs to participate in projects, the course of such engagements needs to be managed with a lot of care. The study asserts that too much community participation could lead to undue influence on the evaluation and too little could lead to evaluators dominating the practice (Patton, 2008). In Kenya, public funded projects committees allow the community to identify the projects close to their interests at the

Location Development Committee Levels CDF Act (GOK 2012). However, it is sometimes difficult to tell their level of competency in determining what is beneficial in the long run or how to integrate the projects within their neighboring locations or constituencies for maximum benefit (Maalim & Kisimbii, 2017). Also, selection of the community members to be involved in M&E activities must be approached with caution. Ochieng M. F., & Tubey, D. (2013) in their study noted that since those selected as monitors were friends of those in high offices, some citizens felt that they were not represented since they did not, for example, vote for the member of parliament during the previous election. This results to their disillusionment with the development in their constituency.

In order to improve the project management system, current ongoing projects and other proposed projects need to emphasise on community participation and to also help to evaluate and monitor these projects (Barness, 2012). Such an engagement is helpful as it provides useful information on project implementation as well as regarding any difficulties facing a particular project thus providing records that can be used to try and reduce these problems and also make sure the goals of implementing public funded healthcare facilities construction projects are always achieved in all the projects. Community feedback mechanisms should also be created as they can be of help in controlling the workmanship thus enhancing the performance of a project (Georgieva & Allan, 2008). The interest of this study was to find out whether community participation on M&E activities contributed towards achieving the desired results in the performance of public funded health facilities construction projects in Kirinyaga County in Kenya. Furthermore, the study sort to establish whether this participation influenced or altered in any way the relationship between monitoring and evaluation and the performance of public funded health facilities construction projects in Kirinyaga County in Kenya

2.4 Theoretical Framework

A theoretical framework introduces and describes the theories that attempt to explain the research problem under study (Sekaran & Bougie, 2010). Eisenhart (1991) delineates a theoretical framework as "a structure that guides research by depending on a formal tested concept... built by collecting relevant interrelated ideas, well supported rationale by previous research, guiding the study under consideration". This study was premised on a number of theories that have evolved

overtime. These theories were used to explain the practices of monitoring and evaluation functions, community participation and performance of public funded healthcare facilities construction projects in Kirinyaga County, Kenya. This study was anchored on theories, approach and model. All these were considered relevant by the researcher to explain most explicitly the relationship between the variables in question: Theory of Change (ToC), Logical Framework Approach, Effective Project Implementation Theory (EPI), Earned Value Management Model (EVM)

2.4.1 Theory of Change (ToC)

The theory of change was developed by Carol Weiss in 1995 (Yumi & Susan, 2007). It is viewed as a model that explains how an intervention is expected to lead to intended or observed impacts (Burt, 2012). According to Jean, Diana & Avan (2011), a theory of change is utilized in strategic planning by management and decision making as a project or programme develops and progresses. It can also reveal what should be evaluated when and how so that project and programme managers can use the feedback to adjust what they do and how they do it to achieve the best results. Theory of change gives the big picture including issues related to the environment or context that you cannot control. It shows all the different pathways that might lead to change, even if those pathways are not related to your programme or project. The theory of change methodology also helps to identify the way people, organisations and situations change as a result of an organisation's activities or services, helping to develop models of good practices (Jean, Diana, & Avan, 2011). According to Woodcock (2011), some projects may yield high initial impacts while others may inherently take far longer even decades to show results. It is not because they do not work, but because of how long it takes for them to be completed (Woolcock, 2011). Burt (2012) further states that the theory of change is useful during implementation as it can check on quality and thus help the programme team distinguish between implementation failure and theory failure. Burt further contends that it is essential to involve key stakeholders and staff in the development of the theory of social change as it will create a sense of ownership in projects.

In planning, Annie (2009) states that the theory of change can help an organisation to achieve a variety of results which are instrumental in its growth namely: strengthened organisational capacity through skills, staffing and leadership; strengthened alliances through level of coordination, collaboration and mission alignment; strengthened base of support through the grassroots, leadership and institutional relationships and alliances; improved policy through stages

of policy change in the public policy arena including adoption, implementation and funding; shift in social norms through the knowledge, attitude, values and behavior; and changes in impact through the ultimate changes in social and physical lives and conditions. Impact is affected not just by policy change, but by other strategies such as community support and changes of behavior (Annie, 2009). This theory was relevant in this study as it explains the relevance of monitoring and evaluation in projects to ensure great performance. It also explains the relevance of having a competent project team in monitoring and evaluation in checking project quality and also the importance of engaging stakeholders in ensuring project success.

However, this theory falls short since project success is much more complex (Louisa, 2010). It is important to understand success beyond just knowing “what works”. Experience has revealed that blindly copying or scaling an intervention hardly ever works (Mackay, 2007). An important task for monitoring and evaluation is to gather enough knowledge and understanding in order to predict with some degree of confidence how a project and set of activities might work in a different situation or how it needs to be adjusted to get similar or better results, hence influencing project performance (Jones, 2009). It was, therefore, important to also look at other theories that will underpin this study.

2.4.2 Logical Framework Approach

The logical framework or log frame is a document that gives an overview of the objectives, activities and resources of a project. It also provides information about external elements that may influence the project called assumptions. Finally, delineates how the project will be monitored through the use of content or indicators. All this information is presented in a Table with four columns and four rows— although variations on this basic scheme do exist. According to Basil Cracknell (1989), the logical framework system for project appraisal is now an integral part of the work of any organisation carrying out project implementation. It is important that it becomes an instinctive pattern of thinking, so continuous training is necessary to ensure that the technique is successful.

According to Basil Cracnell (1989), in his research he concluded that continuous training, based on actual case studies and practical application of the system is undoubtedly needed if the full benefits of the Project Framework approach are to be realised. This position was emphasised by

Kamau, C.G. and Mohamend H.B. (2015) in their study, Practices of Monitoring and Evaluation Function in Achieving Project Success in Kenya: A Survey of County Government's Projects. Otherwise, there is a risk that it may go the way of other management techniques that have been introduced with a flourish in recent decades only to fade into oblivion when a new one becomes fashionable.

The logical framework as a document is a tool that is used in many different approaches. It can be used to plan individual projects. It can also be used as a tool to plan, follow up and evaluate more complex programmes that consist of many different individual projects (or actions). It can also be a tool in a complete management approach for organisations. It can be used to plan, or to report or as a part of a contract. Because of these different roles and different expectations by all the parties that are involved in the project, logframes sometimes have a tendency to become overly complex hence not suitable for frequent and normal short time M&E activities.

The study by Paul Crawford and Paul Bryce (2003) on the methods of enhancing the efficiency and effectiveness of aid project implementation concluded that the conventional logframe matrix does not communicate the time allocated to strategy implementation. The impact of this is that although the tool has proved useful for project design and appraisal, the absence of the time dimension renders the tool ineffective for project management during the life of the project, especially for monitoring purposes. With a view to improve the logframe and perhaps use it for M&E, a 3D version has been proposed. However, Paul Crawford and Paul Bryce (2003) have cautioned that although the 3D logframe has intuitive appeal and facilitates ongoing management functions such as M&E more readily than the conventional logframe, it is probably too conceptual to be adopted in the field context.

Logframe is linear, which means that all activities lead to outputs which lead to outcomes and goals. There are no cyclical practices or feedback loops and hence, whereas this model is ideal for evaluation, it falls short of monitoring as feedback loops are essential in taking corrective action when serious variances are observed in monitoring

2.4.3 Effective Project Implementation Theory (EPI)

According to Nutt (2006), effective project implementation theory has incremental stages taken one at a time by any performing organisation so as to organise for installation of change. This theory is used by practitioners to implement planned changes whether unique or conventional. Effective implementation theory is used to create settings that will make the changes endure and be entrenched. However, specification of these steps is not easy as implementation is pervasive and too general. It was in the researcher's view that this theory was insufficient as it considers primarily the implementation of the project and not adequate for project forecasting and evaluation.

2.4.4 Earned Value Management model (EVM)

Earned Value Management (EVM) model assists project managers in measuring the initiative overall performance. This is a methodical tool used by project managers in analysing project achievement using variances in work planned and actual work done. EVM is also used for outlay and time control. This enables realistic intervention of future projections. Earned value management model serves as a useful tool to measure project progress accomplished.

Using this analysis, the practitioner is able to foretell the project attainment in terms of final cost and culmination date based on the observed trend (Reichel, 2006).

Earned value management model according to Funnell & Rogers (2011), assists in prevention of requirements creep, developing correspondence and discernity with project shareholders, decreasing hazards, benefit scrutiny, innovation foretelling, improved answerability and achievement trail. EVM is composed of statistics collected at a specific time or period performed. Total cost of the project is referred to as "Budget at Completion" (BAC). The expenditure of the work listed or planned is referred to as "Budgeted Work as Scheduled" (BCWS). Work to be performed as per the plan is referred to as "Planed Value" (PV). Calculations using the statistics from BAC, BCWS and PV give an insight on the project performance and forecast in terms of cost and schedule. (Love, Tse & Edwards, 2005).

Earned value is a methodology that let practitioners in M&E practice to monitor the project plan, actual work performed, and work accomplished so as to establish whether the initiative is on course

as planned. EVM will indicate the utilisation of the budget and time in comparison to the actual work done and the time spent at the time of analysis, (Marshall, 2007).

Arising out of previous literature, it has emerged that EVM is superior as an indicator of performance and effective in forecasting future accomplishments as it combines cost, scope and schedule. By use of this model, project managers are alerted on possible problems before they are out of control and hence prevent derailing of the project altogether enabling the practitioners to report project progress with more certainty (Gahlot & Dhir, 2002).

Of all the models, the Earned Value Analysis (EVA) has remarkable advantages in accuracy, flexibility, and adaptability for project complexity. This may have contributed to Malaysian government deciding to implement EVA to enhance the level of project management for the whole country (Abdul-Rahman, Wang, & Muhammad, 2011). This model is superior to the previously discussed as it shows how value can be earned on money and time spent on a particular project, therefore addressing the variables of budgetary allocation, timelines of M&E as well as staff capacity in the course of monitoring and evaluation practices.

2.5 Conceptual framework

The conceptual framework gives a depiction on how the variables relate to one another. The variables defined here were the independent, dependent and moderating variables of this study. An independent variable influences and determines the effect of another variable (Mugenda, 2003). The independent variables in this study were M&E implementation, budgetary allocations of M&E, and M&E staff capacity building. Dependent variable was that factor which is observed and measured to determine the effect of the independent variable (Nyandemo, 2013). The dependent variable was performance of public funded health facilities construction projects in Kirinyaga County, Kenya. It was perceived that any changes in the independent variables, singly or combined, would influence the dependent variable. The moderating variable would be that which was observed and inferred from the data collected. If it modified or altered the relationship between the independent and the dependent variable, it would be a latent variable in the study. Community participation was identified as the moderating variable. Figure 1 is a representation of the conceptual framework developed for this study.

CONCEPTUAL FRAMEWORK

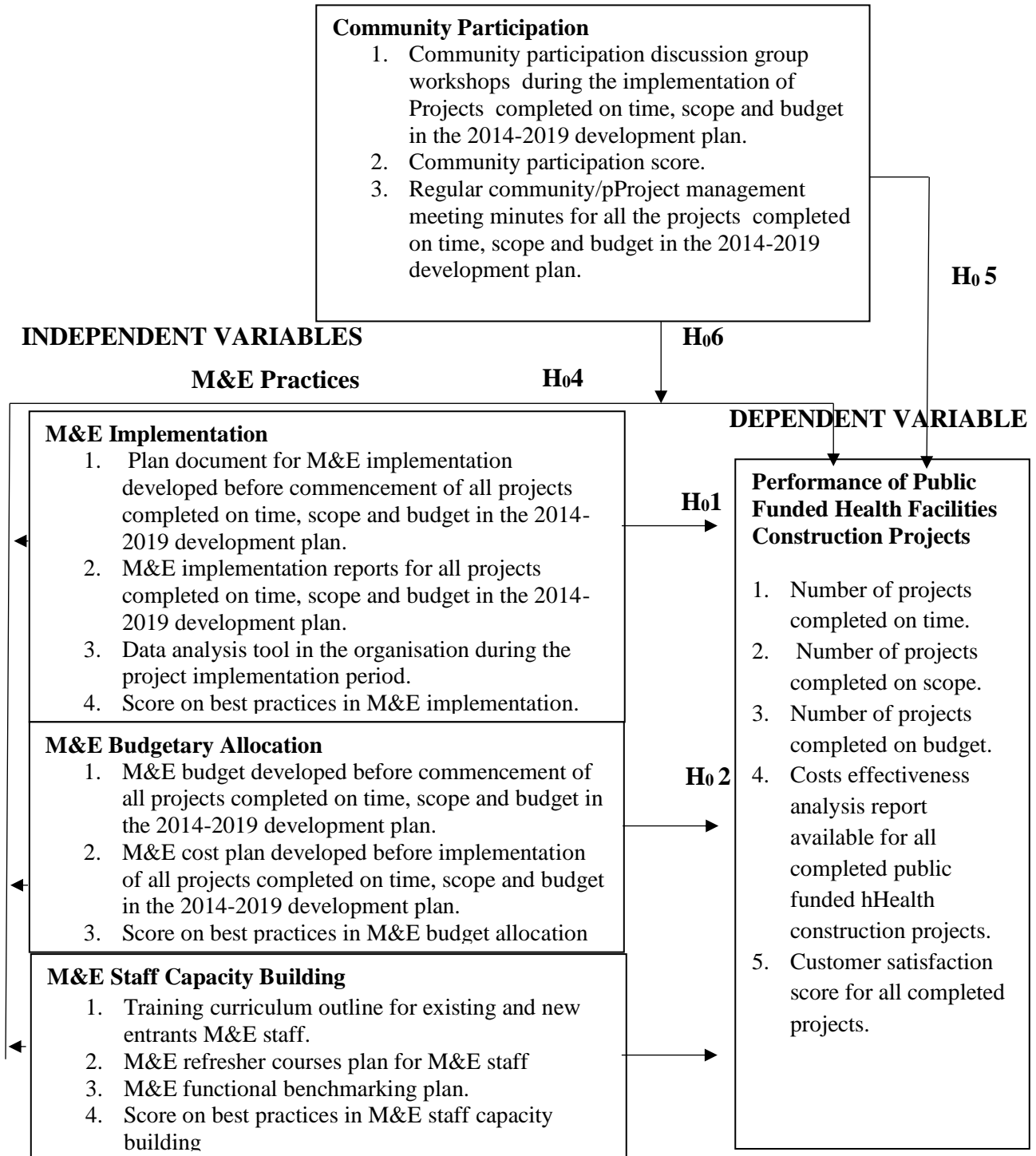


Figure 1: Conceptual Framework for Practices of M&E, Public Participation and Performance of Public Funded Health Facilities Construction Projects

2.6 Summary of Knowledge Gaps

2.6.1 Performance of Public Funded Health Facilities Construction Projects

Table 2.1 Summary of Research Gaps

Author and year	Focus of the Study	Methodology	Results	Gaps in Knowledge	Focus of Study to fill the gap
Das & Ngacho (2017)	Assessment of critical success factors (CSFs) influencing the performance of development projects based on their key performance indicators (KPIs)	Survey questionnaires on 175 respondents comprising of clients, consultants and contractors involved in the implementation of CDF projects on 30 success variables	Individual items constituting the six factors represent six CSFs namely: project related, client related, consultant related, contractor related, supply chain related and external environment related factors. Results show that quality, cost and time are key performance indicators in project management	<ol style="list-style-type: none"> 1. No indication on significance of monitoring and evaluation as among crucial factors affecting performance. 2. Not taking into consideration the activities involved in project management, focuses only on performance of contractors, environment and 	<ol style="list-style-type: none"> 1. Included the significance of M&E as among project crucial factors affecting performance. 2. Considered all activities involved in project management besides the contractual areas in project implementation 3. Balanced the performance

supply chain as indicators to avoid
key sources of bias in the indicators
poor performance
3. Shows biasness in
indicators of
performance

Ojha & Pandey (2017)	Examined the performance driven management of government projects in India.	Employed a cross-sectional approach in 300 construction firms in India, reaching a sample of 300 respondents.	Maximising project performance in public funded government projects requires a carefully crafted structuring strategy. It also requires innovative financing in facilitating flexible decision making, building core capabilities, managing and sharing project	1. Relied only on responses provided by the respondents to test the performance of ongoing projects at that point in time. 2. Study did not show indicators used to test the performance of government projects.	1. Relied on responses by the Project staff and available secondary data to test the performance of the completed projects over time. 2. Indicated the indicators used to measure the performance of
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			risks, providing funds needed for growth and innovation and customizing tailor-made project governance strategy.	3. Did not indicate the criteria used to select the projects for consideration.	public funded construction health projects. 3. Indicated the criteria used to select the projects for consideration
Mensah, Dansoh & Amoah (2011).	Determined the performance of projects funded and managed by public organisations in Ghana.	The study followed pair wise analysis to test for differences between the performances of projects using independent t-test in building projects of three funding organisations.	The time and quality performances of one organisation was better than the other two organisations. The organisation's practices of establishing a budget for particular project and making payments from that budget at defined stages could explain the differences in the performances.	1. The study used only two components in project performance testing hence the pair wise analysis was biased in its results. 2. Did not indicate the criteria used to select the projects for consideration.	1. More than two components were included in the measurement of the performance of projects. 2. Indicated the criteria used to select the projects for consideration.

2.6.2 Monitoring and Evaluation Practices

Table 2.2: Monitoring and Evaluation Practices

Author and Year	Focus of Study	Methodology	Results	Gaps in Knowledge	Focus of study
Tengan Callistus, Aigbavboa Clinton	Barriers faced by projects in the implementation of monitoring and evaluation in the Ghanaian construction industry.	A desk study where literature review was carried out to examine the obstacles facing the practices of projects monitoring and evaluation in the construction industry of Ghana.	<ol style="list-style-type: none"> 1. Weak institutional capacity. 2. Limited resources and budgetary allocations for monitoring & evaluation. 3. Weak linkage between planning, budgeting and monitoring & evaluation. 4. Weak demand for and utilisation of monitoring and evaluation results. 5. Poor data quality, data gaps and 	<ol style="list-style-type: none"> 1. Used a simple t-test to test the hypotheses and hence used a small sample. 2. Considered only the mean, standard deviation and standard error for the barrier factors. No attempt was made to consider level of significance or correlation of the variables. 	<ol style="list-style-type: none"> 1. Used a larger sample in this study. 2. Used responses from the community to gauge the performance of projects. 3. Combined independent variables to measure the performance of the projects.

Table 2.3 Practices of Budgetary Allocation on M&E

Author and year	Focus of the Study	Methodology	Results	Gaps in Knowledge	Focus of Current Study
1. Yakubu A and Ming S (2010)	To establish how financial availability controls the implementation and evaluation of projects at KAVI.	Desk study methodology was used. This research adopted a combination of quantitative and qualitative methods.	Inaccurate evaluation of projects time/duration was ranked 3 rd after design changes and Risk and uncertainty associated with projects in that order.	Inadequate evaluation of projects cost control should have been ranked first. The reason being that design changes and uncertainties are only implemented if approved (not to be regarded as a scope creep) and the extra cost to implement the changes added to the final cost of the projects.	Considered cost control and monitoring by use of implementing effective M&E cost planning activities and establish by use of data analysis the effect of inadequate M&E budget on performance of health facilities construction projects
2. Magondu, A. (2013).	To establish how financial availability	Survey was used as the research	60% of the recipients	1. The target	1. The project responses were delimited to M&E

Table 2.4 Practices of M&E Staff Capacity Building

Author and year	Focus of the Study	Methodology	Results	Gaps in Knowledge	Focus of Current Study
Magondu, A. (2013).	To evaluate how relevant skills, influence the implementation of monitoring and evaluation at KAVI.	Survey was used as the research methodology.	97% strongly agreed that relevant skills are needed for effective implementation of M&E activities.	The research did not statistically attempt to establish any relationship between the necessity of required M&E skills and the successful implementation of the M&E activities.	How M&E staff capacity building influences performance of public funded health facilities construction projects in Kirinyaga County, Kenya was established statistically.

Table 2.5 Community Participation

Author and year	Focus of the Study	Methodology	Results	Gaps in Knowledge	Focus of Current Study
Ochieng M. F. & Tubey, D. (2013)	Effectiveness of monitoring and evaluation of CDF projects in Kenya.	A case study design methodology was used.	<ol style="list-style-type: none"> 1. Community play a key role in any project located within its Surrounding. 2. CDF projects are monitored by external teams and very rarely by the internal members. 3. There lacks a simple monitoring and evaluation framework that include a component of citizen participation. 4. The report generated by M&E team is 	<ol style="list-style-type: none"> 1. The study did not have a conceptual framework to guide the study hence the areas of measurements were not apparent. 2. The target population was not suitably displayed. 3. Method of sampling not mentioned. 4. Though the results were mostly on community participation, the community targeted was mostly derived 	To determine how community participation influences performance of public funded health facilities construction projects in Kirinyaga County, Kenya by use of: <ol style="list-style-type: none"> 1. A clear conceptual framework. 2. Clearly defined target population. 3. Responses from M&E staff secretariat (field and office based)

2.7 Summary of Literature Reviewed

There is a growing concern regarding the organisational and management structure of public funded health facilities construction projects in the 47 counties in Kenya. This is because the projects are put under the control of the County governments led by Governors, who are charged with the responsibility of controlling project formulation and disbursement of the finances. Other public funded projects are controlled by the members of parliament who are responsible for reporting areas of inadequacy and then allocate finances to disburse to the projects and also control the implementation practice. This essentially means they are likely to influence the project management course and particularly the practices of monitoring and evaluation functions in the County-based projects (Ongoya and Lumallas, 2008). They can greatly influence what aspects of a project to monitor and what information to be shared with other stakeholders. This aspect has to a large extent led to biases in projects ultimately resulting in poor performance of most public funded healthcare facilities construction projects in the counties hence the growing concerns on M&E systems being applied in counties.

In Kenya, minimal research has been carried out to establish the practices of the monitoring and evaluation systems that are already in place. Previous studies have been carried out to look at M&E practices in the counties focusing mainly on the management of Constituency Development Funds in constituencies and to find out if monitoring and evaluation has been emphasized on as an important component that drives project performance. For example, Gwadoya, Robinson (2012) did a study on factors influencing effective implementation of monitoring and evaluation practices in donor funded projects in Kenya and found that staff competency, resource adequacy, technology adoption and donor policies play a pivotal role in determining the performance and success of donor funded projects. Owuor & Rath (2013) studied how monitoring and evaluation affects success of projects in public sector in Ainamoi Constituency and found that M & E has a great impact on the success of public funded projects.

In summary, most of the studies done have shown that majority of the public funded projects have recorded unsatisfactory performance due to either the existence of poor monitoring and evaluation frameworks or total lack of such frameworks within government agencies (Abd EI-Razek, Bassion & Mobarak (2008). Some studies have shown that in places where monitoring and evaluation has

been carried out, most projects have failed due to low budgetary allocation, lack of stakeholder involvement, poor timing of projects and evaluation practices, low competence of M&E staff and use of poor M&E approaches. Omanga (2010) study focused on factors affecting the implementation of CDF funded projects in Lari Constituency and found out that the constituents believed that CDF projects fail because monitoring and evaluation was poorly done. He found out from the research that 70 % of the respondents strongly believe that the monitoring practice is highly influenced by politicians and thus negatively impact on performance of CDF projects. The study also reported that only 12 % of the proposed projects were complete, 67 % of the projects were ongoing, 15 % had stalled and 6 % had been abandoned altogether. This implies that there was failed monitoring and evaluation and these results could be generalised to all other parts of the country as most studies have recorded almost similar results.

Additionally, from the literature reviewed in this study, there was a lot of information relating to factors influencing the performance of monitoring and evaluation of government projects in Kenya in the context of emerging economy. However, extant review of the literature suggests that there is lack of rigorous theoretical examination to establish the underlying characteristics of the numerous factors identified in the literature depicting a literature gap. Furthermore, studies have been done on the effect of monitoring and evaluation in project sustainability and performance of constituency development funds in Kenya. However, no study had focused on practices of the monitoring and evaluation functions and the influence of their practices on project performance and this widened the literature gap. In order to add to the existing literature and close the gap, this study could be regarded as a step in the right direction since it has tried to give an insight of how practices of monitoring and evaluation functions influence performance of public funded health facilities construction projects in Kenya specifically focusing on Kirinyaga County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covered the methodology and procedures that were followed when carrying out the study. The sections presented included the research design, study population, sample and sampling procedure, data collection procedures, validity and reliability of research instruments and data analysis techniques. The sections were clearly structured to provide room for the researcher to carry out a comprehensive survey on practices of monitoring and evaluation functions, community participation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

3.2 Research Paradigm

This study adopted the pragmatism paradigm. This paradigm was selected as it allows both qualitative and quantitative approaches to be used and combined in the research design. A combination of qualitative and quantitative methods was used in the data collection. The researchers used the survey method for data collection since it was more appropriate for the study. The researcher used both positivism and constructivism way of thinking. Using this mixed method approach it was possible to collect both quantitative and qualitative data necessary to establish the effect of monitoring and evaluation practices, community participation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

Positivism paradigm adheres to the view that factual know how attained through personal examination and evaluation is more authoritative (Hudson and Ozanne, 1988). In positivism research, the position of the researcher is limited to data collection and interpretation in an unbiased manner. In this category of research, the results are noticeable and measurable. This leads to empirical determinants that give rise to detailed evaluation. As a philosophy, positivism is in line with the evidence view that wisdom arises from individual expertise, (Churchill, 1996).

Constructivism paradigm, also known as interpretivist paradigm, requires the researchers to interpret or breakdown the elements or components of the study, thus incorporating the researcher's interest and views in the study. Therefore, interpretivists believe that breakthrough to

reality is only through human interaction by shared meanings by way of language and conscience. The researcher entered the field of study with some preconceived ideas of the research content that these ideas were not sufficient due to the unpredictable view of reality (Hudson and Ozanne, 1988). Lincoln and Guba (1985) were of the opinion that interpretivism philosophy emphasised on qualitative rather than quantitative methodology approach. This study adopted both paradigms and produced more accurate data for analysis.

3.3 Research Design

This study used correlational research methodology. This methodology was useful to the researcher so as to collect large data from the target population; and after analysis be able to establish the status of public funded health facilities construction projects in Kirinyaga County, Kenya. The use of monitoring and evaluation practices and their influence on the performance of the public health facilities construction projects were considered and examined in earnest using the data collected. Mugenda (2008) noted that a correlational survey research collects data from members of a population (or a sample thereof), describes the existing phenomena by asking individuals about their perception, attitudes, behavior or values of the phenomenon (qualitative); and analyses the empirical data and establishes if a correlation exists between them.

By use of questionnaires, the researcher solicited for responses from a group of individuals in person. That way, it was possible to collect a lot of data (both qualitative and quantitative) from the target population.

3.4 Target Population

The population targeted in this study was grouped in five categories. The first population category was the number of projects planned for 2014-2019 development period. The second population category was the number of monitoring and evaluation staff in the Department of Health and Ministry of Works in the county. The third population category was the community in the county. The fourth population category was the Members of the County Assembly as the community representatives at the county ward level. The fifth population category were the officials of the county government as these are the policy makers for the projects administration and implementation. The second and fifth categories formed the implementers of M&E practices. The

third and fourth category formed the representatives of the community participants in the M&E activities

3.4.1 Sample Size

The number of the projects planned for the year 2014 - 2019 was 45. The projects were distributed as shown in Table: 3.1. This formed the unit of analysis in this area. The unit of analysis for the M&E implementers was the total number of M&E staff distributed as shown on Table 3.2. The unit of analysis considered for the community was 148 distributed as shown on Table 3.3 and 3.4. The number of top officials of the county government considered was 6 as distributed as shown on Table 3.5.

3.4.2 Sampling Procedure

The number of public funded health facilities construction projects in the county was as per the existing Register of Planned Projects in 2014 – 2019 development period. Selection in the second population was by use of the official list in the department. Responses were sought from all the M&E staff in the department. The selection in the third population was by purposive sampling technique. This is a non-probability sampling method found to be very effective when a researcher needs to study a specific population with unique characteristics where knowledge and expertise is required (Ma. Dolores c. Tong Co), (2007). According to Kelly (2010), purposive sampling is used to select respondents that are most likely to yield appropriate and useful information and is a way of identifying and selecting cases that will use limited research resources effectively (Palinkas et al., 2015). It was the researcher's opinion that chiefs, subchiefs and members of county assemblies (MCA) in the sub-county would form a typical representative of the community at the lowest level. Respondents in the fourth population were selected by use of members of county assembly register in the county Speaker's office. The respondent's selection in the fifth population group was by following the county organisation structure found in the County Executive Secretary's Office.

Table 3.1: Projects Planned during the Period

COUNTY/YEAR	K/Cen.	K/East	K/West	M/East	M/West	TOTAL
2013/2014	0	7	5	3	6	21
2014/2015	3	1	0	1	2	7
2015/2016	3	0	0	1	2	6
2016/2017	0	1	2	1	0	4
2017/2018	0	0	0	0	0	0
2018/2019	4	1	0	1	1	7
TOTAL	10	10	7	7	11	45

Data Source: Ministry of Health, Kirinyaga County

Table 3.2: M&E Staff Distribution in Ministry of Health

Kirinyaga West	Kirinyaga Central	Kirinyaga East	Mwea East	Mwea West	Office Based	Total
1	1	1	1	1	4	9

Data Source: Ministry of Health, Kirinyaga County

Table 3.3: Local National Government Structure

Sub-County	Chiefs	Sub-Chiefs	Total
Kirinyaga West	3	16	19
Kirinyaga Central	5	18	23
Kirinyaga East	10	27	37
Mwea East	5	16	21
Mwea West	9	19	28
TOTAL	32	96	128

Data Source: County Commissioner, Kirinyaga County, Kenya

Table 3.4: Ward County Government Structure

Constituency Name	County Assembly Wards	Members of County Assembly
Mwea	8	8
Gichugu	5	5
Ndia	3	3
Kirinyaga Central	4	4
TOTAL	20	20

Data Source: Speaker of County Assembly, Kirinyaga County, Kenya

Table 3.5: Top officials of County Government

Office	Respondents
Her Excellency the Governor	1
Deputy Governor	1
County Minister for Finance	1
The County Executive Secretary	1
County Minister of Health	1
County Minister of Education	1
TOTAL	6

3.5 Research Instruments

The research instruments used to collect data were structured questionnaires and interview guide for face to face interviews.

3.5.1 Questionnaire

The questionnaire consisted of items measured by the likert scale with the responses being ranged for instance from 5-1, strongly agree, agree, not sure or neutral, disagree and strongly disagree respectively. The questionnaire also collected quantitative data for planned and completed projects during the period under study. The questionnaire was divided into six sections: Part A which sought to establish personal details of the respondent, Part B sought to establish the performance of public funded health facilities construction projects, Part C sought to assess how the M&E practice is performed and its influence on performance of public funded health facilities construction projects, Part D sought to establish the practices of budgetary allocation on performance and Part E on the practices of staff capacity on performance. Additionally, Part F looked at how community participation affected the relationship between practices of monitoring and evaluation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

The questionnaires were distributed as shown inTable 3.6

Table 3.6: Distribution of Questionnaires

Respondents	
Chiefs and Sub-Chiefs in all the Sub-Counties	128
M&E Staff in County Ministry of Health Department	9
Members of County Government Assembly (MCAs)	20
TOTAL	157

3.5.2 Interview Guide

Top officials of Kirinyaga County government are the policy makers for M&E practices. Decision on which of the public funded health facilities construction projects in the county are to be carried out in a given period and planning of the projects funds to be used in the projects is the prerogative of these top officials guided by public participation. The researcher used epistemological approach to collect views on M&E practices from the officials in a face-to face meeting. An interview guide was developed and used in gathering this data. The interview guide was structured in a manner which would capture all the variables in the study. The top officials contacted were Her Excellency the Governor, Deputy Governor, County Minister for Finance, County Minister for Health, County Executive Secretary and County Minister for Education.

3.6 Validity and Reliability of the Instruments

Validity and reliability of the instrument used in this study was established before use. The validity and reliability of the instruments in a research are important if the data collected is to be relied upon in the formation of conclusions.

3.7 Pilot Study

To address the appropriateness, meaningfulness and to improve the internal validity of the questionnaire before use in the main study, a pilot study was carried out in Juja Sub-County, Nairobi County. The data collected from this site was to be used primarily for testing the reliability and validity of the instruments. It was not used in the main study and hence selected a site outside the main study area. Using the same participants as well as the same questionnaire for the main study would have introduced frivolousness. Also, the subcounty was selected due to its proximity. This minimised the time required for data collection and cost.

According to Connelly (2008), a pilot study sample size should be 10% of the intended projected study sample size. The sample size of the study was 157 people; 16 respondents were therefore required for the pilot study. The data collected was analysed for correlation within the items. Cronbach's alpha test was used to measure the internal consistency of the measuring instruments and to establish if certain items within a scale measure the same construct. Also to verify whether the data gathered on each variable had significance on the dependent variable.

3.7.1 Validity of the Instruments

Commonly, three basic kinds of validity are considered: face validity, content validity and criterion validity. Face validity refers to the degree with which a measurement appears on the surface to depict the construct it is intended. Content validity refers to the degree with which the measurements cover throughout the data the construct under the study. Criterion validity refers to the degree with which the measurements are correlated with other variables that one would expect them to be correlated with.

This study considered content validity as a measure of accurateness and meaningfulness of the data. To ensure content validity, the instruments were reviewed by the supervisors and hence the content addressed the purpose without ambiguity. This ensured that all respondents understood the content of the structured questionnaire. Response options were provided for some of the questions to ensure that the answers given were in line with the research questions that they were meant to measure.

Internal consistence reliability was adopted in this study. Drost, E A, (2011) in her paper, *Validity and Reliability in Social Science Research*, suggests that internal consistency measures consistency within the instrument and questions. To ensure internal consistence of the instruments, a pilot study was carried out in the County of Nairobi. The data collected from this pilot study was analysed for consistency within the items.

3.7.2 Reliability Analysis

The data collected from the pilot study was analysed for correlation within the items. Cronbach's alpha test was used to measure the internal consistency of the measuring instrument in order to establish if certain items within a scale measure the same construct, and whether the data gathered

on each variable had significance on the dependent variable. Gliem and Gliem (2003) indicated a value of 0.7 and above to be an acceptable level of reliability.

Cronbach's Alpha coefficients were established for the 4 independent variables scales and the dependent variable scale.

The results are as shown on Table 3.7

Table 3.7: Questionnaire Reliability in the Analysis Results

Scale	Cronbach Alpha	Number of Items
1. Performance of Public Funded Health Facilities Construction Projects	0.976	9
2. M&E Implementation	0.926	11
3. M&E Budgetary Allocation	0.850	8
4. Staff Capacity Building	0.828	9
5. Community Participation	0.873	19
Average	0.891	56

The results indicated that the research instrument were reliable since all the measured variables indicated reliability values above 0.8. Gliem and Gliem (2003) stated in their study that instruments showing a reliability of 0.7 (or higher) are acceptable for research data collection. Consequently, the instrument was used to collect data in the main study.

3.8 Data Collection Procedure

Data collection was carried out after the approval of the research proposal by the University of Nairobi. The researcher proceeded to seek a license from the National Commission for Science and Innovation (NACOSTI). Application for consent from Kirinyaga County Government to carry out this research in that county was done. The authorisation letter from the University and the license from NACOSTI supported the application and once consent was granted, the researcher began the activity of data collection. The researcher engaged five research assistants to help in the data collection. This made it easy for the researcher to collect data quickly and efficiently throughout the County. The research assistants were first taken through training to clearly

understand the research instruments, purpose of the study and ethics of research. The researcher and research assistants then engaged in face to face questionnaire administration to the respondents. The research assistants were expected to take some time to explain to what was required of them and the relevance of the information needed. The respondents were given three weeks to fill in the questionnaires. That was considered to be ample time to read, understand and provide the required information at their own comfort. Thereafter, the completed questionnaires were collected in readiness for data analysis.

3.9 Data Analysis Techniques

Once completed and collected, the questionnaires were received and reviewed for completeness and consistency. The study was expected to generate both qualitative and quantitative data. Quantitative data was from close ended questions and likert scale. It was coded and entered into Statistical Packages for Social Scientists (SPSS) Version 25.0 and analysed. This was done by tallying up the responses, computing the percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions. This technique gave simple summaries about the sample data and presented quantitative descriptions in a manageable form (Novikov & Novikov, 2013). Additionally, qualitative data collected from the likert scale questions was analysed on the basis of the content matter of the responses. Responses with common themes or patterns were grouped together into coherent categories.

After quantitative data was analyzed it was presented in tables and explanations were given in prose form. The researcher used multiple regression analysis to establish the strength of the relationship of the combined variables of the study. The hypothesis with linear relationship was analysed using correlation analysis.

Pearson product moment coefficient was used for continuous variables. Spearman's correlation coefficient ρ , (rho) was used to test the strength of the relationship between the ordinal variables. Relationships with values of $r/\rho = 0.7$ and above were considered to be very strong and those with the value of between 0.5 and 0.69 were regarded as strong and those between 0.3 and 0.49 as reasonably strong. Those relationships with a value of r/ρ below 0.29 were considered weak or an indication that there was no relationship.

The continuous variables were represented and expressed as follows.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon; \text{ where;}$$

Y = Performance of public funded healthcare facilities construction projects

X₁ = M&E implementation

X₂ = M&E budgetary allocation

X₃ = M&E staff capacity building

X₄ = Combined independent variables = $X_1 + X_2 + X_3$

X₅ = Community participation

X₆ = Product of combined independent variables and community participation = $X_4 X_5$ = Moderator

β_0 = Constant in the model (Co-efficient or Intercept)

β_1, \dots, β_6 = Regression coefficient (Slope or Beta coefficient) and

ε = Error term in the equation

3.10 Research Hypotheses

The observed data was analysed after being tested in line with the objectives of the study.

A significance level of 0.05 was chosen for this study.

The summary of tests was as outlined in Table 3.8

Table 3.8: Summary of Statistical Tests of Hypotheses

Objective	Hypothesis	Statistical Analysis	Model	Level of rejection/ acceptance
(i) To determine the influence of M&E Implementation on performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	H₀₁: There is no significant relationship between M&E implementation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	Simple regression	Linear $Y = \beta_0 + \beta_1 X_1 + \epsilon$	Reject H ₀ if P value ≤ 0.05 Fail to Reject H ₀ if P > 0.05 Strength of relationship for r values will be $-1 \leq r \leq +1$
(ii) To determine the extent to which M&E budgetary allocation practice influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	H₀₂: There is no significant relationship between M&E budgetary allocation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	Simple regression	Linear $Y = \beta_0 + \beta_2 X_2 + \epsilon$	
(iii) To determine the influence of M&E staff building capacity influence performance of public funded health facilities construction	H₀₃: There is no significant relationship between M&E capacity building and performance of public funded health facilities construction projects in	Simple regression	Linear $Y = \beta_0 + \beta_3 X_3 + \epsilon$	

<p>projects in Kirinyaga County, Kenya,</p>	<p>Kirinyaga County, Kenya.</p>			
<p>(iv) To determine the combined influence of M&E Practices on performance of public funded health facilities construction projects in Kirinyaga County, Kenya.</p>	<p>H₀₄: There is no significant relationship between combined M&E implementation, M&E budgetary allocation, staff capacity building and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.</p>	<p>Multiple Regression</p>	$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$	<p>Reject Ho if P value ≤ 0.05 Fail to Reject Ho if P > 0.05 Strength of relationship for r values will be $-1 \leq r \leq +1$</p>
<p>(v) To determine the influence of community participation on performance of public funded health facilities construction projects in Kirinyaga County, Kenya.</p>	<p>H₀₅: There is no significant relationship between community participation and the performance of public funded health facilities construction projects in Kirinyaga County, Kenya.</p>	<p>Simple regression</p>	<p>Linear</p> $Y = \beta_0 + \beta_5 X_5 + \epsilon$	

(vi) To establish the moderating effect of community participation on the relationship between monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

H₀₆: The Community participation in Monitoring and Evaluation does not significantly moderate the relationship between monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County, Kenya

Multiple regression

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon$$

3.11 Ethical Considerations

The study regarded the respondents as anonymous and thus did not refer to them by name, ethnic or cultural background. This ensured cooperation from the respondents during the study and protection of the information given in confidence. It was made clear to the respondents that participation in the research was voluntary and they reserved the right to continue or withdraw from the research at any time. It was made clear that if, in the opinion of the respondent, divulging certain information about the county was not acceptable to the county government, the respondent had the right to withhold such information. The respondents were also made aware of the positive and negative aspects or the consequences of their participation in the study.

The concept of beneficence was observed while seeking the verbal consent of the respondents. ' Explanation was made to them on the need for the research in the selected field.

The researcher did not use irrelevant, imaginary or fictitious data in the analysis.

Consequently, there were no instances of changing results, omitting some data or results and distorting the same so that the research would seem to be well presented. (Mugenda, 2003; Kour, 2014).

The researcher was cautious not to reveal any results of the study, especially if the information focused on the policies of the organisation and could divulge sensitive matters of the people or organization that may have negatively affected the good working relations with the Kirinyaga County Government. The researcher familiarised himself with The University of Nairobi Ethical Code of Conduct of Research before commencement of the study.

3.12 Operational definition of Variables

This practice defined the concepts used in the study and how they were to be observed and measured. The definition was clear and unique to this specific study. The practice of manipulating the variables and how they were measured constituted the operational definition of the variables.

The variables in the study were as defined under definitions of significant terms used in the Study, M & E Practice, M&E budgetary allocation and M&E staffs' professional capacity as independent variables and performance of public funded health facilities construction projects as the dependent variable with community participation as the moderating variable. Operationalisation of variables was in line with the study's objectives. This was very crucial as the researcher was able to measure, analyse and summarize the proposed hypotheses of the study objectives. The indicators adopted for measurement in the study were also indicated. All these aspects are captured in Table 3.9.

Table 3.9: Operationalized Variables Summary

Main Objective	Variables	Indicators	Measurement	Measuring level	Research Approach	Type of Statistical Analysis	Tool of Analysis
To establish how M&E Practice influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	Performance of public funded health facilities construction projects in Kirinyaga county in Kenya.	1. Customer satisfaction	A mean score was to be obtained by calculating the average of the total sum of the responses over the five scales in Column 3 measuring this variable.	Scale	Quantitative	Parametric	Likert Scale
		2. Percentage of Projects completed on time, scope and budget in the 2014-2019	Responses from Both Open-ended and Closed-ended questions will be used to	Scale	Quantitative	Parametric	Ratio

Main Objective	Variables	Indicators	Measurement	Measuring level	Research Approach	Type of Statistical Analysis	Tool of Analysis
To establish how M&E Practice influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	Performance of public funded health facilities construction projects in Kirinyaga county in Kenya	3. Costs Effectiveness Analysis Report for all Public Funded Health Construction Projects scheduled for 2014-2019 development plan at project commencement	development plan. obtain the quantifiable data. Average score for each Respondent in the questionnaire.	scale	Quantitative	Parametric	Likert Scale

Objective (i)	Variable	Indicators	Measurements	Measuring Scales	Research Approach	Type of statistical Analysis	Tool of Analysis
To establish how M&E implementation on influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	M&E Implementation	1. M&E plan developed before commencement of all projects completed on time, scope and budget in the 2014-2019 development plan 2. M&E Implementation reports for all projects completed on time, scope and budget in the 2014-2019 development plan Data analysis tool in the organisation during the project.	Responses from Both open-ended and closed-ended questions will be used to obtain the required data.	Ratio and Ordinal	Quantitative and qualitative	Non-Parametric	Ratio

Objective (ii)	Variable	Indicators	Measurements	Measuring Scales	Research Approach	Type of statistical Analysis	Tool of Anal
To determine the extent to which M&E budgetary allocation practice influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	M&E Budgetary Allocation	1. M&E budget, developed before commencement of all completed projects 2. M&E cost plan developed before implementation of all completed projects. 3. M&E and project budgets integration	Responses from Both open-ended and closed-ended questions will be used to obtain the required data.	Ratio and Ordinal	quantitative and qualitative	Non-Parametric	Ratio

plan
developed
before
implementati
on of all
projects.

Objectives (iii) (Cont.)	Variable	Indicators	Measurements	Measuring Scales	Research Approach	Type of statistical Analysis	Tool of Analysis
To determine how M&E staff capacity building influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	M&E Staff Capacity Building	1. Training curriculum outline for existing and new entrants M&E staff 2. M&E refresher courses plan for M&E Staff. 3. M&E Benchmarking Plan 4. M&E Staff motivation factors	Responses from both open-ended and closed-ended questions will be used to obtain the required data.	Ratio and Ordinal	Quantitative and qualitative	Non-Parametric	Ratio

Objectives (iv)	Variable	Indicators	Measurements	Measuring Scales	Research Approach	Type of statistical Analysis	Tool of Analysis
To determine the combined influence of M&E Practices on performance of public funded health facilities construction projects in Kirinyaga County, Kenya.	Variables (i), (ii), (iii) above combined	Indicators as in (i), (ii), and (iii) above	Responses from both open-ended and closed-ended questions will be used to obtain the required data.	Ratio	Quantitative	Non-Parametric	Ratio

Objectives (v)	Variable	Indicators	Measurements	Measuring Scales	Research Approach	Type of statistical Analysis	Tool of Analysis
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<p>To determine the extent to which community participation in M&E activities influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya</p>	<p>Community Participation</p>	<p>1. Community participation discussion group workshops during the implementation projects completed. 2. Written criteria for community representatives for all projects decision making groups in the county. 3. Regular community/ project management meeting minutes for all</p>	<p>Responses from both open-ended and closed-ended questions will be used to obtain the required data.</p>	<p>Ordinal</p>	<p>Qualitative</p>	<p>Non-Parametric</p>	<p>Likert Scale</p>
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the Projects
completed on
time, scope and
budget in the
2014-2019
development
plan.

Objectives (vi)	Variable	Indicators	Measurements	Measuring Scales	Research Approach	Type of statistical Analysis	Tool of Analysis
To establish the moderating effect of community participation on the relationship between monitoring and evaluation practices and performance of public funded	Community Participation	As in (v) above	Responses from both open-ended and closed-ended questions will be used to obtain the required data.	Ordinal	Quantitative	Moderation Analysis	Likert Scale

health
facilities
construction
projects in
Kirinyaga
County,
Kenya.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

The purpose of this study was to investigate monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County in Kenya with the moderating effect of community participation. This chapter covers data analysis, presentation, interpretation and discussion of the research results in line with the objectives of the study. Also included is a discussion on the results in relation to the research questions and the literature based on the study objectives.

Before the data was analysed, data cleaning was carried out where incorrectly entered or missing values were detected, removed or replaced (statistically) from the data sets. The data analysed was presented in Tables for clarity during the interpretation.

4.2 Response Rate

This study targeted 163 Respondents. The actual number of respondents who participated in the research by filling and returning the questionnaires comprised of community representatives, monitoring and evaluation staff, and the top officials of the county. The results are presented in Table 4.1

Table 4.1: Response Rate of Respondents

Respondents	Responded	Frequency	
		Not responded	% responded
Community	103	45	70
M&E Staff	9	0	100
County Gov. Staff	6	0	100
TOTAL	118	45	72.4

As per the results in Table 4.1, 118 out of 163 respondents responded and returned filled in questionnaires, amounting to 72.4%.

Mugenda and Mugenda, (1999) in their study stipulated that a response rate of 50% is adequate for analysis and reporting, a rate of 60% is satisfactory, whereas 70% and above is good and suitable for analysis. 100% return and response rate is excellent. The rate for all the Respondents was found to be good and satisfactory for analysis.

4.3 Social-demographic Information

This section focussed on the social demographic information of the respondents. The results obtained in this section established the required information to describe the social factors of the respondents. The information required included gender, age distribution, academic qualification and years of service of the respondents in the SubCounty represented. The results of gender respondents were as shown in Table 4.2

Table 4.2: Gender of Respondents

Respondent	Frequency			Percentage	
	Gender		Total	Male	Female
	Male	Female			
Community	80	23	103	78%	22%
M&E Staff	7	2	9	78%	22%
County Gov. Officials	3	3	6	50%	50%
Total	90	28	118	76%	24%

The aim was to find out the gender composition of the respondents. Most, (76%), of the respondents were male. Gender parity ensured that public participation in all gender related projects was effective.

The age bracket of the respondents was as presented in Table 4.3

Table 4.3: Age Distribution of Respondents

Respondent	Frequency Age Range					Total
	Under 30 Yrs.	31 - 40 Yrs.	41 - 50 Yrs.	51 - 60 Yrs.	Over 60 Yrs.	
Community	5	29	39	28	2	103
M& E Staff	1	3	4	1	0	9
Total	6	32	43	29	2	112
Percentage (%)	5%	29%	38%	26%	2%	100%

From the results presented in Table 4.3, the age bracket of most of the respondents (67%) was 31 – 50 years old. Only 5% of the respondents were below 30 years old. 2 respondents, (2%), were over 60 years of age. The results alluded to the fact that the respondents were mature in age and hence reliable in their judgement.

Academic Qualification of the Respondents

The academic qualification distribution of the respondents was essential in establishing the ability of the community respondents to understand the English language, which was used in the questionnaire. It was also necessary to establish the highest level of education of the M&E staff. The results are captured in Table 4.4.

Table 4.4: Academic Qualification of the Respondents

Respondents	Frequency Academic Achievement					Total
	KCSE	Diploma	B-Degree	Masters	PhD	
Community	43	53	6	1	0	103
M&E Staff	1	7	1	0	0	9
Total	44	60	7	1	0	112
Percentage%	39%	54%	6%	1%	0%	100%

The results presented in Table 4.4 indicated that the majority, (54%), of the respondents attained a Diploma as the highest level of academic achievement. 39% of the respondents attained KCSE certification while 7, (6%) of the respondents had a Bachelor’s degree. Only 1, (1%) member of

the respondents had a Master’s degree. This implied that all of the respondents had a modest education and hence had the ability to understand the English language used in the questionnaire and could also appreciate project implementation in their area

Years of Service of the Respondents in the Region during the Study

The results sought to find out the length of service of the respondents in the region. For the community representative, the length of service indicated whether the respondents had enough time to interact with the larger community and hence qualify to represent the aspirations of the surrounding community. The length of service of the monitoring and evaluation staff indicated the experience and exposure of the personnel in the project location. The results were as presented in Table 4.5

Table 4.5: Respondent’s Length of Service in location

Respondent	Frequency					Total
	Year of Service					
	under 1 Yr.	1-5 Yrs.	6-10 Yrs.	11-15 Yrs.	over 15 Yrs.	
M&E Staff	0	7	2	0	0	9
Community	4	45	14	24	16	103
Total	4	52	16	24	16	112
Percentage %	3.6%	46.4%	14.3%	21.4%	14.3%	100.0%

From the results in Table 4.5, 45, (46.4%), representatives of the community who responded had worked in that position for up to about 5 years. 24, (21.4%), representatives had worked in the position under study between 11 and 15 years. Only about 4 (3.6%) representatives had worked in that location for a period of less than I year. From the results, therefore, the respondents had enough time to interact with the community and hence represented their aspirations on projects implementation adequately.

4.4 Tests for Statistical Assumptions and Analysis of Likert Type of Data Outliers Tests

All the variables were entered in SPSS and box plots generated so as to detect any outliers present in the data sets. The results detected no outliers in all the variables data sets. Hence the data was suitable for further analysis.

Linearity Tests

All the variables were entered in SPSS and a scatter plot matrix generated. A best fit line was drawn in each data set and a linearity (positive or negative) established for the data set distribution. The results detected positive linearity in all the variables data sets except the relationship between community participation and performance of public funded health facilities construction projects, which was a negative linearity. Hence, the data was suitable for further analysis.

Variables Data Normality Distribution Tests

Skewness and kurtosis were calculated for all the variables by entering the data into SPSS. The results were as shown on Table 4.6

Table 4.6: Skewness and Kurtosis Statistics for all Variables

VARIABLE	N	Skewness		Ratio	Kurtosis		Ratio
	Statistic	Statistic	Std. E	Skew/SE	Statistic	Std. E	Kurt/SE
Performance of Public Funded Health Facilities Construction Projects	112	.372	.228	1.63	-.289	.453	-0.64
M&E implementation	112	.576	.228	2.53	-.357	.453	-0.79
M&E budgetary allocation	112	.384	.228	1.69	-.746	.453	-1.65
M&E staff capacity building	112	.401	.228	1.76	-.691	.453	-1.53
Monitoring and evaluation ractices	112	.414	.228	1.82	-.679	.453	1.50
community participation	112	-.400	.228	-1.75	-.214	.453	-0.47
M&E IDVs and community part combined	112	.513	.228	2.25	-.184	.453	-0.41
Valid N (list wise)	112						

Peter César, 2010, in his book entitled “*Skewness and Kurtosis in Functions of Selection of Network Traffic Distribution*” Vol 7 No.2 stated on page 96 that the ratio of skewness to its standard error can be used as a test of normality. Normality can be rejected if the ratio is less than

-2 or greater than +2. He also stated that the ratio of kurtosis to its standard error can be used as a test of normality, that is, you can reject normality if the ratio is less than -2 or greater than +2.

The results in Table 4.6 indicated that the ratio of skewness to its standard error for performance of public funded health facilities construction projects, M&E budgetary allocation, M&E staff capacity building, monitoring and evaluation practices (combined independent variables) and community participation were 1.63, 1.69, 1.76, 1.82 and -1.75 respectively. The ratio of kurtosis to its standard error were -0.64, -1.65, -1.53, 1.50 and -0.47 respectively. These figures were indicative of normality of the data. The ratio of skewness to its standard error for M&E implementation data and combined independent variables were 2.53 and 2.25. Ratio of kurtosis to its standard error was -0.79 and -0.41, which was indicative of slight departure from normality. The variables data were therefore used for correlation analysis.

Multicollinearity Test

A bivariate correlation analysis was conducted to examine the relationship between performance of public funded health facilities construction projects, M&E implementation, M&E budgetary allocation, M&E staff capacity building, monitoring and evaluation practices (combined independent variables) and community participation. Also, the correlation matrix was examined to establish the variables interrelationships (multicollinearity). A complete list of the correlations was as presented in Table 4.7.

Table 4.7: Correlation Matrix

Variable		Y	X1	X2	X3	X4	X5
Performance of Public	Pearson Correlation	1	.665**	.792**	.777**	.749**	-.520**
Funded Health Facilities Construction Projects =Y	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	112	112	112	112	112	112
M&E Implementation =X1	Pearson Correlation	.665**	1	.968**	.976**	.988**	-.459**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	112	112	112	112	112	112
M&E Budgetary Allocation =X2	Pearson Correlation	.792**	.968**	1	.997**	.995**	-.521**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	112	112	112	112	112	112
M&E Staff Capacity Building =X3	Pearson Correlation	.777**	.976**	.997**	1	.997**	-.515**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	112	112	112	112	112	112
Monitoring and Evaluation IDVs Combined =X4	Pearson Correlation	.749**	.988**	.995**	.997**	1	-.501**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	112	112	112	112	112	112
Community Participation =X5	Pearson Correlation	-.520**	-.459**	-.521**	-.515**	-.501**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	112	112	112	112	112	112

The results in Table 4.7 indicated that there were strong relationships between M&E implementation, M&E budgetary allocation, M&E staff capacity building, monitoring and evaluation practices (combined independent variables), community participation and performance

of public funded health facilities construction projects. It was also noted that the independent variables were correlated within themselves, showing multicollinearity. According to Daoud, (2017), multicollinearity among predictor variables, can be reduced appreciably by centering the predictor variables. The method for centering adopted in the analysis of this study was by use of Z-values.

4.5 Performance of Public Funded Health Facilities Construction Projects

This section focussed on how the public funded health facilities construction projects performed in the county. To establish the performance, number of projects scheduled for implementation in 2014/2019 development period, number of projects completed during this period, cost effectiveness evaluation and the community satisfaction mean score were considered.

Planned and Completed Public Funded Health Facilities Construction Projects

The focus was to establish the percentage of the completed projects during the 2014-2019 development period during the time of study. The results were as shown in Table 4.8.

Table 4.8: Planned and completed projects in the county during 2014 – 2019 development period

Sub - County	Projects scheduled in 2014-2019	Completed projects on time, cost and budget in 2014-2019 period
	Mean	Mean
Kirinyaga West	7	0
Kirinyaga Central	10	2
Kirinyaga East	10	0
Mwea East	7	1
Mwea West	11	1
Total	45	4

The results in Table 4.8 indicated that a total of 45 development projects were scheduled during 2014 – 2019 development period. 7 (15.6%), were allocated to Kirinyaga West and none (0%) was completed during the 5-year development period. 10 (22.2%), were allocated to Kirinyaga Central and 2 ((20%), were completed in the Sub-County during the 5-year development period. 10 (22.2%), were allocated to Kirinyaga East and none (0%), completed during the 5-year

development period. 7 (15.6%), were allocated to Mwea East and 1 (14.3%), was completed during the 5-year development period. 11 (24.4%), were allocated to Mwea West and 1 (9.1%) was completed during the 5-year development period. During the 2014 - 2019 development period, out of 45 projects planned, only 4 (8.9%), projects were completed.

4.5.2 Cost Effectiveness Analysis for County Health Facilities Development Report

The researcher sought to establish whether cost effectiveness analysis was done before implementation of planned projects in Kirinyaga Sub- Counties. The results are shown in Table 4.9.

Table 4.9: Cost Effectiveness Analysis Carried out and Procedure Development Report

			Sub-County represented by M&E Staff					
			Kirinyag a West	Kirinyaga Central	Kirinyaga East	Mwea East	Mwea West	Office Based
Ex- ante evaluation cost effectiveness analysis carried out and report developed and issued	No	Count	1	1	1	1	1	4
	Yes	Count	0	0	0	0	0	0
Intermediary evaluation cost effectiveness analysis carried out and report developed and issued	No	Count	1	1	1	1	1	4
	Yes	Count	0	0	0	0	0	0
Post- evaluation cost effectiveness analysis carried out and report developed and issued	No	Count	1	1	1	1	1	4
	Yes	Count	0	0	0	0	0	0
Number of projects that ex- ante evaluation cost effectiveness analysis carried out and report developed and issued	Mean		0	0	0	0	0	0

The results in Table 4.9 indicated that there was no cost effectiveness analysis procedure carried out before implementation of completed projects in the 2014 – 2019 development period.

4.5.3 Customer Satisfaction Mean Score for all Completed Projects.

The results in this section were used to establish how satisfied the community was with the performance of the public funded health facilities construction projects in the County during 2014

– 2019 development period. The score was established by computing the mean of measurements on likert scale. The likert scale was coded as 5-very satisfied, 4-satisfied, 3-neutral, 2-dissatisfied and 1 as very dissatisfied. Before the computation, the internal reliability of the scale was established by use of Cronbach’s alpha coefficient. The results were as shown in Table 4.10 and Table 4.11

Table 4.10: Reliability Statistics for Customer Satisfaction Score Scale for all Completed Projects in the County

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
.976	.977	9

The scale for measuring the customer satisfaction score for all completed projects was subjected to a reliability test for all the items involved. The results, as shown on Table 4.10, yielded a Cronbach’s alpha of 0.976, which indicated that the scale was reliable and suitable for measuring the performance mean score.

Table 4.11: Customer Satisfaction Score for all Completed Projects in Kirinyaga County

	Mean Score	Std. Deviation
Level of satisfaction for project performance on date deliverables	2.56	1.014
Level of satisfaction for project performance on progress status reports deliverables	2.78	1.202
Level of satisfaction on problems address by project and resolution duration	2.56	1.014
Level of satisfaction on the project product or service	2.33	1.000
Level of satisfaction on the quality practice used during the project	2.33	.707
Level of satisfaction with the project management practice	2.33	1.000

Level of satisfaction on the information received	2.44	1.236
Your overall level of satisfaction with the project completion on time, scope and budget	2.22	1.202
Your satisfaction is on the level that you can recommend such completed projects to other sub-counties	2.44	1.014

The results in Table 4.11 showed that the mean score for all satisfaction measurement items were below the value of 3 when measured on the likert scale. This indicated that all the respondents were generally dissatisfied with the performance of projects completed in the county. Also, an average standard deviation of 1.05 indicates that the scores were clustered around the mean.

4.6 M&E Practices and Performance of Public Funded Health Facilities Construction Projects

This section focussed on establishing the influence of monitoring and evaluation practices on performance of public funded health facilities construction projects in Kirinyaga County when carried out. To establish this, procedures for M&E implementation, M&E budget allocation, staff capacity building and agreement mean score on M&E best practices were considered. The results were as shown in Tables 4.12, 4.13, 4.14, 4.15 and 4.16.

4.6.1 Plan Document for M&E Implementation developed and issued for all Projects completed on time, scope and budget

The researcher sought to establish whether an M&E plan was developed during the main planning and before commencement of all completed projects across the county. The results are as shown in Table 4.12

Table 4.12: M&E Plan developed for all Projects completed on time, scope and budget

		Number of M&E Implementation Plans developed and issued
		Mean
Sub-County	Kirinyaga West	0
represented by	Kirinyaga Central	0
Staff	Kirinyaga East	0
	Mwea East	0
	Mwea West	0

From the results in Table 4.12, no M&E implementation plans were developed before commencement of all the completed projects in the County before they were implemented.

4.6.2 Operational M&E Data Analysis Tool in the County Department

This focus in section is to find out if an operational M&E Data Analysis Tool exists in the County Department. The results were as shown in Table 4.13

Table 4.13: M&E Data Analysis Tool in the Organisation during the Project Implementation Period

		Count
Does an operational M&E Data analysis ool exist in your	No	9
Section	Yes	0

The results in Table 4.13 indicate that there was no Data Analysis Tool in the Department during the time of study.

4.6.3 Monitoring and Evaluation Implementation Agreement Mean Scores for Best Practices and Performance of Public Funded Health Facilities Construction Projects in Kirinyaga County

In this section, the researcher sto establish monitoring and evaluation implementation agreement mean score for best practices influence on performance of public funded health facilities construction projects in Kirinyaga County. The scores were measured on likert cale, 5-strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree. To establish the level of agreement using the mean scores, the 5 scales were collapsed into three scales, 1-Disagree, 2-No opinion and 3-Agree. To ensure internal consistency of the measurement items, Cronbach’s alpha test was conducted. The results were as shown in Table 4.14, Table 4.15 and Table 4.16

Table 4.14: Scale Reliability Statistics for Monitoring and Evaluation Implementation Agreement Mean Score for best Practices Influence on Performance of Public Funded Health Facilities Construction Projects in Kirinyaga County.

Cronbach's Alpha	N of Items
.878	13

According to results in Table 4.14, a Cronbach’s alpha coefficient of 0.878 was obtained. Gliem and Gliem (2003 stated in their study that instruments showing a reliability of 0.7, (or higher), are acceptable for research data collection. Consequently, the instrument was used to collect data for establishing monitoring and evaluation agreement mean score for best practices influence on performance of public funded health facilities construction projects in Kirinyaga County.

Table 4.15: Monitoring and Evaluation Agreement Mean Score for Best Practices

Scale Item	Mean	SD
M&E Plans should always be developed before commencement of all Projects completed	3.22	1.394

M&E Implementation Reports should always be developed for all Projects completed	3.33	1.500
Implementation Tools should be purchased and used in the Department for monitoring and evaluation purposes	2.22	1.093
Regular evaluation of effectiveness of models influences the performance of the projects	3.44	0.601
Sharing of Information characterize good planning and performance of M&E of projects	3.11	1.130
M&E best practices in implementation, budgetary allocation and staff capacity building influences the performance of the projects	4.44	0.882
Dissemination and use of M&E Plan between M&E officers and supervisors influences the performance of projects	4.33	1.000
Monitoring and Evaluation Plans are jointly prepared by office-based M&E officers and M&E field staff as best practice of M&E	3.33	1.500
There is proper keeping of Project Monitoring and Evaluation Records in the Department	3.56	1.509
Proper keeping of project monitoring and evaluation records influences the effectiveness of M&E practices	4.67	0.500
The type of M&E Data collected influences the overall performance of the Projects	3.44	1.424
Time duration, Cost performance and Scope performance, are the main Data collected for carrying out M&E	4.56	0.882
M&E Data Collection Tools when designed, reviewed and agreed by all stakeholders influence the performance of projects	4.56	0.882
Grand Mean	3.780	1.04

From the results in Table 4. 15 the mean score was 3.780 and a standard deviation of 1.04, indicating that respondents generally agreed that the best practices influence the performance of public funded health facilities construction projects in the County. The low standard deviation of the data emphasized this position.

Table 4.16: M&E Staff Agreement Level on Monitoring and Evaluation Practices influence on performance of public funded health facilities construction projects in the County

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	11.1	11.1	11.1
	No opinion	2	22.2	22.2	33.3
	Agree	6	66.7	66.7	100.0
	Total	9	100.0	100.0	

The results inTable 4.16 indicated that 6, (66.7%), of the monitoring and evaluation staff agree that best practices of monitoring and evaluation influences the performance of public funded health facilities construction projects in the County. 2 (22.2%), hold no opinion on influence of monitoring and evaluation best practices on performance of projects. 1,(11.1%), disagreed that best practices of monitoring and evaluation influence performance of public funded health facilities construction projects in the County.

4.7 M&E Budgetary Allocation and Performance of Public Funded Health Facilities Construction Projects

This section focussed on establishing the influence of budget allocation practices of monitoring and evaluation practices on the performance of public funded health facilities construction projects in Kirinyaga County. M&E cost plan development and agreement mean score on best practices in M&E budget allocation were considered.

4.7.1 M&E Cost Plan for all Projects completed on time, scope and budget in the 2014 2019 development period

The results in this section sought to establish whether an M&E cost plan for all completed projects before commencement was developed. The results are as presented in Table 4.17

Table 4.17: Was an M&E Cost Plan developed before implementation of all projects completed on time, scope and budget in the 2014-2019 development period?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	9	100	100	100
	Yes	0	0	0	100.0
	Total	9	100	100	

The results in Table 4.17 indicate that there was no M&E cost plan developed for any completed projects in the county during the time of study

4.7.2 Agreement Mean Score on Best Practices in M&E Budget Allocation

This section sought to establish monitoring and evaluation budget allocation agreement mean scores for best practices influence on performance of public funded health facilities construction projects in Kirinyaga County. The scores were measured on likert scale, 5-strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree. To establish the level of agreement using the mean scores, the 5 scales were collapsed into three levels: 1-Disagree, 2-No opinion and 3-Agree. To ensure internal consistency of the measurement items, Cronbach’s alpha test was conducted. The results were as shown in Table 4.16, Table 4.17 and Table 4.18

Scale Reliability Statistics for M&E Budget Allocation Best Practices Items

To ensure internal consistency of the measurement items, Cronbach’s alpha test was conducted. The results were as shown in Table 4.18

Table 4.18 Reliability Statistics

Cronbach's Alpha	N of Items
.872	13

According to results in Table 4.18, a Cronbach’s alpha coefficient of 0.872 was obtained.

Gliem and Gliem (2003) state in their study that instruments showing a reliability of 0.7 (or higher) are acceptable for research data collection. Consequently, the instrument was used to collect data for establishing monitoring and evaluation budget agreement mean score for best practices influence on performance of public funded health facilities construction projects.

Table 4.19: Item Statistics for Agreement Mean Score of Best Practices for Monitoring and Evaluation Budget Allocation

	Mean	Std. Deviation
M&E Budget is always developed before commencement of any of the Projects	3.78	.441
M&E Staff always involved in M&E budget preparation	2.33	.500
M&E Cost Plan is always developed before implementation of all Projects	2.22	.441
M&E and Project Budgets Integration plan is always developed before implementation of any Projects	3.67	.500
Appropriation of money for planned M&E purposes influences the performance of public funded health facilities projects	3.89	.333
There is always timely remittance of M&E funds in all completed projects in the Sub-County	2.22	.441
Timely remittance of M&E funds significantly affects the performance of projects in the county.	3.89	.601
Amount allocated for the implementation of M&E affects the final performance of projects	4.22	.667

A clear Practice of budget allocation to the M&E activities significantly influence the performance of projects	3.78	.441
The practice of budget allocation for M&E activities is effective in the County	2.33	.500
M&E Budgetary Allocation is bureaucratic and this has a negative influence on performance of projects	4.00	.707
An effective M&E allocation practice forms the basis of planning and implementing the M&E activities accurately	4.00	.500
A clear and adequate M&E budget to M&E activities ensures satisfactory performance of projects	3.78	.441
A realistic estimation of cost for monitoring and evaluation is usually undertaken when planning for projects	3.78	.441
Involvement of M&E Staff in Budget preparation Influences M&E practices and project performance	4.33	.707
M&E budget plan is always available and accessible before start of M&E implementation	3.78	.441
Summary Statistics	3.50	0.51

Agreement mean score, and their standard deviations from the mean of each item were as indicated in Table 4.19. The summary statistics of the scale indicated that the grand mean of the scores is 3.50 with a standard deviation of 0.51. The mean score implied that the respondents tended to agree that budget best practices influence on performance of public funded health facilities construction projects. The low standard deviation of the scores indicated that the data was closely clustered around the mean and hence a more reliable and suitable representation of the population.

4.8 M&E Staff Capacity Building and Performance of Public Funded Health Facilities Construction Projects

This section focussed on establishing the influence of M&E staff capacity building in the performance of public funded health facilities construction projects in Kirinyaga County. To establish this, training curriculum outline, M&E refresher courses plan for M&E Staff, M&E functional bench marking plan, emphasis of staff capacity Building in the department and agreement mean Score on best practices for staff capacity Building procedures were considered.

4.8.1 Training curriculum outline for existing and new entrants M&E staff

The researcher sought to establish the existence of a training curriculum for both old and new M&E staff entrants. The results were as shown in Table 4.20

Table 4.20: Curriculum Outline for M&E Staff

		Count
Does your section have a Training curriculum outline for existing and new entrants M&E staff	No	9
	Yes	0

According to the results in Table 4.20, the County's Ministry of Health did not have a training curriculum outline for the M&E Staff. The implication was that M&E staff were not adequately trained to undertake M&E activities

4.8.2 M&E Refresher Courses Plan for M&E Staff

This section was concerned with establishing whether M&E refresher courses were regularly conducted in the department. The results were as shown in Table 4.21

Table 4.21: Refresher courses attended during 2014-2019 development period

	Mean	Count
Number of M&E refresher courses you have attended during Year 2014-2019 planning period	0	9

According to Table 4.21, all the 9 members of M&E staff in the Ministry of Health Kirinyaga County, reported that no refresher M&E courses plans were prepared to equip the M&E staff with the prerequisite modern knowledge of M&E practices.

4.8.3 M&E Functional Benchmarking Plan

In this section, the researcher sought to establish the existence of M&E functional benchmarking planned by Kirinyaga County. The results were as indicated in Table 4.22

Table 4.22: Number of M&E Functional Benchmarking Attended

	Mean	Count
Number of M&E functional benchmarking attended during Year 2014-2019 planning period	0	9

According to Table 4.22, all the 9 members of M&E staff in the Ministry of Health, Kirinyaga County, reported that no M&E functional benchmarking was attended so as to compare with similar activities in other counties.

4.8.4 Agreement Mean Score on Best Practices for Staff Capacity Building Procedures

This section sought to establish whether Monitoring and Evaluation Staff Capacity Building Procedures Agreement Mean Scores for best practices influence the performance of public funded health facilities construction projects in Kirinyaga County. The scores were measured on likert scale, 5-strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree. To ensure internal consistency of the measurement items, Cronbach’s alpha test was conducted. The results were as shown in Table 4.23 and Table 4.24

Scale Reliability Statistics for M&E Staff Capacity Building Best Practices Items

To ensure internal consistency of the measurement items, Cronbach’s alpha test was conducted on those items. The results were as shown in Table 4.23

Table 4.23: Agreement Mean Score on Best Practices for Staff Capacity Building Procedures Reliability Statistics

Cronbach's Alpha	N of Items
.795	8

According to results in Table 4.23, a Cronbach's alpha coefficient of 0.0.795 was obtained for all the eight scale items when included for the analysis.

Gliem and Gliem (2003) stated in their study that instruments showing a reliability of 0.7, (or higher), is acceptable for research data collection. Consequently, the instrument was used to collect data for establishing monitoring and evaluation capacity building agreement mean score for best practices influence on performance of public funded health facilities construction projects.

Agreement Mean Scores for Best Practices of M&E Staff Capacity Building.

The focus in this section was to establish the agreement mean score for the items measuring the best practices used for M&e staff capacity building procedures. The results of these mean scores are as shown in Table 4.24

Table 4.24: Item Statistics for Mean Scores

	Mean	Std. Deviation
Adequate training in M&E is required	3.78	.441
Benchmarking Sessions for M&E Practices	3.67	.500
Motivation of M&E Staff directly influences the effectiveness of M&E	3.78	.441
Refresher Courses in M&E practices are integral part of M&E Training Curriculum	3.67	.707
Highly skilled M&E Staff contribute to quality of M&E performance	3.78	.441
Adequate remuneration of M&E staff affects recruitment of qualified staff	3.78	.441
Training curriculum outline includes a designed structure for new M&E staff entrants.	3.11	.782
The Department has developed an M&E Staff Appraisal	2.00	.000
TOTAL	3.45	0.54

From the results in Table 4.24 the mean score was 3.45 and a standard deviation of 0.54, indicating that respondents agreed that the best practices for M&E staff capacity building include adequate training in M&E. Benchmarking sessions should be arranged occasionally for M&E practices so as to enable M&E compare the way M&E is practiced in other counties, motivation of M&E Staff directly influences the effectiveness of M&E, Refresher Courses in M&E practices are integral part of M&E training curriculum, highly skilled M&E staff contribute to quality of M&E performance, adequate remuneration of M&E staff affects recruitment of qualified staff, and training curriculum outline includes a designed structure for new M&E staff entrants as expressed by a mean score of 3.78,3.67, 3.78, 3.67, 3.78,3.78 and 3.11 respectively. They all disagreed with the fact that the Department had developed an M&E staff appraisal system, as indicated by a mean score of 2.00 and a 0.00 standard deviation.

4.9 Community Participation on M&E Practices and Performance of Public Funded Health Facilities Construction Projects

In this section, the researcher sought to establish whether the respondents were aware of community participation discussion groups. If they answered in the affirmative, they were to state if they had attended any of the discussion groups, the number of attendants in those discussion groups during the implementation of the projects and if a written criteria existed for selecting the Respondents to these projects decision making groups. Also, the researcher, sought to establish if there were any regular community/project management meetings arranged in the Sub-County and if any, written criteria existed for selecting the respondents in the management meetings. The researcher sought to establish whether they strongly agreed, agreed, neutral, disagreed or strongly disagreed that community participation influences the relationship between M&E practices and the performance of the public funded healthcare facilities construction projects in Kirinyaga County. The agreement mean score of the respondents was examined. The analysis was carried out for each Sub- County separately. Performance of the projects was regional, or Sub-County based, and then aggregated at the County level

4.9.1 Awareness and Attendance of Community Participation Groups in Kirinyaga County.

Table 4.25: Are You Aware or have You Attended any of the Monitoring and Evaluation Discussion Groups Workshops or Project Planning Sessions?

		Count
Kirinyaga East	Yes	2
	No	6
	Total	8
Kirinyaga West	Yes	2
	No	19
	Total	21
Mwea East	Yes	4
	No	21
	Total	25
Mwea West	Yes	10
	No	18
	Total	28
Kirinyaga Central	Yes	8
	No	13
	Total	21
Total	Yes	26
	No	77
	Total	103

From the results obtained, 77(74.8%) of the respondents in the county reported that they did not attend (or arranged for attendance) the Monitoring and Evaluation Discussion Group Workshops or Project Planning Sessions during the project implementation period of 2014 – 2019.

4.9.2 Awareness and Attendance of Community Participation Groups in Kirinyaga County.

Table 4.26: Availability of Minutes for Community Participation in Projects Management Meetings

		Count
There were minutes for meetings involving the community representatives and project officials for all the completed projects	Strongly disagree	4
	Disagree	13
	Neutral	28
	Agree	41
	Strongly agree	26
Total		112

The results in Table 4.26 indicated that 67, of those who responded agreed that there were minutes for regular community/project management meetings for all projects completed on time, scope and with budget allocated in Kirinyaga County in the 2014-2019 development plan.

Table 4.27: Agreement on Community Participation in M&E Practices Influencing Relationships between M&E and Projects Performance in Kirinyaga County

		Count
Community Participation Mean Agreement Level	Disagree	16
	No opinion	2
	Agree	94
	Total	112

From the results in Table 4.27, 84, of the respondents agreed that community participation in M&E practices influences the performance of public funded health projects in the County of Kirinyaga. 16 disagreed while 2 held no opinion on community participation influence on performance of public funded health projects.

4.9.3 Agreement Mean Score of the Respondents on Influence of Community Participation on Relationship between M&E Practices and Project Performance

This section sought to establish community participation agreement mean scores on influence of the relationship between M&E practices and performance of public funded health facilities construction projects in Kirinyaga County. There was concern for best practices as they influence the performance of public funded health facilities construction projects in Kirinyaga County. The scores were measured on Likert Scale, 5-strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree. To ensure internal consistency of the measurement items, Cronbach’s alpha test was conducted for the reliability of the scale items.

Reliability of Scale Items

To ensure internal consistency of the measurement items, Cronbach’s alpha test was conducted for all the measurement items used. The results were as shown in Table 4.28

Table 4.28 Item Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
.864	.865	17

According to results in Table 4.28, a Cronbach’s alpha coefficient of 0.864 was obtained for all the 17 scale items when included for the analysis.

Gliem and Gliem (2003) stated in their study that instruments showing a reliability of 0.7 (or higher) were acceptable for research data collection. Consequently, the instrument was used to collect data for establishing agreement of mean score of the respondents on influence of community participation on the relationship between M&E practices and project performance.

Agreement Mean Score of the Respondents on influence of Community Participation.

The results in this section were used to establish the agreement mean score for the items measuring the influence of community participation on relationship between M&E practices and project performance. The results of these mean scores were as shown in Table 4.29

Table 4.29: Item Statistics

Item	Mean	Std. Deviation
Community participation in M&E activities and influence on relationship between M&E practices and project performance	3.76	1.109
Workshops and seminars were held during the implementation of projects	3.62	1.016
Community representatives were involved in project identification	3.63	.988
There were minutes for meetings involving the community representatives and project officials for all the completed projects	3.64	1.073
The community through representatives were involved in early phase of the projects	3.46	1.138
The community through representatives were involved in establishing the steps required to define the project objectives	3.54	1.114
The M&E staff and the community representatives were involved in determining the relevance and level of achievement of projects objectives	3.50	1.082
Community opinions towards the projects were considered during M&E implementation.	3.44	1.003
Discussions held between the community groups and Project M&E officials	3.85	1.059
High community participation in needs analysis procedures influences the selection and performance of projects	3.61	1.188
High community participation in projects identification procedures influences the implementation and performance of projects	3.73	1.131

Community is included in monitoring and evaluation and their general views are usually considered in the M&E implementations	3.43	1.121
High community participation in project monitoring and Evaluation practice influences the implementation and performance of projects	3.55	1.214
High community participation in project planning practice influences the implementation and performance of projects	3.64	1.114
Project evaluation is carried out in partnership with the Community	3.54	1.073
There is transparency in selecting Community representatives in the project committee membership	3.58	1.136
Community participation in projects management has a significant influence on the relationship	3.85	1.059
GRAND MEAN	3.61	1.092

From the results in Table 4.29, the average for all the mean scores was 3.61 with a standard deviation of 1.092. Measured on the Likert Scale, this figure indicated that the average number of the respondents agreed to the statement that community participation influences the relationship between M&E practices and project performance.

4.10 Research Objectives Results

In this section the researcher sought to establish how M&E implementation influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya; to determine the extent to which M&E budgetary allocation practice influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya; to determine how M&E staff capacity building influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya; to determine the combined influence of M&E Practices on performance of public funded health facilities construction projects in Kirinyaga County, Kenya; and to

determine the extent to which community participation in M&E activities influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya. The researcher also sought to establish the moderating effect of community participation on the relationship between monitoring and evaluation practices and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

For ease of reference to the variables, the mean scores for performance of public funded health facilities projects was denoted by **Y**, monitoring and evaluation implementation mean scores by **X₁**, monitoring and evaluation budget allocation mean scores by **X₂**, monitoring and evaluation staff capacity building mean scores by **X₃**, combined mean score for M&E implementation, M&E budget allocation and M&E staff capacity building by **X₄**, community participation mean scores by **X₅** and a single score combining **X₄** and **X₅** denoted by **X₆**. The mean scores were considered for the analysis.

Moderating influence of community participation on relationship between monitoring and evaluation practices and performance of public funded health facilities was established by considering the product of the appropriate mean scores of the variables.

4.10.1 Research Hypotheses Testing

To test the research hypotheses, a correlation matrix was developed for all the variables. The results were as shown in Table 4.30.

Table 4.30: Correlation Matrix

Variable		Y	X1	X2	X3	X4	X5
Performance of Public	Pearson Correlation	1	.665**	.792**	.777**	.749**	-.520**
Funded Health Facilities Construction Projects =Y	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	112	112	112	112	112	112
M&E Implementation =X1	Pearson Correlation	.665**	1	.968**	.976**	.988**	-.459**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	112	112	112	112	112	112
M&E Budgetary Allocation =X2	Pearson Correlation	.792**	.968**	1	.997**	.995**	-.521**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	112	112	112	112	112	112
M&E Staff Capacity Building =X3	Pearson Correlation	.777**	.976**	.997**	1	.997**	-.515**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	112	112	112	112	112	112
Monitoring and Evaluation IDVs Combined =X4	Pearson Correlation	.749**	.988**	.995**	.997**	1	-.501**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	112	112	112	112	112	112
Community Participation =X5	Pearson Correlation	-.520**	-.459**	-.521**	-.515**	-.501**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	112	112	112	112	112	112

H₀₁ There is no significant relationship between M&E implementation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

From the results in Table 4.30, the correlation coefficient for monitoring and evaluation implementation and the performance of public funded facilities construction projects in Kirinyaga County was, $r(112), = 0.665, P < 0.05$, indicating a positive significant linear relationship.

The P-value was less than the threshold level of 0.05, and hence **H₀₁** was rejected. The Alternate Hypotheses was hence upheld, concluding therefore that there was sufficient evidence to suggest that there was a significant relationship between monitoring and evaluation implementation and the performance of public funded facilities construction projects in Kirinyaga County.

H₀₂ There is no significant relationship between M&E budgetary allocation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

From the results in Table 4.30, the correlation coefficient for monitoring and evaluation budget allocation and the performance of public funded facilities construction projects in Kirinyaga County was $r(112), = 0.792, P < 0.05$, indicating a strong significant positive linear relationship.

The P-value was less than the threshold level of 0.05, and hence **H₀₂** was rejected. The alternate hypotheses was hence upheld. Therefore, there was sufficient evidence to suggest that there was a significant relationship between monitoring and evaluation budget allocation and the performance of public funded facilities construction projects in Kirinyaga County

H₀₃ There is no significant relationship between M&E staff capacity building and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

From the results in Table 4.30, the correlation coefficient for monitoring and evaluation staff capacity building and the performance of public funded facilities construction projects in Kirinyaga County was, $r(112), = 0.777, P < 0.05$, indicating a strong significant positive linear relationship.

The P-value was less than the threshold level of 0.05, and hence **H₀₃** is rejected. The alternate hypotheses was hence upheld and consequently, it was concluded that there was sufficient evidence to suggest that there was a significant relationship between monitoring and evaluation staff building capacity and the Performance of public funded facilities construction projects in Kirinyaga County

H₀₄ There is no significant relationship between monitoring and evaluation practices (combined M&E implementation, budgetary allocation and staff capacity building) and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

From the results of Table 4.30, monitoring and evaluation implementation, budget allocation and staff capacity building were highly correlated with each other, suggesting high multicollinearity and hence not suitable for correlation analysis as a group. To mitigate the multicollinearity and test of this hypotheses, the variables were combined into a single variable by summing up the means of the original variables and correlating this composite variable with the performance of public funded health facilities construction projects. The single variable was referred to as monitoring and evaluation practices. The correlation coefficient for this composite variable was $r(112) = 0.749$, $P < 0.05$, indicating a strong significant positive linear relationship

The P-value was less than the threshold level of 0.05, and hence H₀₄ is rejected. The Alternate Hypotheses was hence upheld, and the conclusion was that there was sufficient evidence to suggest that there was a significant relationship between monitoring and evaluation practices and the performance of public funded facilities construction projects in Kirinyaga County.

H₀₅ There is no significant relationship between community participation and the performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

From the results in Table 4.30, the correlation coefficient for community participation and the performance of public funded facilities construction projects in Kirinyaga County was, $r(112) = -0.520$, $P < 0.05$, indicating a negatively significant linear relationship.

The P-value was less than the threshold level of 0.05, and hence H₀₅ was rejected. The alternate hypotheses was hence upheld: there was sufficient evidence to suggest that there was a significant relationship between community participation and the performance of public funded facilities construction projects in Kirinyaga County.

H₀₆ The community participation in monitoring and evaluation does not significantly moderate the relationship between monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

A product of standardised mean scores for the monitoring and evaluation practice and the mean scores of community participation was computed to develop the community participation moderator, X_6 .

To establish the significance of the relationship between the moderator and the performance of public funded health facilities construction projects, a bivariate correlation between the variables was carried out. The results were as shown in Table 4.31

Table 4.31: Moderator Correlation Matrix

		Projects =Y	Moderator: Product ZX4*ZX5= X6
Performance of Public Funded Health Facilities Construction Projects =Y	Pearson Correlation	1	-.133
	Sig. (2-tailed)		.161
	N	112	112
Moderator: Product ZX4*ZX5 = X6	Pearson Correlation	-.133	1
	Sig. (2-tailed)	.161	
	N	112	112

From the results in Table 4.31, the moderator had a very weak negative insignificant relationship with the Performance of Public Funded Projects, $r(112) = -0.133$, $P = 0.161 > 0.05$,

The P-value was more than the threshold level of 0.05, and hence H_{06} was upheld. Therefore, the community participation in monitoring and evaluation did not significantly moderate the relationship between monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

4.10.2. Study Objectives Results

To address the research objectives, Simple and Multiple Regression Analysis was carried out as necessary.

4.10.2.1 Objective 1

To determine the extent to which M&E budgetary allocation practice influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

Simple linear regression was carried out to establish the extent. M&E budgetary allocation was denoted by X_2 and performance of public funded facilities construction projects in Kirinyaga County, Kenya by Y

The results were as shown on Table 4.32, 4.33, and 4.34

Table 4.32: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.621	1	25.621	185.252	.000 ^b
	Residual	15.213	110	.138		
	Total	40.834	111			

a. Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

b. Predictors: (Constant), M&E Budgetary Allocation =X2

From the results inTable 4.32, $F(1,110) = 185.252$, $P = 0.000 < 0.05$, indicating enough evidence to reject the Null Hypotheses and sustain the alternate hypotheses. It was, therefore, concluded that the overall model was statistically significant and hence fit for analysis.

Table 4.33: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.792 ^a	.627	.624	.37189

a. Predictors: (Constant), M&E Budgetary Allocation =X2

b. Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

From the results in Table 4.33, $R^2 = 0.627$, indicating that 62.7% of the variance of the performance of public funded health facilities projects in Kirinyaga county were predicted by monitoring and evaluation budgetary allocation during the time of study.

Table 4.34: Model Coefficients

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.594	.143		4.159	.000
1 M&E Budgetary Allocation =X2	.729	.054	.792	13.611	.000

Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

From the results of Table 4.34, the model constant, $\beta_0 = 0.594$. Monitoring and evaluation budget allocation had a $P=0.000 < 0.05$. This indicated that monitoring and evaluation budget allocation significantly predicted the performance of public funded health facilities projects in Kirinyaga County. The model predicted that as monitoring and evaluation budget allocation mean-score increased by 1.00, the mean score of performance of projects correspondingly increased linearly by 0.729

The model was represented by the equation.

$$Y = 0.594 + 0.729X_2.$$

4.10.2.2 Objective 2

To determine how M&E Staff Capacity Building influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya

Simple linear regression was carried out to establish the extent. M&E staff capacity building was denoted by X_3 and performance of public funded facilities construction projects in Kirinyaga County, Kenya by Y.

Table 4.35: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	24.661	1	24.661	167.737	.000 ^b
1	Residual	16.173	110	.147		
	Total	40.834	111			

a. Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

b. Predictors: (Constant), M&E Staff Capacity Building =X3

From the results of Table 4.35, $F(1,110) = 167.737$, $P = 0.000 < 0.05$, indicating enough evidence to reject the Null Hypotheses and sustain the alternate hypotheses. It was therefore concluded that the overall model was statistically significant and hence fit for analysis

Table 4.36: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.777 ^a	.604	.600	.38344

a. Predictors: (Constant), M&E Staff Capacity Building =X3

b. Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

From the results of Table 4.36, $R^2 = 0.604$, indicating that 60.4% of the variance of the performance of public funded health facilities projects in Kirinyaga county was predicted by monitoring and evaluation staff capacity building during the time of study.

Table 4.37: Model Coefficients

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.624	.148		4.224	.000
1	M&E Staff Capacity Building =X3	.718	.055	.777	12.951	.000

Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

The results in Table 4.37 show that the model constant, $\beta_0 = 0.624$. Monitoring and evaluation staff capacity building had a $P = 0.000 < 0.05$. This indicated that monitoring and evaluation staff

capacity building significantly predicted the performance of public funded health facilities projects in Kirinyaga County. The model predicted that as monitoring and evaluation staff capacity building mean score increased by 1.00, the mean score of performance of projects correspondingly increased linearly by 0.718. The model was represented by the equation;

$$Y = 0.624 + 0.718X_3.$$

4.10.2.3 Objective 3

To establish how M&E Implementation influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

Simple linear regression was carried out to establish the extent. M&E implementation was denoted by X_1 and performance of public funded facilities construction projects in Kirinyaga County, Kenya by Y

The results are shown on Table 4.38, 4.39 and 4.40

Table 4.38 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.079	1	18.079	87.393	.000 ^b
	Residual	22.755	110	.207		
	Total	40.834	111			

a. Dependent Variable: Performance of Public Funded Health Facilities Construction Projects = Y

b. Predictors: (Constant), M&E Implementation = X_1

From the results of Table 4.38, $F(1,110) = 87.393$, $P = 0.000 < 0.05$, indicating enough evidence to reject the Null Hypotheses and sustain the alternate hypotheses. It was therefore concluded that the overall model was statistically significant and hence fit for analysis.

Table 4.39: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.665 ^a	.443	.438	.45482

a. Predictors: (Constant), M&E Implementation =X1

b. Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

From the results of Table 4.46, $R^2 = 0.443$, indicating that 44.3% of the variance of the performance of public funded health facilities projects in Kirinyaga county was predicted by monitoring and evaluation implementation during the time of study.

Table 4.40: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.954	.168		5.661	.000
1	M&E Implementation =X1	.588	.063	.665	9.348	.000

Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

In the results of Table 4.47, the model constant, $\beta_0 = 0.954$. Monitoring and evaluation implementation had a $P=0.000<0.05$. This indicated that monitoring and evaluation implementation, significantly predicted the performance of public funded health facilities projects in Kirinyaga County. The model predicted that as monitoring and evaluation implementation mean score increased by 1.00, mean core for performance of projects correspondingly increased linearly by 0.588.

The model was represented by the equation; $Y = 0.954+0.588X_1$.

4.10.2.4 Objective 4

To determine the combined influence of M&E Practices on Performance of Public Funded Health Facilities Construction Projects in Kirinyaga County, Kenya

From the results inTable 4.48, monitoring and evaluation implementation, budget allocation and staff capacity building were highly correlated with each other suggesting high multicollinearity and hence not suitable for multiple regression analysis as a group in the original form. To mitigate

the multicollinearity and establish this extent therefore, the variables were combined into a single variable by summing up the means of the original individual variables and simply regressing this composite variable with the performance of public funded health facilities construction projects. The single variable was referred to as monitoring and evaluation practice. Simple linear regression was carried out between the monitoring and evaluation practice (the composite Score) denoted by X_4 and performance of public funded facilities construction projects in Kirinyaga County, Kenya by Y .

Table 4.41: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.893	1	22.893	140.356	.000 ^b
	Residual	17.941	110	.163		
	Total	40.834	111			

a. Dependent Variable: Performance of Public Funded Health Facilities Construction Projects = Y

b. Predictors: (Constant), Monitoring and Evaluation IDVs Combined = X_4

From the results inTable 4.48, $F(1,110) = 140.356$, $P = 0.000 < 0.05$, indicating enough evidence to reject the Null Hypotheses and sustain the alternate hypotheses. It was therefore concluded that the overall model was statistically significant and hence fit for analysis.

Table 4.42 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.749 ^a	.561	.557	.40386

a. Predictors: (Constant), Monitoring and Evaluation IDVs Combined = X_4

From the results inTable 4.42, $R^2 = 0.561$, indicating that 56.1% of the variance of the performance of public funded health facilities projects in Kirinyaga county was predicted by monitoring and evaluation practices during the time of study.

Table 4.43: Model Coefficients

Model	Unstandardised Coefficients		Standardised	t	Sig.
	B	Std. Error	Beta		
(Constant)	.706	.154		4.575	.000
1 Monitoring and Evaluation IDVs Combined =X4	.228	.019	.749	11.847	.000

Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

The results of Table 4.50 show that the model constant, $\beta_0 = 0.706$. Monitoring and evaluation practices had a $p=0.000 < 0.05$. This indicated that monitoring and evaluation practices significantly predicted the performance of public funded health facilities projects in Kirinyaga County. The model predicted that as monitoring and evaluation practices mean score increased by 1.00, the mean score of performance of projects correspondingly increased linearly by 0.228. The model was represented by the equation.

$$Y = 0.706 + 0.228X_4.$$

4.10.2.5 Objective 5

To determine the extent to which community participation in M&E activities influence performance of public funded health facilities construction projects in Kirinyaga County, Kenya

Simple linear regression was carried out to establish the extent. Community participation was denoted by X_5 and performance of public funded facilities construction projects in Kirinyaga County, Kenya by Y.

Table 4.44: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.520 ^a	.270	.264	.52040

a. Predictors: (Constant), Community Participation =X5

From the results of Table 4.51, $R^2 = 0.270$, indicating that 27% of the variance of the performance of public funded health facilities projects in Kirinyaga county was predicted by community

participation during the time of study. Community participation was therefore the lowest predictor for performance of public funded facilities construction projects in Kirinyaga County among all the independent variables considered separately with the highest being budget allocation, followed by staff capacity building and M&E implementation, in that order.

Table 4.45: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.045	1	11.045	40.784	.000 ^b
	Residual	29.789	110	.271		
	Total	40.834	111			

a. Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

b. Predictors: (Constant), Community Participation =X5

From the results in Table 4.58, $F(1,110) = 40.784$, $P = 0.000 < 0.05$, indicating enough evidence to reject the Null Hypotheses and sustain the alternate hypotheses. It was therefore concluded that the overall model was statistically significant and hence fit for analysis.

Table 4.46: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.679	.348		13.434	.000
	Community Participation =X5	-.605	.095	-.520	-6.386	.000

Dependent Variable: Performance of Public Funded Health Facilities Construction Projects =Y

The results of Table 4.53 show that the model constant, $\beta_0 = 4.679$. Community Participation had a $P=0.000 < 0.05$. This indicated that community participation significantly predicted the performance of public funded health facilities projects in Kirinyaga County. The model predicted that as community participation mean core increased by 1.00, the mean score of performance of projects correspondingly reduced by 0.605. The model was represented by the equation.

$$Y = 4.679 - 0.605X_5.$$

4.10.2.6 Objective 6

To establish the moderating effect of community participation on the relationship between monitoring and evaluation practices and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

To test for moderating effect of community participation on the relationship between monitoring and evaluation practice and the performance of public funded health facilities projects in Kirinyaga County, a multiple regression analysis was carried out between monitoring and evaluation practices, X_4 , and performance of public funded health facilities projects, Y , with the community participation, X_5 , as the moderating variable. The results in Table 4.47 indicate a significant moderately strong relationship between monitoring and evaluation practice and community participation. To mitigate this level of multicollinearity, and hence run the regression test, the mean scores for the variables were standardised. The moderator was computed by finding the product of the standardised values for X_4 and X_5 . A multiple regression was conducted with standardised values for performance of public funded health facilities projects, as the dependent variable, and the standardised values for community participation and monitoring and evaluation practice. The results were as shown on Table 4.47.

Table 4.47: Moderator Model Coefficients

Model	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Beta		
(Constant)	.002	.069		.025	.980
Zscore: Monitoring and Evaluation IDVs Combined = X_4	.652	.071	.652	9.132	.000
Zscore: Community Participation = X_5	-.195	.074	-.195	-2.620	.010
Moderator: Product ZX4*ZX5 = X_6	.003	.062	.004	.056	.955

Dependent Variable: Zscore: Performance of Public Funded Health Facilities Construction Projects = Y

The results in Table 4.47 showed that the moderator had a positive constant of $\beta_0 = 0.003$, contributing only 0.4% of the variance of the mean scores of performance of public funded health facilities construction projects. This contribution was insignificant, $P = 0.955 > 0.05$. This indicated

that the moderating effect of community participation on the relationship between monitoring and evaluation practice and the performance of public funded health facilities projects in Kirinyaga County was positive, but minimal and not significant.

The model was represented by

$$Y = 0.002 + 0.652X_4 - 0.195X_5 + 0.003X_6$$

4.11 Discussions

The discussion in this section will highlight the following: the influence of monitoring and evaluation budget allocation practices; monitoring and evaluation staff capacity building; monitoring and evaluation implementation on performance of public funded health facilities construction projects in Kirinyaga County, Kenya; and how community participation moderate the relationship between the M&E practice and the performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

M&E Budget Allocation and Performance of Public Funded Health Facilities Construction Projects

The study showed that for every completed project in the County, an M&E budget had been prepared before commencement. Arain (2013) in his study opined that inadequate budgetary and timely control of that budget contributes immensely to low performance of construction projects initiatives. This was also in line with Echeme and Moneke (2016) whoopined that a realistic budget for M&E must be drawn and considered holistically with the overall project budget before implementation. This would give M&E its rightful position and recognition in project management. Also, a study carried out by Gwadoya (2012) showed that it was essential for financial resources for monitoring and evaluation to be estimated realistically at the time of planning for 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 results of the study revealed that there were no cost plans prepared for any monitoring and evaluation implementation. This was in contradiction with Maalim and Kisimbii (2017) who asserted that monitoring emphasizes 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. A comprehensive and detailed M&E budget should be prepared, in addition, cost control mechanism of the budget is to be drawn. Implementing the M&E over budget or under budget (hence compromising quality of the deliverables) will adversely affect the performance of the projects. Lack of M&E cost plans for the planned projects had contributed significantly to the poor performance of monitoring and evaluation and consequently to poor performance of public funded health facilities construction projects in the county. Dansoh and Amoah (2011) in a study in which they tried to determine the performance of projects funded and managed by public organisations in Ghana found out that organisation's practices of establishing a budget for particular project and making payments from that budget at defined stages could explain the differences in the performances of projects.

The study further established that the rate of funds allocation to M&E activities was low. This had an adverse effect on the performance of monitoring and evaluation. Zagorsky, (2010) stated that the major delays in government sponsored construction projects was by the contractor who faced enormous financial difficulties during project implementation due to late honoring of payment certificates. Also, Thornton (2011) in his study found out that late certificate payments, unrealistic profit margins, and excessive debt are considered as the major contractors' financial inadequacies and hence contributes to the overall poor project performance. This explains the poor performance of public funded health facilities construction projects in the County.

There was sufficient evidence from the results of the study that M&E Staff were not involved in preparation of M&E budget. This disaffirmed what Majid & Ugwu & Doran (2008) held in their study that community participation is paramount in development projects, especially when the community is given room to provide their opinions concerning a certain project. Wambugu (2012) was of the view that although minor decisions and emergency situations are generally not appropriate for community participation, a complex situation with far-reaching impacts like budget preparation warrant community involvement and when done proactively rather than in response to a problem it helped to avoid problems in the future especially in accountability of project funds. Lack of involvement of the community in decision making, regarding budget allocation adversely affected performance of public funded health facilities construction projects in the County.

The results of the study demonstrated that M&E staff embraced best practices in monitoring and evaluation budget allocation by agreeing that the practices influence significantly the performance of public funded health facilities construction projects in Kirinyaga County. This upheld the results found in the study conducted by Wanjiku (2012) who conceded that financial issues, human resources conditions, site characteristics and design quality aspects are factors influencing performance of government funded health facilities building projects. Further, Chaplowe (2008) opined that it is important for monitoring and evaluation specialists to weigh in on monitoring and evaluation budget needs at the project design stage so that funds are allocated specifically to the implementation of key monitoring and evaluation tasks.

There was a strong evidence from the study that there was a significant strong positive linear relationship that existed between M&E budgetary allocation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya. This corroborated the results of Burgess, Jedwab, Miguel and Morjaria (2013) who in their study averred that monitoring and evaluation should be planned together with the project, however, the budget for each function should be discrete. This is due to the fact that monitoring is virtually complete at the practical completion of the project whereas evaluation activities continues way ahead after project handover. The budget so developed would be aligned positively well with the project implementation, which ultimately would score highly in its final performance index.

M&E Staff Capacity Building and Performance of Public Funded Health Facilities Construction Projects

It was established by the study that there was no training curriculum outline for both old and new M&E staff entrants, refresher courses and M&E functional benchmarking plan in the section of monitoring and evaluation in the Department of Health, Kirinyaga County. This was in support of the results of the study by Jones (2009) who stated that monitoring and evaluation needs should be undertaken by individuals with the relevant skills, sound methods and adequate resources as well as transparency in order to secure the project quality. Adequacy of staff and sound methods are prerequisite to any M&E implementation. Furthermore, the results backed those of Bailey and Deen (2002) who affirmed that skills were of paramount importance to an effective monitoring and evaluation and the staff needed to be trained on the basics of evaluation. This implied the need for

the personnel to have a high monitoring and evaluation capacity in order to secure the effectiveness of monitoring and evaluation. This was also supported by Vanessa and Gala (2011) whose study concluded that the technical capacity and expertise of staff in conducting evaluations, professional capacity of human resource, the value and participation of the human resource in an organisation during the decision making practice as well as their motivation in implementing the decision can hugely impact on the evaluation.

Lack of adequate M&E training and benchmarking within the County, therefore, negatively affected performance of public funded health facilities construction projects in the County.

The study established that there was very little or no emphasis on capacity building for M&E staff in the County. From the study most senior officers stated that that no professional training programme, bench marking programme or performance appraisal conducted for the M&E staff in the County.

This was contrary to what Ling, Low, Wang and Lim (2009) concluded in their study that emphasis on various aspects used in assessing staff capacity success which include the number of monitoring staff, monitoring staff skills, frequency of monitoring, stakeholder's representation, proficiency in latest Information systems (use of latest technology), influence of role and teamwork among the members of M&E team on project implementation must be held paramount.

The results also underpinned what Kyriakopoulos (2011), stated in his study that staff capacity should not just be about mere training of staff by undertaking learning approaches which are best practices; and have a positive effect on the evaluation practice within an organization. Instead, the staff carrying out monitoring and evaluation should be competent enough in order to deliver expected results within the allocated project timelines.

The findings of this study demonstrated that a general positive agreement existed among the M&E staff that best practices in monitoring and evaluation staff capacity influences significantly the performance of public funded health facilities construction projects in Kirinyaga County. This is in support of Isaac & Navon (2013) who opined that managing communications, managing

stakeholders, motivating, and knowledge transfer as part of best practices for performance of M&E, are essential knowledge areas for effective M&E implementation.

The findings of this study indicated that there was a significant strong positive linear relationship between M&E staff capacity building and performance of public funded health facilities construction projects in Kirinyaga County, Kenya. This supported the argument by Jones, (2009), who stated that monitoring and evaluation needs to be undertaken by individuals with the relevant skills, sound methods and adequate resources as well as transparency in order to secure the project quality.

M&E Implementation and Performance of Public Funded Health Facilities Construction Projects

The study established that monitoring and evaluation of public funded health facilities projects in Kirinyaga County were implemented without any M&E plan as required by the best practices in project management. This contradicted Gyorkos (2013) who concluded in his study that project organisers ought to incorporate a clearly described and delimited monitoring and evaluation plan as a fundamental and essential part of the overall project implementation plan. The study showed that only 9% of the scheduled health projects for 2014-2019 development plan was completed in Kirinyaga County. This unsatisfactory performance of the health projects could be attributed to poor monitoring and evaluation implementation.

From the findings of this study, monitoring and evaluation field staff prepared only site meeting minutes for the monitoring and evaluation activities carried out during implementation of the projects in the County. The office based M&E staff prepared project progress reports and site visit reports as the monitoring and evaluation reports in the County. The information contained in these reports fall short of what is suggested by Mulwa (2008) who opined that the practice of monitoring and evaluation involves measuring, assessing, recording and analysing the project information on a continuous basis and communicating the same to those concerned. Nyonje, Ndunge & Mulwa, (2012) described monitoring as a practice of collecting and managing project data that provides feedback as pertains to the progress of a project. The reports prepared by the M&E Staff did not follow the best practices for monitoring and evaluation implementation. Those reports, therefore,

did not contribute significantly to the overall performance of public funded health facilities construction projects.

The findings of the study revealed that no data analysis tool was used to collect and analyse any data collected during implementation in the County. This contradicted Nyonje, Ndunge and Mulwa, (2012), who in their study stated that project evaluation is a practice that involves systematic collection, analysis and interpretation of project related data that can be used to understand how the project is functioning in relation to its objectives. Therefore, the data collected during M&E implementation in Kirinyaga County was not analysed and evaluated using an appropriate data analysis tool. That data, therefore, did not enhance the overall performance of public funded health facilities construction projects in the County.

The study established that monitoring and evaluation staff appreciated and agreed that the best practices in M&E implementation improves greatly the performance of public funded health facilities construction projects in the County. This aligns with Arazi, Mahmoud & Mohamad (2011) who opined that evaluation is the tool for providing knowledge for continued project implementation. Also, this aligns with Ameh & Osegbo (2011) who stated in their study that M&E practice is vital for improving decision-making, strengthening project implementation, improve quality of project interventions and enhance performance.

The findings of this study revealed that there was a strong positive linear relationship between monitoring and evaluation implementation and the performance of the public funded health facilities projects in Kirinyaga County. This supports the argument put up by Tache (2011) that by applying a coherent monitoring and evaluation flow, the project developers will be able to increase the effectiveness of their projects in term of goals achievement, resources and deadlines compliance and will also be able to assess the economic, social and environmental impacts of their sustainable investment projects.

Community Participation and Performance of Public Funded Health Facilities Construction Projects.

The results of the study ascertained that there was no awareness of monitoring and evaluation discussion /workshop groups or project planning sessions in the County. The lack of these sessions

was contrary to what was found out by Mungai (2009) whose opinion was that community participation in M&E of projects is crucial in order to enhance project performance. Community participation and their engagement in discussions concerning how monitoring and evaluation of programme activities are carried out is often a learning experience for them. It promotes inclusions and facilitates meaningful participation by diverse community groups. Also, Ivana (2010) found out that the whole practice 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. Usually, the focus of community participation is usually sharing information and gathering input from members of the public who may have an interest in a project.

The study deduced that there was a written criteria or guidelines in selecting community respondents in project decision making groups in Kirinyaga County. This underpinned what Ochieng M. F., & Tubey, D. (2013) concluded in their study. The conclusion of that study established that selection of the community members to be involved in M&E activities was to be approached with caution. Sometimes those selected as monitors were friends of those in high offices. Some citizens felt that they were not represented since they did not, for example, vote for them in their member of parliament during the previous election. This made them disillusioned with the development in their constituency.

Community participation in M&E practices influence the performance of public funded health projects in the County of Kirinyaga. The majority of the respondents answered in the affirmative. This is in line with Jones, 2011), who in his study stated that professional practices worldwide dictated that a focal factor for assessing the effectiveness of evaluation was involving the group of people living in the particular area, having same attitudes and sharing common interests. It was noted in that study that local inhabitant's involvement ought to be brought in at the very beginning of populace needs assessment through to project implementation and evaluation. Donaldson, (2003) also stated that the communities' ideas are bound to the rest of the populace being served by the project. This simplifies resource mobilization during project execution. Populace interest in discussing the why, how and what of interventions is a tremendous way of empowerment to them and enhances ownership of the project by the different interested groups. Also, involving the diverse interested groups in the decision making empowers them during the entire project cycle.

The results of this study revealed a significant linear, but negative relationship between community participation and the performance of public funded health facilities construction projects. This contradicts the view held by Jones, (2011), who in his study stated that local inhabitant's involvement ought to be brought in at the very beginning of populace needs assessment through to project implementation and evaluation so as to in cooperate the views and aspirations of the community. This is expected to positively impact the overall performance of the Project. However, a study conducted by Waihenya (2011) suggested that although the community needs to participate in projects, the course of such engagements needs to be managed with a lot of care. In Kenya, even though public funded projects committees allow the community to identify the projects close to their interests at the Location Development Committee Levels, according to GOK CDF Act, (2012), it is sometimes difficult to tell their level of competency in determining what is beneficial in the long run or how to integrate the projects within their neighboring locations or constituencies for maximum benefit. Also, selection of the community members to be involved in M&E activities must be approached with caution. Ochieng M. F., & Tubey, D. (2013) in their study noted that since those selected as monitors were friends of those in high offices, some citizens felt that they were not represented since they did not, for example vote for the MP during the previous election. This made them to feel disillusioned with the development in their constituency.

Monitoring and evaluation practice combines monitoring and evaluation implementation, monitoring and evaluation budget allocation and M&E staff capacity building and performance of public funded health facilities onstruction projects.

The study has established that practices of monitoring and evaluation implementation, monitoring and evaluation budget allocation and monitoring and evaluation staff capacity building when integrated or considered as a group form the best practices of monitoring and evaluation. This underpins the results of the study by Sialala, (2016) who concluded that monitoring and evaluation are usually approached together in project management as a function which provides a real perspective upon the state of projects in order to make all the adjustments necessary in projects' implementation practice. This also corroborates the results arrived at by Charles & Mohamed, (2015) who opined that in public funded health facilities construction projects in county governments, M&E should be planned as an interweaved participatory exercise where all partners

are included, and implementation carried out by employing the latest technological knowledge and best practices.

Monitoring and evaluation implementation, monitoring and evaluation budget allocation and monitoring and evaluation staff capacity building cannot be separated in practice as poorly budgeted monitoring and evaluation, implemented by staff who do not have adequate skills and knowledge will not improve the project performance standards and hence not yield the desired results.

The study ascertained that the relationship between monitoring and evaluation practice and performance of public funded health facilities projects in Kirinyaga County was linear and significant.

This supported the argument by Dobra (2010), who found out that monitoring and evaluation are regarded as core tools for enhancing the quality of project management considering that in short and medium run managing complex projects would involve corresponding strategies from the financial point of view which are supposed to respect the criteria of effectiveness, sustainability and durability

Performance of Public Funded Health Facilities Construction Projects

This study established that only 9% of the scheduled projects for development in Kirinyaga County during the development calendar of 2014 -2019 period have been successfully completed on time across the sub-counties. Measurements for project critical factors for success have traditionally been around scope, time, cost and quality. The results from this study, therefore, have demonstrated poor performance of public funded health facilities construction projects across the Sub-Counties. One of the critical success factors of projects is timely completion. This would be as per Das and Ngacho (2017), who concluded in their study that failure of any construction project is mainly related to its poor completion. The objective of that study was to identify critical success factors (CSFs) influencing the performance of development projects based on their key performance indicators. Results in that study revealed that one of the six individual items constituting these factors included the late completion of the projects.

This study established that no cost effectiveness analysis was carried out before any public funded health facilities project was started in any of the sub-counties in Kirinyaga County. That cast doubt on the suitability of these projects in the first place. Cullen, Moran & Hughey (2005) in their study concluded that project managers and decision makers can use the techniques of cost effectiveness to project likely future success of projects. Those projections should provide valuable information to aid decision making and project selection. Cost benefit analysis is predominately used in making decisions in selecting construction projects where cost benefits (post project completion) are the determining factor. When health benefits are the major factors to be considered especially by the government for the community, then cost effectiveness in selecting the appropriate projects to implement is the methodology to use. If that was not carried out prior to project implementation, then the project would face resistance by the beneficiaries and its satisfaction scores would be very low after completion.

There was strong evidence from the results of the study that the community were generally not satisfied with the performance of the public funded health facilities construction projects in the County. Throughout the history of project management, the success of projects has been gauged by considering the “Project Iron Triangle”, i.e. Scope, Time and Cost. However, project acceptance by the direct beneficiaries of the project is considered as paramount in accessing the performance of community-based projects. Williams, Ashill, Naumann and Jackson (2015), in their study recommended project customer satisfaction as an additional measure to the traditional scope, time and cost aspect, especially for projects implemented by the government for the Community. This argument was also supported by Turner & Zolin, (2012) who ascertained in their study that the current thinking is that, ultimately, project success is best judged by the stakeholders, especially the primary sponsor. Griffin and Page (1996) emphasized this point by drawing a conclusion in their study that customer satisfaction and customer acceptance were among the most useful customer – based measures of success for several project strategies.

Moderating Influence of Community Participation on relationship between Monitoring and Evaluation Practice and the Performance of Public Funded Health Facilities Construction Projects in Kirinyaga County.

The results from the study showed that there was a positive interacting effect of community participation on the relationship between monitoring and evaluation practice and the performance of public funded health facilities projects in Kirinyaga County, albeit minimal and not significant. This implied that the relationship between monitoring and evaluation practice and the performance of public funded health facilities construction projects in Kirinyaga County were not dependent on community participation. Therefore, in the conceptual framework, community participation should be considered as just another independent variable.

There was no significant moderating influence of community participation on the relationship between monitoring and evaluation practice and the performance of public funded health facilities projects in Kirinyaga County. This was expected as the study established that the relationship between monitoring and evaluation practice; and the performance of projects in the county was positively significant; and the relationship between community participation and the performance of projects in the county was negatively significant. Mackinnon, (2012), put forward an argument that if there were two groups that were affected by an intervention in opposite ways, the overall effect would be non-significant even if there was a statistically significant intervention effect in both groups, albeit opposite.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to investigate monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County in Kenya, with the moderating effect of community participation. This Chapter summarises the major results based on the data analysed. Conclusions drawn from the study and recommendations thereof are presented in this chapter.

5.2 Summary of Findings

The study sought to determine the influence of M&E practice on performance of public funded health facilities construction projects in Kirinyaga County, Kenya and how community participation moderate the relationship between the M&E Practice and the performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

M&E Implementation and Performance of Public Funded Health Facilities Construction Projects

This study indicated that monitoring and evaluation implementation significantly predicted the performance of public funded health facilities projects in Kirinyaga County. The study revealed that no M&E plans were developed for the ongoing projects in the county. Monitoring and evaluation field staff prepared only site meeting minutes for the monitoring and evaluation activities carried out during implementation of the projects in the County. The office-based M&E staff prepared project progress reports and site visit reports as the monitoring and evaluation reports in the County.

The projects implementation section in the Department of Health in Kirinyaga County had not procured and installed a data analysis tool to be used for analysing the M&E data once collected, as revealed by the responses from all the M&E staff.

The agreement mean score for best practices in monitoring and evaluation indicated that the majority of the M&E staff agreed that the best practices of M&E implementation influence significantly the performance of public funded health facilities construction projects.

The results of the study revealed that there was a strong positive linear relationship between monitoring and evaluation implementation and the performance of the public funded health facilities projects in Kirinyaga County.

M&E Budget Allocation and Performance of Public Funded Health Facilities Construction Projects

The study showed that for every completed project in the County, an M&E budget had been prepared before commencement. However, the results indicated that there were no cost plans prepared for any monitoring and evaluation implementation. From the results of the study, most of the M&E staff responded that the rate of funds allocation to M&E activities was low.

Whereas the majority agreed that the best practice should be used so as to ensure satisfactory M&E budget allocation would be a clear and transparent practice in budget allocation and involvement in preparation of M&E budget, there was total disagreement that M&E staff were involved in M&E budget preparation in Kirinyaga County.

The agreement mean score for best practices in monitoring and evaluation budget allocation indicated that the majority of the M&E staff agreed that the best practices of M&E budget allocation influence significantly the performance of public funded health facilities construction projects in Kirinyaga County. There was strong evidence from the study that a significant strong positive linear relationship exists between M&E budgetary allocation and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

M&E Staff Capacity Building and Performance of Public Funded Health Facilities Construction Projects

The study established that there was no training curriculum outline for either old and new M&E staff entrants, refresher courses or M&E functional benchmarking plan in the section of monitoring

and evaluation, Department of Health, Kirinyaga County. The study also established that there was very little or no emphasis on capacity building for M&E staff in the County.

Most of the top County Government officials agreed that no professional training programme, bench marking programme or performance appraisal conducted for the M&E staff in the County. Most of the top officials in County answered in the affirmative that the number of M&E staff in the Department be adjusted upwards.

The agreement mean score for best practices in monitoring and evaluation staff capacity building indicated that the majority of the M&E Staff agreed that the best practices of M&E staff capacity building significantly influences the performance of public funded health facilities construction projects in Kirinyaga County.

The results from the study indicated that there was a significantly strong positive linear relationship between M&E staff capacity building and performance of public funded health facilities construction projects in Kirinyaga County, Kenya.

Community Participation and Performance of Public Funded Health Facilities Construction Projects.

The majority of those who responded to the questionnaire were not aware of having attended any monitoring and evaluation discussion /workshop groups or project planning sessions in the County. However, they largely agreed that a written criteria or guidelines in selecting community respondents in project decision making groups existed in the County. The majority also agreed that there were minutes for regular community/project management meetings for all projects completed on time, scope and budget in Kirinyaga County in the 2014-2019 development plan.

When asked whether community participation in M&E practices influenced the performance of public funded health projects in the County of Kirinyaga, the majority answered in the affirmative. The results of the study indicated a moderately significant negative linear relationship between community participation and the performance of public funded health facilities construction projects.

Monitoring and Evaluation Practice (combined Monitoring and Evaluation Implementation, Monitoring and Evaluation Budget Allocation and M&E Staff Capacity Building) and Performance of Public Funded Health Facilities Construction Projects.

The study revealed that monitoring and evaluation practice had a significantly strong positive relationship with the performance of public funded health facilities construction projects.

Moderating Influence of Community Participation on Relationship between Monitoring and Evaluation Practice and the Performance of Public Funded Health Facilities Construction Projects in Kirinyaga County.

The results from the study showed that moderating influence of community participation on relationship between monitoring and evaluation practice and the performance of public funded health facilities projects in Kirinyaga County was minimal and not significant.

Performance of Public Funded Health Facilities Construction Projects

Out of 45 projects scheduled for health facilities development in Kirinyaga County, only 4 were completed during 2014-2019 development period, mostly in Kirinyaga Central, Mwea East and Mwea West. No projects were completed in Kirinyaga East and Kirinyaga west.

The study established that no cost effectiveness analysis was carried out before any public funded health facilities project were started in any of the sub-counties in Kirinyaga County.

The satisfaction mean score of the responses from the community indicated that generally, the community was dissatisfied with the performance of the public funded health facilities projects in Kirinyaga County.

5.3 Conclusions

The study concluded that before implementation of public funded health facilities construction projects in Kirinyaga County, no M&E plans were developed as required by the best practices in project management. This explained the poor performance of the health projects in the County. Implementing monitoring and evaluation without an implementation plan would not yield the desired results and ultimately the monitoring and evaluation would not be of any assistance to the improvement of the performance of the projects.

The upshot of the study was that the monitoring and evaluation reports prepared after conducting the M&E in the County were not as per the best practices for monitoring and evaluation. The reports prepared for monitoring and evaluation must serve the purpose of improving the performance of the project. M&E involves measuring, assessing, recording and analysing the project information on a continuous basis and communicating the same to those concerned so as to act and improve the performance. However, the reports prepared by M&E staff in Kirinyaga County did not contain the necessary information for the purpose of project improvement. The poor reporting of monitoring and evaluation, therefore, contributed to poor performance of the public funded health facilities project in Kirinyaga County.

The study also established that Kirinyaga County Government had not procured any data analysis tool to assist M&E data handling. Project evaluation as a practice involves systematic collection, analysis and interpretation of project related data that can be used to understand how the project is impacting the goals of the project objectives. A tool is required to do the analysis. Poor M&E data handling contributed to inadequacy of the monitoring and evaluation practice, and hence the overall poor performance of the public funded health facilities projects in the County.

The study concluded that monitoring and evaluation staff appreciated and agreed that the best practices in M&E implementation would greatly improve the performance of public funded health facilities construction projects in the County. This was important. It implied that if adequately facilitated, M&E implementation would have greatly aided the performance of public funded health facilities construction projects in the Kirinyaga County.

The study concluded that there was a strong positive linear relationship between monitoring and evaluation implementation and the performance of the public funded health facilities projects in Kirinyaga County. Implementing monitoring and evaluation using the best practices would have a big positive impact on the performance of public funded health facilities construction projects in Kirinyaga County.

It was concluded from the study that in Kirinyaga County a budget for M&E activities was always prepared before commencement of any development project implementation. However, M&E staff

were not involved in the preparation of that budget. Similarly, the study also found out that disbursement of this budget was slow even though there was a clear policy guideline on remittance of funds in the County. This situation negatively affected the smooth running of M&E in the County, and ultimately, the performance of the public funded health facilities projects in Kirinyaga County was unsatisfactory.

The study arrived to the conclusion that there were no cost plans prepared for any monitoring and evaluation implementation. Cost plans are integral to cost management. Creating a budget without control mechanism of the budget would be counterproductive. Efficiency of M&E budget utilisation after allocation in the County was compromised without a clear cost plan. This ultimately contributed to the unsatisfactory performance of the public funded health facilities projects in Kirinyaga County.

The study concluded that M&E Staff embraced best practices in monitoring and evaluation budget allocation by agreeing that the practices influences significantly the performance of public funded health facilities construction projects in Kirinyaga County. The County only needed s only to emphasize and ensure compliance during monitoring and evaluation implementation. This would improve appreciably the performance of the public funded health facilities projects in Kirinyaga County.

In regard to M&E budget, this study concluded that allocation positively related strongly to the performance of public funded health facilities construction projects in Kirinyaga County, Kenya. This implied that if the best practices for M&E budget allocation were complied with, then monitoring and evaluation would greatly influence and improve the performance of the public funded health facilities projects in Kirinyaga County.

The study arrived at the conclusion that there was no training curriculum outline for both old and new M&E staff entrants, refresher courses or M&E functional benchmarking plan in the section of monitoring and evaluation in the Department of Health, Kirinyaga County. This position was confirmed by the top County Government officials, who stated during the face to face interview that there was no professional training programme, bench marking programme or performance

appraisal conducted for the M&E staff in the County. The staff implementing M&E therefore did not use the modern and best methods and technique of monitoring and evaluation practice due to lack of training. Just like project management, monitoring and evaluation practice is a dynamic practice that requires regular knowledge and skills enhancement. Monitoring and evaluation practice requires to acquire and adopt new knowledge through modern training and benchmarking against similar practices within and out of the County. This will gain independent perspective about how well M&E is performed compared to other counties.

The study concluded that best practices for monitoring and evaluation staff capacity building are embraced by the M&E staff. The staff also agreed that the practices influences significantly the performance of public funded health facilities construction projects in Kirinyaga County. The County needed only to emphasize and ensure compliance during monitoring and evaluation implementation. This would improve appreciably the performance of the public funded health facilities projects in Kirinyaga County.

The study concluded that as community participation on monitoring and evaluation increased, the performance of public funded health facilities construction projects in the County significantly reduced. This was not as generally expected. Community participation in most cases enhanced the performance of public funded health facilities construction projects. Involving the community in decision making during the implementation of monitoring and evaluation or project planning needs to be approached with a lot of care. The community must be guided on how to participate in M&E. The researcher opined that that was best done through a facilitator in a structured monitoring and evaluation discussion/workshop groups or project planning sessions. The study established that such workshops or planning sessions were never held in Kirinyaga County. Furthermore, to ensure transparency and accountability during the participation, the respondents must be selected without bias. A criterion for selecting the respondents must be drawn with the community participation for input and ownership. The study established that such guidelines were not available during the period of the study. When no guidelines for respondents' selection and facilitation through workshops and planning sessions are followed, the respondents are easily manipulated. The selection could follow the political affiliation or monitory gains for example. Politicians could also manipulate the participation to ensure failure of the project, if not politically expedient to the

politician. It must be explained to the community, prior to participation, the purpose and importance of the participation.

Finally, the study concluded that the moderating influence of community participation on the relationship between monitoring and evaluation practice and the performance of public funded health facilities construction projects in Kirinyaga County was minimal and not significant. This implied that the relationship between monitoring and evaluation practice and the performance of public funded health facilities projects in Kirinyaga County did not depend on community participation. Considered together, the influence of monitoring and evaluation practice and community participation on performance of public funded health facilities construction projects should be considered independently. The relationship between monitoring and evaluation practice and performance of public funded health facilities construction projects does not depend on community participation.

5.4 Recommendations

From the conclusions of the study, it was established that no M&E implementation plans were developed before commencing M&E activities. It was recommended that a concise and thorough M&E Plan be developed before commencing M&E activities. The Plan should be as participatory as possible.

The monitoring and evaluation reports prepared after conducting the M&E in the County were not as per the best practices for monitoring and evaluation. It was recommended that the reports prepared for monitoring and evaluation be prepared to serve the purpose of improving the performance of the projects. M&E involves measurement, assessment, recording and analyses of the project information without interruption and communication of the same to those concerned so as to act and improve the performance.

Project Monitoring is a practice that involves systematic collection, analysis and interpretation of project related data that can be used to understand how the project is functioning in relation to its objectives. For better handling of this data, a Tool is required for accurate and ease of handling. Kirinyaga County Government does not have any data analysis tool to assist M&E data handling.

It is recommended that this Tool be procured as quickly as possible and training on how to use the same carried out immediately after the purchase.

For effective cost management, all the three areas of cost planning must be considered. A budget is used successfully and transparently when controlled as per the laid down procedure by the National Government. It is recommended that once project budget is drawn, the control mechanism of the budget expenditure must be spelt out. The funds utilisation must be as per the Cost Plan developed. This will ensure that M&E does not spend the funds before completion of the exercise or not spend as required while compromising the quality of the practice.

It was recommended that a training curriculum, refresher courses and M&E benchmarking plans be developed for the section of monitoring and Evaluation of public funded health Projects in Kirinyaga County Government. The staff implementing M&E was not equipped with the prerequisite knowledge of modern and best methods and technique of monitoring and evaluation practice due to lack of training. Just like project management, monitoring and evaluation practice is a dynamic practice that requires regular knowledge and skills enhancement, monitoring and evaluation practice to acquire and adopt new knowledge through modern training and benchmarking against similar practices within and out of the County, this will have an independent perspective about how appropriately M&E was performed compared to other counties.

5.5 Suggestion for Further Studies

The Kenya Constitution of 2010 has emphasised greatly on public participation in all activities that the community is involved, particularly so in the implementation of public funded projects. Community participation on monitoring and evaluation increases, while the performance of public funded health facilities construction projects in the County significantly decreases. This is generally unexpected. Community participation, in most cases enhances the erformance of public funded health facilities construction projects. It is suggested that this scenario be investigated further to establish the reason why community participation does not improve or strength the relationship between monitoring and evaluation practice and performance of public funded health facilities construction projects in Kirinyaga County.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

Duncan M Ngondo

E-mail: **dnjconsultingengineers@gmail.com**

Dear Respondent

RE: DATA COLLECTION

I am a student, currently undertaking a PhD degree in Project Management at the University of Nairobi. As part of the requirement for the completion of my studies, I'm undertaking a research to establish the Practices of monitoring and evaluation, community participation and performance of public funded construction projects in Kirinyaga County, Kenya. In this regard, I am kindly requesting for your support of my study by offering to spend some time in responding to the attached questionnaire. Your accuracy and candid response will be critical in ensuring objective research. It will not be necessary to write your name on this questionnaire, and it will be ensured by the researcher that, all information received will be treated in strict confidence. In addition, the results of the study will solely be used for academic research purposes and to enhance knowledge in the field of construction of Health Facilities projects performance in the County. On request, the research report may be presented to the County for information and record.

Thank you for your valuable time.

Yours faithfully,

Duncan Ngondo

APPENDIX II: QUESTIONNAIRE FOR M&E STAFF

SERIAL No. -----

DATE: -----

SECTION A: RESPONDENT’S PROFILE

Your accuracy and candid response will be critical in ensuring objective research. It will not be necessary to write your name on this questionnaire, and it will be ensured by the researcher that, all information received will be treated in strict confidence.

RP - SECTION A: RESPONDENT’S PROFILE		
	Date:	
SRPQ1	Indicate the Sub-County you represent	Kirinyaga West-----1 Kirinyaga Central-----2 Kirinyaga East-----3 Mwea East-----4 Mwea West-----5 Office Based-----6
SRPQ2	What is your age group?	Under 30 years..... 1 31 – 40 years..... 2 41 – 50 years.....3 51 – 60 years.....4 Over 60 years.....5
SRPQ3	Indicate your Gender	Male.....1 Female.....0
SRPQ4	Please indicate your Section among the following	Architect-----1 Procurement-----2 Clerk of Works-----3 Quantity Surveyor(QS)-----4 Monitoring and Evaluation-----5

SRPQ5	Is M&E your main job in this organization?	Yes-----1 No-----0
SRPQ6	What is the highest level of education have you achieved?	KCSE.....1 Diploma.....2 Bachelor Degree.....3 Masters Degree.....4 PhD.....5
SRPQ7	For how long have you worked in this area	Less than 1 year.....1 1 – 5 years.....2 6 – 10 years.....3 11 – 15 years.....4 Over 15 years.....5

SECTION B: PERFORMANCE OF PUBLIC FUNDED HEALTH FACILITIES CONSTRUCTION PROJECTS

PP - PERFORMANCE OF PUBLIC FUNDED HEALTH FACILITIES CONSTRUCTION PROJECTS		
PPQ1	Indicate the number of projects that were scheduled(Planned) in this sector in the 2014-2019 development plan in your Sub-County	-----
PPQ2	Indicate the number of projects that were completed in the sector within time, scope and budget in the 2014-2019 development plan in your Sub-County	-----

PPQ3	Is an ex- ante evaluation cost effectiveness analysis carried out before the implementation of the health facilities projects	No.....0 Yes-----1 Do not know-----2
PPQ4	Is an intermediary evaluation cost effectiveness analysis carried out during Heath Project implementation.	Yes, 1 No-----0 Do not know-----2
PPQ5	Is post- evaluation cost effectiveness analysis carried out after the health facilities project completion	Yes -----1 No-----0 Do not know-----2
PPQ6	Indicate the number of projects that an ex- ante evaluation cost effectiveness analysis was carried out, and report submitted before commencement for projects scheduled in the 2014-2019 development plan in your Sub-County	-----

In a scale of 5-1, based on your most recent experience, please indicate the extent of your satisfaction on the performance of public funded health facilities construction projects in your county?

Use 5- extremely satisfied, 4- satisfied 3-Neither satisfied nor dissatisfied, 2- dissatisfied, 1-extremely dissatisfied

PPS	PERFORMANCE OF PUBLIC FUNDED HEALTH FACILITIES CONSTRUCTION PROJECTS	5	4	3	2	1
CSQ1	What is your level of satisfaction on deliverable dates of the public funded health facilities construction projects in your county as far as final project plan is concerned?					
CSQ2	How do you rate the level of your satisfaction on the project status progress reports submitted during implementation in view of clarity, concise and containment of enough information to determine project progress?					
CSQ3	How are you satisfied with the way the problems were addressed by the project and time taken for the resolution.					
CSQ4	How do you rate the level of your satisfaction on the product or service provided by the project?					
CSQ5	How do you rate the level of your satisfaction on the quality practice used during the project?					
CSQ6	What is your overall level of satisfaction with the project management practice?					
CSQ7	How do you rate the level of your satisfaction on the information you received during the project implementation regarding status, problems, and progress?					
CSQ8	What is your overall level of satisfaction with the Project Completion on time, scope and budget					
CSQ9	Your satisfaction is on the level that you can recommend such completed projects to other sub-counties with similar community needs?	Strongly agree-----5 Agree-----4 Neutral-----3 Disagree-----2 Strongly disagree-1				

SECTION C: M&E IMPLEMENTATION

MIQ1	Indicate the number of Projects where M&E Implementation Reports of Projects completed on time, scope and budget in the 2014-2019 development plan were submitted	-----
MIQ2	Indicate the number of Projects where Plan Documents for M&E Implementation are developed before commencement of Projects completed on time, scope and budget in the 2014-2019 development plan	-----
MIQ3	Do you have an M&E Data Analysis Tool in your Section	Yes-----1 No-----0
MIQ4	What type of report do you prepare after Site Inspections	Progress Report---1 Site Visits Report-2 Meeting Minutes Reports-----3 M&E Reports----4
MIQ5	What are the most frequent M&E planned scheduled timelines for implementation	Quarterly-----1 Mid Project Implementation---2 End of Project Implementation---3 None-----4
MIQ6	When are the results communicated to the Project team when the M&E activities are completed	Within 7 days-----1 Within 14 days----2 Within 30 days----3 Never -----4
MIQ7	Who are the Report recipients	Project team-----1 Ministry of Health---2 M&E Directorate-----3 Ministry of Devolution-----4

MIQ8	Has a Monitoring and Evaluation Report dissemination Plan been developed in your department, and can be produced on demand?	Yes-----1 No.....0
MIQ9	Has a Follow-up Plan on M&E recommendations been developed and can be produced on demand?	Yes.....1 No.....0

In a scale of 5-1, please indicate the extent to which you agree on the implementation of M&E in your Sub-County.

Use 5- Strongly agree, 4- Agree, 3-Neutral, 2- Disagree, 1-Strongly disagree

MI	M&E IMPLEMENTATION	5	4	3	2	1
MIQ10	As the best practice, M&E Plans should always be developed before commencement of all Projects completed on time, scope and budget in the 2014-2019 development plan					
MIQ11	As the best practice, M&E Implementation Reports for all Projects completed on time, scope and budget in the 2014-2019 development plan should be developed and completed during the period					
MIQ12	Implementation Tools exist in the Department for monitoring and evaluation of public funded health facilities construction projects in the county					
MIQ13	Regular evaluation of effectiveness of models used for M&E activities influence the performance of the projects					
MIQ14	Good planning and performance of monitoring and evaluation of projects in the county have been predominantly characterized by way of sharing of information					
MIQ15	M&E practices in implementation, budgetary allocation and staff capacity building for public funded health facilities construction projects in the county influences the performance of the projects					
MIQ16	Dissemination and use of M&E Plan between M&E officers and supervisors influences the performance of public funded health facilities construction projects in the county					
MIQ17	Office based M&E officers and M&E Field Staff jointly prepare M&E Plans as the best practice operations					

MIQ18	There is proper keeping of Project Monitoring and Evaluation Records in the department				
MIQ19	Proper keeping of project monitoring and evaluation records influences the effectiveness of M&E practices				
MIQ20	M&E Implementation Reports for all completed projects are developed and kept in the county Archives				
MIQ21	Time duration, Cost performance and Scope performance, are the main Data collected to perform M&E during the implementation of public funded health facilities construction projects.				
MIQ22	The Data collection Tools used for M&E activities when designed, reviewed and agreed by all stakeholders influence the performance of public funded health facilities construction projects in the county				

SECTION D: M&E BUDGETARY ALLOCATION

BGT – M&E BUDGETARY ALLOCATION

BGTQ1	<p>How would you rate the level at which funds are allocated to M&E activities for public funded health facilities construction projects in your county?</p> <p>Very high.....4</p> <p>Moderately high-----3</p> <p>Low.....2</p> <p>Very Low-----1</p>	
BGTQ2	<p>Indicate the number of Projects where M&E Budget is prepared before commencement of Projects completed on time, scope and budget in the 2014-2019 development plan</p> <p>-----</p>	
BGTQ3	<p>Were you involved in preparing the M&E budget</p> <p>Yes-----1</p> <p>No-----0</p>	
BGTQ4	<p>Was an M&E Cost Plan developed before implementation of all Projects completed on time, scope and budget in the 2014-2019 development plan</p> <p>Yes-----1</p> <p>No-----0</p>	

BGTQ5	Indicate the number of Projects where M&E Cost Plan was prepared before commencement of Projects completed on time, scope and budget in the 2014-2019 development plan	-----

SECTION E: M&E BUDGETARY ALLOCATION

In a scale of 5-1, please indicate the extent to which you agree with the following statements on M&E Budgetary Allocation during Monitoring and Evaluation Implementation in your Sub-County.

Use 5- Strongly agree, 4- Agree, 3- Neutral, 2-Disagree, 1- Strongly disagree

	M&E BUDGETARY ALLOCATION	5	4	3	2	1
BGTQ6	M&E Budget is always developed in the county before commencement of any of the Projects implemented during the 2014-2019 development					
BGTQ7	Am always involved in M&E Budget Preparation of Development Projects					
BGTQ8	M&E Cost Plan is always developed before implementation of all Projects completed on time, scope and budget in the 2014-2019 development plan					
BGTQ9	M&E and Project Budgets Integration plan is always developed before implementation of any Projects completed during the 2014-2019 development plan					
BGTQ10	Appropriation of money for planned M&E purposes influences the performance of public funded health facilities projects					
BGTQ11	There is always a timely remittance of M&E funds in all completed projects in the Sub-County					

BGTQ12	Timely remittance of M&E funds significantly affect the performance of public funded health facilities projects in the county.					
BGTQ13	M&E budget plan should always be available and accessible before start of M&E implementation in the county					
BGTQ14	Amount allocated for the implementation of M&E affects the final performance of public funded health facilities construction projects					
BGTQ15	A clear Practice of budget allocation to the M&E activities, significantly influence the performance of public funded health facilities construction projects in the County.					
BGTQ16	The practice of budget allocation for M&E activities is effective in the sub county					
BGTQ17	M&E Budgetary Allocation is bureaucratic, and this has a negative influence on performance of public funded health facilities projects in the county					
BGTQ18	An effective M&E allocation practice forms the basis of planning and implementing the M&E activities accurately					
BGTQ19	A clear and adequate M&E budget ensures satisfactory performance of public funded health facilities projects in the county.					
BGTQ20	A realistic estimation of cost for monitoring and evaluation is usually undertaken when planning for projects					
BGTQ21	Involvement of M&E Staff in budget preparation influences the effectiveness of M&E Practices and performance of public funded health projects.					

SECTION F: STAFF CAPACITY BUILDING

SCBQ1	<p>To what extent has capacity building of monitoring and evaluation staff in your county been emphasized as a significant component for performance of public funded health facilities construction projects in the county?</p> <p>Great extent4</p> <p>Moderate extent.....3</p> <p>Little extent2</p> <p>No extent at all.....1</p>	
SCBQ2	<p>M&E is carried out by;</p> <p>External Staff (Hired Consultants).....1</p> <p>Internal Staff (selected within project team members).....2</p> <p>Project Manager.....3</p>	
SCBQ3	<p>Indicate the number of M&E Functional Refresher Courses you have attended during Year 2014-2019 period in this section</p>	<p>-----</p>
SCBQ4	<p>Indicate the number of M&E benchmarking exercises you have attended during Year 2014-2019 period in this section</p>	<p>-----</p> <p>-</p>
SCBQ5	<p>Does your section have a Training Curriculum Outline for existing and new entrants M&E Staff</p>	<p>Yes-----1</p> <p>No-----0</p>
SCBQ6	<p>Are there any M&E Staff Motivation Factors in your section</p>	<p>Yes-----1</p> <p>No-----0</p>
SCBQ7	<p>How do you rate M&E efficiency in your county</p>	<p>Very high-----</p> <p>5</p> <p>High-----</p> <p>4</p> <p>Moderate-----</p> <p>2</p>

In a scale of 5-1, please indicate your agreement on M&E staff capacity building practices.

Use **5- Strongly agree, 4- Agree, 3-Neutral, 2-Disagree, 1, strongly disagree**

	STAFF CAPACITY BUILDING	5	4	3	2	1
SCBQ8	Adequate training in M&E is required for satisfactory performance of Public Funded Health Facilities Construction Projects in Kirinyaga the county					
SCBQ9	Benchmarking Sessions for M&E Practices influences performance of Public Funded Health Facilities Construction Projects in Kirinyaga the county					
SCBQ10	Motivation of M&E Staff directly influences the effectiveness of M&E and hence performance of Public Funded Health Facilities Construction Projects					
SCBQ11	Functional Refresher Courses for M&E practices are integral part of M&E Training Curriculum					
SCBQ12	Highly skilled M&E Staff contributes to quality of M&E performance and hence to the overall performance of public funded health facilities construction projects in the county					
SCBQ13	Adequate remuneration of M&E staff affects recruitment of qualified staff who have the capacity for monitoring and evaluation and hence influence the performance of the public funded health facilities projects in the county					
SCBQ14	Training curriculum outline includes a designed structure for new M&E staff entrants.					
SCBQ15	The Department has developed an M&E Staff Appraisal as a means of motivation Factor that is considered regularly					

SECTION G: COMMUNITY PARTICIPATION ON M&E

CPQ1	In your knowledge, is there any written criteria or guidelines followed in selecting community representatives for Projects Decision Making Groups	Yes-----1 No-----0
CPQ2	In your knowledge indicate the number of people that has ever been selected to participate in needs assessment for identification of public funded health construction projects for implementation during the period of 2014-2019	-----
CPQ3	In your knowledge indicate the number of people that has ever been selected to participate in public funded health construction projects planning before project implementation during the period of 2014-2019	-----
CPQ4	In your knowledge, have you attended, or arranged for attendance, any Monitoring and Evaluation Discussion Group Workshops or Project Planning Sessions during the Project Implementation during the period of 2014-2019	Yes-----1 No-----0
CPQ5	In your knowledge, indicate the number of people that has been selected to attend Monitoring and Evaluation Discussion Group Workshops or Project Planning Sessions during the Project Implementation during the period of	-----
CPQ6	In your knowledge, indicate the number of people that has been selected to attend Regular Community/Project Management Meetings during the Project Implementation period of 2014-2019	-----

In a scale of 5-1, please indicate the extent to which you agree with the statement on Community Participation in M&E activities.

Use 5- Strongly Agree, 4- Agree, and 3- Neutral 2- Disagree 1- Strongly disagree

	COMMUNITY PARTICIPATION ON M&E	5	4	3	2	1
CPQ7	Community participation in M&E activities influences the relationship between M&E and Performance of public funded health facilities construction projects.					
CPQ8	Workshops and seminars were held during the implementation of projects to ensure completion was within time, scope and budget in accordance with the 2014-2019 development plan.					
CPQ9	Community representatives were involved in project identification before implementation thus influencing the performance of the selected public funded health facilities construction projects in the county.					
CPQ10	There are minutes for Regular Community/Project Management meetings for all projects completed on time, scope and budget in Kirinyaga County in the 2014-2019 development plan.					
CPQ11	The community through representatives were involved in early phase of the projects where projects key features, structures, criteria for success, and major deliverables were all planned out.					
CPQ12	The community through representatives were involved in establishing the steps required to define the project objectives, clarify the scope of what needed to be done and develop the task list to do it.					
CPQ13	The M&E staff and the community representatives were involved in determining the relevance and level of					

	achievement of projects objectives, development effectiveness, efficiency, impact and sustainability.					
CPQ14	Community opinions towards the projects were considered during M&E implementation.					
CPQ15	During project implementation, discussions were held between the community groups and project M&E officials to ensure project completion was within time, scope and budget.					
CPQ16	High Community participation in needs analysis procedures influences the selection and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ17	High Community participation in projects identification procedures influences the implementation and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ18	Community is included in monitoring and Evaluation and their general views are usually considered in the M&E implementations					
CPQ19	High Community participation in project Monitoring and Evaluation practice influences the implementation and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ20	High Community participation in project planning practice influences the implementation and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ21	Project Evaluation is carried out in partnership with the Community					
CPQ22	There is transparency in selecting Community representatives in the project committee membership					

CPQ23	Community participation in projects management has a significant influence on the relationship between Monitoring and Evaluation and performance of public funded health facilities construction projects.					
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APPENDIX III:

QUESTIONNAIRE FOR MEMBER OF COUNTY ASSEMBLY IN THE COUNTY GOVERNMENT

DATE: -----

SERIAL No. -----

SECTION A: COMMUNITY RESPONDENT’S PROFILE

Your accuracy and candid response will be critical in ensuring objective research. It will not be necessary to write your name on this questionnaire, and it will be ensured by the researcher that, all information received will be treated in strict confidence.

RP - RESPONDENT’S PROFILE		
CRPQ1	Indicate the Sub-County your Ward is in	Kirinyaga East1 Kirinyaga West2 Mwea East.....3 Mwea West.....4 Kirinyaga Central.....5
CRPQ2	Indicate Gender	Male-----1 Female-----0
CRPQ3	What is your age group?	Under 30 years..... 1 31 – 40 years..... 2 41 – 50 years.....3 51 – 60 years.....4 Over 60 years.....5
CRPQ4mca	What is the highest level of education have you achieved?	KCSE.....1 Diploma.....2 Bachelor Degree.....3

CRPQ5mca	For how long have you represented this ward	Less than 5 years.....0
		More than 5 years-----1

SECTION B: COMMUNITY PARTICIPATION ON M&E

COMMUNITY PARTICIPATION ON M&E		
CPQ1	In your knowledge, is there any written criteria or guidelines followed in selecting community representatives for Projects Decision Making Groups	Yes-----1 No-----0
CPQ2	In your knowledge indicate the number of people that has ever been selected to participate in needs assessment for identification of public funded health construction projects for implementation during the period of 2014-2019	-----
CPQ3	In your knowledge indicate the number of people that has ever been selected to participate in public funded health construction projects planning before project implementation during the period of 2014-2019	-----
CPQ4	In your knowledge, have you attended, or arranged for attendance, any Monitoring and Evaluation Discussion Group Workshops or Project Planning Sessions during the Project Implementation during the period of 2014-2019	Yes-----1 No-----0
CPQ5	In your knowledge, indicate the number of people that has been selected to attend Monitoring and Evaluation Discussion Group Workshops or Project Planning Sessions during the Project Implementation during the period of 2014-2019	-----
CPQ6	In your knowledge, indicate the number of people that has been selected to attend Regular Community/Project Management Meetings during the Project Implementation period of 2014-2019	-----

In a scale of 5-1, please indicate the extent to which you agree with the statement on Community Participation in M&E activities.

Use 5- Strongly Agree, 4- Agree, 3- Neutral 2- Disagree 1- Strongly disagree

	Community Participation on M&E	5	4	3	2	1
CPQ7	During project implementation, discussions were held between the community groups and project M&E officials to ensure project completion was within time, scope and budget.					
CPQ8	Workshops and seminars were held during the implementation of projects to ensure completion was within time, scope and budget in accordance with the 2014-2019 development plan.					
CPQ9	Community representatives were involved in project identification before implementation thus influencing the performance of the selected public funded health facilities construction projects in the county.					
CPQ10	There were minutes for meetings involving the community representatives and project officials for all the projects that were completed within time, scope and budget in the 2014-2019 development plan.					
CPQ11	The community through representatives were involved in early phase of the projects where projects key features, structures, criteria for success, and major deliverables were all planned out.					
CPQ12	The community through representatives were involved in establishing the steps required to define the project objectives, clarify the scope of what needed to be done and develop the task					
CPQ13	The M&E staff and the community representatives were involved in determining the relevance and level of achievement of projects objectives, development effectiveness, efficiency, impact and sustainability.					
CPQ14	Community opinions towards the projects were considered during M&E implementation.					
CPQ15	Community participation in projects management has a significant effect on the relationship between M&E and performance of public funded health facilities construction projects.					
CPQ16	High Community participation in needs analysis procedures influences the selection and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ17	High Community participation in projects identification procedures influences the implementation and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ18	Community is included in monitoring and Evaluation and their general views are usually considered in the M&E implementations					

CPQ19	High Community participation in project Monitoring and Evaluation practice influences the implementation and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ20	High Community participation in project planning practice influences the implementation and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ21	Project Evaluation is carried out in partnership with the Community					
CPQ22	There is transparency in selecting Community representatives in the project committee membership					
CPQ23	Community participation in projects management has a significant influence on the relationship between Monitoring and Evaluation and performance of public funded health facilities construction projects.					

SECTION C: CUSTOMER SATISFACTION

In a scale of 5-1, based on your most recent experience, please indicate the extent of your satisfaction on the performance of public funded health facilities construction projects in your county?

Use 5- extremely satisfied, 4- somewhat satisfied 3-Neither satisfied nor dissatisfied, 2-somewhat dissatisfied, 1-extremely dissatisfied

CS	PERFORMANCE OF PUBLIC FUNDED HEALTH FACILITIES CONSTRUCTION PROJECTS	5	4	3	2	1
CSQ1	What is your level of satisfaction on deliverable dates of the public funded health facilities construction projects in your county as far as final project plan is concerned?					
CSQ2	How do you rate the level of your satisfaction on the project status reports submitted during implementation in view of clarity, concise and containment of enough information to determine project progress?					
CSQ3	How are you satisfied with the way the problems were addressed by the project and time taken for the resolution?					

CSQ4	How do you rate the level of your satisfaction on the product or service provided by the project?					
CSQ5	How do you rate the level of your satisfaction on the quality practice used during the project?					
CSQ6	What is your overall level of satisfaction with the project management practice?					
CSQ7	How do you rate the level of your satisfaction on the information you received during the project implementation regarding status, problems, and progress?					
CSQ8	Your satisfaction is on the level that you can recommend such completed projects to other sub-counties with similar community needs?	Strongly agree-----5 Agree-----4 Neutral-----3 Disagree-----2 Strongly disagree-1				

APPENDIX IV:

QUESTIONNAIRE FOR CHIEFS AND SUB-CHIEFS (COMMUNITY)

DATE: -----

SERIAL No. -----

SECTION A: COMMUNITY RESPONDENT’S PROFILE

Your accuracy and candid response will be critical in ensuring objective research. It will not be necessary to write your name on this questionnaire, and it will be ensured by the researcher that, all information received will be treated in strict confidence.

RP - RESPONDENT’S PROFILE		
CRPQ1	Indicate the Sub-County you represent	Kirinyaga East1 Kirinyaga West2 Mwea East.....3 Mwea West.....4 Kirinyaga Central.....5
CRPQ2	Indicate Gender	Male-----1 Female-----0
CRPQ3	What is your age group?	Under 30 years..... 1 31 – 40 years..... 2 41 – 50 years.....3 51 – 60 years.....4 Over 60 years.....5
CRPQ4	What is the highest level of education have you achieved?	KCSE.....1 Diploma.....2 Bachelor Degree.....3 Masters Degree.....4 PhD.....5

CRPQ5	For how long have you worked in this area	Less than 1 year.....	1
		1 – 5 years.....	2
		6 – 10 years.....	3
		11 – 15 years.....	4
		Over 15 years.....	5

SECTION B: COMMUNITY PARTICIPATION ON M&E

COMMUNITY PARTICIPATION ON M&E		
CPQ1	In your knowledge, is there any written criteria or guidelines followed in selecting community representatives for Projects Decision Making Groups	Yes-----1 No-----0
CPQ2	In your knowledge indicate the number of people that has ever been selected to participate in needs assessment for identification of public funded health construction projects for implementation during the period of 2014-2019	-----
CPQ3	In your knowledge indicate the number of people that has ever been selected to participate in public funded health construction projects planning before project implementation during the period of 2014-2019	-----
CPQ4	In your knowledge, have you attended, or arranged for attendance, any Monitoring and Evaluation Discussion Group Workshops or Project Planning Sessions during the Project Implementation during the period of 2014-2019	Yes-----1 No-----0
CPQ5	In your knowledge, indicate the number of people that has been selected to attend Monitoring and Evaluation Discussion Group Workshops or Project Planning Sessions during the Project Implementation during the period of 2014-2019	-----
CPQ6	In your knowledge, indicate the number of people that has been selected to attend Regular Community/Project Management Meetings during the Project Implementation period of 2014-2019	-----

In a scale of 5-1, please indicate the extent to which you agree that community participation affects the relationship between M&E Practices and performance of public funded healthcare facilities

construction projects? Use 5- Strongly Agree, 4- Agree, 3- Neutral 2- Disagree 1- Strongly disagree

	Community Participation on M&E	5	4	3	2	1
CPQ7	During project implementation, discussions were held between the community groups and project M&E officials to ensure project completion was within time, scope and budget.					
CPQ8	Workshops and seminars were held during the implementation of projects to ensure completion was within time, scope and budget in accordance with the 2014-2019 development plan.					
CPQ9	Community representatives were involved in project identification before implementation thus influencing the performance of the selected public funded health facilities construction projects in the county.					
CPQ10	There were minutes for meetings involving the community representatives and project officials for all the projects that were completed within time, scope and budget in the 2014-2019 development plan.					
CPQ11	The community through representatives were involved in early phase of the projects where projects key features, structures, criteria for success, and major deliverables were all planned out.					
CPQ12	The community through representatives were involved in establishing the steps required to define the project objectives, clarify the scope of what needed to be done and develop the task					
CPQ13	The M&E staff and the community representatives were involved in determining the relevance and level of achievement of projects objectives, development effectiveness, efficiency, impact and sustainability.					
CPQ14	Community opinions towards the projects were considered during M&E implementation.					
CPQ15	Community participation in projects management has a significant effect on the relationship between M&E and performance of public funded health facilities construction projects.					
CPQ16	High Community participation in needs analysis procedures influences the selection and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ17	High Community participation in projects identification procedures influences the implementation and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ18	Community is included in monitoring and Evaluation and their general views are usually considered in the M&E implementations					

CPQ19	High Community participation in project Monitoring and Evaluation practice influences the implementation and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ20	High Community participation in project planning practice influences the implementation and ultimately the performance of the selected public funded health facilities construction projects in the county					
CPQ21	Project Evaluation is carried out in partnership with the Community					
CPQ22	There is transparency in selecting Community representatives in the project committee membership					
CPQ23	Community participation in projects management has a significant influence on the relationship between Monitoring and Evaluation and performance of public funded health facilities					

SECTION C: CUSTOMER SATISFACTION

In a scale of 5-1, based on your most recent experience, please indicate the extent of your satisfaction on the performance of public funded health facilities construction projects in your county?

Use 5- extremely satisfied, 4- somewhat satisfied 3-Neither satisfied nor dissatisfied, 2-somewhat dissatisfied, 1-extremely dissatisfied

CS	PERFORMANCE OF PUBLIC FUNDED HEALTH FACILITIES CONSTRUCTION PROJECTS	5	4	3	2	1
CSQ1	What is your level of satisfaction on deliverable dates of the public funded health facilities construction projects in your county as far as final project plan is concerned?					
CSQ2	How do you rate the level of your satisfaction on the project status reports submitted during implementation in view of clarity, concise and containment of enough information to determine project progress?					
CSQ3	How are you satisfied with the way the problems were addressed by the project and time taken for the resolution?					
CSQ4	How do you rate the level of your satisfaction on the product or service provided by the project?					
CSQ5	How do you rate the level of your satisfaction on the quality practice used during the project?					

CSQ6	What is your overall level of satisfaction with the project management practice?					
CSQ7	How do you rate the level of your satisfaction on the information you received during the project implementation regarding status, problems, and progress?					
CSQ8	Your satisfaction is on the level that you can recommend such completed projects to other sub-counties with similar community needs?	Strongly agree-----5 Agree-----4 Neutral-----3 Disagree-----2 Strongly disagree-1				

INTERVIEW GUIDE FOR TOP OFFICIALS OF KIRINYAGA COUNTY GOVERNMENT

DATE: -----

Personal Details

<p>IGQ1</p>	<p>Please indicate your Gender</p> <p>Male-----1</p> <p>Female-----0</p>
<p>IGQ2</p>	<p>Please indicate your official rank in the county</p> <p>His Excellency the Governor,1</p> <p>Deputy Governor.....2</p> <p>The County Executive Secretary.....3</p> <p>County Minister for Health.....4</p> <p>County Minister for Finance.....5</p> <p>County Minister for Education.....6</p> <p>Appointed Rep for His Excellency the Governor,7</p> <p>Appointed Rep for The Deputy Governor.....8</p> <p>Appointed Rep for The County Executive Secretary.....9</p> <p>Appointed Rep for County Finance Minister10</p>
<p>IGQ3</p>	<p>Kindly state, in your own view, how you can rate the performance of public funded health facilities construction projects in your county?</p> <p>Very Poor.....1</p> <p>Poor.....2</p> <p>Satisfactory.....3</p> <p>Successful.....4</p> <p>Very successful.....5</p>
<p>IGQ4</p>	<p>Has it been reported to you by the M&E department on the adequacy of funds allocated for monitoring and evaluation of health facilities construction projects and the effect on performance?</p> <p>Yes.....1</p>

	No.....0
IGQ5	Is there any approved policy by your county for funds remittance procedure for M&E activities? Yes.....1 No.....0
IGQ6	How does the remittance time period of these funds affect M&E activities the performance of these projects? Very seriously.....5 Seriously.....4 Moderately.....3 Little effect.....2 No effect.....1
IGQ7	Is there any Professional Training Programme for the M&E staff in the County Yes.....1 No.....0
IGQ8	Is there any M&E Bench Marking Programme for the M&E staff in the County Yes.....1 No.....0
IGQ9	Is there any planned Performance Appraisal for the M&E staff in the County Yes.....1 No.....0
IGQ10	In your opinion, should the number of M&E staff in the Department be adjusted upwards? Yes.....1 No.....0
IGQ11	Does the participation of the community affect the performance of public funded health facilities construction projects Yes.....1 No.....0

APPENDIX V: BUDGET FOR THE STUDY

Budget Line	Items	Cost In Ksh.
1. Proposal development	Printing papers, notebooks and internet and library	50,000.00
	Printing	10,000.00
	Photocopy	7,000.00
2. Data Collection (Field Work)	Photocopy	3,000.00
	Travelling	5,000.00
	Research Assistance	12,000.00
3. Data Analysis and Interpretation	Data Entry, Coding and Analysis	15,000.00
4. Report Writing and Dissemination	Report Writing	8,000.00
	Binding and dissemination	10,000.00
5. Miscellaneous expenses		30,000.00
	TOTAL COST	150,000.00

APPENDIX VII: 5 -YEAR HEALTH FACILITIES CONSTRUCTION PROJECTS

ITE M No.	PROJECT NAME	LOCATIO N	BUD GET (Ksh)	STAR T DATE	END DATE	ST AT US	REMARKS
	Drug Warehouses for Health						
1	Products and commodities/Medical Supplies Construction	Kirinyaga Central	40M	2013	2017	80 %	Delayed but ongoing
2	Existing Drug commodity stores upgrade Phase 1	Ditto	5M	2013	2015	100 %	completed
3	Existing Drug commodity stores upgrade Phase 2	Ditto	20M	2015	2017	50 %	Stalled
4	Existing vaccine immunisation stores upgrade Phase 1	Ditto	20M	2013	2015	100 %	Completed
5	Existing vaccine immunisation stores upgrade Phase 2	Ditto	40M	2015	2017	80 %	Delayed but ongoing
6	Fully equipped Radiology department construction	Ditto	30M	2013	2014	100 %	Completed
7	Fully equipped Isolation Ward construction	Ditto	30M	2013	2015	80 %	Delayed but ongoing
8	Fully equipped Surgical Ward construction	Ditto	20M	2013	2015	80 %	Delayed but ongoing
9	Fully equipped Cancer Treatment Centre construction	Ditto	50M	2013	2015	80 %	Delayed but ongoing
10	Fully equipped Renal unit construction	Ditto	100M	2013	2015	50 %	Stalled
11	Fully equipped ENT/Eye unit construction	Ditto	50M	2013	2015	100 %	Completed

12	Fully equipped ICU/HDU construction	Ditto	100M	2013	2017	50 %	Stalled
13	KMTC construction, fully equipped and furnished	Ditto	300M	2013	2018	5%	Stalled
14	Perimeter wall construction	Ditto	30M	2013	2016	50 %	Stalled
15	Fully equipped Diabetic Centre construction	Ditto	5M	2013	2018	100 %	Completed
16	Fully equipped Maternity Ward construction	Mwea	20M	2013	2015	20 %	Stalled
17	Fully equipped morgue construction	Ditto	5M	2013	2014	100 %	Completed
18	Fully equipped Radiology department Construction	Ditto	20M	2013	2016	50 %	Stalled
19	Fully furnished administrative offices construction	Ditto	20M	2013	2018	50 %	Stalled
20	Fully furnished and equipped modern kitchen Construction	Ditto	10M	2013	2016	80 %	Delayed but ongoing
ITEM No.	PROJECT NAME	LOCATION	BUDGET (Ksh)	START DATE	END DATE	STATUS	REMARKS
21	Fully furnished and equipped isolation Wards Construction	Mwea	20M	2013	2016	80 %	Delayed but ongoing
22	Fully equipped Inpatient wards (25 bed capacity) construction	Ditto	40M	2013	2017	80 %	Delayed but ongoing
23	Perimeter wall construction	Ditto	30M	2013	2016	50 %	Stalled
24	Fully furnished and equipped Casualty department construction	Ditto	60M	2013	2017	30 %	Stalled
25	300KVA automatic generator Installation	Ditto	8M	2013	2016	50 %	Stalled

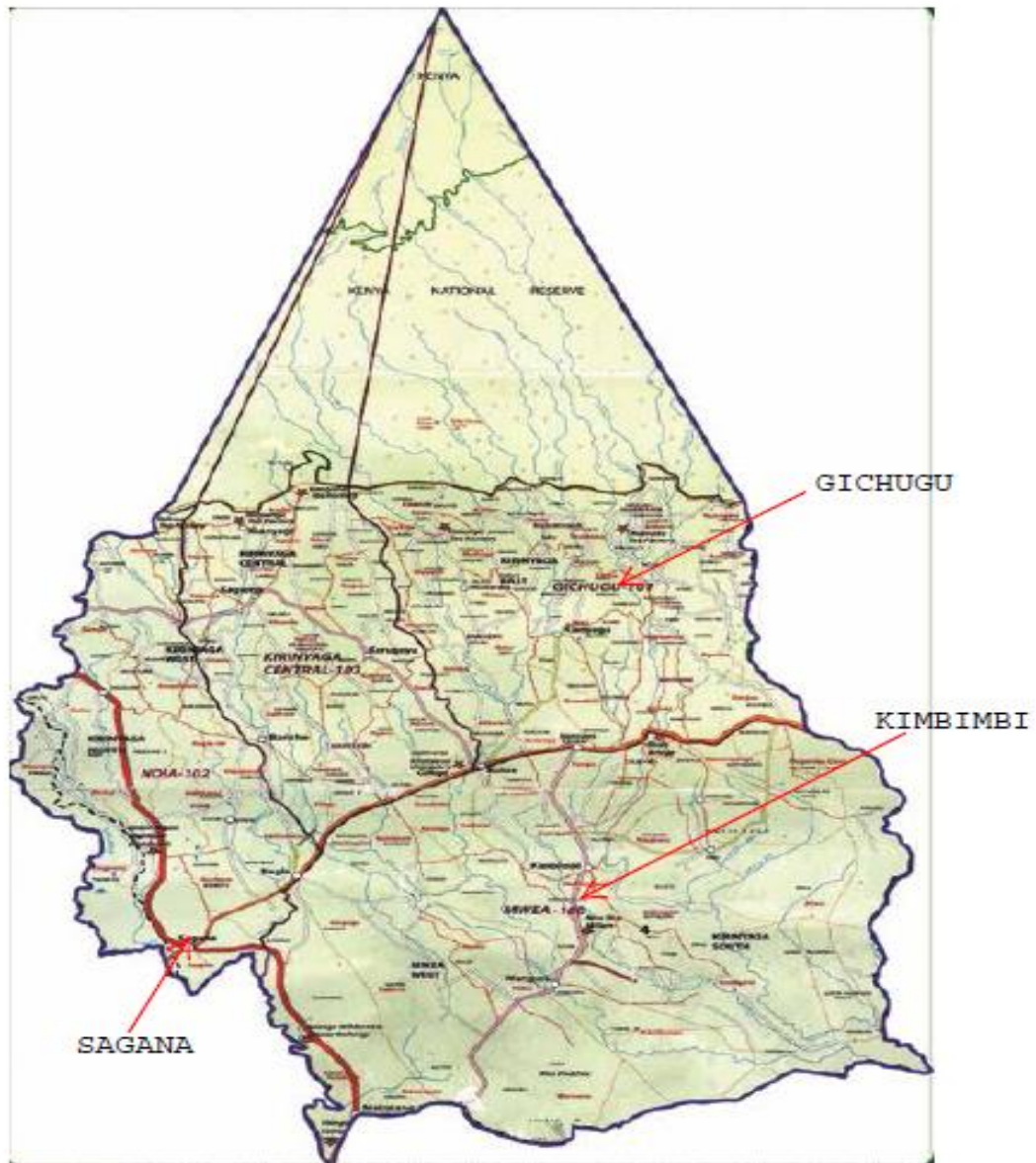
26	Fully furnished and equipped Radiology department Construction	Gichugu	30M	2013	2016	50 %	Stalled
27	Fully Furnished public health office	Ditto	20M	2013	2018	80 %	Delayed but ongoing
28	Fully equipped Modern Kitchen Construction	Ditto	10M	2013	2017	100 %	completed
29	Fully furnished and equipped Physiotherapy/Occupational department construction	Ditto	10M	2013	2018	50 %	Stalled
30	Fully furnished and equipped optical & dental units construction	Ditto	30M	2013	2017	50 %	Stalled
31	Fully furnished and equipped isolation wards construction	Ditto	30M	2013	2016	80 %	Delayed but ongoing
32	Fully Equipped and furnished Casualty Department Construction	Ditto	60M	2013	2017	50 %	Stalled
33	Fully equipped and furnished Inpatient Wards/Capacity construction	Ditto	40M	2013	2014	100 %	completed
34	Fully equipped Morgue construction	Ditto	30M	2013	2016	80 %	Delayed but ongoing
35	300KVA automatic generator Installation	Ditto	8M	2013	2015	100 %	completed

ITEM No.	PROJECT NAME	LOCATION	BUDGET (Ksh)	START DATE	END DATE	STATUS	REMARKS
36	Fully Equipped and operational Radiology Department construction.	Ndia	20M	2013	2016	80%	Delayed but ongoing
37	Fully furnished and equipped modern kitchen Construction.	Ditto	10M	2013	2016	100%	Completed
38	Fully equipped Cancer Physiotherapy/Occupational Centre construction.	Ditto	10M	2013	2017	100%	Completed

39	Fully equipped Renal unit construction.	Ditto	30M	2013	2016	80%	Delayed Ongoing
40	Fully equipped and functional ENT/Eye unit Construction.	Ditto	20M	2013	2015	100%	Completed
41	Fully equipped ICU/HDU construction.	Ditto	40M	2013	2016	50%	Stalled
42	Perimeter wall construction	Ditto	30M	2013	2016	100%	Completed
43	Fully equipped and furnished casualty department Construction.	Ditto	60M	2013	2016	50%	Stalled
44	Fully equipped and operational theatre department Construction.	Ditto	60M	2013	2016	50%	Stalled
45	Fully equipped morgue construction.	Ditto	30M	2013	2018	30%	Stalled

Source: Kirinyaga County First Integrated Development Plan 2013-2017

APPENDIX VIII: MAP OF KIRINYAGA COUNTY



Source: KCBP

APPENDIX IX: CALCULATIONS

Community Participation Sample size

The sample size will be estimated by use of Yamane (1967:886) formula as indicated below;

$$n = N \div [1 + N(e^2)]$$

Where n = Sample size

N = Population size

e = Level of precision or margin of error.

This study will assume a confidence level of 95%, and hence a margin error of 0.05,

Therefore,

Let $N= 609,842$ be the total population across the county, (beneficiaries)

and $e = 0.05$

Then

$$n = 609842 \div [1 + 609842(0.0025)]$$

giving a sample size of 400 Project beneficiaries across the county. Hence sample size for the study will be 400 respondents.

Questionnaire Distribution

The allocation of questionnaires to each Sub-County will be done using proportionate stratification formula, shown below:

$$n_h = \left(\frac{N_h}{N} \right) \times n$$

Where n_h =allocated questionnaires

N_h = Population for the Sub-County

N = Total population for the county and

n = total number of respondents