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Factors influencing Monitoring and Evaluation Processes of County Road Projects in Turkana County Government, Kenya

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Abbreviations and Acronyms

FY	Financial Year
GDP	Gross Domestic Product
KES	Kenyan Shillings
KRB	Kenya Roads Board
MR&R	Maintenance Repair and Rehabilitation
O & M	Operation and Maintenance
SSA	Sub-Saharan Africa
TCG	Turkana County Government
M & E	Monitoring and Evaluation
ANOVA	Analysis of Variance

Abstract: Fast deteriorating state of roads in Kenya calls for need to focus on monitoring and evaluation of roads during construction. This study will focus on factors influencing monitoring and evaluation processes of county road projects in Turkana county government. Monitoring and evaluation has not been bought well by the relevant bodies/stakeholder like the contractors and ministries handling the projects via various funding bodies etc. Various researches have keenly highlightedthe M&E strategy but fail to notice the basic factors influencing the strategy.The study seeks to evaluate to which extent availability of funds, stakeholder participation and involvement of technical persons affects performance of monitoring and evaluation processes of county road projects in Turkana County Government.The study was limited to road infrastructure construction projects within the County government of Turkana and the major limitation of the study proofed to be the cost and time constraints. This study utilized a descriptive survey design where self-administered questionnaires and secondary sources were used for data collection.The subjects of study were drawn from the 35 ongoing road projects per financial year and within the geographical precincts of the unit of study. The 50 respondents were selected from employees who have worked in the construction and maintenance of roads since the county government came in place. This comprised of the technical staff in the Ministry of Roads, Transport & Public works (Turkana County), contractor's team and the Monitoring & Evaluation Committee from Ministry of Finance &Planning. The sampling technique used in this research was Stratified Random Sampling Technique, a type of probability sampling technique. Numerical data collected using questionnaires was coded and entered and analyzed with the help Ms Office Package: Excel. A descriptive analysis with frequency table and varying percentages was used to present the findings of the research. The data was also analyzed using Excel 2013 data analysis: Anova tests to establish if there were any statistical differences between the means of the independent groups.The ANOVA tests yielded P-values greater than the 0.05 level of significance indicating that there was no significant relationship between availability of funds, stakeholder participation, involvement of technical personnel and the monitoring and evaluation processes. Hypothesis testing was further analyzed using Excel 2013 data analysis; t-test-Two samples assuming unequal variances. The researcher concludes from the available data that funds available for M&E of most of the county projects are not adequate, unplanned and that there's no timely disbursement. It is further concluded that stakeholder participation is essential in project management as they have significant influence over the project deliverables and finally involvement of technical persons is key in carrying out M&E activities. The study findings therefore indicated that there is a great influence of availability of funds, stakeholder participation and involvement of technical persons on M&E processes of county road projects.

Introduction

Transport is acrucial component of infrastructural development. As the driving force in the unification of the economy, transport and service facilities make up major requirements to enable commerce and the movement of goods and people. Transport infrastructure have for many years been viewed as means of facilitating trade within the whole and specific regions of the country in an unstable and ever changing global

environment, thus continues to uphold development in an attempt to hasten growth while reducing poverty. Considering the difficult task of globalization, Africa as a continent isclearly fallingbehind in the growth and promotion of regional trade, especially due to the lack of effective, secure and dependable transport system. The available transport infrastructures are totally outward-looking on the issue that transport infrastructure and services are underdeveloped and the physical structure integrated poorly.Between the years of 1960up to 1980, billions of dollars in 3rd world countries have been lost due to the impairing quality of their roads. (World Bank. (2013). *"International Road federation, World road Statistics and electronic*."World Development Indicators, World Bank. Washington, D.C.)

Massive road facilities of great value have been poorly upheld norpreserved while being misused and abused to great extents. The estimated capital required to restore this deteriorated roads greatly triples the cost that would have been acquired in maintaining it properly and effectively. Apart from road restoration cost, heavier charges are incurred in form of costs for Vehicle operation that in time quickly and steadily exceed the costs of road repair as road conditions worsen. Combined, these costs that could have been avoided mold into a difficult barrier discouraging greater economic development. Kenya has an extensive network of paved and unpaved roads. Turkana county road network is poorly developed. The county has a road structure covering a total of 5,496.2 km within which 488.5 km are bitumen, and 5007.7 km earth surface. (KRB gazette on road reclassification 2015). Seasonal rivers that cut through roads and poor soils poses a greatest challenge thus increasing the cost of road construction and maintenance. As a result, a number of roads are rendered impassable during the rainy seasons.

All the roads within the county are in a poor state. There exists the A1 road from Kitale passing through the county up to South Sudan. However this road was tarmacked long time ago but due to lack of maintenance it became dilapidated. Other major important roads that need to be rehabilitated include the Lodwar-Kalokol road, Lodwar-Lorugum road, Lodwar-Lokitaung road and The Kerio road among others. Most of the roads within urban centers such as Lodwar, Lokichoggio, Kakuma, Lokichar, Kainuk, Lorugum and Lokori need also to be tarmacked. The LAPPSET which is expected to pass through the county will be very significant to Turkana County as it is anticipated to increase trading activities between this county and the neighboring countries and counties. This LAPPSET consists of a 200m road reserve carrying a modern railway system and a pipeline. Once completed it is expected that the LAPSSET project will boost the economy of Turkana County.

In Africa, measures guiding construction and maintenance of roads are not consistent for all countries.Inasmuch as a couple of countries possess somewhat the adequate financial resource and human personnel to build and maintain roads to internationally acceptable quality, a large number of African countries are not equipped to do so.As the development of road systems continues to be insufficient in many African nations, poor and inadequate maintenance of the already existing roads is clearly a greater concern,thusmany parts of the road network cannot be used during the wet season.Out of the 169,886 km of total road network in Kenya, only 11,197km is classified as paved while the remaining 149,689 is unpaved (KRB, APRP FY 2012/2013). This therefore implies quality roads are critical for development of any country. Fast deteriorating state of roads in Kenya calls for need to focus on monitoring and evaluation of road projects during construction. This study will focus on factors influencing monitoring and evaluation processes of county road projects in Turkana county government. Monitoring and evaluation has not been bought well by the relevant bodies/stakeholder.

Other studies across the country by a number of organization have shown that the perception and corruption have influenced the monitoring and evaluation process of the road development projects in all the 47 counties (World Bank, 2014), issues of limited budgetary allocations from the national government and the delays in funds release limits the M&E process (Ministry of Transport, 2013) and poor contractual agreements as shown by the Public Procurement & Disposal Act published by the Republic of Kenya (2015).

The Study of Harral and Faiz (1988) was perhaps the first study to come out with some reform directions to improve roads. It indicated that road agencies were usually public monopolies and had too many responsibilities, such as planning, directing and executing construction and maintenance activities. In addition, it pointed out that they devoted of staff time, funds and facilities to executing roadworks and sought separation of planning, controlling and executing of roads with the transfer of execution of roads to the private nongovernmental sector or an independent public agency specialized in order to bring about clarity in responsibility, improved incentive structure, and strengthen accountability.

Over the past 50 years, the Kenya roads sector has experienced many transformations that have paved way to probably its most illustrious phraseyet. Incontext of the country's 2010 Constitution proper execution of the new road policy is anticipated to further push the sector to a greater level.On reviewing the past 5 decades, a gradual and positive process of change that the roads sector has undergone is clearly presented. Even though different challenges have been experienced, the main picture presented is one of success. In regards to the

Nations strive for economic and social development, basicinfrastructures continuously perform major roles. The public sector has been the key player in this, backed up by a diverse team of development partners and the private sector.(Kenya National Highways Authority. (2011). "*Monitoring and Evaluation Report*, 1st Quarter 2012/2013, Planning." Planning, KeNHA.)In Kenya, Road Transport makes up important component of the country's service industry from its assistance in contributing to local employment and its major role in facilitatingexternal commerce, specifically in various regions. Kenya's economic development clearly depends on roads and road transport. Proper and well established infrastructure influence trade activities, economic growth and better living standards particularly in Kenya, where roads bear over 80 percent of the public transport. Roads are the major modes of conveyance for both people and goods and also serve in linking other different modes not to mention providing access to essential social commodities and services.

Turkana county has road structure covering over 9000km, consisting of 488.5 km (9%) dilapidated bitumen surface, and (91 %) of earth surface. Recent reclassification of roads classified 5,100.2 Km of roads within Turkana County. Out of which 41.8% i.e 2131.2Km are under the jurisdiction of the national government. 2969.02Km are reclassified as county roads (Kenya Roads Register Gazette 2015)

Quality of roads constructed has been compromised in the sense that they are not done to the required standards. Poor quality arises due to poor workmanships of contractor's technical staff.Award of county roads has largely been prone to nepotism and fraud practices. A bidder who had quoted very low may be given the contract and yet he may not be the most successful bidder. In the long run the contract may not be executed to completion.In view of the above, Monitoring and evaluation of road projects within the county is paramount.The vast geographical size of the county posts a big challenge given also the time frame for monitoring and evaluation therefore information given may not be accurate.

Objectives

The study aimed at achieving the following objectives:-

i. To assess the extent to which availability of funds affects performance of monitoring and evaluation processes of county road projects in Turkana County Government.
ii. To examine the influence of stakeholder participation on monitoring & evaluationprocesses ofcounty road projects in Turkana County Government.
iii. To establish the influence of involvement of technical personnel in monitoring and evaluating processes of road projects in Turkana County Government

Definition of Significant Terms

This study encompassed the following terms:

Project: an individually or collaboratively planned initiative that is carefully designed to accomplish a specific aim.

Project Evaluation: It is the process of systematic collection, analysis and interpretation of project related data that can be used to understand how the project is functioning in relation to the project objectives. It involves determining decision areas of concern choosing the best suitable information, collecting and analyzing data so as to report summary useful to decision makers in selecting among alternatives (Alkin, 1969). Project evaluation is a necessary component that must be included in the project designs.

Project Monitoring: This is a regular and periodic assessment, and overseeing of the project in order to ensure that input administered, labor timeline, expected outputs and other needed action proceed in accordance with the plan (UNFPA, 1990). Monitoring is a continuous process of gathering information involving on-going projects periodically

Literature Review

Monitoring

Monitoring involves steady and orderly planned gathering and analysis of information in an attempt to focus on the progress of program implementation in contrast to set objectives. It aims to answer the question "did we deliver?" Monitoring makes the project objectives clear, connects activities and their resources to objectives, change objectives into performance indicators and sets targets, regularly gathers informationon these indicators, does a comparison of actual results with targets and conveys progress information to top managers notifying them of problems (Monitoring and Evaluation for Business Environment Reform: A Handbook for

Practitioners)Monitoring provides knowledge on the state and situation of a specific policy, program or project any given time (or over time) in relation to specific objectives and outcomes. (McMiniminee, J.C, Shaftlin, S, Warne, T.R., Detmer, S.S., Lester, M.C., Mroczsca G.F., Yew,C. (2010). *Best Practices in Project Management project delivery*. Scan ManagementAroraand Associates, P.C. Washington DC.) It particularly concentrates on effectiveness, and the utilization of resources. Even though the monitoring process presents information on activities and results, and alerts problems to be addressed on the way, it solely describes and may be unable to elaborate on specific reasons as to why certain problem arise, or reasons for the occurrence or nonoccurrence of a particular outcome.

Evaluation on the other hand factors in questions regarding cause and effect. It is determining or estimating the value, worth or impact of an intervention and is normally undertaken periodically, maybe yearly or on completion of a phase in a larger project or program.

Evaluation

This is aimed evaluation of freshly completed or ongoing projects, task or policy, whose structure, execution and results deeply inform on what has resulted from specific actions. Evaluation involves deep analysis on reasons for achieving or not achieving expected results. It assesses certain informal input from activities all the way to results, inspect the process of implementation, further analyze unexpected outcomes, and highlight the major and noticeable areas of success giving favorable suggestions to push for further improvements. (Nyamwaro, E. M. (2011). *Analysis of Challenges Facing Project Implementation: A Case Studyof Ministry of Roads Projects*. Unpublished MBA project. University of Nairobi.). It focuses on importance and how effective and efficient an intervention is by providing proof as to the reasons for underachievement.

Monitoring and Evaluation of Projects

Project monitoring is the continuous evaluation process of execution of projects in relation to planned timeline and use of inputs, physical material and human resources (Simon, 1986). Project evaluation on the other hand is the regular evaluation of specific importance of a project, its effectiveness and both unexpected and expected impact in accordance with set targets. Both Projects monitoring and project evaluation present shareholders and top managers with constant feedback about execution, interim and terminal evaluations. Conducted on the projects so as to notify on the neededadjustments to be implemented in designing the project and to analyze its effectiveness (Paul, 2005).

Project sustainability is currently an extremely relevant concept worldwide. It is described as theextension of a Project's goals, principles, and activities undertaken to successfully obtain the needed outcomes (Paul 2005; Simon, (1986). It is crucial to assess the utilization ofM&E tools in various projects as they heavily affect project outcomes. Thus notifying project managers and stakeholders on key areas to be enhanced so as to achieve suitable outcome. Gaba (2013) agrees that there is dire need for effective project M&E due to its major recognition as a necessary tool of both project and portfolio management. This clear evidence strongly supports the need to enhance the execution of development assistance requests with close focus on the availability of management information that help in implementing programs and inputting back into new initiative plans. Now with even more transparency expected in development projects. The firms and organizations assisting in such projects need to act on calls for more success. In accordance to this, there should be clear examples of infrastructure building projects with evidence that they have arrangements that support gaining of information from the experience. M&E tools may assist in strengthening project plans and executions at every stage of the project development process and enhancing the relationship of involved stakeholders as itis able to strongly affect sector assistance strategy. (Kenya National Highways Authority. (2011). "*Monitoring and Evaluation Report*, 1st QuarterFY 2012/2013, Planning." Planning, KeNHA) Important information from assessing projects and evaluating necessary policies are expected to present outcomes of past interventions taking note of strengths and weaknesses observed in their execution. It may also enhance project design and tools involved in the process such as theological framework outcomes in procedural selection of measures for keeping an eye on the performance of a project

Highway maintenance

A highway facility deteriorates in its characteristics due to various causes. These are:

A. Traffic Factors

The traffic operating on the facility causes ravelling, rutting, corrugations, cracking, loss of material, loss of skid-resistance and structural deformation. The extent of deterioration depends upon the intensity of traffic, especially the wheel load and its repetitions. Iron-wheeled traffic can be significance in the case of

water-bound macadam roads and earthen roads.(Highway Department. (1988). "*Calculation of the Value of Roads in Hungary: 1981-1986."Ministry of Transport*, Budapest)

B Environmental Factors

The external influence of environmental factors such as rainfall, snowfall, temperature variation and atmospheric conditions can cause deterioration of the pavement. Rainfall causes erosion of shoulders and slopes and ingress of water into the pavement structure and subgrade and affects the performance of drainage structures. Snowfall can cause ingress of moisture into the pavement structure and result in frost action. It can also disrupt traffic: Temperature variations can soften the binder and affect the performance of bituminous surfaces and cement concrete pavements. Atmospheric action can oxidise the binder and cause deterioration.(Schliessler, Andreas, and A. Bull. (1993). *Roads: A New Approach for Road NetworkManagement and Conservation*. United Nations Economic Commission for LatinAmerica (ECLAC). Santiago). In addition to the above, the extent of deterioration and its rate are governed by the standards to which a facility was designed initially If a facility is designed to higher standards initially, its maintenance needs will be lower than if it is designed to lower standards initially.

The economic benefits of a well-planned maintenance policyare:

a. Reduction in the costs loaded onroad user such as vehicle operating costs, travel time savings and accident costs.
b. Reduction in the level of future maintenance and rehabilitation costs (remember: a stitch in time saves nine),
c. Reduction or prevention of the economic loss due to road closures.

From the above, it is clear that a good policy of highway maintenance should be one of the aims of any highway department.

Availability of Funds and their Influence on M&E of Projects

Providing support and strengthening of M&E team is a sign of good governance and is expected to perform a major role in ensuring that the M&E team adds value to the organizations operations (Naidoo, 2011). A motivated team usually achieves high performance (Zaccaro et' al, 2002). This implies that the more a team is strengthened, the better the performance and value addition to the organization. This also applies to the monitoring and evaluation teams in project management. The literature reviewed identifies the various aspects which are used in assessing the strength of monitoring team which is perceived to be one of the factors influencing project success. These aspects include: Financial availability, number of monitoring staff, monitoring staff skills, frequency of monitoring, stakeholders representation, Information systems (Use of technology), Power of M & E Team and teamwork among the members (Naidoo, 2011; Ling et' al, 2009; Magondu, 2013; Hassan, 2013; Georgieva & Allan, 2008; Gwadoya, 2012) The funds allocated for M&E in the Turkana County, Ministry of Finance and Planning are not enough. Ministry of Roads, Transport & Public works doesn't have a vote for M&E.

Injecting the required funds into set plans is necessary. Without efficient and consistent financial assistance in all involved departments, road development and maintenance activities will not be successful. Thus the dire need for efficient and continuous budget allocation which are often withheld by treasury departments in response to difficult financial situations. Such actions forces project expenditure to fall below estimated budget. (African Development Bank. (1999). *African Development Report 1999: InfrastructureDevelopment in Africa*. Oxford University Press). This results in poor and continuously deteriorating roads that during wet seasons often become unusable especially in rural areas and the much buildup of road restoration steadilyincreases with most of the ongoing works in construction being hoarded by stagnating contractors who have been unable to complete works on time rendering the project not cost effective. (Kikwasi, 2012).

The main reason why road monitoring and maintenance processes within the Ministry of Roads, Transport & Public works, TCG is underfunded is that the Ministry works under constrained budgets in that much of the budget is spent on new investments (mainly upgrading existing roads and in the development of turnpike feeder roads). An analysis done in nineteen Sub-Saharan African Nations did indicate that, between the years of 1986 and 1988, 58% of the total road expenditure was dedicated to new development or improvement, 17% to reconstruction process and restoration, and just a mere 25% was dedicated to routine and regular maintenance (World Bank. 1992; 2013). It is clear that Countries continue to improve already existing roads and construct new ones even when there are no resources set to maintain them.

This is supported by the Makone(2010) who argue that, roads like other construction projects in Kenya face a major challenge of funds; a factor that has made the monitoring and evaluation for example a tedious activity. Lack of separation of the M&E process in these cases for example (with a different source of funds,

with an allocated budget and with sufficient amounts of finances) has led to difficulties in implementing successful M&E strategy in all the roads in the county.

Availability of Personnel and their Influence on M&E of Projects

Human resources management are very important in project management. Particularly, they are crucial for an effective monitoring and evaluation. The technical capacity and professionalism of the organization in evaluating, the importance and involvement of its human resources during the decision making process as well as their motivation in implementing the decision can hugely impact on the evaluation.(Vanessa and Gala, 2011). Foresti (2007) further illustrate that this should not be just mere training by undertaking learning approach which are best practice and have a positive effect on the evaluation process within the organization. Capacity building on Monitoring and Evaluation has not been given much attention. Project development cycle has nine procedural stages ranging from problem identification, conducting possibility research, formulating policies and sanctioning of the project, plotting the project and having it authorized, project construction; commissioning; operation of the project; impact estimation; and post project assessment. (Harral, C., and A. Faiz. (1988). *Road Deterioration in Developing Countries*. World BankPolicy Study. Washington, D.C) This limitation in understanding narrows the ability to obtain and disseminate correct and useful M & E data. When preparing forM&E the first step involvesascertaining the available M & E labor and involved staff experience within the selected team, partner firms and organizations, targeted communities and any other group that may be involved in the M & E process. This is done to point out any gaps in between the project M & E needs and available staff, which henceforth notify on the need for capacity enlargement in order to better their technical capability to carry out the M&E process.

Human resource limitations are the some of the very important problems affecting many county governments. They are short of skilled, professional and qualified individuals and hence contract large number of unskilled workers. Construction projects require higher numbers of M&E experts who understand all the steps and levels of monitoring so as to give the direction of the projects.

Influence of Stakeholder Participation in M & E of projects

Rogers (2008) advocates for multi-stakeholders dialogues in the data collection, hypothesis testing as well as in intervention in order to secure greater participation. Monitoring is linked to the project management function and as such is a complex issue resulting to disarray in applying them on projects (Crawford and Bryce, 2003).

Effective monitoring improves the project management decision making process at the implementation phase thus ensuring the success of the project (Gyorkos, 2003; Crawford and Bryce, 2003). Further, monitoring emphasizes on transparency and accountability during distribution and utilization of resources to the stakeholders such as beneficiaries and the entire community where the project is executed**.** Chambers (2009) argue that the starting point in politics as an element of evaluation involves asking who would gain lose and how. This also involves how the results make a difference to the various stakeholders. Evaluation on the other hand provides an assessment of the effectiveness of the project in achieving the goal and the relevance and sustainability of the on-going project (McCoy, 2005). Evaluation compares the impact of the project as set to be achieved by the project plan (Shapiro, 2004)

Findings and Discusions

1Availability of funds affects performance of monitoring and evaluation processes of county road projects in Turkana County Government

Respondents were asked if availability of funds affects performance of monitoring and evaluation processes of county road projects in Turkana County Government and they gave the following responses.

Table 1 Influence of availability of funds on M&E processes

RESPONSE	FREQUENCY	PERCENTAGE
NO	11	28.2%
YES	28	71.8%
TOTAL	**39**	**100%**

71.8% of the respondents believed that availability of funds affects performance of M&E processes while as 28.2% were of the contrary opinion.

Descriptive analysis on the views given by the respondents on the influence of availability of funds on M&E processes is detailed as below.

25.6% of the respondents believed that Amount allocated for M & E is adequate, 10.3% of the respondents were not sure and majority 64.1% of the respondent's disagreed. This is an indication that M&E is not taken seriously by most of the projects.
Majority of the respondents 61.6% disagreed that there is timely disbursements of funds for M&E, 25.6% were not sure while as only 12.6% of the respondents agreed.
Majority 48.8% of the respondents reported that there is no planned Budget for M & E, 17.9% were not sure while as 33.3% agreed to the existence of a Planned Budget for M & E.

Table 2 Descriptive analysis on how availability of funds affects performance of M & E processes

Statement	N	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
Amount allocated for M & E is adequate	39	-	25.6%	10.3%	51.3%	12.8%	100%
Timely disbursements of funds for M&E	39	-	12.8%	25.6%	38.5%	23.1%	100%
Planned Budget for M & E	39	5.1%	28.2%	17.9%	46.2%	2.6%	100%

2 Influence of stakeholder participation on monitoring & evaluation processes of county road projects in Turkana County Government.

Respondents were asked if stakeholder participation influences performance of monitoring and evaluation processes of county road projects in Turkana County Government and they gave the following responses.

Table 3 Influence of stakeholder participation on M&E processes

RESPONSE	FREQUENCY	PERCENTAGE
NO	15	38.5%
YES	24	61.5%
TOTAL	**39**	**100%**

61.5% of the respondents were of the view that stakeholder participation influences performance of M&E processes while as 38.5% were of the contrary opinion.Descriptive analysis on the views given by the respondents on the influence of stakeholder participation on M&E processes is detailed as below.28.2% of the respondents reported that Project Stakeholders are known and documented while most the respondents 59% reported that they are not known. 12.8% of the respondents were not sure.Moreover, Majority (61.5%) of the respondents reported that stakeholders are not involved in M&E activities, 25.7% were not sure and 12.8% responded that they are involved in the M&E activities.Majority of the respondents (76.9%)further reported that participation of stakeholders was critical to the successful implementation of M&E, 20.5% were not sure and 2.6% responded that stakeholder's participation wasn't critical to the successful implementation of M&E. On whether stakeholders had knowledge of M&E practices, 35.9% agreed, 28.2% were not sure and 35.9% disagreed that they had no knowledge on M&E practices.

Table 4 Descriptive analysis on how stakeholder participation influence performance of M & E processes

Statement	N	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
Stakeholders are involved in M&E activities	39	-	12.8%	25.7%	28.2%	33.3%	100%
Project stakeholders are known and documented	39	5.1%	23.1%	12.8%	30.8%	28.2%	100%
Participation of stakeholders is crucial to successful implementation of M&E	39	43.6%	33.3%	20.5%	2.6%	-	100%
Stakeholders have knowledge of M&E practices	39	-	35.9%	28.2%	25.6%	10.3%	100%

3 Influence of involvement of technical persons in monitoring & evaluation processes of county road projects in Turkana County Government.

Respondents were asked if involvement of technical persons influences performance of monitoring and evaluation processes of county road projects in Turkana County Government and they gave the following responses.

Table 5 Influence of involvement of technical persons in M&E processes

RESPONSE	FREQUENCY	PERCENTAGE
NO	17	43.6%
YES	22	56.4%
TOTAL	**39**	**100%**

56.4% of the respondents were of the view that involvement of technical persons influences performance of M&E processes while as 43.6% were of the contrary opinion .Descriptive analysis on the views given by the respondents on the influence of involvement of technical persons in M&E processes is detailed as below. The study attempted to confirm the influence of the involvement of technical persons in monitoring & evaluation processes of county road projects in Turkana County Government

Majority (43.6%) of the respondents reported that Project staff are properly trained on project M&E, 15.4% were not sure while as 41% disagreed. In addition, 28.2% of the respondents reported that Project staff exhibit skills and competence in M&E, 25.6% were not sure, while as 46.2 disagreed. This result suggests that most project staff do not exhibit skills for conducting M&E activities.

Further to this objective, 43.6% of the respondents reported that project Staff have undertaken short courses on M&E, 12.8% were not sure while as 43.6% disagreed. This is an indication that short courses in M&E is not well bought by several projects. Majority (59%) of the respondents also believed that M&E is not a core staff function but has been done by external consultant, 5.1% were not sure while as 35.9% disagreed.

Table 6 Descriptive analysis on how involvement of technical persons influence performance of M & E processes

Statement	N	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
Project staff are properly trained on project M&E	39	2.6%	41.0%	15.4%	28.2%	12.8%	100%
Project staff exhibit skills and competence in M&E	39	7.7%	20.5%	25.6%	30.8%	15.4%	100%
Staff have undertaken short courses on M&E	39	10.3%	33.3%	12.8%	43.6%	-	100%
M&E is not a core staff function but has been done by external consultants	39	18%	41.0%	5.1%	20.5%	15.4%	100%

Inferential Analysis

Availability of funds affects performance of monitoring and evaluation processes of county road projects in Turkana County Government

The study examined the influence of availability of funds on performance of monitoring & evaluation processes of county road projects in Turkana County Government. Table 7 indicates that there is no noticeable relationship between availability of funds and the monitoring and evaluation processes of county road projects in Turkana County Government.

The test yielded a P-value of 0.8678, which is greater than the 0.05 level of significance.

Availability of funds plays a key role in conducting M&E exercise.

Table 7 ANOVA of availability of funds and M&E Processes

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	76.92308	2	38.46154	0.143787	0.867831	4.102821
Within Groups	2674.9	10	267.49			
Total	2751.823	12				
Total	3739.189	15				
Total	2751.823	12				

Influence of stakeholder participation on monitoring & evaluation processes of county road projects in Turkana County Government.

The study further examined the influence of stakeholder participation on monitoring & evaluation processes of county road projects in Turkana County Government. Table 7 Indicates that no significant relationship between stakeholder participation and the monitoring and evaluation processes of county road projects in Turkana County Government exists The test yielded a P-value of 0.89909, which is greater than the 0.05 level of significance.

Stakeholders have different and mostly contending interests. This shows that a certain procedure in needed to reduce the range of possible questions whichhenceforth brings the focus on a smaller list of potential stakeholders referred to as primary intended users by Patton (2008)

Table 8 ANOVA of Stakeholder Participation and M&E Processes

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	88.23529	3	29.41176	0.193287	0.89909	3.410534
Within Groups	1978.16	13	152.1662			
Total	2066.395	16				
Total	3704.751	21				

Influence of involvement of technical persons in monitoring & evaluation processes of county road projects in Turkana County Government

The researcher conducted the ANOVA tests in order to compare the strength of the relationship between involvement of technical persons and project monitoring and evaluation activities. In Table 8, the P value 0.929569 is more than 0.05, the relationship between involvement of technical persons and M&E performance is not statistically significant.

Table 9 ANOVA of involvement of technical persons in monitoring & evaluation processes

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	78.94737	3	26.31579	0.147681	0.929569	3.287382
Within Groups	2672.9	15	178.1933			

Total	2751.847	18

Hypothesis Testing

Availability of funds affects performance of monitoring and evaluation processes of county road projects in Turkana County Government

H1: Availability of funds affects performance of monitoring and evaluation processes of county road projects in Turkana County Government

Table 10 T-Test: Two-Sample Assuming Unequal Variances

	RESPONSE	***FREQUENCY***
Mean	1.5	19.5
Variance	0.5	144.5
Observations	2	2
Hypothesized Mean Difference	0	
df	1	
t Stat	-2.11399279	
P(T<=t) one-tail	0.140644179	
t Critical one-tail	6.313751515	
P(T<=t) two-tail	0.281288359	
t Critical two-tail	12.70620474	

From the analysis, the t-value was compared with the t-critical values.
The null hypothesis was rejected since the t-value was smaller than the t-critical values.
T value obtained was -2.114 while as t critical values for one tail and two tail were 0.1406 and 12.7062 respectively.
Alternate hypothesis was therefore accepted i.e. Availability of funds influences monitoring & evaluation processes of county road projects in Turkana County Government.

Influence of stakeholder participation on monitoring & evaluation processes of county road projects in Turkana County Government.

H1: Stakeholder participation influences monitoring & evaluation processes of county road projects in Turkana County Government.

Table 11 T-Test: Two-Sample Assuming Unequal Variances

	RESPONSE	***FREQUENCY***
Mean	1.5	19.5
Variance	0.5	40.5
Observations	2	2
Hypothesized Mean Difference	0	
df	1	
t Stat	-3.975534939	
P(T<=t) one-tail	0.078439869	
t Critical one-tail	6.313751515	
P(T<=t) two-tail	0.156879738	
t Critical two-tail	12.70620474	

From the analysis, the t-value was compared with the t-critical values. The null hypothesis was rejected since the t-value was smaller than the t-critical values. T value obtained was -3.9755 while as t critical values for one tail and two tail were 0.0784 and 12.7062 respectively. Alternate hypothesis was therefore accepted i.e.

Stakeholder participation influences monitoring & evaluation processes of county road projects in Turkana County Government.

Influence of involvement of technical persons in monitoring & evaluation processes of county road projects in Turkana County Government

H1: Involvement of technical persons influences monitoring & evaluation processes of county road projects in Turkana County Government.

Table 12 T-Test: Two-Sample Assuming Unequal Variances

	RESPONSE	***FREQUENCY***
Mean	1.5	19.5
Variance	0.5	12.5
Observations	2	2
Hypothesized Mean Difference	0	
df	1	
t Stat	-7.060180865	
P(T<=t) one-tail	0.044787313	
t Critical one-tail	6.313751515	
P(T<=t) two-tail	0.089574626	
t Critical two-tail	12.70620474	

From the analysis, the t-value was compared with the t-critical values. The null hypothesis was rejected since the t-value was smaller than the t-critical values. T value obtained was -7.0602 while as t critical values for one tail and two tail were 6.314 and 12.7062 respectively. Alternate hypothesis was therefore accepted i.e. Involvement of technical persons influences monitoring & evaluation processes of county road projects in Turkana County Government.

Conclusions and Recommendations

Conclusion

Monitoring and evaluation is a key activity in the project management cycle. Monitoring enables the project team to track the performance of a project on a continuous basis so as to ensure that it is implemented as planned. Evaluation allows the project team to determine the effectiveness of the projects in view of achieving pre-established targets.

This study examined the influence of three factors namely availability of funds in monitoring and evaluation, stakeholders' participation, and involvement of technical persons on the M&E processes of county road projects in Turkana County Government

The researcher concludes from the available data that funds available for M&E of most of the county projectsare not adequate, unplanned and that there's no timely disbursement.

The researcher also concludes that stakeholder participation is essential in project management as they have significant influence over the project deliverables and finally involvement of technical persons is key in carrying out M&E activities

Recommendations of the Study

In light of the major findings of this study, the following recommendations are proposed:

(i) Funds for carrying out M&E activities should be adequate, well budgeted and disbursed as planned.

(ii) Findings also showed that project stakeholders are not known and documented. They are also not involved in M&E activities. It is therefore recommended that stakeholders should participate in M&E activities to an agreed extent by the project managers

(iii) Finally findings further showed that project staff do not exhibit skills and competence in M&E. The effectiveness of monitoring and evaluation can be enhanced when project team learn how to apply technical and systematic methodologies in executing M&E activities. Formal training program also can equip personnel with the knowledge of these methodologies and the skills required to apply these methods effectively.

References

[1]. African Development Bank. (1999). *African Development Report 1999: Infrastructure Development in Africa*. Oxford University Press.
[2]. Ahadzie, D. K. (2011). *A Study of the Factors Affecting the Performance of Contractors Working on KMA Projects*, Journal of Local Government Studies, Vol. 3 .
[3]. Ahmed, Azhar, Castillo and Kapagantulla. (2012). *Integration in the Construction Industry:Information Technology as the Driving Force, In Proceedings of the 3rd InternationalConference on Project Management*, (Singapore: Nanyang Technical University).
[4]. Benmaamar, M. (2002). *Urban transport services in sub-Saharan Africa: recommendations forreforms in Uganda*. Crowthorne: Transport Research Laboratory, November 2002 refPA3834/02.
[5]. *Casley, D. & Kumar, K. (1988). The collection, Analysis and use of Monitoring and Evaluation Data. Maryland: World Bank.*
[6]. De Richecour, Anne B. (1994). "*Review of African Road Funds: What Works and Why*?" SSATP Working Paper 14, World Bank, Africa Technical Department. Washington D.C.
[7]. DFID. (2002). *Making connections: infrastructure for poverty reduction*. Consultation document, May 2002.
[8]. Edmonds, G.A. (1980). 'The "Roads and Labour" programme, Mexico.' In: G.A. Edmonds andJ.D.F.G. Howe, eds. *Roads and Resources: Appropriate Technology in RoadConstruction in Developing Countries*. London: Intermediate Technology DevelopmentGroup for ILO. p. 123–134.
[9]. Fouracre, P.R. et al. (1994). Public transport in Ghanaian cities - a case of union power.*Transport Reviews*, 14,1:45-61.
[10]. Ganiyu, B.O., Zubairu, I.K. (2010). *Project cost prediction model using principal componentregression for public building projects in Nigeria*. Journal of Building PerformanceISSN: 2180- 2106 Vol. 1 Issue 1, pp. 21-28.
[11]. Harral, C., and A. Faiz. (1988). *Road Deterioration in Developing Countries*. World Bank Policy Study. Washington, D.C.
[12]. Highway Department. (1988). "*Calculation of the Value of Roads in Hungary: 1981-1986."Ministry of Transport*, Budapest.
[13]. KahuraNjenga. (2014).*Factors Influencing Effective and Efficient Delivery of Road Construction Projects In Kenya*: A Case Of Nairobi County. School of Business.
[14]. Kenya Roads Board. (2013). *Annual Public Roads Programme: Financial Year 2012/2013*. GoKPress.59
[15]. Kimuyu, P.K., and S.K. Mugerwa. (1998). *'Enterprise response to deficient infrastructure.IPAR Discussion Paper No. 011/98.* Nairobi: Institute of Policy Analysis and Research.
[16]. Kenya National Highways Authority. (2011). "*Monitoring and Evaluation Report*, 1st QuarterFY 2012/2013, Planning." Planning, KeNHA.
[17]. McMiniminee, J.C, Shaftlin, S, Warne, T.R., Detmer, S.S., Lester, M.C., Mroczsca G.F., Yew,C. (2010). *Best Practices in Project Management project delivery*. Scan ManagementAroraand Associates, P.C. Washington DC.
[18]. Mugenda A, (2003*) Qualitative and Quantitative Approaches*, Research Methods, Africa Centrefor Technology Studies (Acts) Press, Nairobi.
[19]. Nyamwaro, E. M. (2011). *Analysis of Challenges Facing Project Implementation: A Case Studyof Ministry of Roads Projects*. Unpublished MBA project. University of Nairobi.
[20]. Republic of Kenya (2009); *Building code and by-laws.* Government Printers, Nairobi.
[21]. Republic of Kenya (2010);*The constitution of Kenya, 2010.* Government Printers, Nairobi.
[22]. Republic of Kenya (2011).; *The Physical Planning Act, Chapter 286.* Government Printers,
[23]. Republic of Kenya (2012); *The Housing Act, Chapter 117.* Government Printers, Nairobi.
[24]. Republic of Kenya.(2014); *The National Construction Authority Act No. 41 of 2011*. Government Printers, Nairobi.
[25]. Schliessler, Andreas, and A. Bull. (1993). *Roads: A New Approach for Road Network Management and Conservation*. United Nations Economic Commission for Latin America (ECLAC). Santiago.
[26]. World Bank. (2013). *"International Road federation, World road Statistics and electronic*."World Development Indicators, World Bank. Washington, D.C.
[27]. World Bank, (2014*). Infrastructure Assessment, Finance, Private Sector and InfrastructureGroup,* Middle East & North Africa, December 2004