

Project Monitoring and Evaluation and Project Success in Local Government in Rwanda

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Abstract

Efficiency of road infrastructure projects is essential for the economic growth and development of any country. These projects play a critical role in the economy in terms of wealth creation and provision of employment opportunities. Infrastructure covers a range of services, from public utilities such as power, telecommunications, water supply, sanitation and sewerage, solid waste collection and disposal, and piped gas; to public works such as roads, dams and canal works, railways, urban transport, ports, waterways and airports. Massive investments are put into infrastructure projects. Throughout the world, the business environment within which construction projects operate continues to change rapidly for betterment of citizens, projects management are still failing to adapt and respond to the complexity of the new environment tend to experience survival problems. With increasing users of the road' requirements, environmental awareness and limited resources and high competition, lack of skills of contractors have to be capable of continuously improving the efficiency of the project during implementation. Efficient performance of road infrastructure projects is essential for economic growth and development of any country. Local construction firms contribute significantly towards realization of this goal. However, road projects experience challenges in completing within the budgeted cost, time schedule and attaining the desired quality. This research sought to establish the effects of project monitoring and evaluation on project success in local government road projects. The study carried out in the Kicukiro District on the Cricket road construction project in Rwanda, Gahanga Sector. The target population was 827, where the sample size used was 90 selected using probability sampling technique and the systematic sample method was used. The researcher used an explanatory research design to establish the causal relationship of the variables under study. Data were collected using questionnaire and analysed using SPSS version 22. The Statistical findings indicated that staff technical skills during the M&E are not statistically significant on project success. Technical skill of staff is not significant on project completion period as planned at p -value of $0.81 > 0.05$; and not significant to meeting project costs compared to estimated project cost at p -value of $0.479 > 0.05$, while not significant on helping the project to achieve its desired goals where the p -Value was $0.540 > 0.05$. These statistics indicated that having technical skills does in M&E does not matter in project success. Possessing skills is not enough as using them properly, professionally and technically to enhance the project performance. The statistical findings indicated that the M&E budget is not significant on project completion on time as planned at p -value of $0.959 > 0.05$ and not at the same time significant on meeting project costs as estimated at a coefficient of significance of p -value $0.745 > 0.05$ and finally not significant on project meeting its set goals at p -value of $0.816 > 0.05$. This shows that project performance is not only due to the available budget and approved, it depended on how the budget is effectively allocated to the task of monitoring and evaluation of the project as stipulated in the project design and implementation plan. It is clear from the regression analysis that stakeholder's involvement in M&E helps the project management to collect feedback on what have been compared to the expected that satisfy the stakeholders needs. The findings indicate that, stakeholder's engagement in M&E and feedback is significant on project completion on time compared to the expected time at a p -value of $0.01 < 0.05$, but not significant on meeting project costs as budgeted at p -value of $0.760 > 0.05$ while not significant also to project achieving its goals at p -value of $0.217 > 0.05$. Due to lack of major influence during the project design and implementation, the feedback of stakeholders during the monitoring and evaluation may not have so much significant effect on the project success.

Keywords: Monitoring and evaluation • Project success

Introduction

All project designed aims the achievement of the set of their objectives. The completion of the projects scope and activities depend on several factors like available resources, skilled labor and personnel, allocation of the responsibilities in the project implementation but mostly monitoring and evaluation.

Project management today is facing several challenges whereby project managers and founders set impossible deadlines with a lot of resource deprivation in the initiation of the project, project designers set ambiguous contingency plans that may not be accomplished without serious strategies, project developers and fund managers do not have high level accountability. These challenges impact the scope of the project in a lot of scope changes and delay in the project completion and lack of stakeholder's engagement in the project design, implementation, monitoring and evaluation. These challenges are overcome when there is a strong monitoring and evaluation that is set with the organization or in the project management process. Project monitoring and evaluation is an important part of the project success, which gives a clear

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feedback of what project manager planned to do and the extent to which it has been to performing the tasks of the project and achieve the project objectives

In Africa, the 62% of road construction projects wouldn't end as per the scope of work, 32.8% not completed and reasons where lack of financial resources 32%, un expected activities added during the project implementation 15% and due to lack of monitoring and evaluation of 53% (work bank report, 2007).

In Rwanda, the report of the office of auditor general of 2017, indicated that more of 50% audited had un qualified opinion, 50% project were received adverse opinion. A total of 109 project audited, contract worth 206 billion had delayed, 123 billion abandoned and 45 billion not finalized where 63% of the project were road construction projects. The major cause of the abandoning was lack of information and data on the progress of the implementation of the project that may need actions and changes where necessary and lack of local government ownership.

The cicket road construction in kicukiro district, as one of the projects implemented by local government in Kicukiro District, faced difficulties in its implementing the project did not meet the deadline and the needs of the beneficiaries as planned due to the lack of appropriate monitoring and evaluation tool and financial resources. The delay of the completion of the project as due to the lack of sufficient staff technical skills of measuring the progress of the construction project during monitoring and evaluation, lack of adequate and sufficient budget that was allocated to monitor and evaluate the track progress of the ongoing activities by external party, and inactive and redundant stakeholders involvement in the project monitoring and evaluation. These issues have translated the project into delays of being finally accepted

by the District. This research was conducted to evaluate the extent to which monitoring and evaluation plays a key role in the project success in local government Rwanda in Kicukiro District [1]. Some of the reasons that may lead to project failure include inadequate project planning, but mostly lack of adequate monitoring and evaluation tools appropriate to the project that was aligned during the project design. It is in view of the above problem that the researcher wanted to investigate the effect of effective monitoring and evaluation on project success.

The overall objective of the study is to analyze the effect of project Monitoring and evaluation on project success in local Government.

Specific objectives

- i. To analyze the effect of staff technical skills in Monitoring and Evaluation on project success cricket Road construction in Kicukiro District
- ii. To determine the level of significance of budgetary allocation in Monitoring and Evaluation on project success of cricket Road construction in Kicukiro District
- iii. To determine the level of stakeholder's participation in monitoring and evaluation on project success cricket Road construction case study in Kicukiro District

Research question

- i) Do staff technical skills in Monitoring and Evaluation has any significant effect on project success of cricket Road construction in Kicukiro District?
- ii) What is the level of significance of budgetary allocation in Monitoring and evaluation on project success of cricket Road construction in Kicukiro District?
- iii) Do stakeholders participation in monitoring and evaluation impact project success of cricket Road construction in Kicukiro District

Literature Review

Relationship between M&E and project efficiency

Project Monitoring and evaluation are considered essential tools to improve the quality of project management, given that the management of a complex project in the short and medium term will imply corresponding strategies from a technical point of view, which are supposed to respect the criteria of efficiency, durability and safety sustainability (Lim and Mohamed, 1999). The follow-up activity helps project managers and staff understand if the project is progressing on time or if its objectives, inputs, activities and timeline are being met (Solomon and Project manager, 2007).

Project monitoring and evaluation measurement factors

Staff technical skills in Project monitoring and evaluation: McRae (2013) studied the role of monitoring and evaluation skills in managing infrastructure projects in Europe. The study asserted that the acquisition of M&E skills will boost the performance of construction firms in terms of quality and time taken to complete the projects. Training will therefore empower people to make better decisions and provide better quality goods and services. Ghura (2013) pointed out that adequate and timely planning of M&E personnel prevents cost overruns in road infrastructure projects. Leyman (2013) noted that lack of staff with the M&E skills required to perform a task in infrastructure projects is another challenge in the implementation of projects. This is very critical to project success. This aspect was found lacking in the most construction firms and led to projects being completed long after the time scheduled initially. Leyman said that skilled M&E human resource leads to the achievement of quality, productivity and efficiency in implementing infrastructure projects. The above studies focused on the implementation of road projects and not performance of road projects and were also done in other countries [2,3].

Budget allocation in Project Management and Evaluation: Adequate skilled staff and available financial resources are vital ingredients in developing an effective M&E system (Harold Kerzner, 2000). Failure to ensure a reasonable proportion of resources is spent on this aspect of project management is

likely to impede internal learning and result in the poor operation of the M&E system. Due to the fact that Evaluation is a scientific based appraisal of the strengths and weakness of the project (Hunter, 2009). It is therefore a comparison between the actual and the planned. Evaluation is a means of checking efficiency, effectiveness and impact of a project. Evaluation involves: looking at what the project intended to achieve, assessing progress towards what was to be achieved and impact on targets, looking at the effectiveness of the project strategy, looking at the efficient use of resources, opportunity costs and sustainability of the project, and the implications for the various stakeholders (Hunter, 2009 and Shapiro, 2011). All these process, collection of data and analyze in a better manner requires enough liquidity that needs to be budgeted and allocated in the project design process and used in the project during monitoring and evaluation of the activities of the project that were implemented.

Stakeholders' feedback in monitoring and evaluation: Mark (2007) agreed that Stakeholders are key group, organization and institution beneficiaries of the project may affect the project performance. Feedback during the project implement and project execution will demonstrate a central factor that facilitate the project managers and implementers to update the feedback where necessary to satisfy the expected needs when project is completed.

Project success Indicators

Schedule

Project management success is often determined by whether or not, the project manager kept to the original timeline. Experienced project managers know how hard that is, but it's a little bit easier if project manager continually evaluate project progress as project goes. The update the project schedule regularly at least weekly. The schedule evaluation is something project manager can do more formally at the end of the stage or phase, or as part of a monthly report to project manager senior stakeholder group or Project Board. It's easy to update project manager project schedule if project manager builds it on an online Gantt chart, where tasks and deadlines are made into visual timelines. Look at project manager major milestones and check if they still fall on the same dates as project manager originally agreed. Work out the slippage, if any, and how much of an impact this will have on project manager overall project timescales.

Quality

The end of a project phase is a good time for a quality review. Project manager can check both the quality of project manager project management practices – are project manager following the change management process every time and so on – and also the deliverables.

A quality review can evaluate whether what project manager are doing meets the standards set out in project manager quality plans. Best find out now before the project goes too far, as it might be too late to do anything about it then.

Cost

Many executives would rate cost management as one of their highest priorities on a project, so evaluating how project manager the project is performing financially is crucial. Compare project manager current actual spend to what project manager had budgeted at this point. If there are variances, look to explain them. Project manager can use a project dashboard to check project manager actual spend in real time.

Project manager will also want to look forward and re-forecast the budget to the end of the project. Compare that to project manager original estimate too and make sure it is close enough for project manager management team to feel that the work is on track. If project manager forecasts go up too much it is a sign that project manager spending will be out of control by the end of the project – again, something it is better to know about now.

Stakeholder Satisfaction

Project manager wider team – project manager stakeholders – are essential

in getting much of the work done, so it's worth checking in with them. Find out how they are feeling about the project right now and what project manager could be doing differently.

This is a difficult measure to document statistically, although there's nothing to stop project manager asking them for a rating out of 10. Even if project manager is evaluating their satisfaction subjectively, it is still a useful exercise. If project manager notice that stakeholders are not fully supportive, project manager can put plans in place to engage them thoroughly to try to influence their behavior. For the purpose of this study, the researcher used, meet the project cost compared to the planned, achieve the set project goals and achieve the goals on time as expected as indicated in the project design.

Empirical review

The theory of project management competency explains the role of project management competencies in monitoring and evaluation on the performance of infrastructure projects. Gladder (2010) in the study, the effect of project monitoring and evaluation on road constructed project in Malesia noted that technical project managers and monitoring and evaluation specialists should be able to apply knowledge, skills, tools and techniques effectively so as to deliver as expected and be able to achieve the project's goals and optimize the integrated cost, schedule and effort. P-value was 0.000 of all the predictors. The study found out also that that two of the most influential standards; the results address only the knowledge aspect of competence while a second research in, Australian's National competency standards focuses on demonstrable performance ability in running project and monitoring. The study also found out that some project managers do not have the required competence skills to monitor and evaluate the road infrastructure projects effectively and failed the project manager to Fastrack needed changes.

The study of Ryman and Harries (2008) study established the constraints and problems that hamper Monitoring and evaluation of development projects. In order to achieve the intended objectives, data on 37 projects was used. The study found out that the role of monitoring and evaluation of projects is can no longer be underestimated. The study results also showed the main constraints and problems that hampered monitoring and evaluation in development projects. They include; lack of commitment to conduct monitoring and evaluation, failure to carry out, discuss, share and incorporate the results of monitoring and evaluation activities. Other constraints found out from the study were: shortage of trained staff, insufficient technical resources, and inadequate allocation of funds to monitoring and evaluation p-0.003 and limited training opportunities p-002. However, this study was done in Europe and the findings may not necessarily apply in Kenya.

Harold (2013) showed that knowledge about monitoring and evaluation helps project contractors and managers to effectively monitor and evaluate the infrastructure projects and therefore improve the performance of the projects. The study also found out that project managers of road infrastructure projects need to know the extent to which their projects are meeting the desired client standards. Furthermore, the study indicated that information generated through monitoring and stakeholders' feedback were not statistically but significant to project performance.

Harries and Reyman (2010) established that the project manager should be able to identify the purpose and scope of the M&E system, plan for information reporting and utilization, collection and management of data, analysis of data, monitoring and capacity building of human resource. Kabwegyere and Kiyega (2010); Kerzner (2011) study outlines the key monitoring and evaluation activities in a project. They include; initial needs assessment, project design logical framework, M&E planning and base line study. They further argued that M&E system should focus on the usage of project inputs and the effectiveness of the project implementation process to ensure that the final road project attains the desired quality.

Critical review and research Gap identification

The positive relationship between Project Monitoring and evaluation and the achievement of project outputs. Researches that were done, have not concluded in the same whether or not project monitoring and evaluation effect the project success.

Performance of road infrastructure projects is essential for the economic growth and development of any country. These projects play a critical role in the economy in terms of wealth creation and provision of employment opportunities while using, to cover a range of services, from public utilities such as power, telecommunications, water supply, sanitation and sewerage, solid waste collection and disposal, and piped gas; to public works such as roads, dams and canal works, railways, urban transport, ports, waterways and airports (World Bank, 2012). Massive investments are put into infrastructure projects. Throughout the world, the business environment within which construction firms operate continues to change rapidly. Firms failing to adapt and respond to the complexity of the new environment tend to experience survival problems (Lee, 2009). With increasing users' requirements, environmental awareness and limited resources and high competition, contractors have to be capable of continuously improving their performance (Samson & Lema, 2011). There are several factors that impact on performance of projects, complexity of the project, Shortage of skills of manpower, weaknesses in organizational design and capabilities, poor supervision and poor site management, unsuitable leadership, shortage and breakdown of equipment among others cause delays in the United Arab Emirates (Faradic & El-Saying, 2010). Conflict, poor workmanship and incompetence of contractors had also negative impact on project performance in sub-Saharan Africa (Carter, 2012). Carter further noted that project managers should be given full authority to implement the projects and an other third party to do the monitoring and evaluation to ensure the independence and segregation of duties in project management. Harries and Ryman (2010) noted that on average 65 percent of road projects constructed by local firms in Africa were considered to have failed due to the fact that most of the project designers are the same agents to do the monitoring and evaluation which translate into failures to show the reality of what is wrong that require changes to impact the project performance. These projects were suspended and later contracted to other firms

Therefore, performance of projects is a subject many scholars have discussed with the objective of ensuring that projects are undertaken within the stipulated cost, time schedule and meet the desired quality. However, little attention has been focused on road projects constructed by local firms. There is need therefore to understand the effects of project monitoring and evaluation on the performance of road infrastructure projects constructed by local firms.

Theoretical Framework

Program Theory

The theory was developed by Weiss (1972) and recommended the use of flow diagrams to model the sequence of steps between a program intervention and the desired results during monitoring and evaluation. This is the informal model that helps the evaluator to identify the variable to be included in the assessment, to discover where the sequence breaks down in the chain of events, and to stay tuned for changes in program implementation that are likely to occur. This theory is related to this study, because, during the monitoring and evaluation, monitoring specialist need to prepare a sequence of plan and program of activities to be monitored and evaluated and prepare related plan to avoid monitor and evaluate what is not needed or any other minor activity that may not have an effect on project performance. This theory is in the form of an organizational plan describing how to gather, configure and deploy resources and organize program activities in order to develop and maintain the desired service system [4]. The theory also discusses the service utilization plan, which examines how the intended target population receives the intended amount of the intended intervention through interaction with the program's service delivery system.

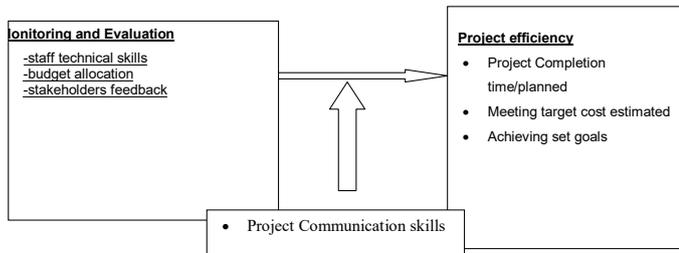
Theory of change

The theory of change is part of the program theory that emerged in the 1990s as an improvement to the evaluation theory (Stein and Valters, 2012). A theory of change is a tool used for developing solutions to complex social problems. It provides a comprehensive picture of early and intermediate term changes that are needed to reach a long-term set goal (Anderson, 2005). It therefore provides a model of how a project should work, which can be tested and

refined through monitoring and evaluation. A theory of change is also a specific and measurable description of change that forms the basis for planning, implementation and evaluation. Most projects have a theory of change although they are usually assumed (CARE, 2013). The theory of changes helps in developing comprehensible frameworks for monitoring and evaluation project. It is mainly used by local government in the implementation of donor's project to articulate long term impact on projects (James, 2011) [4,5].

Conceptual framework

Independent variables Dependent variables



Methods

The Explanatory research design was used to determine the level of significance of the project monitoring and evaluation on project efficiency in local government project in Rwanda. During the research, the qualitative data were collected from the questionnaire and be analyzed using SPSS for discussion purpose[6]. A sample size of 90 was selected using a probability sampling technique and questionnaire were distributed to them for data gathering. Validity and reliability test was ensued and a pilot study was conducted.

Findings

Analysis of technical skills of Staff in M&E

The findings reveal that during this project implementation of road construction in Gahanga Sector, cricket road project, 53.3% agreed that the monitoring and evaluation is being done, while 46.7% said that the monitoring and evaluation is not done. This indicated the researcher that though the monitoring and evaluation is done, it not regular and formal to inform all staff and players during the project implementation [7]. Sometime M&E is done on some specific activities and also based on the construction phases that all may not be aware and be informed (Table 1).

The question in the questionnaire, intended to evaluate the exact period of M&E during the project implementation to track project progress. The respondents agreed at 46.7% that M&E is done monthly, while 38.9% agreed that it is done on a quarterly basis and 14.4% said that M&E during the project implementation is being done when it is needed by the project stakeholders. This indicates to the researcher that there is no appropriate time of M&E as long as it is done to track the activities progress and suggest changes that would impact the project success. A good project monitoring and evaluation, the one that is done regularly to avoid the problems surprises that would affect the project not to achieve its intended goals (Table 2).

The research findings indicate that the techniques that are being used in the project monitoring and evaluation are all important and all being used. 18.9% said they use questionnaire, FDGs is mostly used at 53.3% and observation

Table 1. Analysis on whether monitoring and evaluation is done in the project implementation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	48	53.3	53.3	53.3
	Non	42	46.7	46.7	100.0
	Total	90	100.0	100.0	

Table 2. Time of M&E within the project.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	monthly	42	46.7	46.7	46.7
	quarterly	35	38.9	38.9	85.6
	when is needed	13	14.4	14.4	100.0
	Total	90	100.0	100.0	

Table 3. Techniques used in M&E in road cricket Gahanga construction project.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	questionnaire	17	18.9	18.9	18.9
	FGDs	48	53.3	53.3	72.2
	observation	25	27.8	27.8	100.0
	Total	90	100.0	100.0	

Table 4. Types of M&E done within the project.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Results based monitoring	14	15.6	15.6	15.6
	Progress(activities) monitoring	49	54.4	54.4	70.0
	Finance monitoring	25	27.8	27.8	97.8
	Beneficiaries monitoring	2	2.2	2.2	100.0
	Total	90	100.0	100.0	

is 27.8%. This tells the researcher, that there are many techniques used in the progress of the M&E in the construction project in Rwanda [8] (Table 3).

The research findings confirmed that results-based monitoring, progress monitoring, finance monitoring, beneficiaries monitoring is being used during the monitoring and evaluation. It is clear that most of the M&E types that are mainly done are progress activities monitoring and evaluation that the respondents agreed at 54.4% and 27.8% did finance monitoring and evaluation. 15.6% of the M&E was done on Results based monitoring and Evaluation, while 2.2% of M&E were based on the beneficiaries monitoring and evaluation to ensure that the best project beneficiary involvement (Table 4).

The table above revealed that summative evaluation is the one which is mostly used at 44.4 percent, while the formative project evaluation is done at 40%. The Mid-term project evaluation is not frequently done at 15.6% due to the fact that, this last evaluation is done by the request of the donor and project sponsor with the purpose only to pay the contractor not to tack the progress of the project implementation. The most used summative evaluation helps the project manager to assess the set goals and compare with the outcomes. This evaluation had allowed the project manager to quantify the changes in the resource use that were attributed to the project and track how they can impact the project. This evaluation enabled the project implementers to see how the project works and assess whether or not project objectives will be achieved or not and take reasonable remedies to achieve the set project objectives [9,10] (Table 5).

Though there are several challenges during project monitoring and evaluation, but specifically during the monitoring and evaluation of cricket road construction project in Gahanga Sector, the respondents confirmed at 31.1% that M&E is not scheduled, the monitoring is surprised and not planned to allow the contractors to prepare for the visit and related reports and activities done. 35.6% indicated that there is no appropriate budget for monitoring and evaluation during the project monitoring and evaluation [11]. The budget is not separated from the normal recurrent budget and this sometimes would not be released for the work done. 17.8% of the respondents also agreed that M&E results are not shared and communicated for improvement. The results are

only shared with the contractor which may cause a problem of not being on the same page during the project implementation. 15.6% indicated that they don't possess adequate and sufficient technical skills that my help them to perform the M&E activities that might impact the project (Table 6).

The contextual knowledge in M&E is very critical in the efficiency of Monitoring and Evaluation at 55.6%, the data analysis is also important in the M&E at 37.8% and technical skills of M&E on data collection through technology at 6.7%. The technical skills are very important in the implementation of Monitoring and Evaluation during the project implementation for its success (Table 7).

The purpose of this question was to collect the information on whether the staff have been trained on the M&E during the project implementation. It is clear from the respondents that 50% of respondents agreed that they received training on linking M&E to project design to ensure the efficiency of the project. 37.8% of respondents agreed that they received training on basic on M&E concepts and have received knowledge and skills that impact the project success, while 12.2% received training and have gained skills on identifying indicators and targets that also increased their skills on the project monitoring and evaluation [12] (Table 8).

Table 5. Types of project evaluation done in the cricket road construction.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Formative evaluation	36	40.0	40.0	40.0
	Summative Evaluation	40	44.4	44.4	84.4
	Mid-term evaluation	14	15.6	15.6	100.0
	Total	90	100.0	100.0	

Table 6. Challenges uncounted during M&E.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	lack of technical skills	14	15.6	15.6	15.6
	no separate budget	32	35.6	35.6	51.1
	M&E activities not on schedule	28	31.1	31.1	82.2
	results of M&E not communicated	16	17.8	17.8	100.0
	Total	90	100.0	100.0	

Table 7. Technical skills of M&E.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	data analysis	34	37.8	37.8	37.8
	contextual knowledge	50	55.6	55.6	93.3
	data collection through technology	6	6.7	6.7	100.0
	Total	90	100.0	100.0	

Table 8. Training received on M&E within the project training on M&E received.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	basic M&E concepts	34	37.8	37.8	37.8
	Linking M&E to Project Design	45	50.0	50.0	87.8
	Identifying Indicators & Targets	11	12.2	12.2	100.0
	Total	90	100.0	100.0	

During the feasibility study of the project, it is very important that the appropriate budget for monitoring and Evaluation to easy the activity of Monitoring and Evaluation that would impact the performance of projects. The 57.8% of respondents agreed that the budget of Monitoring and evaluation does not exist, and not separated from the master budget of the District while 42.2% responded that the budget exist but not sufficient as per the monitoring and Evaluation requirement. Monitoring and evaluation should be done regularly to track progress and avoid risk of the project not meeting its objectives and started. If the budget is not availed or sufficient, there is a likelihood that monitoring and evaluation will not be done as needed and project success will fall (Table 9).

Table 9: Project M&E budget.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Insufficient	38	42.2	42.2	42.2
	does not exist	52	57.8	57.8	100.0
	Total	90	100.0	100.0	

During the M&E within a specific project, budget report should be communicated to the concerned and discussed for changes and improvement by different stakeholders. The table above, indicates that when project monitoring and evaluation is completed in cricket, budget reports are prepared but 8.9% said that did not get communicated about the report, 6.7% agreed that the report was discussed in staff meeting and were involved in the tracking and budget changes that were needed. 32.2% said that the budget report were presented to them, and approved to be given to the project donors for review and give more insight and suggestions on how the identified problems might be improved towards project performance, while 52.2% agreed that project is only communicated to the project manager to understand the variability during the project implementation that might hinder the project performance progress [13] (Table 10).

Table 10: M&E budget report communication.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No communication	8	8.9	8.9	8.9
	Approved M&E budget report to the donors	29	32.2	32.2	41.1
	M&E budget report to project Manager	47	52.2	52.2	93.3
	Project Budget Discussion in staff meeting	6	6.7	6.7	100.0
	Total	90	100.0	100.0	

Analysis of stakeholder's engagement and feedback in M&E

It is indicated by the descriptive statistics that stakeholders are engaged in the project monitoring and evaluation in different manners. Whereby, some confirmed that they participated in funds mobilization during the project implementation when track changes were needed at 10.0%. 44.4% agreed that during monitoring and evaluation with the staff project, gave project feedback in the implementation and 37.8% suggested track changes that were necessary and may be omitted or ignored during the project design and implementation. 5.6% have seen that the project needed to revisit the proposal and comply with what was planned that would help the project to achieve its objectives and 2.2% said that the engagement in the activity of monitoring and evaluation enabled them to well understand the activities being done during the implementation and increased their level of ownership and suggest remedies to improve the effect of the project on their development (Table 11).

Analysis of the cricket road construction success factors

Cricket road construction project performance was analyzed and the

researcher found that, most factors to measure the project success are project to be completed on time as planned, target costs are met compared to the estimated costs during the project implementation phase and project goals are achieved as set during the project design. Respondents agreed to those variables are 100%. These variables were used as dependents factors to measure project performance in this study [14] (Table 12).

The purpose of this table was to analyze whether the project succeeded. It is evidenced by the respondents that the project performance. This is revealed by the statistics that the project works were completed on time as planned at 100%. The costs that were planned were well executed as estimated in the cost budget at 100%, while targets of the project were achieved as set in the project design. Thus, this indicates that the project in general succeeded (Table 13).

Correlation analysis of variables

The correlation was analyzed to determine the relationship between the

Table 11. Stakeholder’s feedback in M&E in cricket road construction project.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	fund mobilization	9	10.0	10.0
	give project implementation feedback	40	44.4	54.4
	suggest track changes	34	37.8	92.2
	revisit the project proposal	5	5.6	97.8
	understand the project activities being done	2	2.2	100.0
	Total	90	100.0	100.0

Table 12. Factors project performance indicators of cricket road construction project.

	Frequency	Percent
Valid	Project Completion time/ planned	90
	Meeting target cost /estimated	90
	Achieving set goals	90
	Total	90

Table 13. Analysis of the cricket road construction project success.

	Project completion time/planned period	Met target cost/ estimated	Achieved set goals
N	90	90	90
	Missing	0	0

Table 14. Analysis of the correlation between independent variables (predictors).

	Technical skills of M&E	M&E budget	stakeholder’s engagement in M&E
technical skills of M&E	Pearson Correlation	1	.244*
	Sig. (2-tailed)		.170
	N	90	90
M&E budget	Pearson Correlation	-.146	1
	Sig. (2-tailed)	.170	.148
	N	90	90
stakeholder’s engagement in M&E	Pearson Correlation	.244*	1
	Sig. (2-tailed)	.021	.148
	N	90	90

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

independent variables and the dependent variables used in the research [15].

The predictors under study, technical skills of M&E, M&E budget and Stakeholders engagement in M&E have shown a relationship between them. This indicates that the use of them to test the significance level may not present any autocorrelation in the variables. All tested correlation is less than 0.89, as indicated in the table 4.2.7 above. The correlation tests give the clear statement to the researcher that all the predictors used in the research can be used to determine the relationship between project monitoring and evaluation on project success (Table 14).

There is a strong relationship between these variables that were used to measure the project success. This strong relationship is due to the fact that all respondents confirmed at 100% that project completion compared to the time planned, costs were met as planned and project targets were met. And also, they confirmed that the project succeeded. Because the linear regression model will be presented separately based on each project success factor, the researcher found no reason of removing any variable to measure project success [16] (Table 15).

Regression analysis of the findings between the variable

- a. Dependent Variable: project completion time/planned period
- b. Predictors: (Constant), stakeholders’ engagement in M&E, M&E budget, technical skills of M&E

The analysis of variance indicates that project completion on time compared with the planned period is statistically significant with stakeholder’s engagement, budget and technical skills at p-value of 0.045 < 0.05. While the Model summary indicates that R-Square to measure the relationship between the independent and dependent variable at 89% while Durbin Watson of 1.75 that indicates that the data are not autocorrelated because the coefficient between 1.5 and 2 (Table 16).

- a. Predictors: (Constant), stakeholders’ engagement in M&E, M&E budget, technical skills of M&E
- b. Dependent Variable: project completion time/planned period

The model summary to establish the effect of stakeholders’ engagement in M&E, M&E budget and technical skills on project completion on time as planned, indicates a relationship of 89% measured by the R-Square. This reveals that for a project to be completed on time as planned, the project management should focus more on allocating budget in the M&E, provide technical skills to staff and engage stakeholders (Table 17).

- a. Dependent Variable: project completion time/planned period
- The coefficient of regression of the model for the predictors of the independent variables used by the researcher indicates that technical skills of M&E, M&E budget are statistically not significant on project completion on time compared to the planned period with P-value of 0.081, 0.959 that are greater than 0.05. While stakeholder’s engagement in M&E is statistically significant to project completion on time as planned at P-Value of 0.01 < 0.05. This shows that when stakeholders are engaged in the M&E process, feedback will be given to the

Table 15. Analysis of the correlation between dependent variables.

Project success variables		project completion time/planned period	meet target cost/estimated	achieved set goals
Project completion time/planned period	Pearson Correlation	1	.015	-.119
	Sig. (2-tailed)		.891	.264
	N	90	90	90
Meet target cost/estimated	Pearson Correlation	.015	1	-.188
	Sig. (2-tailed)	.891		.076
	N	90	90	90
Achieved set goals	Pearson Correlation	-.119	-.188	1
	Sig. (2-tailed)	.264	.076	
	N	90	90	90

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.967	3	.656	2.801	.045 ^b
	Residual	20.133	86	.234		
	Total	22.100	89			

Table 16. Model Summary of independent variable and the project time completion.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.298 ^a	.089	.057	.48384	1.75

Table 17. Coefficients of regression between independent variable and the project time completion.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.405	.409		3.438	.001
technical skills of M&E	.158	.090	.188	1.765	.081
M&E budget	.005	.105	.005	.052	.959
stakeholder's engagement in M&E	-.168	.064	-.281	-2.631	.010

contractor from different people that are involved in the project implementation, when corrected, they contribute to the project completion [17] (Table 18).

a. Predictors: (Constant), stakeholders' engagement in M&E, M&E Budget, technical skills of M&E

b. Dependent Variable: meet target cost/estimated

The summary model of the relationship between independent predictors and meet the target costs compared to the estimated costs. The model reveals that the R-Square of 76%, and the Durbin Watson that measure the autocorrelation of 1.543. This means that the data are not auto correlated and the relationship between the monitoring and evaluation and meeting the target costs and planned is at 76%. Which is a positive relationship of the two variables (Table 19).

a. Dependent Variable: meet target cost/estimated

b. Predictors: (Constant), stakeholders' engagement in M&E, M&E budget, technical skills of M&E

It is clear from the statistical findings that stakeholder's engagement, M&E budget and technical skills in M&E of staff have not significant effect of project meeting project targeted costs as estimated. P-value is at $0.895 > 0.05$. This is true because meeting targets costs during project implementation is not due to the available budget, engagement of stakeholders and technical skills of staff but dependent on the planned activities during the project implementation and other macroeconomic factors and environment factors (labor force, commodity price and material as well as available natural resources (Table 20).

a. Dependent Variable: meet target cost/estimated

The regression model analysis between technical skills in M&E, M&E available budget and stakeholders' engagement in M&E being the factors of Monitoring and Evaluation shows that there is no significant effect on meeting the project targeted cost as indicated by their respective p-Value of $0.479; 0.745; 0.760 > 0.05$. The reason behind is that the factors that are influencing the project to meet targeted costs are many and can be available funds on time, just in time delivery, stable prices and availability of local materials needed [18] (Table 21).

a. Predictors: (Constant), stakeholders' engagement in M&E, M&E budget, technical skills of M&E

b. Dependent Variable: achieved set goals

The summary of the regression model between the independent and dependent variable (achieve project goals) indicated that the data of the model are not auto correlated at 1.686 of coefficient but, the level of relationship is very small between the technical skills, stakeholders engagement and available M&E budget and met the set goals of the project of 20%. This shows that having technical skills, engage stakeholders and having M&E budget is not enough to achieve planned project goals. What is important it to have them and utilize them efficiently in a manner that they can contribute the efficiency and effectiveness of the project (Table 22).

a. Dependent Variable: achieved set goals

b. Predictors: (Constant), stakeholders' engagement in M&E, M&E budget, technical skills of M&E

The table shows that predictors (stakeholders' engagement in M&E, M&E

Table 18. Regression analysis between the independent variable and meeting target costs.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.183 ^a	.076	0.028	.46716	1.543

Table 19. ANOVA^a analysis between the independent variable and meeting target costs/estimated costs.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.132	3	.044	.201	.895 ^b
	Residual	18.768	86	.218		
	Total	18.900	89			

Table 20. Regression Coefficients analysis between the independent variable and meeting target costs/estimated costs.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.505	.395		3.815	.000
	technical skills of M&E	-.062	.087	-.079	-.712	.479
	M&E budget	-.033	.102	-.036	-.327	.745
	stakeholder's engagement in M&E	.019	.061	.034	.307	.760

a. Dependent Variable: meet target cost/estimated

Table 21. Model Summary between the independent variable and achieving set project targets.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.143 ^a	.020	-.014	.49604	1.686

Table 22. ANOVA^a between the independent variable and achieving set project targets.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.439	3	.146	.595	.620 ^b
	Residual	21.161	86	.246		
	Total	21.600	89			

Table 23. Regression Coefficients between the independent variable and achieving set project targets.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.418	.419		3.384	.001
	technical skills of M&E	-.057	.092	-.068	-.615	.540
	M&E budget	-.025	.108	-.025	-.234	.816
	stakeholder's engagement in M&E	.081	.065	.138	1.245	.217

budget, technical skills of M&E) are not significant on achieved set project goals P-value 0.620>0.05. It is obvious that there is no direct effect between predictors (stakeholders' engagement in M&E, M&E budget, technical skills of M&E) and achieving the goals of the project (Table 23).

a. Dependent Variable: achieved set goals

The statistics reveal that technical skills of M&E that staff receive impact positively but not significantly the achievement of the project. P-value of 0.540>0.05. There is no statistical significance effect of M&E budget and achieving the project goal. P-Value of 0.816>0.05 the same as stakeholder's engagement in M&E is not significant on project goals achievement [19,20]. These predictors can influence the project to achieve its goals, if they are well managed and fit the purpose of the project. The other factors might be proper project planning, motivated project team, and mitigative measures of risk management during project implementation (Table 24).

Conclusion

Objective one: To analyze the effect of staff technical skills in Monitoring and Evaluation on project success cricket Road construction in Kicukiro District

The research findings indicated that staff technical skills during the M&E are

not statistically significant on project success. Technical skill of staff is not significant on project completion period as planned at a p-value of 0.81>0.05; and not significant to meeting project costs compared to estimated project cost at p-value of 0.479>0.05, while not significant on helping the project to achieve its desired goals where the p-Value was 0.540>0.05. These statistics indicated that having technical skills does in M&E does not matter in project success. Possessing skills is not enough as using them properly, professionally and technically to enhance the project performance.

Objective Two: To determine the level of significance of budgetary allocation in Monitoring and Evaluation on project success of cricket Road construction in Kicukiro District

The statistical findings indicated that the M&E budget is not significant on project completion on time as planned at p-value of 0.959>0.05 and not at the same time significant on meeting project costs as estimated at a coefficient of significance of p-value 0.745>0.05 and finally not significant on project meeting its set goals at p-value of 0.816>0.05. This shows that project performance is not only due to the available budget and approved, it depended on how the budget is effectively allocated to the task of monitoring and evaluation of the project as stipulated in the project design and implementation plan.

Objective Three: To determine the level of stakeholder's participation in monitoring and evaluation on project success cricket Road construction case study in Kicukiro District

It is clear from the regression analysis that stakeholder's involvement in M&E helps the project management to collect feedback on what have been compared to the expected that satisfy the stakeholders needs. The findings indicate that, stakeholder's engagement in M&E and feedback is significant on project competition on time compared to the expected time at a p-value of $0.01 < 0.05$, but not significant on meeting project costs as budgeted at p-value of $0.760 > 0.05$ while not significant also to project achieving its goals at p-value of $0.217 > 0.05$. Due to lack of major influence during the project design and implementation, the feedback of stakeholders during the monitoring and evaluation may not have so much significant effect on the project success.

Conclusions

The findings indicated that there is a positive relationship between the project monitoring and evaluation and project performance. But there is no significant effect between the predictors under study and the dependent variable. The linear regression model indicated that there no significance effect of technical stall, M&E budget and stakeholders monitoring and evaluation feedback on the project success, measure by meeting project cost, achieving desired project goals and achieving goals on time as planned during the project design.

Recommendations

- i) Project funders and management should separate the project monitoring and evaluation budget with the entire project budget
- ii) Increase the level of the stakeholder's involvement during the entire project management phases, that would allow them to know the expected and furnish the project implementation and monitoring feedback for quick track changes.
- iii) More technical training is need to empower staff that are mostly involved in the monitoring and evaluation process and system.

Suggestions for further study

- i) Stakeholders involvement in project design to minimize project risks during project implementation.
- ii) Analysis of the effect of monitoring and evaluation tools on the project performance.

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