

Monitoring & Evaluation Tools and Project Performance in Rwanda. A Case Study of Busanza Housing Project Kicukiro District

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Abstract

Background: This research examined the effects of monitoring and evaluation tools on project performance in Rwanda using a case study of Busanza housing project, Kicukiro district. The study objectives were, to identify the effect of M&E Plan on Busanza Housing Project, identify the effect of logical framework on Busanza Housing Project and to identify the effect of formal survey on Busanza Housing Project.

Materials and methods: The study employed both qualitative and quantitative research approaches. It was qualitative in a sense that the researcher measured the perceptions of respondents on the contributions of M&E tools on the success of a housing project based on the researcher's objectives. The researcher also employed quantitative research approach which was descriptive research design due to the nature and size of the target population and the results was analyzed using inferential statistics. The target population was 120 people consisted of 3 managers of contractors, 30 Kicukiro District staffs and 87 beneficiaries. Stratified sampling technique was used to have all parts of the population equally covered in the exercise of collecting data. Simple random sampling technique was also employed in the selection of respondents from each small group of the population under study. Using Sloven's formula, a sample size of 94 respondents were selected to participate in this study. Questionnaires, interview guide and document analysis schedules were used to collect the data. Data entry, coding, cleaning and analysis was done with the help of SPSS software version 25. Tables, Figures and textual models were used to present analyzed data.

Results: Throughout the findings, it was concluded that M&E plan effected the performance of Busanza housing project as indicated by M&E plan and stakeholders' satisfaction correlated ($r=.348^{**}$, $p=.001$), planning for M&E enabled delivery on time correlated at ($r=.750^{**}$, $p= 0.002$) and planning for M&E facilitated project delivery within the budget ($r=.148^{**}$, $p=.004$). on the second objective was concluded that logical framework influenced the performance of Busanza housing project as indicated by Logical framework and increased stakeholders' satisfaction ($r=.323^{**}$, $p=.002$), logical framework enabled delivery on time ($r=.254^{**}$, $p= 0.016$) and the logical frame work facilitated delivery within the budget ($r=.922^{**}$, $p=.011$). On the third objective, It was concluded that Formal survey correlated with the performance of Busanza housing project. This was indicated by formal survey of M&E and increased stakeholders' satisfaction ($r=.510^{**}$, $p=.041$), Formal survey for M&E enabled delivery on time ($r=.291^{**}$, $p= 0.005$) and the formal survey for M&E facilitated housing project delivery within the budget ($r=.243^{**}$, $p=.021$). About the effects of M&E tools on Busanza housing project, it was concluded that combined effects of M&E plan, logical framework and formal survey explains 72.7 percent on stakeholder's satisfaction; 55.3% on time that Busanza housing project was delivered, and 75.3% on the effective use of Budget at Busanza housing project in Kicukiro district, the study recommend effective use of M&E tools in project management.

Key words: Monitoring & Evaluation Tools; Project Performance; Busanza housing project

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I. Introduction

In the contemporary world monitoring and evaluation tools play a leading role in determining the efficiency and effectiveness of projects in most countries through assessing the performance of projects right away from selection, planning, implementation until they reach at completion stage. Tola (2019) indicated that monitoring and evaluation tool is a guide or a road map that demonstrates the objectives and goals of a project or a group of projects and explains what will happen to the project from planning stage up to the period the project attains its goals and brings the intended impact to the project owner and the community. Monitoring is an ongoing activity that takes place throughout the implementation of a project or a program and is used to compare what a project has delivered and what was planned before. Evaluation on the other hand is a way of

assessing objectives of an ongoing or completed project or program in relation to its design, implementation and results (United Nations Evaluation Group norms and standards 2005). Monitoring facilitates in providing clear indicators to management and stakeholders of attaining forecasted results by utilizing the resources available (Gyorkos 2013).

In the study conducted by Day (2010) emphasizes that effective use of M&E is appreciated as a necessary requirement for project management. This is due to the fact that M&E provides a platform for accountability in using the available resources. Bopaya (2009) postulates that monitoring and evaluation tools facilitate the project to work towards the timeline, meeting the budget constraint for the project and the project team to develop scheduling and present to the senior management for approval before continuing to the next stage. With a view to Mayor of Kigali city Pascal Nyamulinda (2018) report, due to the fact that the cost of housing in Rwanda is unaffordable to many people especially low income earners and those who settle in unplanned, informal and high risky zones, the government of Rwanda through Rwanda Housing Authority launched a policy to construct affordable housing units for mostly low earners and people who live in highly risky areas to obtain better houses in exchange of their poorly constructed ones that would put their lives at risk. It is in this regard therefore that a two-year housing construction project was launched at Busanza, Kicukiro District from 2018-2019 to offer resettlement program of Bannyahe slum dwellers in Nyarutarama, Gasabo district. A housing project was completed and residents resettled in October 2020 where 420 families obtained their titles for the houses that can be used as a collateral security to access loans in the bank (Respondents' Report 2020). Despite the move to ensure that city dwellers achieve decent housing schemes, there is a number of weaknesses identified by the auditor general's office related to wasteful financial expenditures and non-financial expenditures of the government projects. Those non- financial expenditures include lack of M&E tools applied to projects to make them achieve the intended objectives thus resulting into delays and uncompleted projects. This therefore attracted the attention of the researcher to examine how M&E tools contribute to the successful completion of a housing construction project at Busanza to find out whether the project was delivered on the set time, delivered according to budget plan and satisfied the needs of stakeholders.

Statement of the Problem: The Government of Rwanda is targeting to increase urbanization rate from 18% to 35% in 2024 to support economic growth. This increase in urbanization of 35% is an expression of an increase in urban population by about 2.7 million people. (IGC, 2018). In line with above, Rwanda initiated the affordable housing program to find solutions to housing challenges of low- and middle-income communities all over the country. According to Mayor of Kigali, Pascal NYAMURINDA report, (2018), the project will help the city to provide affordable housing schemes at requisite scale and will alleviate the housing crisis in Kigali where over 70% city residents live in unplanned or informal settlements. In order to cover the gap of housing crisis in Rwanda, effective monitoring and evaluation should be enhanced in project. This agrees with Kahilu, (2010) who postulates that project managers should carry out monitoring and evaluation by developing frame works and guidelines for measuring impact of the project. Rwanda is committed to supporting planning process at all District levels by ensuring that plans are aligned with the earmarked funds and strategic plan, coordinating, monitoring and evaluating the implementation of the project's annual work plan and budget (Rwanda housing authority, 2018) In a report from Auditor's General, (2017) identified that out of 109 audited projects, a contract worth 206 billion Rwandan francs were not timely completed. Those that were abandoned were worth 123 billion Rwandan francs and those that were not completed worth 45 billion Rwandan francs. The weaknesses identified by the auditors indicated that 4% of these weaknesses are related to expenditures such as unsupported, wasteful, fraudulent, or overstated expenditures while the remaining 96% weaknesses are related to non-expenditures such as lack of monitoring and evaluation tools to enable proper budget allocation, projects timely completed and meeting the satisfaction of stakeholders. This pertinent issue drew the attention of the researcher to evaluate the extent to which project monitoring and evaluation tools contributed to project performance and to put on light the reliable information that would facilitate the management of Kicukiro District in decision-making.

The specific objectives achieved in this study were:

- i) To identify the effect of M&E Plan on the performance of Busanza Housing Project
- ii) To identify the effect of logical framework on the performance of Busanza Housing Project
- iii) To identify the effect of formal survey on the performance of Busanza Housing Project.

II. Research Methodology

According to Onen and Oso (2016), research design was explained as framework created to find answers to scientific research problems. Research design was also described as a scientific plan created to seek answers to research questions (Johnson et al., 2007). This study employed mixed method research design. Johnson et al., (2007), define Mixed Method design as the type of research design through which a researcher or a team of researchers combine both elements of quantitative and quality research approaches, (for example, the

use of quantitative and qualitative point of views, data collections, analysis, inference techniques) for the broad purposes of depth and sensitive understanding and collaboration. The rationale for using mixed methods design is that, it combines both qualitative and quantitative data within a single study hence complementing each other by integrating their strengths (Creswell, 1994). Target population of this study was 120 people consisted of 30 Kicukiro district staff, 3 managers and 87 beneficiaries. To calculate an appropriate sample size from a target population for the study, the researcher used Slovens' formula (Ryan, 2013). Bailey (1978) defined a sample as a subset of elements that make up a study population. In this study, the sample size was determined using Solven's formula. Sloven's formula
$$n = \frac{N}{1 + Ne^2}$$

With n representing the size of the sample, N = Total population and e is the Error of tolerance which is equal to 0.05; Sample size= $120/1+120(0.05)^2 = 120/ (1+120*0.0025) = 120/(1+0.3) = 120/1.3 = 94$ respondents. The number of respondents were selected proportionally where; 27 staffs in Kicukiro district; 3 project managers and 63 beneficiaries of Busanza housing project. During the process of data collection for this research different sampling method were employed to select appropriate respondents; simple random and stratified sampling techniques were used. Employees at Kicukiro district were sampled using stratified sampling, managers and beneficiaries were selected with the help of simple random sampling. This provided equal chance to every individual to participate in the study. These techniques facilitated the researcher to obtain real information directly from different respondents and different units in order to achieve the study objectives.

According to Heaton (2004) data collection methods varies from one person to another but has some similarities. The study employed primary and secondary data to collect data for this study. In the course of investigation, primary data was collected through questionnaires and interview guide administrated to the respondents of the study. While, documents analysis schedules give secondary data.

The researcher employed questionnaires since the responses gathered were in a standardized and organized way and it is one of the quickest ways of collecting information. The questionnaire was regarded as beneficial to the respondents since it gives well thought answers as they do it in the absence of the researcher. Closed questions were used to obtain respondents' responses and it is the easiest way of answering since it requires short answers. The questionnaire was in open-ended format, this gives opportunities to the respondents to demonstrate their answers deeply and also to facilitate the researcher capture some information not highlighted in the questionnaire. The questionnaire was organized in Likert scale format, where. 1= Strongly Disagree, 2= Disagree, N= Neutral, 4=Agree, and 5= Strongly Agree. In addition, complement data was collected from interview. Sekaran (2003) defines Key informants as respondents who hold and provide important information relevant to the study. In case of clarifications or where the respondents lack concentration, face to face interview was also employed. In this regard, 4 participants were given interview including: 3 project managers of Busanza Housing Project and 1 corporate manager of Kicukiro District. Questionnaires were administered to 90 respondents who consist of stakeholders of Busanza Housing project including; workers of the project and owners of houses.

After data collection and coding and clearing was followed with the help of SPSS 22nd version. Having done with coding, descriptive (mean, frequency & percentages) and inferential statistics (Karl Pearson correlation coefficient and regression model) were computed for quantitative data collected from questionnaires whereas qualitative data was collected from interview guide. Data was presented in form of tables to facilitate interpretation. The regression model used were as follow: $Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e$

Y =Project performance, α = Constant term; β =Beta coefficients; X_1 = Planning process; X_2 = Logical frame work; X_3 = Formal survey; e = Error term; The study used the regression analysis modal to investigate the effect of M&E plan, logical frame work and formal survey on project performance and the findings displayed using Tables.

III. Findings and Discussions

The presentation of research findings was based on research objectives which were to identify the effects of M&E Plan on the performance of Busanza housing project, to identify effects of logical framework on the performance of Busanza housing project, and to identify the effects of formal survey on the performance of Busanza housing project in Kicukiro district.

3.1 Effects of M&E Plan on Busanza Housing Project

Table 1 M&E Plan in Busanza Housing Project in Kicukiro District

STATEMENTS	SD		D		N		A		SA		Mean	St.D.dev
	F	%	F	%	F	%	F	%	F	%		
At the project initial stage, the project allocates funds for monitoring and evaluation.	0	0.0	9	10	9	10	35	37.4	37	42.6	3.87	1.07
The M&E plans contain the M&E planning process.	0	0.0	0	0.0	18	20	36	40	45	50	4.31	1.19
In M&E plan, activities are clearly defined in the organization.	0	0.0	0	0.0	0	0.0	18	20	72	80	4.40	0.66
The M&E plan support decision making during implementation.	9	10	0	0.0	0	0.0	27	30	54	60	4.26	1.21
The M&E plan helps to estimate the cost of the required resource for M&E.	0	0.0	0	0.0	0	0.0	36	40	54	60.0	4.54	0.58
Total	2	2.2	2	2.2	5	5.56	30	33.34	51	56.7		

Source: Primary Data, 2021.

Table 1 shows the extent to which respondents appreciated M&E plan in Busanza housing project. Presentation and analysis were based on the provided statement. The first statement was “at the project initial stage, the project allocates funds for monitoring and evaluation”. The findings revealed that 9 (10%) disagree, 9(10%) were neutral, 35(37.4%) agree and 37(42.6%) strongly agreed that the project allocates adequate funds for monitoring and evaluation activities and this help the project to achieve the intended goals. These findings were in line with the findings presented by Dumba (2014) who views project plan as a means of designing a project that defines objectives, identifying tasks to be done which led to the project success. The second statement was “the M&E plan contain the M&E planning process”. On the second statement 18 (20.0%) were neutral 36 (40.0%) agree and 45(50.0%) strongly agreed that M&E plan contained the M&E planning process and this contributed to the project performance. These findings were supported by the findings presented by Johnston (2018) that setting M&E helps to detect frauds which hinder effective completion of the project. The third statement was “In M&E plan, activities are clearly defined in the organization” on this statement the findings revealed that 18(20.0%) agreed and 72(80%) strongly agreed that planning process of M&E was clearly defined in Busanza housing project this influence project performance. These findings were in line with the recommendation given by project management institute (PMI, 2008) which noted that project monitoring starts with the first day of project implementation to track project progress and minimize actions that hinder smooth running of the project toward the completion of planned goals. The fourth statement was “the M&E plan support decision making during implementation phase”. On this fourth statement, the findings revealed that 9(10%) strongly disagree; 27(30%) agreed and 54(60) strongly agreed that the M&E plan supported decision making during the implementation phase. These findings concur the findings presented by Mc Hill, (2011) that monitoring and Evaluation provide useful information to the decision makers and improve the success of the project. The fifth statement was “the M&E plan helps to estimate the cost of the required resource for M&E” on the fifth statement the findings revealed that 36 (40%) agreed, and 54(60%) strongly agreed that M&E plan help to estimate the cost of the required resources for M&E. This finding collaborated with the findings presented by Eshna (2012) that planning for M&E helped in industrial project cost estimation. On average, 2 (2.20%) strongly disagree, 2(2.20%) disagree, 5(5.56%) were neutral, 30 (33.34%) agreed and 51(56.7%) strongly agreed that M&E plan was employed in Busanza housing project. These findings were supported by Tola Data (2019) that a good planning acts as a necessary tool of any M&E system and it enables the project staff to think clearly before going through implementation process. In similar manner, US navy (1992) revealed that majority of poor monitoring and evaluation contributed a lot to the failure of Navy projects.

Correlation Analysis

Table 2 M&E Plan and Busanza Housing Project Performance

		Correlations		
		M&E plan increased stakeholder satisfaction	M&E plan enabled delivery on time	M&E plan facilitated delivery on budget
M&E Plan increased stakeholder satisfaction	Pearson Correlation		.750	.348**
	Sig. (2-tailed)		.002	.001
	N	90	90	90
M&E plan enabled delivery on time	Pearson Correlation	.750	1	.148
	Sig. (2-tailed)	.002		.004
	N	90	90	90
M&E plan facilitated delivery on budget	Pearson Correlation	.348**	.148	1
	Sig. (2-tailed)	.001	.004	
	N	90	90	90

** Correlation is significant at the 0.01 level (2-tailed).

Source: Primary Data, 2021

As indicated in Table 2, there is significant correlations between M&E plan and increased stakeholder satisfaction ($r=.348^{**}$, $p=.001$), M&E plan enabled delivery on time ($r=.750^{**}$, $p= 0.002$) and M&E plan facilitated delivery within the budget ($r=.148^{**}$, $p=.004$). These correlations were statistically significant given that the p value was < 0.05 suggesting that M&E plan influence the performance of Busanza housing project in Kicukiro District. The findings were supported by findings collected from interview held with the manager of housing project in Busanza Kicukiro district, that “yes, planning for monitoring and evaluation helped to improve the performance of housing project in Busanza Kicukiro District”. These findings were supported by the findings presented by Kawonga, et al. (2012), that poor setting goals for M&E lead to the failure of HIV project in countries.

Table 3 Logical Framework and Busanza Housing Project

STATEMENTS	SD		D		N		A		SA		Mean	St.D. Dev
	F	%	F	%	F	%	F	%	F	%		
The logical frame work is defined to support the performance of a project	9	10.0	0	0.0	0	0.0	27	30.0	54	60.0	4.30	1.19
The logical frame work guides systematic and logical analysis of key interrelated elements that constitute a given project.	1	1.1	1	1.1	0	0.0	70	77.8	18	20.0	4.14	0.57
Facilitate better communication among decision makers.	0	0.0	0	0.0	18	20.0	45	50.0	27	30.0	4.11	0.56
Prepares for successful results.	0	0.0	18	20.0	9	10.0	18	20.0	45	50.0	4.00	1.18
Ensures continuity of approach when the original project staff is replaced.	9	10.0	9	10.0	0	0.0	54	60.0	18	20.0	3.70	1.19
Total	3	3.4	5	5.4	5	5.4	47	52.46	30	33.34		

Source: Primary Data, 2021

Table 3 presents logical framework data, and the extent to which it was used in housing project in Busanza Kicukiro district. The data was presented in Likert scale. Whereas, findings, presentation and analysis followed provided statement. The first statement was “the logical frame work was defined to support the performance of a project”. On the first statement the findings revealed that 9(10%) strongly disagree, 27(30%) disagree, and 54(60%) strongly agreed that logical frame work was well defined to support the performance of Busanza housing project. The second statement was “the logical frame work guided systematic and logical analysis of key interrelated elements that constitute a given project”. On this second statement the findings indicated that 1(1.10%) strongly disagree, 1(1.10%) disagree, 70(77.80%) agree, and 18(20%) strongly agreed that logical frame work guided the systematic and logical analysis of key interrelated elements that constitute housing project in Busanza Kicukiro District. The third statement was “logical framework facilitates better communication among decision makers”. On the third statement the findings indicated that 18(20%) were neutral, 45(50%) and 27 (30%) strongly agreed that logical frame work facilitated better communication among decision makers of housing project in Busanza Kicukiro district. The fourth statement was “logical framework prepares for successful results”. On the fourth statement the findings indicated that 18 (20.0%) disagree; 9(10.0%) were neutral; 18 (20.0%) agreed; and 45(50%) strongly agreed that logical frame work was prepared for successful results in Busanza housing project. The fifth statement was “ensures continuity of approach when the original project staff is replaced”. On the fourth statement the findings indicated that 9 (10.0%) strongly disagreed; 9 (10.0%) disagreed; 54(60.0%) agree; and 18(20.0%) were strongly agreed that logical frame work ensured the continuity of approach when the original project staff was replaced.

On average, the findings indicated that 3(3.40%) disagreed, 5(5.40%) disagreed; 5(5.4%) were neutral; 47(52.46%) agreed, and 30(33.34%) strongly agreed that logical framework technic was effectively used in Busanza housing project in Kicukiro district. These findings collaborated with the findings presented by Bob (2009) logical frame work is among the key tool used in monitoring and evaluation. Relationship between Logical Framework and the Performance of Busanza Housing Project in Kicukiro District There was a need to establish the extent to which logical framework correlated with the performance of Busanza housing project in Kicukiro district, the collected was presented in the followings:

Correlation Analysis

Table 4 Relationship between Logical Framework and Busanza Housing Project

		Correlations		
		The logical frame work increased stakeholder satisfaction	The logical frame work enabled delivery on time	The logical frame work facilitated delivery within budget
The logical frame work increased stakeholder satisfaction	Pearson Correlation	1	.254*	.323**
	Sig. (2-tailed)		.016	.002
	N	90	90	90
The logical frame work enabled delivery on time	Pearson Correlation	.254*	1	.922
	Sig. (2-tailed)	.016		.011
	N	90	90	90
The logical frame work facilitated delivery within the budget	Pearson Correlation	.323**	.922	1
	Sig. (2-tailed)	.002	.011	
	N	90	90	90

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

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Primary Data, 2021

As indicated in Table 4, there significant correlations found between logical framework and increased stakeholders' satisfaction ($r=.323^{**}$, $p=.002$), logical framework enabled delivery on time ($r=.254^{**}$, $p=.016$) and the logical frame work facilitated delivery within the budget ($r=.922^{**}$, $p=.011$). These correlations were statistically significant given that the p value was < 0.05 suggesting that logical frame work influence the performance of housing project in Busanza Kicukiro District. These findings were supported by the interview held with project manager who noted that yes, it is true a well-structured logo frame played a role in the performance of housing project in Busanza. These findings were supported by Johnston (2012) that there a link between effective use of logical framework and project performance.

Effects of Formal Survey on Busanza Housing Project

Table 5 Formal Survey and Busanza Housing Project

STATEMENTS	SD		D		N		A		SA		Mea n	Std.D ev
	F	%	F	%	F	%	F	%	F	%		
Provides baseline data useful for M&E	0	0.0	0	0.0	9	10.0	45	50.0	36	40.0	4.30	6.43
Compare changes overtime	0	0.0	9	10.0	0	0.0	54	60.0	27	30.0	4.10	0.83
Compare actual conditions with the targets establishes in the program	1	1.1	17	18.9	1	1.1	62	68.9	9	10.0	3.67	0.93
Data collection methods and timeline is defined.	12	13.3	2	2.2	1	1.1	75	83.3	0	0	3.54	1.05
Reporting data is created to interpret the findings.	1	1.1	1	1.1	9	10.0	52	57.8	27	30.0	4.14	0.74
Total	3	3.3	6	6.7	4	4.5	58	64.4	19	21.2		

Source: Primary Data, 2021

Table 5 presents formal survey data, and the extent to which it was used in housing project in Busanza Kicukiro district. The data was presented in Likert scale format, whereas, the findings presentation and analysis followed provided statement. The first statement was “formal survey provides baseline data useful for M&E”. On this statement the findings indicated that none disagreed; 9 (10%) were neutral; 45(50%) agreed; and 36(40%) strongly agreed that formal survey provide baseline data useful for M&E process in the housing project in Busanza Kicukiro district. The second statement was “formal survey compares changes overtime”. On this statement the findings indicated that 9(10%) disagreed; 45(60%) agreed; and 27(30%) strongly agreed that formal survey helped to compare Busanza housing project progress changes overtime. The third statement was “formal survey compare actual conditions with the targets establishes in the program”. On this statement the findings indicated that 1(1.10%) strongly disagreed; 17 (18.9%) disagreed; 1(1.10%) were neutral; 62(68.9%) agreed; and 9(10%) strongly agreed that formal survey helps to compare actual conditions with the targets establishes in the program of housing project in Busanza Kicukiro District. The fourth statement was “data collection methods and timeline are defined”. On this statement the findings indicated that 12(13.3%) strongly disagree; 2(2.2%) disagreed; 1(1.1%) were neutral; 75(83.3%) agreed that data collection methods and timeline were defined. The fifth statement was “reporting data is created to interpret the findings”. On this statement the findings indicated that 1(1.1%) strongly disagree; 1(1.1%) disagreed; 9(10%) were neutral; 52(57.8%) agreed; and 27(30%) strongly agreed that reporting data was created to facilitate the interpretation of the collected data

over the progress of the project. On the average 3(3.3%) strongly disagreed; 6(6.7%) disagreed; 4(4.5%) were neutral; 58(64.4%) agreed and 19(21.2%) strongly agreed that formal survey was among the M&E planning techniques used in housing project in Busanza Kicukiro district. The content analysis from interview held with District planning unit shows that monitoring and evaluation plans; logical frame work and formal survey for M&E plan are commonly used in their planned project. These findings were supported by the findings presented by Muzinda (2007) who divided monitoring and evaluation techniques into approaches, frameworks and data collection methods. From the above evidence, the researcher concluded that M&E plan, logical frame work and formal survey for M&E were the major Monitoring and Evaluation Technics used in housing project in Busanza in Kicukiro District.

Correlation Analysis

Table 6 Formal Survey for M&E and Housing Project Performance in Busanza

		Correlations		
		Formal survey increased stakeholder satisfaction	Formal survey enabled delivery on time	Formal survey facilitated in delivery within the budget
Formal survey increased stakeholder satisfaction	Pearson Correlation		1	.291**
	Sig. (2-tailed)		.005	.041
	N	90	90	90
Formal survey enabled delivery on time	Pearson Correlation	.291**	1	.243*
	Sig. (2-tailed)	.005		.021
	N	90	90	90
Formal survey facilitated in delivery within the budget	Pearson Correlation	.510	.243*	1
	Sig. (2-tailed)	.041	.021	
	N	90	90	90

** . Correlation is significant at the 0.01 level (2-tailed).

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

Source: Primary Data, 2021

As indicated in Table 6, there significant correlations found between formal survey of M&E and increased stakeholders’ satisfaction ($r=.510^{**}$, $p=.041$), Formal survey for M&E enabled delivery on time ($.291^{**}$, $p= 0.005$) and the formal survey for M&E facilitated housing project delivery within the budget ($r=.243^{**}$, $p=.021$). These correlations were statistically significant given that the p value was < 0.05 suggesting that formal survey influence the performance of housing project in Busanza, Kicukiro District. Content analysis from interview held with project manager revealed that data for project progress was collected daily and analyzed weekly, and this provide important tools to the project manager to take relevant decision leading to the project success. These findings were not far from the recommendation given by project management institute (PMI, 2012) that for project to succeed M&E data should be collected from the first day of project implementation.

Regression Analysis

Table7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.868 ^a	.753	.748	.52288

a. Predictors: (Constant), planning for M&E, logical frame work; formal survey

Source: Primary (2021)

The findings presented in Table 7: on model summary indicates that $R= 0.868$, R - square = 0.753 , adjusted R - square= 0.748 , and the $SE= 0.52288$. The coefficient of determination also called the R square is 0.753 . This means that the combined effect of the independent variables (planning for M&E, logical frame work; formal survey) explains 75.3% of the variations for housing project in Busanza for being delivered within the budget. This implies that a change in independent variables has a strong and a positive effect on the budget allocated on housing project in Busanza Kicukiro district.

Table 8: Regression Coefficient Analysis

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	1.076	.149			7.209	.000
	Planning for M&E	.855	.038	.963		22.645	.000
	Logical framework	.084	.039	.121		2.127	.035

Formal survey	-0.446	.041	-0.657	-10.987	.000
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a. Dependent Variable: project delivered within the budget

Source: Primary data (2021)

In Table 9: shows the regression coefficients of the independent variables planning for M&E, logical frame work; formal survey is statistically significant in explaining effective use of housing project budget in Busanza Kicukiro district. It showed that planning for M&E is statistically significant to increase effective use of budget in housing project in Busanza (B=0.963, p value=0.000). This implies that an improvement in M&E plan by one unit leads to an increase 0.963 units chance for being delivered within the budget. Furthermore, table 4.22 indicated that logical framework was also statistically significant to increase effective use of budget at Busanza housing project as indicated by (B=0.121, p value=0.035). This implies that an improvement in logical frame work by one unit leads to an increase 0.121 units of the chance of project to be delivered within the budget. Surprisingly, formal survey shows no statistically significant to decrease effective use of budget in housing project in Busanza this was indicated by (B=-0.657, p value=0.000). This implies that an improvement in formal survey by one unit decrease 0.657unit on the chance of the project to be delivered within the budget. These findings were against the findings presented by Bob (2009); Gorgens and Kusek (2009), who emphasized the role of formal survey for M&E on the success of the project.

IV. Summary & Conclusions

Monitoring and evaluation tools are very vital into projects as they act as an engine to stimulate the performance of projects. Basing on the findings presented in chapter four and analysis made. The research was conducted on monitoring and evaluation tools and project performance in Rwanda. The data collected to establish the performance of Busanza housing project indicated that 86 percent of the respondents agreed that Busanza housing project was completed on time; about 87 percent indicated that Busanza housing project was delivered within planned quality; about 97 percent indicated that Busanza housing project was delivered within budgeted cost; about 88 percent indicated that Busanza housing project will have impact on the community, and about 77 percent indicated that outputs of Busanza housing project achieved the intended objective. In general, the findings indicated that 89 percent of the respondents agreed that housing project in Busanza has successfully achieved the intended goals. On the first objective, it was concluded that M&E plan effected the performance of Busanza housing project as indicated by M&E plan and stakeholders' satisfaction correlated (r=.348**, p=.001), M&E plan enabled delivery on time correlated at (r=.750**, p= 0.002) and M&E plan facilitated project delivery within the budget (r=.148**, p=.004). The second objective was also concluded that logical framework influenced the performance of Busanza housing project as indicated by logical framework and increased stakeholders' satisfaction (r=.323**, p=.002), logical framework enabled delivery on time (.254**, p= 0.016) and the logical frame work facilitated delivery within the budget (r=.922**, p=.011). On the third objective, It was concluded that Formal survey correlated with the performance of Busanza housing project. This was indicated by formal survey of M&E and increased stakeholders' satisfaction (r=.510**, p=.041), Formal survey for M&E enabled delivery on time (.291**, p= 0.005) and the formal survey for M&E facilitated housing project delivery within the budget (r=.243**, p=.021). About the effects of M&E tools on Busanza housing project, it was concluded that combined effects of M&E plan, logical framework and formal survey explains 72.7 percent on stakeholder's satisfaction at Busanza housing project. This implies that change in independent variables has a strong and a positive effect on stakeholders' satisfactions. That, the combined effects of M&E plan, logical framework; formal survey explains 55.3% of the variations on the time that Busanza housing project was delivered. This implies that a change in independent variables has a strong and a positive effect on the time schedule for project provision. And that the combined efforts of M&E plan, logical framework; formal survey explains 75.3% on the effective use of Budget at Busanza housing project. This implies that change in independent variables have a strong and a positive effect on the budget allocated on Busanza housing project. The researcher recommends project managers to put more emphasis in monitoring and evaluation of their projects. The government of Rwanda through districts planning unit should facilitate their staffs by training them on effective use of M&E tools. In addition, the government of Rwanda and its development partners should create a supportive policy framework to increase awareness and understanding on the role M&E tools play in the effective performance of projects.

References

- [1]. Adeli, P. H. (2003). "Expert Systems in Construction and Structural Engineering". Chapman and Hall, New York, USA.
- [2]. Atkinson, D. and Wellman, G. (2003). A monitoring and evaluation manual for municipal water and sanitation management. Water research commission of South Africa. Pretoria: Silowa Printers.
- [3]. Bwebare, N. & Mirembe, E. (2017). Economics for Rwandan Schools, Kampala, Uganda: Fountain Publishers.
- [4]. Chuck W. (2005) Management: Third edition, Thomson Corporation, South-Western, United states of America.
- [5]. Crawford, L. (2002). Project Performance Assessment. Masters in Project Management Course, 10th-15th June, Paris, France. UTS/ESC-Lille.

- [6]. Creswell, (1994). *Advanced design in nursing research*. (2ndEd). Thousand Oaks, CA: sage publication.
- [7]. David, I & Bopaya B., (2009). *Project Management CIRCA 2025* ; Project Management Institute, United States of America.
- [8]. Davis R. (2004). *Scale, complexities and theories of change (1&2)*, London & New Dehli : Sage publications.
- [9]. Day, J. (2010). The need and practice of monitoring, evaluating and adopting marine planning and management –lessons from the Great Barrier Reef. *Marine policy*, 32(5), 823-831
- [10]. Ddumba-Ssentamu.J. (2004). *Basic Economics for East Africa. Concepts, Analysis and Applications*. Kampala: Fountain Publishers. Design, Wismar, Germany, Development Report, Executive Summary, Development, 1(1): 29–64.
- [11]. Dona T & Muamer R (2012). *Facilitators Source Book on the Theory of Change Process*.
- [12]. Faunka, M. (2002). What are the Major Ethical Issues in Conducting Research? Is there a Conflict Between the Research Ethics and the Nature of Nursing? *Health Science Indicators of Sustainable Development: Guidelines and Methodologies*, New York, Third Edition.
- [13]. Faunka, M. (2012). What are the Major Ethical Issues in Conducting Research? Is there a Conflict Between the Research Ethics and the Nature of Nursing? *Health Science Indicators of Sustainable Development*.
- [14]. Fayoh H., (1918). L'administration positif dans la Technique Moderne. *Fevrier*, , 72-76.
- [15]. Freedman, M. (2003). The Genius is in the Implementation, *Journal of Business Strategy*, Vol. 2,4.
- [16]. Gaga, A. J. Disha, A. & Chiho, S. (2005). *A Guide for Monitoring and Evaluation Child Health Programs*. Measure Evaluation. Carolina Population Center, University of North Carolina at Chapel Hill.
- [17]. Gebremeskel H., Tesfa G. & Randall W., (2004). *The role of small business in economic growth and economic development alleviation*. West Virginia.
- [18]. Grawitz, (2004). *Lexique des sciences sociales (8e édition)*. Paris: Guidelines and Methodologies, New York, Third Edition.
- [19]. Gyorkos, T. (2013). Monitoring and Evaluation of large scale Helminth control programmes. *Acta, Tropic*, 86(2): 275-282
- [20]. Heaton, J. (2004). *Reworking qualitative data*. London: Sage publications.
- [21]. Hishigsur and Gaamaa. (2014). "Impact Assessment Findings Using the SEEP-AIMS Tools at Sinapi Aba Trust, Ghana." The Institute for Development Studies (IDS) Imp-Act Program
- [22]. Hulme (2010). *Qualitative Data Analysis: Exploration with Nvivo*. Philadelphia: Open Human Development. National Human Development Report, United Nations
- [23]. International Finance Corporation., (2011). *Strengthening access to finance for women owned SMEs in developing countries*. Washington, USA.
- [24]. Issacs, W.N. (1993) Taking Flight: Dialogue, Collective thinking and Organisational Learning *Organisation Studies*, 22(2):24-39.
- [25]. J.Arent, D. (2014). *Key economic sector and services*. New York, United Kingdom: Cambridge University Press.
- [26]. Johnson M. et al (2007). *Educational research: Quantitative, Qualitative, and Mixed approaches*. SAGE publishers. Inc.
- [27]. Kahilu, D. (2010). Monitoring and evaluation report of “ the impact of information and communication technology service (ICT) among end users in the ministry of agriculture and cooperatives in Zambia” *Journal of Development and Agricultural Economics*,3(7), 302-311.
- [28]. Kawonga, M. Blaauw, D. Fonn, S. (2012). Aligning vertical interventions to health systems: A case study of the HIV Monitoring and Evaluation system in South Africa. *Health Research Policy and Systems*, 10(2).
- [29]. Kayitera,C.(2012).The impact of merging project implementation units on the performance of environmental project management in Rwanda. A case study of REMA SPIU School of Business and Public Management(unpublished master’s thesis). Mount Kenya University Kerstin.
- [30]. Kelly, K. &Magongo, B. (2014). Report on Assessment of Monitoring and Evaluation Capacity of HIV/AIDS organization in Swaziland.Swaziland:NERCHA.35.
- [31]. Kerstin, B & Wiberg, A (2003). The value of savings and financial intermediaries in Tanzania. A minor field study (unpublished master’s thesis). Umea University.
- [32]. Kerzner,H. (2010). *Project Management. Best practices: Achieving Global Excellence*. Second Edition, John Willy& Sons, Inc. New Jersey, Canada..
- [33]. Kessy, S and Temu, S.S (2010). The Impact of Training on Performance of Micro and Small Enterprises Served by Microfinance Institutions in Tanzania. Available on <http://scialert.net/fulltext/?doi=rjbm.2010.103.111&org=10>.
- [34]. Kothari C.R., (2008). *Research Methodology: Methods and Techniques*, 2nd Revised Edition , New Age International (P) Limited, Publishers, New Delhi.
- [35]. Lipsey, M. (2011). Multi-Coutry co-operation around shared waters: Role of monitoring and evaluation. *Global Environmental Change* 14(1), 5-14.
- [36]. Lobb-Rabe, A. (2000). *Impact Assessment with a Poverty Focus in Policy Advisory Projects*. GTZ: Hainburg, Germany..
- [37]. Musyoka, L.W. (2011). Challenges of Strategy Implementation in Jomo Kenyatta Foundation. *International Journal of Current Research*, 3(11): 301-308.
- [38]. Mutegaya,H. (2011). *Entrepreneurship Education for Rwanda Secondary Schools*. Fountain Publishers, Kampala
- [39]. Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill Companies.
- [40]. Nyakundi, A. A. (2014). Factors influencing implementation of monitoring and evaluation processes on donor funded projects; a case of Gruppo per le relazioni Transculturali-GRT project in Nairobi, Kenya (Doctoral dissertation).
- [41]. Okumus, F. (2003), Aflame work to Implement Strategies in organizations. *Management Decisions*, Vol.41.9.MCB UP.
- [42]. Oso, W.Y & Onen, D. (2009). *A General guide to writing research proposal and report*. Nairobi. The Jomo Kenyatta Foundation.
- [43]. Pamela, H., Joe, N. & Nay, T. (2013). *Programme Management and Federal Evaluator*. Public administrative Review.
- [44]. Patton (2012) *Analyzing Qualitative Data: Program Development and Evaluation*. University
- [45]. Pinkerton, J. (2008). *Project Management. Achieving Project Bottom-line Success*. The Mc Graw-Hill Companies, New York, USA. Poor through village savings and credit associations. Rwanda people’s Banks: FAO
- [46]. PMI, (2008). *Introduction to project management*. New York: McGraw-Hill.
- [47]. Rogers P (2006). *Programme theory and theories of change*. Edinburgh: Evaluation Summer School, University of Edinburgh.
- [48]. Ryan, T. (2013). *Sample Size Determination and Power*. John Wiley and Sons Sage Publications.
- [49]. Samuel B.A & Michel A. (2016). The interactions between Microfinance Institutions and Small and Medium Scale Enterprises in the Sunyani Municipality of Ghana.
- [50]. Savita Shankar (2011). An analysis of the role of microfinance programs in promoting financial inclusion in India.
- [51]. Sethi, R., & Philippines, R. (2012). The Influence of Project Managers on Project Success Criteria and project success by type of project. *European Management Journal*, 25(4), 298-309.
- [52]. Shapiro I (2005). *Theories of Change, Beyond Intractability*, Washington DC: Aspen Institute.
- [53]. Singh, K., Chandurkar, D., & Dutt, V. (2017). *A Practitioners’ manual on monitoring and evaluation of development projects*.

- [54]. Swerdilik (2010). Influence of project planning on project performance in India: The journal of educational Research, 60(8), 359-362.
- [55]. Uitto, J. A. (2010). Multi-country co-operation around shared waters: Role of Monitoring and Evaluation. *Global Environmental Change*, 14(1)
- [56]. US Navy, (1992). Introduction to project management: Project Scheduling. California USA.
- [57]. World Bank Group (2013) Self-employment in the Developing World. *World Development*,5(6):313-331.
- [58]. World Bank. (2004). Template and Guidelines for the Project Appraisal Document (PAD). Washington DC: The International Bank for Reconstruction and Development.

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