

# Effect of M&E Human Capacity on Project performance: A case of Integrated Nutrition and Wash Activity in Kicukiro District

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## Abstract

Despite M&E being a critical factor in the project success, it is one area of weakness for many projects and programmes. The study assessed the effect M&E human capacity on project performance; To explore this theory, the study used a descriptive research survey design and a quantitative method. A census method was used on the target population meaning all 65 employees working on Integrated Nutrition and Wash Activity project. Therefore, the results revealed that Out of 65 respondents, 100% agreed that M&E expertise had contributed to the performance of Integrated Nutrition and Wash Activity project; Out of 65 respondents, 67.7% agreed and 32.3% strongly agreed that capacity building initiatives had contributed to the performance of Integrated Nutrition and Wash Activity project in Kicukiro District. And results showed that there was a low positive correlation between M&E Human capacity and the performance of Integrated Nutrition and Wash Activity project with  $r=0.407$ . The findings of the current study confirmed that to achieve the set project goals, deliberate effort needs to be put on human related factors and M&E human capacity is key for a strong monitoring and evaluation systems resulting in a successfully project performance.

**Keywords:** *M&E Human capacity, Project performance, M&E expertise, Capacity building initiatives, M&E competencies*

## 1. Introduction

Performance of projects is influenced by various factors one of which is the level and capacity of human resources tasked with project implementation. However, assessment of project performance has been based on specific indicators such as time, budget, quality, specifications, and stakeholders' satisfaction (Ika, 2012). Competency of project managers, use of appropriate technology, project size has also been cited as critical drivers affecting how project performs (Ngugi, Muigai & Muhoro, 2014; Midida, Gakure & Orwa, 2013). Earlier studies showed that performance of projects remained an issue of concern in project management globally (Muller & Jugdev, 2012; Ika, 2012). Moreover, several authors acknowledge that performance of projects seem to be influenced by various factors (Ngugi, Muigai, & Muhoro, 2014; Ulrich, 2014; Nzekwe, Oladejo & Emoh, 2015). A study by Tidac & Pivac, (2014) on human resources capacity and performance of projects established that M & E program staff should be given incentives and resources that include skills, time, and equipment so as enable them play their rightful role in accelerating performance of projects. Similarly, Rejaul, Huda & Khan (2012) notes that trained human resources contribute to various project related outcomes. Hence those managing projects need to prioritize the type of capacity needed when recruiting M & E staff. The influence of human resource level and capacity has been cited as a key driver for continued existence and success of most projects. Equally, projects owe their economic performance to those charged with

overseeing implementation. The level of human resource capacity is an important management tool which can be used for guiding the available human resources to enhance performance of projects (Tengan et al., 2014). To this end human resource capacity in monitoring and evaluation causes projects to perform better. In addition, trained and competent staff contributes to quality project performance. The realization of this fact requires that knowledge and experience in monitoring and evaluation is given priority in recruitment of staff tasked with M & E function. Despite this valued importance of human resources capacity in M & E, there is little evidence as to what extent does human resources capacity for M & E influence performance of projects implemented through the decentralized Government of Rwanda systems, structures, and local civil society organizations such as Integrated Nutrition and Wash Activity project. Therefore, the present study sought to study to explore the effect of M&E human capacity on the performance of Integrated Nutrition and Wash Activity in Kicukiro district. The focus was on M&E expertise, Capacity building initiatives and M&E competences.

## 2. Review of Literature

Project outcome depends on several parameters one of which is human resources capacity. As such organizations are not only focusing on excelling in project delivery but also provide value for their workers. For those implementing projects, a deliberate effort is put on human related factors such as improving the technical capacity for those tasked with delivery of project results (Oladipo, 2011). Similarly, to achieve sustained project performance, management needs to meet the needs of employees within the workplace by equipping project staff through training (Aquino & Kraiger, 2009). In reviewing various literatures relating to project teams, it is argued that in most cases monitoring and evaluation staff will be responsible for actual collection, recording and reporting of project data. Hence staffs responsible for monitoring and evaluation need to have the required skills to deliver on their M & E function (Tuckermann, 2007; Chand & Katou, 2007; Ubels, Fowler & Acquaye-Baddoo, 2010; Imran et al., 2011; El Mouallem & Analoui, 2014). Additionally, link between human resource's capacity and competitive advantage have been established borrowing largely from behavioral psychology. To this end, researchers Lado & Wilson (1994) established that competent human resource's capacity have the potential of contributing to better performance and competitive advantage. Similarly, Ubels et al. (2010) in their study on resource volume capacity development argues that the ability to

perform and attain the set goals at individual and institutional levels qualifies to be defined as capacity. In another study on impact of human resource performance management on project outcome, Imran et al. (2010) established that there was a correlation between performance monitoring of human resource and project results. To a large extent, the competency of project staff was a factor in determining the extent to which projects were deemed successful. In another study Chand & Katou (2007) established that hotel performance was positively correlated to human resources management defined by recruitment, job design, training, and development. In view of the forgoing literature competent human resources is seemed to reinforce the role of behaviours in enhancing result-oriented project delivery. Moreover, contribution of human resources to performance is prevalent where organizational climate nurtures and rewards quality practices of employees known to meet customer expectations (Reid et al., 2003). Equally, motivation of staff tasked with M & E functions through skill training improve project effectiveness and performance. However, providing the much-needed support resource allocation including specific budget for recruitment and training of M & E staff is an important consideration Imran et al. (2011). Importantly, M & E roles and responsibilities need to be embedded in job descriptions and performance agreements. Specifically, individual performance needs to be linked to overall project performance outcomes. To the extent possible, considerations regarding the role and support of project staff should be encompassing capacity aspects of M & E (Tidac & Pivac, 2014).

## 3. Materials and Methods

The study used a descriptive survey research design where regression and correlation were used to find out the effect of M&E Human capacity on the performance of Integrated Nutrition and Wash Activity project and a cross sectional survey design where a quantitative approach was used, and a census method was used where all 65 staff of the Integrated Nutrition and Wash Activity Project was considered as sample size. Integrated Nutrition and Wash Activity project was implemented by DUHAMIC- ADRI, a local civil society organization through decentralized government structures, so the respondents were selected among all Integrated Nutrition and Wash Activity project implementers at different levels notably data managers at health centers, social affairs at sector levels and service providers at cell level. The structured questionnaires were used and administered to administrative officers and were translated to local language and

administered to community volunteer's; the researcher had explained them how to fill in answers and submit the filled questionnaires. During data collection the researcher used numbers, proportions, and statistics to make sure that the research problem is appropriately addressed; The researcher waited the five working days to collect the filled questionnaires. The open-ended questions allowed more freedom to the respondents to express their opinions to Integrated Nutrition and Wash Activity Project design, implementation and monitoring and evaluation. The closed questions helped the researcher to have information about knowledge of respondents, believes, attitudes and behavior. Cronbach's Alpha Reliability of at least 0.7 for all items of the variables was considered. During analysis, the inferential statistics was pertained for data analysis. The results were analyzed by using statistical package for social sciences (SPSS) software tool version 20. The study used the inferential statistics specifically correlation analysis. The multiple linear regression analysis was applied, the following formula was used:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e$$

#### 4.1 Demographic Characteristics of Respondents

It was important and helpful to have background on the respondents, this section presented subsections which were: gender, education level and working

Where: Y = Monitoring and evaluation system achievements

$\beta_i$ ;  $i=1,2,3$  = The coefficients representing predictors Variables.  $B_0$  = the Y intercept

$X_i$ ;  $i=1, 2, 3$  = Values of the various independent (Covariates) variables

e = the error term which is assumed to be normally distributed with mean zero and constant variance,  $X_1$ = M&E framework,  $X_2$  = M&E work plan,  $X_3$ = M&E human capacity.

#### 4. Results and Discussion

This chapter deals with analysis, presentation, and discussion of the findings. The findings were based on the following themes: M&E expertise, Capacity building initiatives and M&E competences which were the key points taken to analyze the effect of M&E human capacity on the performance of Integrated Nutrition and Wash Activity project. Initial analysis involved describing the data sets. All the 65 questionnaires were filled, which was adequate for the study.

experience with Integrated Nutrition and Wash Activity project were summarized in the tables below:

**Table 1: Gender of Respondents**

	Frequency	Percent
Male	41	63.1
Female	24	36.9
Total	65	100

Table 4.1 presents the gender of respondents, out of 65 respondents, 63.1% were male while 36.9% were female. Obviously, the number of males was greater

than females and the difference was small, since long time females had been implicated in the management of projects and the situation still until now.

**Table 2: Education level of respondents**

	Frequency	Percent
Secondary school	26	40
University/Bachelor	37	56.9
Master's Degree	2	3.1
Total	65	100

Table 4.2 presents the education level of respondents, out of 65 respondents, 40% did the secondary school, 56.9% had the bachelor's degree and 3.1% of respondents had a master's degree. The results

showed that the high number of respondents had the bachelors' degree in Integrated Nutrition and Wash Activity Project, Kicukiro District.

**Table 3: Working experience of respondents**

	Frequency	Percent
0-1 year	19	29.2
1-2 years	17	26.2
3-4 years	23	35.4
5 years	6	9.2
Total	65	100

Table 4.3 presents the working experience of respondents. Out of 65 respondents, 29.2% had 0-1 year, 26.2% had the 1-2 years, 35.4% had 3-4 years

and 9.2% of respondents had the 5 years and above working experience in Integrated Nutrition and Wash Activity Project, Kicukiro District.

#### 4.2 M&E human capacity and the performance of Integrated Nutrition and Wash Activity Project

The M&E human capacity is key for a strong monitoring and evaluation systems resulting in a successfully project performance. In this study,

researcher wanted to analyze the role of M&E human capacity in Integrated Nutrition and Wash Activity project performance in Kicukiro District. The more discussion was presented in the following subthemes of tables:

**Table 4: M&E expertise contribution on the performance of Integrated Nutrition and Wash Activity project**

	Frequency	Percent
Agree	34	52.3
Strongly Agree	31	47.7
Total	65	100

Table 4 presents the responses of respondents on how adequate M&E human capacity had contributed to Integrated Nutrition and Wash Activity Project performance. Out of 65 respondents, 52.3% agreed and 47.7% strongly agreed. All respondents agreed that M&E expertise played invaluable role in the

performance of Integrated Nutrition and Wash Activity Project in Kicukiro District. This is consistent with Oladipo (2011) who argues that to achieve the set project goals, deliberate effort needs to be put on human related factors.

**Table 5: Capacity building initiatives influence on the performance of Integrated Nutrition and Wash Activity Project**

	Frequency	Percent
Agree	44	67.7
Strongly Agree	21	32.3
Total	65	100

Table 5 presents the findings of respondents on how staff capacity building initiatives influenced positively the performance of Integrated Nutrition and Wash Activity Project. Out of 65 respondents,

67.7% agreed and 32.3% strongly agreed. All respondents agreed that Capacity building initiatives influenced positively the performance of Integrated Nutrition and Wash Activity Project in Kicukiro District. This confirms assertions in a report by

IFAD (2002) which indicated that investing in human resources personnel tasked with M&E roles impacted on project outcomes. IFAD report further suggests that this can be done by hiring those already trained in M & E and remunerate well to retain them. Alternatively, providing on job training and mentorship for already existing project staff or

stakeholders would contribute to sustained performance. On the same line, the study finding agrees with an earlier study by Aquinis&Kraiger (2009) established that to sustain project performance; management should be actively involved in meeting the needs of staff.

**Table 6: M&E competency had contributed to the performance of Integrated Nutrition and Wash Activity Project**

	Frequency	Percent
Not Sure	1	1.5
Agree	37	56.9
Strongly Agree	27	41.5
Total	65	100

Table 6 presents the responses of respondents on how M&E staff competency in project execution had contributed to the performance of Integrated Nutrition and Wash Activity Project. Out of 65 respondents, 1.5% were not sure, 56.9% agreed and 41.5% strongly agreed that M&E competency influenced the performance of Integrated Nutrition

and Wash Activity Project in Kicukiro District. Only 1.5% were not sure, almost of respondents agreed, meaning that they acknowledge the role of M&E staff competency for project performance. This consists with Chand&Katou (2007) who emphasizes that as such knowledge and competency, higher level of competency is associated with higher level of project performance.

**Table 7: Relationship between M&E human capacity and project performance**

		M&E human capacity	Project performance
M&E human capacity	Pearson Correlation	1	.407**
	Sig. (2-tailed)		.001
	N	65	65
Project performance	Pearson Correlation	.407**	1
	Sig. (2-tailed)	.001	
	N	65	65

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

Table 7 presents the relationship between M&E human capacity and Integrated Nutrition and Wash Activity Project performance. A statistical package for social sciences (SPSS) software was used to find out the pearson coefficients. According to the results, a correlation between M&E human capacity and project performance was  $r=0.407$ , this indicate that there was a low positive correlation between M&E human capacity and project performance. The result is consistent with (Chand&Katou; 2007; Ubels et al 2010; Imran et al, 2011&El Moullem, 2014) who established that More so investing in human capital

through improving the technical capacity of those tasked with delivery of project results is a prerequisite for consistent project performance; Similarly, the current study finding resonates with that of Tidac&Pivac, (2014) who found that to the extent possible project staff tasked with M & E roles need to have the necessary skills. Moreover, they need to understand what required and is how to address M & E related challenges. This way they can comfortably propose corrective action when using an M & E system to measure project outcomes.

**Table 8: Model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.407 <sup>a</sup>	.165	.152	.586

a. Predictors: (Constant), M&E human capacity

Table 8 indicates the model summary, the results showed that the R Square=0.165. It was clear that

16.5% of all variables in project performance can be explained by one's of all variables of independent of



M&E human capacity. This agrees with an earlier study by Aquinis&Kraiger (2009) established that to sustain project performance; management should be actively involved in meeting the needs of staff. Similarly, the study finding in consonance with Rejaul et al.(2012) who argues that providing

incentives and resources needed such as skills, time, equipment and funding to support the M &E tasks has was reported to be a great motivation. Highly motivated individuals reported more benefits of trainings which were reflected in the way their projects performed.

**Table 9: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.290	1	4.290	12.486	.001 <sup>b</sup>
	Residual	21.648	63	.344		
	Total	25.938	64			
a. Dependent Variable: Project performance						
b. Predictors: (Constant), M&E human capacity						

Table 9 presents the ANOVAa, the results showed that the variables were statistically significant with F (4.290)=12.486 and p=0.001b

**Table 10: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.574	.812		1.939	.057
	M&E human capacity	.685	.194	.407	3.533	.001
a. Dependent Variable: Project performance						

Table 10 presents the constant of independent variables (M&E human capacity) that it was statistically significant since p values is less than 0.05. The results presented that M&E human capacity variable was statistically significant with

## 5. Conclusions

The study explores M&E human capacity in Integrated Nutrition and Wash Activities project in Kicukiro District; Findings from the current study have revealed that to sustain the performance, those tasked with M &E need to have the right expertise and competency. Additionally, M&E roles and responsibilities need to be embedded in job descriptions, and link individual performance to overall project performance outcomes. The study results seem to confirm findings from earlier studies which have argued that human resources capacity influences performance of projects. Institutionally, especially in projects implemented through decentralized governmental structures there is need to consider policies that enhance both the human capital base and project performance. Implementation of an integrated strategy should include allocating budget for capacity building for M &E. Similarly, in developed system, aspects of

p=0.001. Overall, it was established that monitoring and evaluation human capacity was therefore an important factor in predicating performance of projects.

project monitoring and evaluation need to be part of the county integrated development plans. Methodologically the use of descriptive research design with a Quantitative approach provided the way to identify and quantify factors of M&E human capacity influencing the project performance. further studies may use mixed method approaches in data collection as questionnaire, key informant interview and focused group discussions for a reach data that provides value addition in findings triangulation.

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