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EFFECT OF MONITORING AND EVALUATION PLANNING ON SUCCESS OF RURAL WATER CHLORINATION PROJECTS, A CASE OF CHLORINE DISPENSERS PROJECT IN WESTERN; KENYA

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ABSTRACT

Project management is a practice that has been there for a long time. It can be traced to the ancient use in constructing of Egyptian pyramids that stand to date. However, it is only from 1950s that project management as a field started being professionalized with massive use by the United States Navy for war operations. Project Management has been found to be important in ensuring projects are completed within the right time, budget, scope and have impact to stakeholders. Rural water chlorination projects provide access to safe water to the most vulnerable in society. Monitoring and Evaluation is an important component in managing projects. This study established the effect of Monitoring and Evaluation Planning on success of Rural Water Chlorination Projects in Western Kenya. The study adopted descriptive research survey design. The target population was water project managers in Western Kenya. Stratified sampling was as a sampling Technique for determination of the study sample. The Questionnaire was used as an instrument for primary data collection. Pilot study was done on the on managers who were not part of the major study from western; Kenya, hence this enabled for testing of the reliability and validity of the research instrument. The study descriptive and inferential statistics was analyzed by use of SPSS software version 24, further; a regression equation model was developed to test the relationships between the variables. The results of the findings indicated Monitoring and Evaluation Planning influenced Success of the Rural Water Chlorination projects in Western Kenya. The study recommended for County Governments to embrace the use of Monitoring and Evaluation Planning practices, since it improves the Success of Rural Water Chlorination. The study recommended for further studies on the same considering same variables but different methodologies.

Key words: *Monitoring and Evaluation Planning, Monitoring and Evaluation Practices, Success of the project*

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INTRODUCTION

Globally, ideally all projects are expected to follow the project life cycle of initiation, planning, executing, monitoring and closing (Patanakul, 2010). There has been however a tendency for projects to shortchange these processes. This mistake brings repercussions later. The time spent properly planning the project results in reduced cost, duration and increased quality over the life of the project. (Mochal, 2009). Project management practice is applied both in private and in public sector. It has been identified as an efficient approach, which helps in upgrading management capabilities, enable public sector to efficiently complete projects, and attain developmental objectives (Kirsten, 2010).

It was also recognized as a key enabler. Public sector organizations adopting business improvement methodologies such as Lean Management and Total Quality Management (TQM) have a direct linkage to organizational success (Christos, 2010). The uniqueness of project is pointing to its genuine nature in the sense that there may not be a pre-existing blue print for the project's execution and there may not be a need to repeat the project once completed. Its goal characteristics may be well perceived as achieving stated objectives or solve a particular problem, while its temporary nature signifies a discrete, definable commencement and conclusion. (Abbasi and Al-Mharmah (2000)). This could be realized through planning, designing, scheduling, monitoring and controlling a mixture of project activities in order to achieve specific objectives within given time, budget and standards (Mladen, 2017).

Project management has been practiced for as long as humanity existed. In the global perspective, project management practice can be traced to over 4500 years ago during construction of Egyptian pyramids. Its usage over the centuries continued to employed in the making of the Great Wall of China by the Qin Dynasty in 208 BC (Haughey, 2014). Even though the concept was not as clear as today, the projects involved dealt with huge resources and

workforce that needed meticulous planning, and implementation. This could only be achieved through deliberate and systematic organization of the processes (Westland, 2018). However, it is only from the 20th century that the art started being taken seriously, applied, and documented. In this period, tools like the Ghant chart came to being. These were improved overtime as serious application of project management started being applied by the US Navy in the 1950s (Tom, 2014). Kwak suggests that project management from the 20th century has evolved through four main time frames (1) before 1950s where the ghant chart was formulated and heavily used. This were used in projects like construction of the Hoover dam, 1950s to 1980 where core project tools like Critical Path Method(CPM) and Program Evaluation and Review Technique(PERT) came to force and used in projects like NASA moon exploration, 1980 to 1990s where use of IT and computing expanded greatly increasing speed of planning. These were used in projects like Calgary Olympic winter games, and finally 1990s to present where the internet has taken shape as a global connecting tool for projects and was used in projects like Y2K, which organizations all over the world worked on.

Project Management is an innovative management practice that tends to achieve stated or specified objectives within specific time and budget limits through optimum use of resources. (PMI, 2017). It helps organization in investing their limited resources in the best way possible in order to achieve recurring success and meeting the expectations of stakeholders. Government and organizations usually embark on different projects with the aim of creating new service or improving the functional efficiency of the existing ones. All these projects require appropriate skills and techniques that go beyond technical expertise only, but encompass good and sound skills to manage limited budgets, and monitor shrinking schedules and unpredicted outcomes, while at the same time dealing with people and organizational issues (Abbasi & Al-Mharmah, 2000).

Project monitoring and evaluation can be further defined as the process of tracking, constant reviewing and regularizing the process to ensure it meets the set objectives (Young, 2007). Project Monitoring and evaluation of water projects has a lot of significance. About 884 million people collect drinking water from distant, unprotected sources. Reliable safe water prevents diarrhea, guinea worm, typhoid, cryptosporidiosis (Bartram, 2010). In rural areas of Africa, increased populations and drought creates lack of fresh, safe water for human consumption affecting the people's lives. Management approach that aims on preventing or reducing pathogens access to drinking water is cheaper in the long run, than dealing with the side effects of treating people from waterborne diseases. Greatest microbiological risk is in ingesting water that is infested with pathogens (WHO, 2011).

Project Monitoring and evaluation if put to practice can assist project managers and their teams evaluate and foresee potential risks to the project. Making crucial project decisions without data to back up is dangerous and costly in the end. Both manual and automated systems of monitoring could be applied depending on assignment (Viedor, 2017). Strategic decision making in water projects are taken seriously if an element of Monitoring and Evaluation is added. If and when the Monitoring team is empowered, then they have a platform of providing competitive value to the project just like the rest of the departments (Naidoo, 2011). Monitoring assists in keeping the project in track and helping the management know what is going right or wrong on the project. They can then make necessary corrections in bringing the project on track. Evaluation looks into the overall outcomes against what had been set out to be achieved.

Statement of the Problem

Water to a large extent is not given the full attention it deserves. Most living organisms are made up of over 66% water and require it to live (Chaplin, 2001). Water is available in various forms including solid, liquid, and vapour but the liquid form is the most common and essential to living

organisms. Across the globe people use it majorly for washing, cooking and drinking (Westall, 2018). Provision of safe water is thus an important parameter for living things existence and it is interconnected with the Global Sustainable Development Goals (Hesselbart, 2005). The World Health Organization has continuously set out parameters of ensuring safe drinking water guidelines are clear. Disinfection is listed as an unquestionable activity to the supply of safe water with chlorination being the most recommended method of killing pathogens (WHO, 2011). Roy (2005) notes that unsafe and insufficient water makes children sick, food unsafe, less food produced and unproductive domestic animals.

Terrible water stress is common in Africa due to poor management and poverty (Clerk, 2009). Rural communities are further disadvantaged as most water treating plants are concentrated in urban centers. The urban populations with higher buying power are also better placed to purchase alternative chlorination methods like bottled chlorine. Any chlorination project in rural areas must therefore be well managed to have greatest impact to the population. Project monitoring and evaluation Planning is one of the recommended project management practices (Salapatias, 2000). Hwang (2013) established that project monitoring and evaluation if done well could lead to success of a project. Project monitoring and evaluation complements planning and ensures the project moves in the right direction (Ika, 2010). Timely and correct monitoring and evaluation of projects brings immediate feedback on project process and helps mitigate future losses or failures (Yang, 2015). Water chlorination projects just like other projects would thus be more successful if monitoring is conducted well.

Jiju (2019) notes that poor project monitoring and evaluation Planning is among the top ten reasons why projects fail. Marcelo (2014) analyzed poorly performing projects in the past ten years and determined that lack of critical monitoring and evaluation Planning causes weak systems and is still

a big contributor to poor project outcomes. (Rivet,2013) notes that in Africa, despite project monitoring and evaluation policies for water projects being formulated, most of them are only active in the city management but there is a total disconnect and poor implementation at the rural settings. This study therefore aims to improve the body of knowledge on factors that may be affecting project monitoring and evaluation planning at the rural level on water chlorination projects. This in the long term will build on ways of improving project monitoring and evaluation competency and hence provide better outputs for projects in water sectors and beyond.

Objective of the Study

The study examined the effect of monitoring and evaluation planning on the success of rural water chlorination projects. The study was guided by the following research hypothesis;

- **H₀₁**: Monitoring and evaluation planning has no significant effect on the success of rural water chlorination projects.

LITERATURE REVIEW

Theoretical review;

Theory of Change

Theory of change is defined as a methodological approach in planning, participation and evaluation that is used mostly to promote social change. It defines long term goals then provides backward map on reaching the goal. (Brest, 2010). It breaks the journey into short term, intermediate and long term outcomes thus providing a clear understanding of what is to be achieved when. Each outcome stage is explained in terms of how it is linked with the others. Theory of change was established in 1990s with the overall aim of analysing programs and initiatives used in social or political projects. It is a means and model to evaluate comprehensive community projects (Taplin, 2012).

According to Walton et al. (2000).Theory of Change follows three quality criteria. (1) Plausability which is basically a look into the logic of the outcome. If

there are any gaps, (2) Feasibility looks into if the initiative manage to reach its ultimate goal while (3) Testability looks into how strong the indicators are. Will they yield enough content to convince the stakeholders. Application of the model needs a facilitator who is conversant with the process. Colby (2013) states that once the big goal is identified, then plans are written down on what conditions should be met to reach the goal. He continues that participants in the process may use markers, chart papers, to write sketches of the plan. (Valters & Steine, 2012) further identifying four broad purpose for the Theory (1)Strategic planning where it helps organizations map change and its implementation (2)Monitoring and evaluation by articulating processes that can be reviewed overtime(3) Description that allows organizations to articulate their change processes to internal and external stakeholders(4) Learning where it assists people clarify and develop theory behind their organization Theory of Change success is demonstrated with its ability to progression in achieving the desired outcomes. This confirms that it is consistent. Posing theory based questions helps focus evaluation outcomes on key concerns. The use of Theory of Change for planning and evaluation has continued to increase exponentially among organizations across the world. It is found to be strengthening the monitoring, evaluation and learning with their impact extending to originally hard to measure areas like governance, and institutional development(Jackson,2013)

The limitation of the Theory of Change according to Clark (2014) is that at times it is not realistic for items to follow a linear model where one activity leads into the other. It is possible for distractions to occur in an activity that lead to generation of a totally different route or outcome from what was originally anticipated. Things at times impact each other in unpredictable ways. Also notes that maintaining the parties interest in the long term process may be a hard hurdle as naturally people tend to loose morale on items after the few initial excitement wears off. (Saranshkataria, 2015). The

theory is relevant to the study as it captures aspects of the end result and success as prerequisite of independent variables of planning and resource allocation.

Utilization-Focused Evaluation Theory

This theory was developed by Michael Quinn Patton on the concept that 'evaluations should be judged by their utility and actual use' (Paton, 2013). The model should be used when the final goal is concrete decision making. He recommends that to engage primary users, the evaluator need to find stakeholders that have direct stake in the evaluation and outcomes. The users must be engaged continuously throughout the process through a 17 step facilitation of the theory as listed here; (step1) Assess and build program and organizational readiness for utilization-focused evaluation.(step2) Assess and enhance evaluator readiness and competence to undertake a utilization- focused evaluation.(step3) Identify, organize, and engage primary intended users.(step4) Conduct situation analysis with primary intended users(step5) Identify primary intended uses by establishing the evaluation's priority purposes(step6) Consider and build in process uses if appropriate(step7) Focus priority evaluation questions(step8) Check that fundamental areas for evaluation inquiry are being adequately addressed(step9) Determine what intervention model or theory of change is being evaluated(step10) Negotiate appropriate methods to generate credible findings and support intended use by intended users(step11) Make sure intended users understand potential controversies about methods and their implications.(step12) Simulate use of findings.(step13) Gather data with ongoing attention to use.(step14) Organize and present the data for use by primary intended users.(step15) Prepare an evaluation report to facilitate use and disseminate significant findings to expand influence.(step16) Follow up with primary intended users to facilitate and enhance use.(step17) Metaevaluation of use: Be accountable, learn, and improve.

For step 1 Assess and build program and organizational readiness for utilization-focused evaluation , he notes that projects that are ready to seriously engage in evaluation are more likely to look into ways of enhancing it. The evaluator should engage the users to understanding better the importance of evaluation and commitment to its usage. Perceptions about evaluation at the time can be checked. It is paramount to build trust so that to get true opinion of how evaluation is viewed. Commitment by the participants to the process is key to ensure proper results are received.

In Step 2 on Assess and enhance evaluator readiness and competence to undertake a utilization- focused evaluation recommendation is to ensure the evaluator posses the right education and skill set to conduct the activity. These may include project management knowledge, systematic inquiry skills, professional practical knowledge, and situational analysis skills among others. Appearing focused and knowledgeable by the evaluator before the users increases their confidence of participating in the process.

Step3 Identify, organizes, and engages primary intended users. This step involves identifying, organizing and clearly engaging the users. The process will succeed better if they own the process and feel a sense of obligation to see it proceed well. Attributes to look for in the users to engage include knowledge, interest and commitment. Explanation should be clear so that the users understand what they are getting into. Progressively check the performance of the users to ensure the interest and commitment is maintained.Step4 Conduct situation analysis with primary intended users. This involves the evaluator working closely with the users in identifying any possible barriers that may make the process not to go as intended. Further agree on timelines for the activities to be undertaken so that everyone works with a target. If support will be needed for the evaluation, then it is prudent to choose a support team that complements the evaluators' portfolio. This will ensure quality of work is maintained.

Step5 Identify primary intended uses by establishing the evaluation's priority purposes. This involves critically looking into the aim that the evaluation seeks to achieve. This clarity will ensure that the overall objective is clearly understood by everyone hence minimize deviation from the goal. Step6 Consider and build in process uses if appropriate. It involves reviewing, analysing and prioritizing menu process. Further reviewing; of any concerns, controversies or potential negative effects. Step 7 Focus priority evaluation questions, it is not possible to ask questions on each and every area. This process then looks into prioritizing the set of questions to be generated. Background review of different areas can build into formulation of the questions. The formulated questions should be relevant, easy to answer, timely and moderate in length.

Step8 Check that fundamental areas for evaluation inquiry are being adequately addressed. This involves a look into the project goals. Then having a review of the processes; in understanding if the same are being followed. If they are Specific Measurable Achievable Realistic and Timebound (SMART). Step 9 Determine what intervention model or theory of change is being evaluated. It involves a look into the critical analysis of how intended outcomes will be produced. How the theory is conceptualized will be important on how the evaluation will be done. Meaningful structures should be set to check the relationship between the input and expected output. Step10 Negotiate appropriate methods to generate credible findings and support intended use by intended users. The design should lead to meaningful conclusion and not be a waste of time and resources. The proposed methods should be practical, appropriate, cost effective and ethical. Identify and address issues of data quality, credibility and utility.

Step11 Make sure intended users understand potential controversies about methods and their implications. The users must be educated enough on implications of the methods being fronted. Provide explanations where possible on advantages

and disadvantages of participating in the process. Step12 Simulate use of findings. Before the final results are picked, trials of the data checks are also important. A read into the eventual use and dissemination of the results also apply.

Step 13 Gather data with ongoing attention to use. The data tools are shared here and respective data collected. The process is also monitored across to ensure consistency of the collection. Any issues arising from the users should be addressed as they come. In case original user backs out, having a substitute user should be in the plan. This will ensure the agreeable quantity of data is collected. Avoid bogging down the users with too much information; provide just what is needed to keep them interested,

Step14 Organize and present the data for use by primary intended users. From the original plan, it should be clear where and how the data will be used. Who will be target consumers of the same. Once the data has been collected, then sharing to this group. Actively involve relevant stakeholders in interpretation of the data. Eventually examine the findings and analyze their implication to the users and stakeholders. Step15 Prepare an evaluation report to facilitate use and disseminate significant findings to expand influence. The post research stage is also important. Information gathered should be helpful to the stakeholders. Recommend areas that need to be improved and provide ways of implementing the same.

Step16 Follow up with primary intended users to facilitate and enhance use. Enough time and resources should be devoted to this stage. Check against the set international standards to ensure compliance to global expectations and finally Step17 Meta evaluation of use: Involves being accountable, learning, and improving. The theory captures emphasis on implementation of reporting which is in line with the reporting variable of this study. It shows that reporting in itself is a process and its implementation provides successful outcomes.

Conceptual Framework

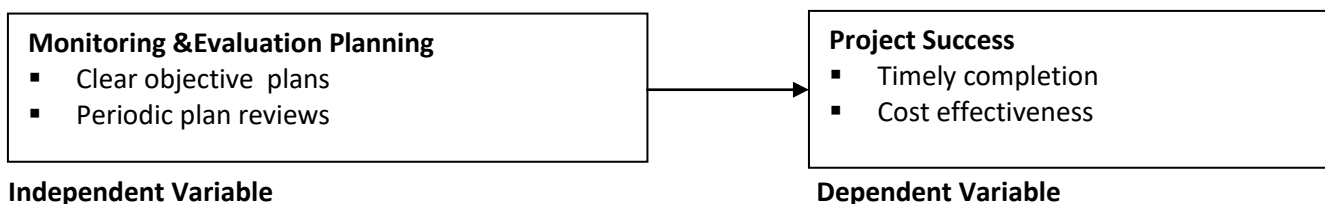


Figure 1: Conceptual framework

Review of study variable

In a study to analyze the factors affecting Monitoring and Evaluation success in Starehe constituency, (Wachaiyu, 2016) found that the strength of an M&E planning is a crucial factor in the success of a project. She further noted that the same had not been adopted effectively. Many project planners show a general lack of interest at times for the planning process. Monitoring and evaluation means to check and assess the implementation status of a project/programme/plan during the implementation on a regular basis. The system of watching/ monitoring the progress of a programme / project implementation, besides being an important link in the project cycle, helps in the identification/analysis and removal of bottlenecks and expediting action where projects have stalled or fallen behind schedule (Lewis,2000).

For an effective monitoring and evaluation system, the project document must have the following essential data/information: i) a clear-cut statement of project objectives and benefits; ii) detailed project cost estimates-component/activity-wise; iii) source of funding; iv) annual financial phasing conceived on the basis of implementation plan; v) physical scope in quantitative terms with components detail; and vi) phasing of the physical scope as per its implementation schedule, duly based on PERT/CPM or Bar Charts (Wagner, 2005).

Wilets & Crawford (2017) state that there are 6 main stages for a Monitoring and Evaluation data planning setup: (1) Identification. This involves carefully selecting data that would fulfill the M&E purpose (2) Capturing of identified data. Could be

through formal and informal interviews (3) Analysis of the raw data. This is to assist bring out any meaningful insights (3) Dissemination of findings to stakeholders. This ensures the targeted recipients are provided with necessary outcomes (4) Utilization of outcomes. The stakeholders pick relevant recommendations and put them into practices (5) Assessment of the completed process.

METHODOLOGY

Descriptive research survey design was therefore used to determine an association between the conceptualized independent and dependent variables as shown in the study's conceptual model. This study targeted 108 water managers from Western Kenya. A sampling frame is a list of all the items in the population (Cooper & Schinder, (2007). That is, it is a complete list of everyone or everything you want to study or a list of things that you draw a sample from. In this study it consisted of Managers from western Kenya. Therefore a sample size took into consideration census technique and handled all the 108 managers of water since it was manageable. Primary data was collected by means of self-administered questionnaires. The questionnaires had structured questions. These questionnaires were structured and designed in multiple choice formats. Data collected from the field was coded, cleaned, tabulated and analyzed using both descriptive and inferential statistics with the aid of specialized Statistical Package for Social Sciences (SPSS).version 24 software. Descriptive statistics such as frequencies and percentages as well as measures of central tendency (means) and dispersion (standard deviation) was used. Data was

also organized into graphs and tables for easy reference.

Further, inferential statistics such as regression and correlation analyses was used to determine both the nature and the strength of the relationship between the dependent and independent variables. Correlation analysis is usually used together with regression analysis to measure how well the regression line explains the variation of the dependent variable. The linear and multiple regression plus correlation analyses were based on the association between two (or more) variables. SPSS version 24 is the analysis computer software that was used to compute statistical data. Study conceptualized Regression Model was;

$$y = \beta_0 + \beta_1 X_1 + \epsilon$$

y = Success of the Project

β_0 = Constant

X_1 = Monitoring and Evaluation Planning

$\{\beta_1\}$ = Beta coefficients

ϵ = the error term

FINDINGS AND DISCUSSIONS

The study involved 108 questionnaires being dispatched for data collection, 108 questionnaires were returned completely filled, representing a response rate of 100% which was good for generalizability of the research findings to a wider population.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.477 ^a	.227	.202	2.984

a. Predictors: (Constant), Monitoring and Evaluation planning

The study therefore, modeled the influence of respondent's characteristics on monitoring and evaluation planning affects the success of rural water chlorination projects using linear regression analysis.

In the model, the value of the coefficient indicates on monitoring and evaluation planning on the success of rural water chlorination projects. The positive and negative signs of the coefficient indicate increased and decreased monitoring and evaluation planning on the success of rural water

Descriptive statistics: Influence of monitoring and evaluation planning on the success of rural water chlorination projects.

Most respondents agreed (44.2%) that the Monitoring and Evaluation Plans are set before the project cycle starts. More closely, only 35.1% agreed while 22.1% of respondents stated that staff are involved during Monitoring and Evaluation plans preparation. Further, while 48.1% of respondents agreed that Monitoring and Evaluation planning objectives are clearly understood. More, so 50.6% of respondents agreed that the Monitoring and Evaluation plans are often reviewed. While 42.9% of respondents also agreed that enough time is allocated for Monitoring and Evaluation Planning.

Inferential Statistics

Regression analysis on the influence of monitoring and evaluation planning

The primary objective of the study was to examine how monitoring and evaluation planning affects the success of rural water chlorination projects. The null hypothesis tested was Monitoring and evaluation planning has no significant influence on the success of rural water chlorination projects. The regression model is presented as follows in table 1.

chlorination projects respectively. The significance of the relationship between a given independent variable and the dependent variable was tested at $p=0.05$.

The results of the regression analysis in table 1 indicated that the constant of the regression is statistically significant indicating that the variables fit in the model were able to predict the outcome variable. The variables in the model; (M&E plans are set out

before the project cycle starts, Staff are involved during M&E plans preparations., M&E objectives are clearly understood, M&E plans are reviewed often and Enough time is allocated for M&E planning) were able to predict 0.321 (32.1%) of the variation in success of rural water chlorination projects.

The results of the regression analysis indicated that the variables; M&E plans are set out before the project cycle starts, Staff are involved during M&E plans preparations, M&E objectives are clearly understood, M&E plans are reviewed often and Enough time is allocated for M

& E planning were statistically significant in explaining the variation on monitoring and evaluation planning on the success of rural water chlorination projects while the variables , Staff are involved during M&E plans preparations, Enough time is allocated for M&E planning were not.

Analysis of variance on the influence of monitoring and evaluation planning on the success of rural water chlorination projects

The study sought to establish the analysis of variance, the results is as presented in table 2 below.

Table 2: Analysis of variance(ANOVA^b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	81.210	1	81.210	9.117	.005 ^a
	Residual	276.123	32	8.907		
	Total	357.333	33			

a. predictors: (constant), monitoring and evaluation planning

b. dependent variable: project success

Source: (Author, 2021)

Table 2 above summarizes the results of an analysis of variance. For the accounted for values, the mean square (the sum of squares divided by the degrees of freedom), is 81.210, the F statistic (the regression mean square divided by the residual mean square) is 9.117 and the degree of freedom (df) is 1 whereas the output for residual which displays information about the variation that is not accounted for by the model has the following values: sum of squares as 276.123, df as 32 and a mean square of 8.907. The overall relationship was statistically significant (F = 9.117, p=0.005). In the case above, the p-value has a

significance level of 0.005 meaning that the regression model is a good predictor of the relationship between monitoring and evaluation planning and success of water projects, hence, can be used to reliably predict the effect of monitoring and evaluation planning on the success of rural water chlorination projects.

Coefficient of determination on the influence of monitoring and evaluation planning on the success of rural water chlorination projects

The study sought to establish the coefficient of determination, the results is as presented in table 3 below.

Table 3: Coefficients^a of determination

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error			
1	(Constant)	4.707	1.935		2.433	.021
	Monitoring and evaluation planning	.591	.196	.477	3.019	.005

a. dependent variable: project success

The findings in Table 3; above showed that water projects companies in western Kenya have an

index of 4.707 when monitoring and evaluation planning are held constant. In addition, the Beta

coefficient (β_1) was 0.591 for the relationship between monitoring and evaluation planning and success of rural water projects. This shows that a unit increase in monitoring and evaluation planning measures would lead to a 0.591 improvement in success of rural water projects. The relationship was statistically significant as the ($P=0.005$) was less than the significance level ($p\leq 0.05$). Thus yielding a regression model where $Y = 4.707 + 0.591X_1$. Therefore, rejection of null hypothesis that "Monitoring and evaluation planning has no significant influence on the success of rural water chlorination projects".

The study findings concur with previous study by Afande (2013) which established that the degree of accomplishment of contributor project is resolved by specialized and organization capability of human resources of the executing offices. He contended that the officers in the running project may likewise have the formal skills in preparing and guiding, administration, planning and book keeping of projects.. Xavier, Harold, Racheal and Walton (2012) found that even if there is the traditional learning that the ability of the project groups is most identified with achievement.

CONCLUSIONS AND RECOMMENDATIONS

The objective was to establish the influence of monitoring and evaluation planning affects the success of rural water chlorination projects. The related research hypothesis assessed the relationship between monitoring and evaluation planning and project success. The findings were

that there was a positive and statistically significant relationship between in M & E planning and project success in terms of client acceptance. These findings are in congruence with (Martinez & Olander, 2018; Nyandika & Ngugi, 2018; Ibanga *et al.*, 2018). The study revealed results shows that project managers are involved in project monitoring and evaluation. Majority of the respondents perceived that their participation in the monitoring and evaluation planning influenced the success of water project in Western Kenya.

Based on the findings of the study, it is concluded that monitoring and evaluation planning is an important ingredient to project performance as it contributes to client acceptance. Resource allocation is also an additional ingredient to project performance. Its presence in a project leads to project acceptance and cost adherence. Additionally, project reporting was also found to be a main component of project performance as it leads to project cost and time performance.

It was recommended that projects do consider the contributions of monitoring and evaluation planning inclusive other variables for example; resource allocation and project reporting and implementation as non-negotiable components of project success.

Areas for further research

Similar study can be done on other set up apart from water industry especially the companies using liquid materials different methods of analysis for comparison of the findings.

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