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Effects of Project Monitoring and Evaluation on Performance of Rural Electrification Projects in Kitui County, Kenya

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Abstract:

The government invests in rural electrification projects to boost the country's social-economic development and growth. However, despite the efforts put by the government, performance of the projects remains to be poor in terms of projects efficiency, effectiveness and satisfaction of the customer's needs. The study sought to establish the effect of monitoring and evaluation on performance of rural electrification project in Kitui County, Kenya. The study target population was 125 rural electrification projects where 75 respondents were targeted and census approach was used. The study recommended organization to get other independent bodies to conduct monitoring and evaluation of the projects for successful performance of projects.

Keywords: Project monitoring and evaluation, rural electrification projects, project performance

1. Introduction

Performance of electricity projects is critical in global economic development and growth as projects that perform satisfy the needs of the beneficiaries and achieves the set objectives and goals (Serrador & Turner, 2015). In rural areas, rural electrification projects play major roles in the economy in terms of poverty eradication, creation employment opportunities, development of areas and wealth creation (ROK, 2012).

According to Gitenya and Ngugi (2012), infrastructure projects performance to be successful, planned activities had to be organised and put in action during project implementation stage. Klakegg (2009) added that projects that performed; linked to users' needs, solved conflicts, secured stakeholder commitment and had clear objectives of the projects. Further, World Bank (2014), and Wanyoike (2012) indicated that performance of electricity projects involved achievement of a given duty or task, measuring the predetermined standards, and completeness of the project within cost and speed. Following the Vision 2030 blueprint, successful electricity project performance enhanced production of quality services and products that promotes the growth and development of the country's economy.

World Bank report (2016) noted that rural electrification projects in Kenya needed more attention as electricity was a major driver for promoting the growth of Gross Domestic Product (GDP) and it enhanced achievement of Sustainable Development Goals (SDGs). Further, Ndirangu (2013) outlined that performance of RE projects had to be successful to ensure electricity was available in all parts of the country in sufficient quality, quantity and in affordable prices for total promotion of Gross Domestic Product (GDP). Therefore, projects performance had been a critical concern by most scholars to ensure they were carried within given budget, time frame and scope to achieve the set objectives and also satisfy beneficiary's needs

1.1. Project Monitoring and Evaluation and Performance of Rural Electrification

Project monitoring and evaluation involve continuous routine of collecting and analyzing information to track the projects progress (Harrison, 2008). According to Mambo and Chiragu (2013), evaluation assessed the ongoing and completed projects to check the project's design, projects management process and finally the projects results while Project monitoring and evaluation involve continuous routine of collecting and analyzing information to track the projects progress (Harrison, 2008). Anyango (2016) added that monitoring and evaluation ensured early corrective measures in case of risks that enhanced effective and efficient performance.

Early monitoring and evaluation gave control to the project resources and helped in utilization of the resources that enhanced completion to be within the scheduled budget and time. Prackel (2014) argued out that involvement of stakeholders in monitoring and evaluation helped in projects management as they had certain roles to play. Stakeholders of the rural electrification (RE) projects were; government, donors, employees, the community, contractors and customers.

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evaluation ensured early corrective measures in case of risks that enhanced effective and efficient performance. Early monitoring and evaluation gave control to the project resources and helped in utilization of the resources that enhanced completion to be within the scheduled budget and time.

Mugo and Oleche, (2015) outlined that monitoring and evaluation remained to be a management tool that enhanced early planning, effective decision making and economic policy management in project management. In addition, Kibet and Wanyoike (2015) argued out that monitoring and evaluation skills guided the management team to understand if the progress of the projects were within schedule, met the set objectives and deadline which helped in providing background for effective project performance.

1.1.1. Monitoring and Evaluation and Stakeholder Involvement

Stakeholders' theory focuses on responsibilities of stakeholders in management of projects to enhance project performance. Friedman, wicks and Palmer (2004) argued out that all stakeholders had vital decision to make towards implementation of the projects. Further, Boonstra (2011) outlined that stakeholder involvement in project management ensured transparency and accountability in resource management that reduced costs overruns. Prackel (2014) argued out that involvement of stakeholders in monitoring and evaluation helped in projects management as they had certain roles to play and Maina (2018) added that Involvement of stakeholders in projects implementation helped in decision making and monitoring the projects ensured achievement of the project's objectives and goals.

1.1.2. Monitoring and Evaluation and Training

Project management competency theory focuses on crucial skills, knowledge and positive attitudes that can influence the performance of projects positively. Garrish and Huemann (2014) argued out that project managers had to have skills needed to choose the project implementation tools, techniques and capabilities that facilitated the performance of the projects. The project manager's competency to apply the management techniques effectively optimised the performance of the projects. According to Waithera and Wanyoike, (2015), short M & E training courses to the members of the projects to enhance performance of projects enabled the project managers and team to acquire the required skills for better decisions which led to successful projects performance.

2. Literature Review

Literature review had importance of formalizing key factors used in the study which included projects monitoring and evaluation, rural electrification projects and performance of projects. For this research, Electricity projects and performance of projects was important on establishing the effect of monitoring and evaluation of rural electrification projects performance.

2.1. Monitoring and Evaluation and Performance

Monitoring and evaluation of projects is very crucial for performance of projects as supervision and control of resources enhances project performance. Phiri (2015) conducted a study that focused on investigation of M & E effects on project performance a case of AVU in Kenya. The study considered the following M & E planning, M & E skills and baselines survey and information systems. The study used mixed research design of ex-post facto and survey. The findings showed that M & E as a function of management had a positive significant influence on projects performance. Yusuf, Muchelule; Otonde, Mbawi Geoffrey; Achayo, MucheluleSaada (2017) study established influence of M & E on performance of CDF projects in Kajiando Sub-County, Kenya. To achieve the objectives, the study employed descriptive survey research design and sampled a sample size of 122 respondents who filled questionnaires. The study noted that M & E tools, training and time allocation had positive influence on CDF projects performance and the findings indicated that inappropriate M & E tools, lack of proper training had challenge in CDF projects performance. The study revealed that M & E gave feedback which led to timely response. The challenges of monitoring and evaluation affected the success of C D F projects. Monitoring and evaluation were very crucial for management of projects and for government projects should adopt it effectively. The current study still added M & E policies and standards Waithera and Wanyoike (2015) sought to investigate projects monitoring and evaluation influence on performance of youth funded agribusiness projects in Bahati Sub County, Kenya. The study established the influence of staff training, stakeholder participation and political influence on performance of the projects and to achieve the objectives, the study carried descriptive survey design and conducted census of 50 projects which was the target population. The study findings indicated that staff training had a statistically significant influence on the performance of projects. The study still indicated that the projects leaders had to offer short M & E training courses to the members of the projects to enhance performance of projects. The study further showed that staff training enabled the project managers acquire the required skills for better decisions which led to successful agribusiness projects performance.

Mugo and Oleche (2015) study examined monitoring and evaluation of development projects and its influence on economic growth in Kenya. The study considered training, amount of money allocated and participation of stakeholders. The study also considered institutional guideline and political influence as mediating and moderating effects. The study findings showed that the independent variable considered had positive relationship with system implementation in development projects. The study also revealed that presence of institutional guidelines increased chances of implementing M & E. In addition, the study revealed that political influence relationship was statistically insignificant. Further, the study showed involvement of stakeholders in monitoring and evaluation activities enhanced better management of projects that led to successful projects that influenced economic growth. Safari and Kisimbii, (2020) determined monitoring and evaluation influence county government funded project performance, Kwale county Kenya. To

achieve the studies objectives, the sought answers on extend on M & E plans and training on performance of the projects. The study used mixed of ex post factor research design and survey. The study sampled 100 sample sizes from a target population of 113 respondents. The study findings indicated that monitoring and evaluation plans and training had influence on the performance of county government funded projects

2.2. Effects of Stakeholder Involvement on Electrification Projects Performance

Githinji and Kitheka, (2020) investigated on stakeholder involvement influence on performance of projects, a case study of Kenya ferry services. Descriptive research design was used. A sample size of 70 respondents was selected from target population of 231 stakeholders of Kenya ferry service. Questionnaires were used to collect data which was analysed use of linear regression. The study findings indicated that involvement of stakeholders, organization respect had positive influence on projects performance the study recommended stakeholder enhancement in project identification

Bwisa and Muli (2016) study investigated on the role of stakeholder management on performance of CDF projects in Kenya. The study used cross sectional research design. In addition, stratified random sampling was used and a sample size of 450 projects was established. The study considered stakeholder mapping, stakeholder involvement and communication. The study finding showed that stakeholder management had a positive influence on the performance of CDF projects in Kenya. The study concluded that involvement of stakeholders from initiation stage to the last stage of project management enhanced project performances. The study concluded that government had to establish framework that ensured stakeholder management was done in all government funded projects

Maina (2018) investigated on the stakeholder management and performance of open-air market in Nyeri County, Kenya. The study considered stakeholder involvement, stakeholder communication, conflicts management and stakeholder need and expectation. To achieve the study's objectives, cluster sampling was done and the findings indicated that stakeholder management had positive influence to open air projects in Nyeri County. For stakeholder involvement, the study recommended that it was very critical for the performance of the projects and the government should ensure that all aspects of stakeholder involvement should be covered in an adequate manner during feasibility study to enhance projects performance.

2.3. Training and Electrification Projects Performance

Project management competency theory's objective and goal was to explain the roles of competency in project management and its effects on projects performance. The project employee had to apply knowledge, skills and management techniques successfully to achieve the set goals of the projects (Gladder, 2010). Garrish and Huemann (2014), project managers were needed to have ability to choose the project implementation tools, techniques and capabilities that facilitated the performance of the projects the project manager's competency to apply the management techniques effectively optimised the performance of the projects. In management of projects, competency in using modern technology, tool and capabilities was very critical to the success of the projects (Edum-Fotwe&McCaffer, 2011).

Hilson& Murray, (2012), project implementers had to be competent in their duties to enhance successful performance in projects. In addition, Ruth and David (2011) added that projects managers had to have personal characteristics for the job for them to perform Hilson& Murray, (2012), project implementers had to be competent in their duties to enhance successful performance in projects. Maximum performance in an organization occurred if individual's competency correlated to the organizational structures, systems, environment and requirement of the responsibilities and roles (Boyatzis, 2008). Soderland (2012) supported the study by emphasizing that the top management team had to have management competences that enabled them to implement the projects effectively and meet projects quality objectives.

3. Research Methodology

Thorpe and Jackson (2008) argued that the positivism focused on facts which were measured on variables which used quantitative methods survey and still used statistical analysis' of the data and the. Further Creswell (2009), positivism philosophy explained relationships, identified causes that influenced outcomes and provided basis for predicting and generalizing. This study's event of interest was objective, external and independent to the study's researcher. Therefore, this study adopted positivism research philosophy as it was an objectively- based method which was used to test hypothesis from the existing theories and was commonly used in natural science (Saunders, Lewis &Thornhill 2013. Further the study used both descriptive and explanatory research design as both designs drew valid conclusion and explanations from the study's findings and that's why the study adopted the two designs (Neuman, 2006). This study used multiple regression models to establish the relationship between managerial processes and rural electrification projects performance. According to Muthen (2007), regression model was effective when the dependent variable was continuous and that's why this study adopted the model. According to Gujarati and Sangeetha (2007), multiple regressions allowed control of many factors affecting dependent variable and can accommodate explanatory variables. The study carried diagnostic tests before regression analysis to check for any statistical problems that prevented compliance to linear regression model. According to Gujarati and Sangeetha (2007), to avoid biasness, inefficiency and inconsistency in parameter values, the study conducted diagnostic test. The study conducted the following diagnostic tests: multicollinearity, linearity, homogeneity and normality

4. Discussion and Findings

4.1. Descriptive Results

Performance of rural electrification projects the respondents' results show that performance had an aggregate mean of 3.1705 and a low standard deviation of .20638 which showed a narrow variability. This revealed that the organizations had installed the required managerial processes in a moderate way to support performance. Performance was measured in three ways effectiveness, efficiency and customer satisfaction. Customer satisfaction had the highest mean of 3.4514 (moderate extend) and the lowest standard deviation of 0.29818. The results indicated that the customers were moderately satisfied by the performance of the projects and respondent's views had narrow variability. Effectiveness was the second highest with a mean of 3.1429 which implied that the respondents agreed in moderate extend that projects achieved the set goals and objectives and standard deviation indicated low variability within the response. The last was efficiency indicator which had a mean of 2.9171 and a standard deviation of 0.31113. The score was rounded off to 3 as per the adopted Likert scale which implied that respondents agreed in a moderate extend that the projects were completed within budget, time and scope.

The respondents were asked if the projects achieved the set goals and objectives. The respondents agreed in great extend (after a round off score to 4) that the organization had resource utilization ($M=3.809$ $SD = 0.604$). the respondents gave the following response for; projects goals are achieved within given time, projects are completed within given budget and project materials and equipment were provided within given time with the means and standard deviations of 2.69, 2.91, 2.77 and 0.578, 0.654 and 0.618 respectively

Monitoring and evaluation skills had an overall mean of 2.8821 and a standard deviation of 0.37764. The value was rounded off to 3 as per the adopted Likert scale. The results showed that respondents agreed in moderate extend that M & E skills was adequate to ensure projects of rural electrification achieved the set objectives and were completed within the given time and budget. Njeru and Luketero (2018) indicated that M & E skills influences performance of projects Employee training on M & E processes gave a mean of 2.76 (Moderate extend) after round off to a score of 3 on Likert scale adopted by the study and standard deviation of 0.770. The results indicated that employees agreed in a moderate extend that employees trained on the M & E processes which influenced performance of projects.

Stakeholder management for rural electrification projects the respondents for stakeholder involvement, all response showed moderate extend that there was duty sharing among the shareholders had the highest mean of 3.33 and standard deviation of 0.531, identification of qualified contractors been the second with a mean of 3.29 and standard deviation of 0.568, third was members knew the seniors where they had to report had a mean of 3.13 and standard deviation of 0.482. The results showed that the respondents had the same views on the stakeholder involvement due to low standard deviation and agreed in a moderate extend that stakeholder involvement had influence on performance of rural electrification projects.

4.2. Results for Regression

The results for monitoring and evaluation were as follows

	N	Minimum	Maximum	Mean	Std. Deviation	
Enough M & E resources were provided in time	70	2	5	2.99	.789	
Available M & E tools were adequate for efficient performance	70	2	4	3.27	.779	
Organization had organized M & E systems	70	2	4	2.80	.628	
Enough time was allocated for M & E activities	70	2	4	3.09	.812	
Aggregate scores for M & E tools	70	2.25	3.75	3.0357	.40666	
Employees were trained on M& E processes	70	2	4	2.76	.770	
Employees had required M & E skills	70	2	5	3.30	.823	
Organization planned for M & E in advance	70	2	4	2.90	.801	
Employees attended M & E seminars frequently	70	2	4	2.57	.627	
Aggregate Scores for M& E Skills	70	2.00	3.75	2.8821	.37764	
Stakeholders understood the polices and standards of M &E clearly	70	2	4	2.97	.636	
The set M & E policies and standards influenced performances of RE projects	70	2	5	3.00	.816	
M & E policies and standards were reviewed frequently	70	2	4	2.80	.754	
M & E exercise was allocated enough funds	70	2	5	2.99	.843	
Scores for policies and standards	70	2.00	3.75	2.9393	.42014	
Aggregate Scores	70	2.42	3.42	2.9524	.25951	
Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig
		B	Std error	Beta		
(Constant)		1.290	.449		2.874	.005
M &E		.131	.041	.279	3.177	.002

Table 1

Table 1 shows that Beta coefficient for monitoring and evaluation was 0.131 and with P-value of 0.02. The results indicated that if the other factors were held constant, a unit change in monitoring and evaluation leads to 0.131 units change on rural electrification projects performance. The results P-value less than 0.05 ($P < 0.05$) indicated that null hypothesis (H_0) was rejected implying that monitoring and evaluation had statistical significance influence on performance of rural electrification projects in Kitui County

5. Conclusion

The study's conclusion was that monitoring and evaluation had a positive influence of rural electrification projects. Further, the study concluded that monitoring tools, skills and standards had positive influence on RE projects performance. To aid adequate monitoring and evaluation of the projects the government and the organization had to play crucial role of financing the activities.

5.1. Contribution of the Study to the Knowledge

5.1.1. Monitoring and Evaluation and Training

Rural electrification projects have been performing poorly compared to electricity projects in urban areas. Despite such performance the previous scholars have not considered performance rural electrification projects in Kituicounty. Few researchers considered electricity implementation in urban towns and there was need to conduct a study in rural areas in Kenya. The study added to the body of knowledge, the testing of the multiple regressions and its application in performance of rural electrification projects. Finally, the study gave insights on effects of managerial processes on performance of rural electrification projects in Kitui County, Kenya.

6. References

- i. Adhiambo, A. (2015). Factors Influencing Implementation of Rural Electrification Programme in Kilifi County. Unpublished Masters Theses, Nairobi University African Development Fund, (2010). Power Transmission System Improvement Project. Project Appraisal Report
- ii. African Development Bank (ADB), (2014). Last Mile Connectivity Project – Environmental and Social Management Framework Summary, ADB
- iii. Barasa, M. (2015). Influence of monitoring and evaluation tools on project completion in Kenya: a case of constituency development fund projects in kakamega county, Kenya. Unpublished masters' theses, University of Nairobi
- iv. Creswell, J. W. (2011). Educational research: Planning, conducting, and evaluating Quantitative and qualitative approaches to research. *New Jersey: Merrill/Pearson Education.*
- v. Creswell, J.W. (2013). Research design: Qualitative, quantitative, and mixed methods approach. Second edition. Thousand Oaks, SAGE Publications, Inc.
- vi. Dancey, C. &Reidy, J. (2004). Statistics without maths for Psychology. Pearson
- vii. Education Limited.
- viii. Harrison, J. S., & Wicks, A. C. (2013). Stakeholder Theory, Value and Firm Performance. *Business Ethics Quarterly*, 23(1), 97-124.
- ix. Muchelule, W. (2017). Influence of monitoring Practices on project performance in Kenya.: State corporation
- x. Mugo, M. & Oleche, D. (2015). Monitoring and evaluation of development projects and economic growth. *International journal of novel research in humanity and social science vol.2 issue6, pp 952-63*
- xi. Muriungi, T. M. (2015). The role of participatory monitoring and evaluation programs among v m p : A E N ' N D v pm Authority. *International Academic Journal of Social Sciences and Education, 1(4), 53-76.*
- xii. Njeru, I. M. & Luketero, S. W. (2018). Influence of monitoring and evaluation strategies on performance of medical camp projects in hospitals in Kenya: A case of Embu North Sub County. *International Academic Journal of Information Sciences and Project Management, 3(1), 61-73.*
- xiii. Waithera, S & Wanyoike, D. (2015). Influence of Project Monitoring and Evaluation on Performance of Youth Funded Agribusiness Projects in Bahati Sub County, Kenya. *International Journal of Economics, Commerce and Management, United Kingdom vol iii, issue 11 ISSN 23480386*
- xiv. Yusuf, Muchelule; Otonde, Mbawi Geoffrey; Achayo, Muchelule Saada (2017) : Influence of monitoring and evaluation on performance of constituency development fund projects In Kajiado East Sub-County, Kenya, The International Journal of Management Science and Information Technology (IJMSIT), ISSN 1923-0273, NAISIT Publishers, Toronto, Iss. 23, pp. 12-26