

Influence of Project Planning and Evaluation on Performance of Constituency Development Funded Projects in Public Schools in Rongai District, Kenya

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Abstract: Project management process is important ingredient to project success and more especially in capital investment projects common in Public Schools in Kenya. The main aim of the study was to analyze the influence of project planning and evaluation on performance of CDF projects in Public schools in Rongai District, Kenya. The study adopted descriptive survey design with 356 head teachers, their deputies, BOG chairmen and committee chair in charge of school projects. The study used systematic random sampling procedure. The sample size for the study was 185 head teachers, their deputies, BOG chairmen and committee chair in charge of school projects. The study used structured questionnaire as the collection instrument which will be piloted and peer reviewed to ascertain its validity and reliability. The study use descriptive statistics to analyze the data that describes the variable. The relationship between project planning, evaluation and project performance was tested using regression model. The analyzed data were presented using frequency tables and charts. The study found out that project planning in Public Schools in Rongai District was not correlated with project performance on one hand and that a strong positive correlation between project evaluation and performance indicating that the public schools projects were evaluated on the outcome rather than the strategies used in implementation, the project design and even the coherence of stakeholders participation on the other hand.

Keywords: Project Management, Project Planning, Project Evaluation and Community Development.

INTRODUCTION

When National Rainbow Coalition (NARC) party took over the running of the Kenya Government in January 2003, it spearheaded the enactment of the constituency development fund (CDF) through the CDF Act in the Kenya Gazette supplement No. 107 (Act No. 11) of 9th January, 2004. This is a decentralized scheme born as a result of the previous related concepts mentioned above to address regional development imbalances due to partisan politics of the time. The fund has been viewed as a key strategic driver of socio-economic development and registration within Kenya. It is a development initiative targeted at the constituencies by devolving resources to meet socio-economic objectives which have previously been managed from the centre.

The main aim of Constituency Development Funds (CDFs) is to devote public funds for the purpose of benefiting a particular political sub division. The representative in the national parliament influences the allocation and in some cases the spending decision of CDF funds. The CDFs policy making entails size and goal of the funds, overseeing of CDF management and operations, the structure and modality on the utilization

of CDF as well as relative influence of various groups and individuals who are involved in the policy making process that governance the utilization of CDF for social and economic developments.

The Constituency Development Fund in Kenya was established through NG - CDF Act 2003 and Amended in 2007 with other supplementary amendments in 2013 whose main aim has been to adjust the administration of the fund with an aim of making it more project focus and constituents driven. All these administrative changes over the years, have not been adequately empirically analyzed by putting them to these specific perspectives; analysis of factors that informed changes in the administration structure of the Fund, the level of fund awareness brought about by the these administrative changes among the constituents, the level of community participation in the selection and implementation of projects brought about by the administrative changes, the administrative, transparency and accountability mechanisms brought about by the changes and whether NG - CDF projects had benefited the local citizens by comparing outputs against stated objectives of the Fund. The purpose of this devolved fund is to ensure there is rapid social and economic

development by financing local prioritized projects at constituency level and improve public participation at community level [1].

Physical learning Facilities and equipment that are designed to enhance learning are lacking in most public schools. To worsen the situation, the money allocated for repair, maintenance and improvement of the school's infrastructure under free primary education program is hardly sufficient to meet this ever rising demand. Ngacho *et al.* [2] established that 59.4% of educational projects financed by CDF suffered cost overrun indicating either poor cost management or inadequate financing of the projects. This has made Public Schools to initiate school development from participation of various stakeholders; Parents through Parents Teachers Association (PTA), Contributions from CDF, Contributions from other well-wishers through *harambees* among many others. All these contributions and participations are managed through the schools Board of Governors where the head teacher is the secretary.

It is shown from previous studies [3-5] that the failure of any project is mainly related to the problems and failure in performance. Moreover, there are many reasons and factors which attribute to such this problem. The symptoms of lack of application of project management process include; most public school projects taking unnecessary longer time, some projects are accomplished beyond the budgets and others meeting the standards required. The application of project management process into Public School projects key to successful implementation of these projects and also improved performance of the projects. The question whether Public Schools in Kenya have been applying project management process in running their respective projects is the literature gap that necessitated a study to analyze influence of project management process on Public School projects performance.

In order to achieve the objective of the study which was to analyze the influence of project planning and evaluation on performance of Constituency Development Funded projects in Secondary Schools in Rongai District, Kenya, the study tested the following hypotheses; H_{01} : There is no relationship between project planning and performance of Public Schools Projects in Rongai District and H_{02} : There is no relationship between project evaluation and performance of Public Schools Projects in Rongai District.

LITERATURE

Theoretical Framework

The study adopted theory of change and logical model developed by Carol Weisis in the 1970s [6]. Logic models support design, planning, communication, evaluation, and learning. They are

often used when explaining an idea, resolving a challenge, or assessing progress. They can untangle and clarify complex relationships among elements or parts. Modeling allows careful consideration of the relationship between activities and results. When tackled by a team or small group of stakeholders, models can be improved by engaging the knowledge and experience of others. This theory fits the study because it clearly explain project life cycle in terms of; developing common language among stakeholders, offering highly participatory learning opportunities, documenting and emphasizing explicit outcomes, clarifying knowledge about what works and why, identifying important variables to measure and enable more effective use of evaluation resources, providing a credible reporting framework and leading to improved design, planning, and management.

Pinto and Slevin [7] developed a project model and identified 10 factors that influence success of project implementation. Their principal research question was: "Are project implementation critical success factors of equal and stable importance over the life of a project, or does their relative importance (weighting) change as the project moves through different stages of completion?". Regression analysis revealed that different factors were significantly related to project success in the four different stages. For instance, in the conceptual stage, project mission and client consultation were the two variables significantly linked to project success while in the termination stage, technical tasks, project mission, and client consultation explained 60% of the variance in project success. Surprisingly, the personnel factor "was the only factor not found to be significantly predictive of project success in at least one of the life cycle stages.

Empirical Review Project Planning

According to literature reviews, Planning is the process of setting goals, reasons for choosing them and actions to accomplish them, with enough details in regard to schedules, costs and other factors that affect the execution of such goals [8]. The literature offers various methods of planning; some researchers tend to use classical charts, whereas others argue for the use of systematic planning, due to its simplicity in use for non-specialized employees [9]. Hans *et al.* [5] has developed, through a survey and two case studies, a generic hierarchical planning and control framework that supports multi-project planning. In a project with high complexity and uncertainty rates, this framework enables the selections of the appropriate methods of planning based on organizational characteristics.

Issues pertaining to development institutions, processes, structures, and attitudes and the project strategy offer some relationships and conflicts. While there is agreement between development practitioners at the World Bank with the views of Todaro and Smith [4] concerning the need for institutional strengthening

which seems to be an euphemism for institutional change, in developing nations as part of development investments based on the project strategy, this has faced challenges due to the unwillingness of public officials of developing nations in subscribing to such changes.

Project Evaluation

Academic researchers with a view to overcoming the limitations of the traditional performance evaluation criteria of time, cost and quality have suggested the inclusion of additional measures of performance. These include safety of the project site [6], site disputes [10], environmental impact [11] and community/client/customer satisfaction [12]. These contributions, although widen the scope of performance evaluation amongst development projects, are skewed towards either societal or environmental aspects. None of the above has provided a balanced and holistic performance evaluation framework which would capture all essential and unique features of a development project.

Project evaluation is the periodic assessment of a project's relevance, performance, efficiency, and impact both expected and unexpected in relation to stated objectives. The technical capacity of the organization in conducting evaluations, the value and participation of its human resources in the policymaking process, and their motivation to impact decisions, can be huge determinants of how the evaluation's lessons are produced, communicated and perceived [11]. Evaluations must be independent and relevant. Independence is achieved when it is 'carried out by entities and persons free of the control of those responsible for the design and implementation of the development intervention' [13,14]. Research shows that it is vital to determine what methods are appropriate to the users' needs, the given context, and issues of data, baselines and indicators [15].

Despite the fact that the Constituencies Development Fund disbursement is growing at higher rate, the Fund commits 2% of its budget for capacity building into which Monitoring and Evaluation of CDF Projects is included. What is demanded of the Board and by extension, the community level organs together

with which it operates, cannot be met by the current capacity both in terms of human resource as well as available skills [6].

Proudlock [16] also found that the whole process of impact evaluation, and particularly the analysis and interpretation of results, can be greatly improved by the participation of intended beneficiaries, who are after all the primary stakeholders in their own development and the best judges of their own situation. However, stakeholder engagement needs to be managed with care too much stakeholder involvement could lead to undue influence on the evaluation, and too little could lead to evaluators dominate the process [14].

Monitoring and Evaluation should be integral components of the project management cycle including project planning and design [17]. Gyorkos [18] notes that project planners should include a clearly delineated monitoring and evaluation plan as an integral part of the overall project plan that include monitoring and evaluation activities, persons to carry out the activities, frequency of activities, sufficient budget for activities and specification of the use of monitoring and evaluation findings. Jody and Ray [17] identify the complementary roles of the two functions. Information from monitoring feeds into evaluation in order to understand and capture any lessons in the middle or at the end of the implementation with regard to what went right or wrong for learning purposes. This could lead to redesigning the project.

The analyzed literature indicated a significant literature gap on influence of project management process on project performance. Much of the literature concentrated on other project management process and project success yet outside Kenya and other aspects of development like construction and very little attention on Public Schools Projects. This therefore indicates that the study will add knowledge on the missing links on influence of project management processes on Public School Projects.

Conceptual framework

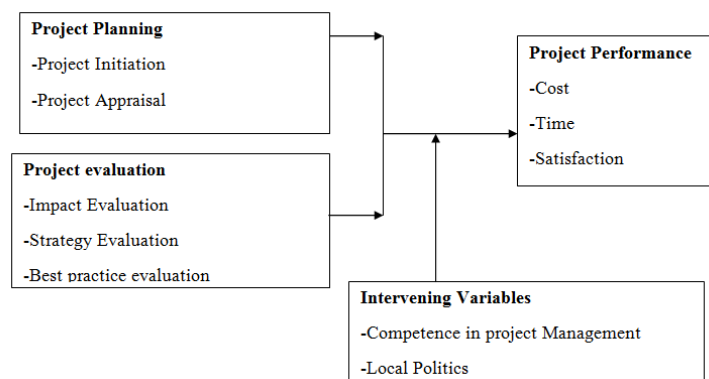


Fig-1.1: Influence of Project Planning and Evaluation on Performance

The independent variables of the study are; project planning and project evaluation. The dependent variable is project performance measured in terms of cost, schedule and stakeholders satisfaction. When the Public School projects are well initiated, stakeholders' well mapped and level of participation encouraged, the projects well implemented and evaluated, then the project performance is expected to increase through cost delivery as per budget, finished as per schedule and all stakeholders satisfied with the project under well controlled competence in project management and the local politics.

METHOD

The Study Location

Rongai Constituency is an electoral constituency in Kenya. It is one of eleven constituencies in Nakuru County. The constituency has five wards; Solai, Soin, Visoi, Menengai West and Mosop. CDF in the Constituency is involved in the construction activities. The Constituency has a population of 130,130 persons within approximate square kilometers of 1,049.1. The constituency uses CDF to carry out various aspects of constructions and service delivery of public schools within its jurisdiction.

Study design, population and sample selection

The research design that the study adopts is descriptive survey design. This is because descriptive survey design provides information about naturally occurring characteristics of a particular group.

The target population for this study included 356 Head Teachers and their Deputies and also the Chairmen Board of Governor and chairman of Projects Sub-Committee in both the primary and secondary schools in Rongai District. There are a total of 89 Public Schools of which there were 29 Secondary Schools and 60 Primary Schools. The study purposively picked the Head Teacher, his Deputy, Chairman Board of Governor and Chairman of Development Sub-Committee in each school to give a target population of 356 of which 178 will be the school administrators (Head Teacher and his Deputy) and the other 178 were Board of Governors (Chairman of the Board and Chairman of Development Sub-Committee).

The study used probabilistic sampling technique provided in an article by James E. Bartlett and Joe W. Kotlik [18] titled Organizational Research: Determining Appropriate sample size in Survey Research is used to calculate the sample size for this study.

$$s = \frac{(z)^2(p)(q)}{(d)^2}$$

S= Sample size

Z= Value of selected alpha level. In this study 0.25 in each tail = 1.96

d= acceptable margin of error for proportion being estimated = 0.05.

(p) (q)= estimate of variance = 0.25 maximum possible proportion (0.5) (1-0.5). This produces maximum possible sample size.

$$s = \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2} = 384$$

$$s_1 = \frac{S}{1 + s}$$

Where S1 = Required Sample size
 S = uncorrected sample
 N = Total target population

$$s = \frac{384}{1 + \frac{384}{356}} = 185$$

which will form the sample of the study

The study further used systematic sampling technique to equally allocate the samples according to the strength of the population in the Divisions (see table 3.1 below). The study then employed simple random sampling technique to randomly pick the samples in any school in the respective division so long as the specified sample per division is reached.

STUDY INSTRUMENTS

The study used close ended questionnaires based on Likert Scale as the main mode of data collection. The use of questionnaires was justified because they assured an effective way of collecting information from a population in a short period of time and at a reduced cost.

DATA ANALYSIS

To establish relationship between project planning, project evaluation and project performance was measured using Pearson Correlation whereas the relationship between the combined project management process and project performance was measured using regression model below. All inferential statistics were tested at $\alpha = 0.05$ significance level. This was done with the aid of a computer programme - Statistical Package for Social Sciences (SPSS) version 17.0 for windows. $y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon$

Where;

Y= Project Performance

α =constant

$\beta_1 \dots \dots \beta_{5d}$ = parameter estimates

X_1 = Project planning

X_2 = Project Evaluation

ϵ is the error of prediction.

RESULTS

Descriptive Analysis

Project Planning Tool used in Public Schools in Rongai District

Table-1: Project Planning Tool used in Public Schools in Rongai District

Elements of Project Planning	No.	Mean	Std. Dev.
The project outcome were well identified	179	3.72	1.09
The project processes were well identified	179	3.45	1.13
The project output were well identified	179	3.75	1.10
The project input were well identified	179	3.69	1.06
The Project was well initiated	179	3.60	1.22
The project was appraised	179	3.33	1.26
The Project was well funded	179	3.78	1.06
The project delivery schedule was well done	179	2.28	1.08
The Project was well designed	179	2.31	1.14
The project objectives were well identified	179	2.29	1.10

The study established that the respondents agreed that the public secondary schools in Rongai District used the following elements of project planning tool; the project outcome, output, input and process were well identified, and that the projects were well

appraised and funded. This was represented by 4 which according to Likert Scale represented Agree. The respondents on the other hand disagreed that the Public Schools had well designed project schedule and objectives.

Elements of Project Evaluation in Public Schools

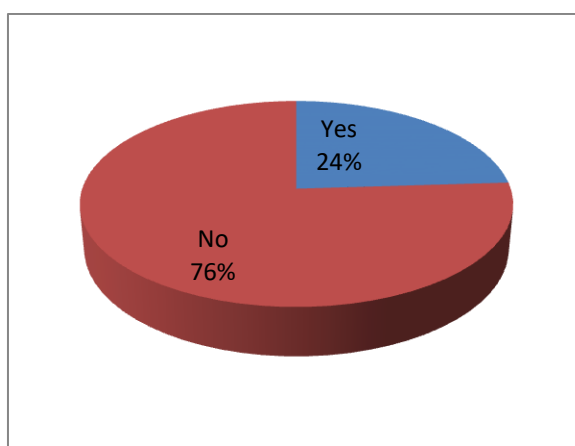


Fig-2: Plans for Evaluation of Public School Projects

The study established that majority of the respondents 76% observed that the schools did not plan

to evaluate the projects compared to 24% who planned to evaluate the projects.

Table-2: Elements of Project Evaluation in Public Schools

Elements of Evaluation	N	Mean	Std. Deviation
Project cost management	179	4.2	1.32
Stakeholders satisfaction	179	3.8	0.79
Project impact to community	179	3.6	0.76
Project impact to the environment	179	2.3	0.76
The project elicited useful lessons	179	1.8	0.85
Project delivery schedule	179	2.4	0.93
Effectiveness of project strategies	179	1.9	0.84

The study used Likert Scale to analyze the project implementation process in Public Secondary School projects in Rongai District as shown in table 2.

No. represented the number of respondents, Min. represented the minimum value of response in the Likert Scale represented by 1, Max represented the

maximum value of response represented by 5, mean represent the mean response between the minimum and maximum response, the standard deviation was how the assumed mean deviated from the actual mean.

The study established that respondents agreed that projects in Public Schools in Rongai District were evaluated based on project cost management,

stakeholders satisfaction and project impact to the community. They disagreed on existence of the following evaluation elements; project impact to environment, evaluation on the lessons learnt for purposes of sharing and improving future projects, project delivery schedule and effectiveness of project strategies.

Performance of Projects in Public Schools

Table-3: Performance of Projects in Public Schools in Rongai District

Elements of Project Performance	N	Mean	Std. Dev.
Project was delivered as per its budgeted cost	179	2.2	0.8
The project was completed on time	179	2.0	0.8
The project was delivered as per quality	179	2.3	1.0
Teachers, students, and BOG were satisfied	179	2.0	0.8
Parents and other stakeholders were satisfied	179	2.3	1.0
The project was done as per safety regulations	179	2.2	0.8

Source: Field Data (2014)

The study established poor performance of the projects of public schools. This was evident by the respondents' level of disagreement (Likert Scale 2 representing disagree) that the projects were delivered

as per budgeted cost, time and quality. They also disagreed that the projects satisfied the schools stakeholders and that the projects were done as per safety regulations.

Relationship between Project Planning, Evaluation and Performance

Table-4: Correlation Analysis of Project Management Process Variables with Project Performance

Variable	Planning	Evaluation
Performance	0.04	0.891**
Planning	1	0.033
Evaluation	0.033	1

**Correlation is significant at 0.01

* Correlation is significant at 0.05

The study established significant correlation coefficient of 0.04 ($p=0.742>0.05$) between project performance and planning and positive significant coefficient of 0.891 between project performance and project evaluation ($P<=0.02<0.05$) indicating that both project planning and evaluation were positively correlated with project performance.

The main objective of the study was to analyze influence of project management processes on performance on Public Schools Projects in Rongai District, Nakuru County. The study used regression analysis below to establish the relationship.

Table-5: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.893	0.798	0.792	0.287

The R Square in the regression model was 79.2% indicating that the data was closely fitted to the regression line.

Table-6: Analysis of Variance (ANOVA) Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56.798	4	14.200	171.851	.000(a)
	Residual	14.377	174	.083		

	Total	71.176	178			
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Table 6 indicates that the regression model predicts the dependent variable significantly well. This is indicated the statistical significance of the regression model that was run. Here, $p < 0.000$, which is less than

0.05, and indicates that, overall, the regression model (project management process variable) statistically significantly predicts the outcome variable (project performance).

Table-7: Regression Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.558	.319		-1.749	.082
	Project planning	-.006	.064	-.003	-.094	.925
	Evaluation	1.285	.051	.903	25.133	.000

a Dependent Variable: Performance

The study established that relationship between project evaluation and project performance that had P value less than 0.05 ($P=0.000<0.05$) rejecting the hypothesis that there is no relationship between project evaluation and performance of Public Schools Projects in Rongai District indicating a strong relationship between project evaluation and performance of Public Schools Projects. Otherwise the H_{01} : hypothesis that there is no relationship between project planning and performance of Public Schools Projects in Rongai District hypotheses was accepted whose P values were; project planning $p=0.925>0.05$.

As indicated in Table 7, from the unstandardized coefficients, the following equation was developed:

$$Y = -0.558 + 0.006X_1 + 1.285X_2 + \epsilon$$

CONCLUSION AND RECOMMENDATIONS

The main objective of this study was to analyze influence of project planning and evaluation on performance of CDF projects in Public Schools Projects in Rongai District, Kenya. The study found out that project planning in Public Schools in Rongai District was not correlated with project performance. This confirm Todaro and Smith [4] observation concerning the need for institutional strengthening which seems to be an euphemism for institutional change, in developing nations as part of development investments based on the project strategy, this has faced challenges due to the unwillingness of public officials of developing nations in subscribing to such changes. The study established a strong positive correlation between project evaluation and performance indicating that the public schools projects were evaluated on the outcome rather than the strategies used in implementation, the project design and even the coherence of stakeholders participation.

The study recommends that the Public Secondary Schools project committee should enhance more on the identification of the project outcome, output, input and process at the same time apply project scheduling tools like Gantt Charts and expressive measurable project objectives. The study recommends

that the involvement of CDF, Community, Politicians, and Parents should be enhanced and the school project committee should make deliberate efforts to expand project stakeholders’ involvement to include Churches, Professionals and Ministry of Education. This will ensure that the projects are well supported and developed as per specifications and professional certifications.

The Schools in Rongai District should enhance monitoring and evaluation systems that can capture data and give information on project cost management, stakeholders’ satisfaction and project impact to the community. Before the projects are implemented, the schools should involve environmental impact assessment experts to assess the impact of the public school projects to the environment which should be evaluated during the evaluation process. The schools should also develop evaluation systems that can capture data on the lessons learnt for purposes of sharing and improving future projects and also on project delivery schedule and effectiveness of project strategies

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