

# INFLUENCE OF STAKEHOLDERS PARTICIPATION ON PERFORMANCE OF ROAD PROJECTS IN KENYA (A CASE STUDY OF ROAD PROJECTS IN NAKURU COUNTY)

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**Abstract:** Road transportation majorly in the developing Countries can be a maker of economic development of an area for it provides the back infrastructure for any kind of investment and the harnessing of its economic potential (Lampe, 1985). Roads make a crucial contribution to economic development and growth and bring important social benefits. They are of vital importance in order to make a nation grow and develop. In addition, providing access to employment, social, health and education services makes a road network crucial in fighting against poverty. Roads open up more areas and stimulate economic and social development. In respect to these values that Roads add to human lives, each country in this World is struggling to build more road networks in quest for development. However, for this noble course to be realized, there are some important persons who must be incorporated known as “Stakeholders”. Stakeholder management is one of the most essential part of project management, for they might cause a change in project characteristics (time, design and budget) at the time of construction to which has been experienced in Kenya through their influence or poor participation in the project. This research paper was carried out in Nakuru County Kenya of Kenya Urban Roads Authority (KURA) with the intention of determining the impacts caused by the influences of stakeholders in these projects. The Descriptive study methods, convergent design was used. Open-ended and close-ended structured questionnaires, were used in data collection. Simple random and systematic sampling was used to select the respondents. Key Informant Interviews (KII) was conducted on 400 respondents consisting of directors of the project, supervisors, Engineers and members of the public. Data was analyzed using Statistical Package for Social Sciences (SPSS) computer software. Univariate analysis and multiple logistic regression shall be performed to determine the association between the independent and the outcome variable and to control for potential confounders. The findings of the study shall be of great significance in policy formulation, proper management and planning purposes in skillful development.

**Keywords:** project identification, project funding, execution and monitoring and control.

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## 1. INTRODUCTION

Roads are the arteries through which the economy pulses across the Globe. Roads are linking producers to markets, workers to jobs, students to school, and the sick to hospitals, roads are vital to any development agenda. Since 2002, the World Bank has constructed or rehabilitated more than 260,000 km of roads across the World. It lends more for roads than for education, health, and social services combined. However, while roads bring economic and social benefits, they can also come with social costs such as pollution, deforestation or destruction of properties. The Amazon rainforest is crisscrossed by almost 100,000 km of roads, enough to circle the Earth two and a half times. And the transport sector accounts for about 23% of global energy-related carbon dioxide emissions and a significant share of local particle pollution. Such tradeoffs need to be weighed when planning any intervention. The existence of such tradeoffs compels stakeholders to be one of the most important party to be incorporated in the implementation of such projects in a community.

### Statement of the problem

Project performance consists of challenging processes in the project management plan to satisfy the project specifications. This involves coordinating people and resources, as well as integrating and performing the activities of the project in accordance with the project management plan (PMBOK, 2008). The ability to implement projects can be more important than the project itself. Investors have come to realize that implementation is more important than the vision of the project (Charan & Colvin, 1999; Charan 1999)

It is of great value to identify the stakeholders as they affect or are affected by the project. According to Pan 2005 it is argued that, the major role of identification of stakeholders involves getting to know those with high or potential role in the project and its outcome a process that involves the grouping of stakeholders with similar objectives. As described by Winch, 2010, the project success relies on identification of various stakeholders who are key actors and incur or perceive they will incur a direct profit or loss as a result of the project.

The execution of construction projects usually brings about new product or value, but they can also have damaging effects creating such problems as noise, dust, environmental pollution and other obstruction within the project area. These often lead to public outcry and resistance from local residents and other interest groups whom could be affected during implementation of the construction project. As described by (Lister, 2014). This perhaps brings the importance of project implementation as critical component of project success. Project execution as this is important in putting action plan into operation as well as proper project changes during implementation, according to (Philip et al, 2008). Several projects have failed due to lack of project stakeholders involvement, during project actualization, as the study indicates in New Zealand high rates of project failures International development projects have also been subject to failures and great disappointments, with various scholars citing ignorance of poor stakeholder management as probable reasons for poor project implementation this has been described largely by several scholars and according to (Aaltonen, 2011; Chang, Pisarski, 2013; Hietbrink, Hartmann, & Dowel, 2012). Many projects in Africa and other developing countries have failed due to lack of proper management of stakeholders, which indicates that the most prominent risk faced in the development of infrastructure in East Africa is completion on time and within budget. In Kenya, implementation of infrastructural projects, particularly rural road projects, research attempts addressing lack of project management during project implementation. According to (Ungwa & Haupt (2007), several projects may be affected by lack of resource management, political interests that may occur during the project implementation

### Objectives

- i. To determine the extent, the stakeholders' influence can affect road project identification in Nakuru County Kenya.
- ii. To determine the extent, the stakeholders' influence can affect road project funding and procurement in Nakuru County Kenya.
- iii. To establish duties and responsibilities of the stakeholders in the execution of Road projects in Nakuru County, Kenya.
- iv. To determine the extent the stakeholders influence monitoring and control of road projects in Nakuru County, Kenya.

### Theoretical Review

#### Theory of Change

The stakeholder theory and the theory of change are in relation to this study, in the sense that, under stakeholder's theory, the influence of different stakeholders on successful implementation of projects is important. Various stakeholders are significantly influential on the extent to which a project is to be implemented while other may not necessarily play a significant role although they are part and parcel of the project. Depending on the significance of the stakeholders, project managers are in a position to examine and make decision on which stakeholder interest deserves the largest deserves more attention as far as implemented is concerned.

#### The Theory of Constraints

This section explains the review theory of constraints with assumptions of the theory and its relevance to this its study line with (Goldratt, 1984), organizational performance is dictated through constraints. These are regulations that prevent a corporation from maximizing its overall performance and reaching its goals. Constraints can involve people, resources, statistics, system, or maybe rules, and may be inner or outside to an enterprise. Types of (inner) constraints encompass

equipment; the way equipment is currently used limits the potential of the gadget to produce extra salable items/offering, humans: lack of skilled humans limits the system. Intellectual fashions held with the aid of people can motive conduct that turns into a constraint, policy: a written or unwritten policy prevents the machine from making.

### Continuum of Movement Theory

This theory came about from how the UK remake context was and is a reflection of participation in the philosophical cavalcade. The proponent of this theory was Wilcox's (1999) and it gives different tiers of participation. These levels are acceptable in diverse settings and contexts, the cavalcade asserts the no transferability of power but value is still beholden in the processes. Contrary to Arnstein's interpretation, this theory is viewed as one that brings about control by the citizenry. In other contexts, this thought move was developed further to describe as continuum the involvement levels.

## 2. CONCEPTUAL FRAMEWORK

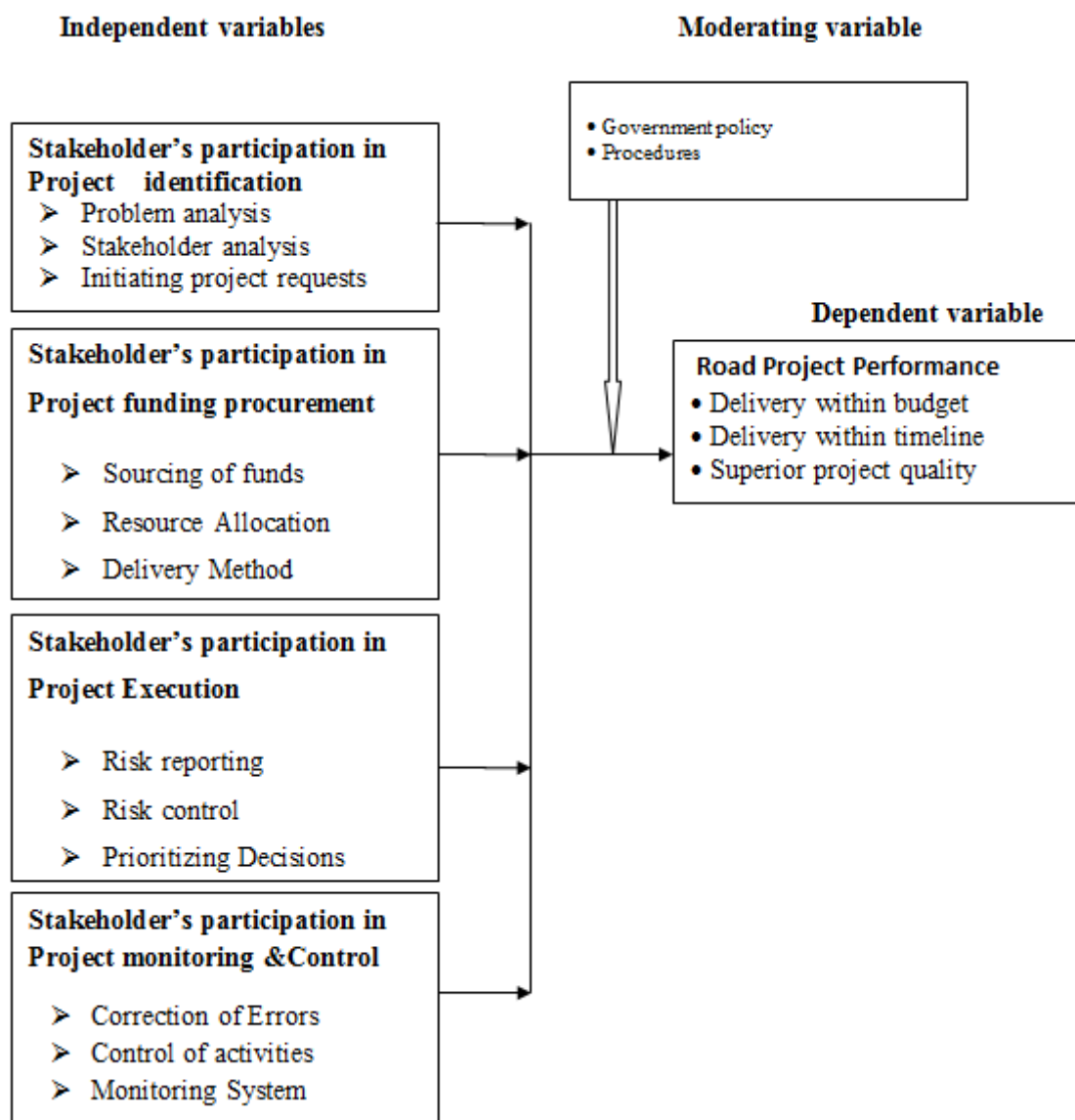


Figure 2.1: Conceptual Framework

### Research gaps

A review of literature reveals that a lot of research on analysis of project performance has been undertaken in developed countries context and their applicability in the developing countries is yet to be explored. Developing countries in Asian continent have carried some studies on effective implementation while in Kenya the studies have focused on reasons for

project failures rather than what determines successfully performance. Ashley et. al. (2007) did a study on the analysis of project performance success and concludes that effective project performance is repeatable and requires a great deal of work to understand it for Achieving cost effectiveness and competitive position. Their study did not look at the determinants of project performance. Torpet al (2004) also carried a study on effective performance factors for project performance on assessment of large public projects in Norway. The objective was to ensure quality-at-entry of major government funded project before funding is appropriated. The study still did not identify the determinants of effective project performance. In Kenya, Karani (2007) carried a study focusing on factors impacting delivery reliability of projects not the determinants which is the focus of the current study. Isensi (2006) analyzed. Factors that lead to failure of projects in Kenya and established that lack of stakeholder involvement, poor project identification method, inadequate experience, underestimation of project duration and poor cost estimation as the factors that caused failure of most projects. Gharashe (2009) concluded in his study on analysis of factors influencing projects in Kenya that the role of stakeholders of project management, operating environment, worker motivation, communication, inadequate resources and organization of the project team as factors affecting project implementation

### 3. RESEARCH METHODOLOGY

Descriptive study design was adopted in the research process for it is concerned with describing the characteristics of a particular individual, or of a group. The target study units for this research were the three main Road Projects in Nakuru County, Kenya under the supervision of KURA. The study was sampled in terms of 44 KURA officials, 14 Project Managers, 50 Engineers, 30 Surveyors, 46 Contractor Representatives, 60 Construction Quality Control Officers, 56 community leaders and 100 members of the public who will be affected either negatively or positively by the project within the County. This study utilized a sample size of 102. Primary data was used to address the constructs of institutional Involvement in Automobile emission control project undertaken by the County Government. The study selected a pilot group of 10 stakeholders based on Mugenda and Mugenda (2003) 10% of the sample size, 2 Contractors Representatives, 2 project managers, 2 Quality Control officers, 2, Construction supervisors and 4 supervising Engineers from County Government of Nakuru, Kenya. In consideration was descriptive statistics method which was applied in analyzing quantitative data where the data was scored by calculating the percentages, mean, standard deviation and Variance. This was done using Statistical Package for Social Sciences (SPSS) computer software. On the other hand, inferential statistics was used through the use of multiple regression analysis to establish the nature of the existing relationship between the research variables.

#### Model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where,

Y = Stakeholder Participation on Performance of Road Projects

X1: Identification

X2: Funding & procurement

X3: Execution

X4: Monitoring & Control

$\beta_0$  is the constant or intercept while  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ , and  $\beta_4$ , are the corresponding coefficients for the respective independent variables.  $\varepsilon$  is the error term which represents residual or disturbance factors or values that are not captured within the regression model.

### 4. RESULTS

#### Regression Results

Multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. This analysis was used to answer the questions; how do the independent variables influence the dependent variable collectively; to what extent does each independent variable affect the

dependent variable in such a collective set-up, and; which are the more significant factors? The results are given in the model summary in Table 4.1. The results in Table 4.1 show that the value obtained for R, which is the model correlation coefficient was  $r = 0.733$  which was higher than any zero-order value in the table. This indicates that the model improved when more variables were incorporated when trying to analyze the involvement of stakeholder's activities on Performance of road construction projects in Nakuru County. The  $r$  square value of,  $r = 0.5373$ , also indicates that the multiple linear regression model could explain for approximately 54% of the variations in the in performance of road construction project in Nakuru county

**Table 4.1: model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.764	.929	.922	.33421

An ANOVA test was run to ascertain whether the model in Table 4.9 was indeed significant. The results of the ANOVA performed on the independent and dependent variables summarized in Table 4.2 indicate that there was a significant difference between means of variables describing reverse supply chain logistics and that describing the performance of road construction projects Nakuru County. ( $F_o = 6.504 > F_c = 2.95$ ;  $\alpha < 0.05$ ;  $df = 4, 78$ ;  $p = 0.05$ ). This finding confirms the finding suggested by regression model in Table 4.2 and the study therefore describing the performance of stakeholders on performance of road construction projects in Nakuru County.

**Table 4. 2: Regression Model Parameters**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	65.294	4	16.323	146.143	.000
Residual	5.026	45	.112		
Total	70.320	49			

To answer the question about which of the independent variables is more important in influencing the performance of performance of stakeholders on performance of road construction projects in Nakuru County. The beta value was used

**Table 4. 3: Analysis of Variance of the Regression**

Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.789	.139		4.785	.002
Project identification	.921	.063	.903	14.57	.002
Project planning	.989	.053	.938	18.69	.002
Project execution	.876	.082	.837	10.68	.003
Project monitoring and evaluation	.727	.105	.708	6.947	.001

**Table 4. 4: Significance of Independent Variables**

The results in Table 4.4 indicate that the most important effect of reversed on the performance of private owned construction project in Nakuru County was Reverse Transportation ( $\beta = 0.576$ ;  $p \leq 0.05$ ) followed by Storage Constraints ( $\beta = 0.423$ ;  $p \leq 0.05$ ) and Inventory Management ( $\beta = 0.345$ ;  $p \leq 0.05$ ) in that order. The beta values for these variables respectively indicate that the dependent variable would change by a corresponding number of standard deviations when the respective independent variables change by one standard deviation. Therefore, it is evident that Reverse Transportation, Storage Constraints and Inventory Management as variables describing reverse supply chain had significant effects on performance of as per the model. This, therefore, led to the rejection of all the null hypotheses.

## 5. CONCLUSION

The relations of stakeholders are very important and significant at each project execution stage. They have an enormous effect on the adequacy, timely manner of execution and the quality of investment projects. Acuteness to such relations should be a key project risk management element. The most important task in terms of developing the construction process participants' relations is factoring in the risk of all the project stakeholders. Focusing on stakeholders in megaprojects is an important issue for it gives an ease in the implementation. The early involvement of stakeholders is of high importance even-though the biggest challenge is how to identify those stakeholders who can affect the project, and then put in place measures of solving the differing demands through good communication in the early stages of a project. Unfortunately, most of the project management teams are within the Organization in charge of execution of the project, thus, it becomes difficult for some stakeholders to trust them in solving the problem. Therefore, the role of identifying and managing stakeholders' expectations should be handled by the project initiators with a combination of their selected team of individuals. In conclusion, there is need to develop a vaster and propound policies and mechanisms that will govern the road construction projects in Kenya. This will help to cab up all these mess that are ever featuring in times when we have megaproject in a community.

### Suggestions for Further Research

Based on the findings of this study, the researcher recommends a more critical look at the following areas in future. A study needs to be done on how stakeholder's involvement in project initiation influences the implementation of road construction projects in Kenya in the context of Nakuru County. Since the study was done on the influence of stakeholder's involvement on implementation of road construction projects in Kenya in the context of Construction projects in Nakuru County, another study should be done on the same topic but in the context of another County.

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