



**RISK ASSESSMENT PRACTICES AND PERFORMANCE OF KENYA RURAL ROADS AUTHORITY, WESTERN REGION; KENYA**

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**Accepted: October 4, 2024**

**DOI: <http://dx.doi.org/10.61426/sjbcm.v11i4.3089>**

**ABSTRACT**

*Economic growth entirely relies on how successful the infrastructures in the economy have developed. Construction companies play an important role in both developing and developed economies. Road construction industry provides returns to all stakeholders in every country through facilitation of means of transport towards and after production of goods and services. Performance of construction projects is measured by how effective and satisfying the output from such projects benefits both the employer who is the contractor and the employee who is as well the consumer. The construction industry is one of the most dangerous industries worldwide due to deadly fatalities and accidents recorded yearly. Though many countries have established and implemented safety programs, the situation does not seem to have been mitigated for the reason being annual reports are there every often. Right contractors value all the cost elements inclusive the welfare of the workers and more so establish the effect welfare costs to the road's construction project. Main objective of the study was to explore the effect of Risk Assessment practice on Performance of Kenya Rural Roads Authority, Western Region; Kenya. Descriptive Survey research design was adopted for the study. The target population consisted of employees of Kenya Rural Roads Authority, Western Region; Kenya. Both descriptive and inferential statistics was focused on and the computation was done by use of SPSS version 24 in order to test the primary data that was collected to satisfy the objectives of study. Pilot study was conducted on employees of Kenya Rural Roads Authority in Kisumu office who were not among the sample in order to find out the validity and reliability of analysis of data of the study. Further, regression equation model was developed to test the relationships between the variables. ANOVA was performed to analyse the effects of various relationships at the variables level as well at item level. The findings indicated Risk assessing practices had a significant effect on performance of Kenya Rural Roads Authority, Western Region, Kenya. The study recommends Kenya Rural Roads Authority to embrace the project Risk Assessing Practices as it enhances performance by minimizing risks as well as mitigation too.*

**Key Words:** Risk Assessment, Occupational Health and Safety, Performance

**CITATION:** Musasia, P. I., & Miroga, J. (2024). Risk assessment practices and performance of Kenya Rural Roads Authority, Western Region; Kenya. *The Strategic Journal of Business & Change Management*, 11 (4), 371 – 384. <http://dx.doi.org/10.61426/Sjbcm.v11i4.3089>

## INTRODUCTION

Construction companies play an important role in both developing and developed economies. The levels of proper roads for transportation rely on the technological skill exposure of associated contractors and the priority of the government in valuing the infrastructure for her economy success and development (Maky, Hassan & Osman, 2020). Construction industry takes up huge expenditure of the economies' income for easiness of inclusion of highly advanced technology, equipment and associated materials (Nyaruai, 2019). European countries' construction industry mainly relies on financially focused performance at the project level which leads to creation of philosophies; for example, concurrent construction and lean production. Others non-financial indicators considered include: Just in Time, Total Quality Management and Total Productive Maintenance (Kumar,2017). According to Fung et. Al, (2016), project performance is a way of accomplishing cost and time objectives while adhering to the product specifications.

Gatihi (2017) suggested awards of major construction contracts in developing countries are skewed in favour of foreign counterparts against citizen contractors since the foreign firms are considered more technically and managerially advanced and well-organized in funds acquirement including competence. In comparison with this, citizen contractors have over the years had challenges related to inadequate financial capacity, poor project performance in terms of adhering to completion deadlines, poor work quality and capital management which has in many cases led to bankruptcy and in extreme cases, abandonment of projects. In other words, majority of citizen contractors usually do not complete construction contracts within initial contract sums and hardly within scheduled completion times. Occupational safety health practices have dominated international agenda calling for support from the International Labour Organization to execute their mandate on behalf of the international community

through regional and national governments (Keinan & Karugu,2018). Apart from the advantages of good infrastructure with good international roads network for economic growth activities, workers require better environment for labour delivery that corresponds to existing international standards (Chowdhury, Othman, Khan & Suleiman,2021)

In Kenya, poor implementation of occupation health safety practices in the road construction industry has resulted to adverse effects on workplace incidences in the sector (Manduku & Munjuri, 2017). According to Vitharana (2015) a health workforce leads to health performance of the road construction company according to this scholar, workers are exposed to acute health hazards like fall from height and electric shocks, while chronic health hazard like exposure to hazardous substances is common in the construction industry. Practices such as training on occupation health safety, emergency response planning, and occupation health safety hazard control mechanisms, and workplace inspections remains a major obstacle to success of occupation health safety practices at road construction companies.

In the study by Amiri *et al.*, (2017), construction industry is a highly risky venture because of its long-life duration and unique product as a result of construction, different professions are involved in one project and employees and the employers are associated with either the affection or effecting the project's team with risks if the guidelines to do with occupation safety health is not followed to latter. According to Patel and Ajha (2016) risks in construction industry should be controlled and reduced during design, procurement and construction phase, and the most important activities are defined risk management plan from the very beginning and to assign risks to different project members and to manage their execution, once such measures have been taken into place then lose from welfare kitty in terms of solving injuries of employees is minimized. Gunduz *et al.*, (2018) assert Project's initial phase has to present;

cost and duration risks and complete contingency for the previously defined budget well described covering the associated occupation safety health items that affects the employees from producing well that enhances the positive indicators of the project performance. Statistical data for one project in design phase have to be analysed and general comments and recommendations proposed in totalled.

In the study by Zwetsloot *et al.*, (2017) Project management in the construction industry is mostly risk management oriented, and the main goal is to achieve risk control in all project phases. Great and long-lasting construction projects are exposed to many different risks, so the most important is to define risks at the very beginning of the project and to control and reduce them during the project execution. Mosly (2015), asserted risk management being very important segment of project management, and generally the main target on a construction project is to manage cost and time including occupation health safety practices since human beings will always be required at the construction sites. According to Lyon and Popov (2016) on occupation health and safety practices, systematize risk overview management is necessary and risk analysis should be carried out. Risk Analysis is a systematic approach to understanding these risks and their impact so that the decision makers can account for them in contingency planning, as well as plan for risk mitigation.

Awwad *et al.*, (2016) viewed general risks during design and procurement (tender) stages being how to coordinate design and to estimate cost, as well as to prepare cost plan in realistic boundaries including the occupation health safety practices. Cost and programme is very difficult to estimate. Thus, during the pre-construction phase it is very important to manage all design risks and to organize design according to design brief as well as to minimize budget increase. After risk elements identification, possible scenarios for all risk elements should be evaluated.

Al-Bsheish (2017) embraced safety performance as a concept revolving around and maintaining safe workplaces. This could be attained through organizational safety culture and workers safety behaviors, or the ability to minimize the quantity of accidents and occupational injuries in the work sites. Yilmaz (2015) found in the literature that enhancing safety performance can be either proactive or reactive. Proactive studies focus on evaluating the safety climate of a region, safety culture, hazard identification and observation. Reactive studies focus on injury frequency rates and compensation costs. Reactive studies seek to measure the safety performance based on historical data, and do not measure the status quo.

According to Kibe (2016) in his assessment of health and safety management on construction sites in Kenya the scholar found out that accidents and ill health amongst workers are caused by tools and equipment, slips, fall from heights and over exertion. Kibe (2016) found out that wounds, bruises, cuts, and fractures were the most reported injuries in the construction industry. This resulted in absenteeism from workers, loss of confidence by workers and the public, increased insurance premiums and proliferation of litigations. In Kenya, issues of occupational health and safety at workplaces are guided by acts of parliament and their subsequent amendments; occupational safety and health act of 2007 and workplace injuries and benefit act of 2007. Occupation Health Safety Association (2007) provides for the safety, health, and welfare of workers and all persons lawfully present at workplaces (Andrew, 2010).

The legislation also allows compulsory annual safety and health audits, risk assessment, and a health and safety statement by all employers. This act also recognizes the need for a safe working environment free of hazards (Manduku & Munjuri, 2017). According to section 13 of Occupation Health Safety Association (2007), an employee has a duty to ensure his safety and duty of care for others without causing hazards. The employer too as the duty to provide safe working conditions and

provides the right tools and protective equipment to its employees. The act lays huge responsibility on the employer not to expose workers to an environment which can cause occupational diseases and injuries. These provisions are consistent with Occupational Safety and Health Act 2006 of Uganda and International Labour Organization convention on occupational safety and health (Nzuve, 2007).

### **Statement of the Problem**

Manduku and Munjiri (2017) contemplate that hardly contractors accomplish projects timely within cost and as per required quality, hence by the time the projects are completed the contractors face heavy court litigation cases for compensation to employees for the contractors having failed to honour protocols of occupation health and safety on the employees that maim employees physically and more so, failure on compliance of construction regulations by the government, hence, hampers performance of the projects.

According to Kibe (2016) in his assessment of occupation health and safety management on construction sites in Kenya, it was found out that accidents and ill health amongst workers are caused by tools and equipment, slips, fall from heights and over extortion; hence this results in absenteeism from workers, loss of confidence by workers and the public, increased insurance premiums and proliferation of litigations which leads to poor performance of construction companies. In Kenya, issues of occupational health safety matters at workplaces are guided by acts of parliament and their subsequent amendments, for example, occupational safety and health act of 2007 and workplace injuries and benefit act of 2007.

Most of the researchers among them; (Konijn, Lay, Boot and Smith, 2018; Makori et.al, 2018; Fung et al., 2016) studied on performance of construction projects but did not zero on effects resulting from Risk Assessment practices on performance of road projects. These scholars focused on variables such as project management systems, procurement methods as well as project leadership skills and

ignored or had less for Risk Assessment practices that care for employees on construction sites.

This dispersion in studies by differing researchers; among them Kibe (2016) valuing Risk Assessment practices and others including Makori et.al, (2018) being inconsiderate on the practices at the project's sites, necessitates the research gap to arise from conceptual, contextual and methodological differences; hence, the study of Risk Assessment practices on performance of Kenya Rural Roads Authority in Western Region; Kenya.

### **Study objective**

To explore the effect of Risk Assessment practices on performance of Kenya Rural Roads Authority, Western Region; Kenya

### **Hypothesis**

**H<sub>02</sub>:** There is no significant effect of Risk Assessment practices on Performance of Kenya Rural Roads Authority, Western Region; Kenya

### **Theoretical Literature Review;**

#### **The Systems Theory**

Dostal (2005) was the first proposer of this theory, explaining the organization being a system of subsystems interlinked. For the sake of this study, organization is viewed as a system comprising interconnected and mutually dependent sub-systems. Road construction of a high way is always managed by various stakeholders; some of the stakeholders are legal persons who may be local or foreign members from various companies. For decision making, all members should come up together and share ideas to form a system that would consist of subsystems. These sub-systems can have their own sub-sub-systems.

Daft and Armstrong (2009) were building on earlier studies by Dostal (2015) that perceived a system as composed of some components, functions and processes. This school of thought can be traced from Bakke's (2013) studies which viewed an organization as a system consisting of the following three basic elements: components, linking processes and organizational goals. As applied in

some organizations today, especially those involved in manufacturing, proponents of system theory such as Baron and Byrne (2014) view the organization as a society or a social family with various sub-components within the whole.

Barzilai (2011) suggests that the systems approach views an organization to be in a state of equilibrium only if all its components are stable and perfectly interlinked to achieve organizational goals. For instance, if a member in a system, say, an employee, is dissatisfied, such an individual can negatively influence overall organizational performance. Thus, for an organization to achieve set objectives, the employees ought to believe in the performance of the organization in which they are a part of. Management therefore needs to involve employees in management and appreciate the influence they have towards organizational performance in all decision-making processes (Ryan, 2009).

The overall organizational performance is therefore a factor of the extent to which the horizontal logistics coordination is effective in the organization (Barzilai, 2011). For results to be achieved in an organizational system, Cummings and Worley (2008) suggest that processes therefore need to have a central coordination unit, usually the Chief Executive Officer (CEO) in a profit-making organization or a Principal Secretary (in the case of Government Ministries in Kenya) or a chief officer in county governments. Similarly, each sub-system, that is, a department, also needs to have a central coordination unit which is the nucleus upon which all elements in that sub-system revolves. The departmental head allocates duties commensurate to designated power and delegated authority from which performance is measured. Ryan (2009) argues that the systems approach was developed to enhance performance by allocating specific duties to every individual in the organization. This theory anchors the variables of occupation safety and health practices on performance of construction companies.

### **Contingency Theory**

Contingency theory was put across by Woodward (1985), that formulate a broad generalization about the formal structures that are associated with various technologies adaptations. The Contingency Theory as described by Hersey and Blanchard (1969) revealed that there is no one definite strategy management which guarantees success of the strategy put in place by the organization. Management and firms are regarded as 'open systems' hence are affected by changes requiring different approaches to handle and solve emerging issues.

The contingency is a key tool in the recent past in identification, analysis and the evaluation of the factors that affect the design and adoption of information systems. The theory holds that, to operate and manage the systems it will require having the relevant resources and well-coordinated skills. Daft (1998) also revealed that each information system varies based on the firm specification, environment, needs, capacity and a system that may work in one organization may not necessarily work in another. As such the Contingency Theory is built on three main aspects; auditing information, financial information, and managerial information. Proper utilization of information from these three major sectors is what is to bring about the success of the roads constructions performance. Thus, this theory is relevant to the research study in that it postulates that not one thing is independent on itself as they depend on other elements so as to be effective and efficient. The roads construction companies have different stakeholders to make decisions hence they have to be independent individually and then at the end depend on each other.

### **Agency Theory**

According to Laffort and Martimost (2002) it was affirmed that the agency theory of strategic management is very important since the action chosen by an individual (the agent) affects not only one, but several other parties (the principals). The role of an agent in strategy and the overall strategic

management process and practices cannot be underestimated. They say that the firm is often characterized as a nexus of both explicit and implicit contracts linking the management and its different stakeholders, including employees, customers, bondholders, suppliers, unions and the state among others.

Agency theory is a management approach where one individual (the agent) acts on behalf of another (the principal) and is required to advance the principal's goals (Jean, 2002). The agent is required to advance both the interests of the principal and his own interests in that particular organization. Normally, a balance of these interests should be combined so that the objectives of the organization can be achieved through the agent because he/she is in charge of the vast resources of the organization.

The Agency Theory holds that there should be proper synergy between the management and its stakeholders in order to work towards an achievable common goal. The Agency Theory has also been defined as the central approach to managerial behaviour. Ross (1987) stated that the Agency Theory is used in the managerial literature as a theoretical framework for structure and managing contract, which is among the emerging issues in strategic management. Hence, the behaviour of principals and agents' relationships in performance contracting in management is explained;

The agency theory tends to be more considered against other strategic management theories. Krueger, (2004) in his paper in strategic management and management by objectives postulates that the plethora of strategic management is the agency theory in practice at all levels of the strategic management process. He argues that starting from the corporate strategy to operational strategy the objectives designed at all these levels must be supervised by the agents or

managers for an organization to achieve its organizational objectives.

For the organization to attain its objectives, management by objectives which observes that organization must formulate objectives at all strategic hierarchy levels according to the studies by Henry (2006) which upholds that, for these objectives to be achieved there has to be joined efforts between the managers as agents and the subordinate staff or team in the organization.

Top managers are required to provide clear and visible support to the strategic management Program. Without that support of the managers as the agent the synthesis between the individual and the organization goals does not develop. Krueger, (2004) upholds that strategic management depends upon a team approach that flows from the corporate level to the functional level of the organization. Therefore, the process depends on input from all levels of management both (top to bottom and bottom up). The Chief Executive Officer (CEO) as the agent should highly embrace synergy by searching for information resulting in an evaluation of the task to be carried out (strategy formulation) and also to propose a strategy to the board (principals), for their agreement and then carry out the agreed task (strategy implementation) in order to gain competitive advantage and perform well in relation to other similar firms in the same field of operation.

In conclusion, the Agency theory of a construction company results from the synergy of various stakeholders coming together for a common objective of better performance of roads construction companies. Various chief executive officers will represent their companies as they join up Kenya nation highway authority on construction of highway roads

## Conceptual Framework

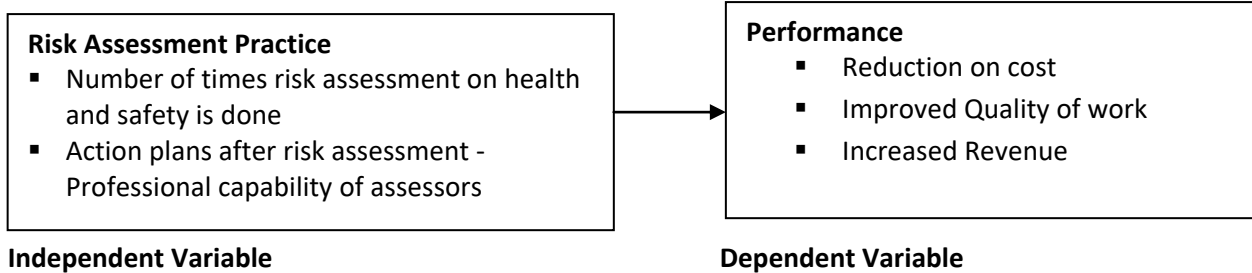


Figure 1: Conceptual Framework

## METHODOLOGY

**Research Design:** In the study by Lavrakas (2008) on encyclopaedia of survey research methods, choosing an appropriate research design depends on nature of research questions and hypotheses, variables, sample of participants, research settings, data collection methods and data analysis methods. Thus, a research design is a structure, or blueprint, of research that guides a process of research from formulation of research questions and hypotheses to reporting research findings. In designing any research study, a researcher should be familiar with the basic steps of the research process that guide all types of research designs. Also, a researcher should be familiar with a wide range of research designs in order to choose most appropriate design to answer research questions and hypotheses of interest. This study adopted a descriptive survey research design since data involved was quantitative in nature and more so descriptive study focuses on explaining situations the way it is.

**Target Population:** Target population encompassed all departments and staff in the Kenya Rural Roads Authority in six county governments in western region; Kenya as indicated in the scope of the study. The study targeted 146 respondents from the 4 departments under study. These departments included; Road Asset Management, Finance and Corporate, Survey, records and ICT and Procurement.

**Sample and Sampling Technique:** The current study derived its sample population from the Kenya Rural Roads Authority employees from western region that includes; County Government of Kakamega, County Government of Busia, County Government of Vihiga, County Government of Bungoma, County Government of Nandi and County Government of Trans-Nzoia. The study employed stratified sampling technique. To determine the sample size, the study used Yamane's formula as below. Out of the 146 targeted staff, the sample size was approximately 107

$$n = \frac{N}{1 + N(e^2)}$$

N = Population, n = sample size, e = margin for error (0.05)

$$n = \frac{146}{1 + 146(0.05^2)}$$

$$= 107$$

**Research Instrument:** The study used the questionnaire as an instrument to collect data. According to Creswell (2014), questionnaires are crucial in collecting unbiased data from a large sample. Research instruments are testing devices used for measuring a given phenomenon designed to obtain data on a topic of interest from research subject (Maina, 2012); hence Structured questionnaires was used as a primary data collection instrument in collecting general information on Occupation Health and Safety Practices and Performance of roads construction projects in western region; Kenya.



**Pilot Test:** The researcher tested the research instruments to ascertain their validity and reliability. The researcher administered the questionnaire to 11 Kenya Rural Roads Authority staff at Nyanza region in Kisumu. The researcher settled on the above figures because they represent 10% of the sample population as proposed by Mugenda and Mugenda (2009). According to Orodho (2009), a pilot study should always be conducted among a different population that are not part in the study. The pilot study helps the researcher to test the research instruments and make the necessary changes in the research tools before going out to collect data.

**Data Analysis:** The collected data was thoroughly examined and checked for errors and tabulated accordingly. The study used descriptive statistics to analyse the data to establish patterns, trends and relationships. Data was presented in frequency tables. The effect of Risk Assessment practices on Performance of Kenya Rural Roads Authority in Western region; Kenya, was established using linear regression analysis. The applicable regression model is shown below:

$$y = \alpha + \beta_1 X_1 + \varepsilon$$

Where;

Y= Performance of Kenya Rural Roads Authority in Western region; Kenya

$\alpha$  =constant

$\beta_1$  = parameter estimate

$X_1$  = Risk Assessment practices

$\varepsilon$  is the error of prediction.

## FINDINGS AND DISCUSSION

### Response Rate

The study targeted 107 employees categorized into their respective departments; Roads Asset Management, Finance and Corporate, Survey Records and Procurement of Kenya Rural Roads Authority, Western Region; Kenya. Table 1 indicates that out of the 107 questionnaires administered, 92 responded, which gave a response rate of 92%. According to Mugenda and Mugenda (2003), the statistically significant response rate for analysis should be at least 50%.

**Table 1: Response Rate**

Response Rate	Sample Size	Percentage (%)
Returned questionnaires	98	92
Un-returned questionnaires	9	8
Total	107	100

### Descriptive Statistics for Risk Assessment

#### Descriptive statistics: Risk Assessment Practices and performance of Kenya Rural Roads Authority

These are summarized responses on whether Risk Assessment Practices influence performance of

Kenya Rural Roads Authority, Western Kenya; Kenya. The descriptive results are presented in table 2.

**Table 2: Descriptive statistics; Risk Assessment Practices**

Statement	5	4	3	2	1	Mean	Std Dev
1. The organization has a hazard control plan	14(14.3)	36(36.7)	9(9.2)	11(11.2)	29(30)	3.51	0.931
2. Hazard control plan is updated regularly	13(13.3)	32(32.6)	32(32.6)	9(9.2)	12(12.2)	3.36	0.934
3. The employees understand the right control mechanisms	11(11.2)	39(39.8)	28(28.6)	10(13.0)	10(10.2)	3.49	0.923
4. The organization provides enough resources for hazard control	12(12.2)	37(37.7)	11(11.2)	29(29.6)	9(9.2)	3.45	0.912
5. Control mechanism effectiveness is checked regularly	15(15.3)	31(31.6)	30(30.6)	10(10.2)	12(12.2)	3.39	0.929
6. ISO standards are followed in managerial processes of risk assessment	14(14.2)	36(36.7)	10(10.2)	30(30.6)	8(8.2)	3.55	0.942
<b>Valid list wise=98</b>							
<b>Grand mean =3.46</b>							

From table 2, most respondents agreed (36.7%) and strongly agreed (14.3%) that the organization has a hazard control plan; which also was supported by 32.6% of respondents who agreed that the organization has a hazard control plan which is updated regularly; implying that the organization values the relevance of health and safety requirements for the sake of employee's operation. More so, 39.8% of respondents agreed that employees understand and know the right control mechanism to counter attack the risks, while 37.7% of respondents also agreed that the organization provides enough resources for understanding effects of risks on the organization; meaning that introduction of risk assessment in the system leads to effectiveness and efficiency for improved performance. Further, 31.6% of respondents agreed and strongly agreed (15.3%) that the control mechanisms are regularly observed and checked.

Lastly, most respondents agreed (36.7%) and strongly agreed (14.2%) (supported by the grand mean = 3.46= 4 = agree) that generally, ISO standards are followed in all risk assessment managerial processes.

In the study by Zwetsloot *et al.*, (2017) on Project management in the construction industry, it is mostly risk management oriented, and the main goal is to achieve risk control in all project phases. Great and long-lasting construction projects are exposed to many different risks, so the most important is to define risks at the very beginning of the project and to control and reduce them during the project execution. Mosly (2015), asserted risk management being very important segment of project management, and generally the main target on a construction project is to manage cost and time including occupation health safety practices since human beings will always be required at the construction sites. According to Lyon and Popov (2016) on occupation health and safety practices, systematize risk overview management is necessary and risk analysis should be carried out. Risk Analysis is a systematic approach to understanding these risks and their impact so that the decision makers can account for them in contingency planning, as well as plan for risk mitigation.

## Inferential statistics

### Correlation Analysis

The correlation analysis presented in Table 3 focuses on the relationship between employee performance and several key variables, including

job rotation, coaching and mentoring, job shadowing, and employee orientation. The findings reveal significant correlations that highlight how these constructs may correlate with employee performance.

**Table 3: Correlation Analysis**

		Risk Assessment Practices	Project Performance
Risk Assessment Practices	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	98	
Project Performance	Pearson Correlation	.744 **	1
	Sig. (2-tailed)	.000	
	N	98	98

Findings showed that there is a strong positive correlation between performance and Risk Assessment, with a Pearson correlation coefficient of 0.744 ( $p < 0.01$ ). This suggests that higher levels of risk assessing are associated with improved performance, indicating that effective support and guidance can significantly enhance performance of Kenya Rural Roads Authority in Western Region, Kenya.

### Analysis of linear regression;

#### Linear influence of Risk Assessment on performance

This tested the direct influence Risk Assessment on performance. The results are shown in table 4. Regression analysis was used to determine the relationship between the independent or predictor variables and a dependent variable.

**Table 4: Direct influence of Risk Assessment Practices on Performance**

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	.753 <sup>a</sup>	.568	.562	.80708	.568	98.422	1	97	.000	
ANOVA <sup>b</sup>										
Model		Sum of Squares	Df	Mean Square	F				Sig.	
1	Regression	64.110	1	64.110	98.422				.000 <sup>a</sup>	
	Residual	48.854	97	.651						
	Total	112.964	98							
Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients	Std. Error	Beta	T				Sig.	
1	(Constant)	.921	.269		3.422				.001	
	Risk Assessment Practices	.801	.081	.753	9.921				.000	

a. Dependent Variable: Performance

From table 4, the model summary shows that  $R^2 = 0.568$ ; implying that 56.8% variations in the Roads Project Performance of Kenya Rural Roads Authority, Western Region; Kenya is explained by Risk Assessment Practices while other factors not in the study model accounts for 43.2% of variation in Roads Project Performance of Kenya Rural Roads Authority, Western Region; Kenya. Further, coefficient analysis shows that Risk Assessment Practices has positive significant influence on Roads Project Performance of Kenya Rural Roads Authority, Western Region; Kenya ( $\beta = 0.801$  (0.081); at  $p < .01$ ). This implies that a single improvement in effective Risk Assessment will lead to 0.801 unit increase in the Roads Project Performance of Kenya Rural Roads Authority, Western Region; Kenya. Therefore, the linear regression equation is;

$$(ii) y = 0.921 + 0.801X_2$$

Where;

y = Performance

$X_2$  = Risk Assessment Practices

## CONCLUSIONS AND RECOMMENDATIONS

This tested the influence of Risk Assessment Practices on Performance of Kenya Rural Roads

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Authority, Western Region; Kenya. The study found that Risk Assessment Practices had an effect that was significant on the Performance of Kenya Rural Roads Authority, Western Region; Kenya. The study results support earlier researches that found that an improvement in the Risk Assessment resulted in a significant improvement on Performance.

Secondly, the Road projects would improve the performance when Risk Assessment exercise is executed rightly; hence, from findings of the study it implies the Risk Assessing Practice is fundamental on Performance of Kenya Rural Roads Authority.

The study recommends that Kenya Rural Roads Authority should adopt and secure Risk Assessment Practices, as such the adoption leads to earlier risk detection for earlier correction, hence improvement of performance on projects. The organization should have a hazard control plan; as well the ISO standards should be followed to the latter.

## Areas for further studies

Similar study can be done on other projects using similar variables, though using different methods.

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