



**CHALLENGES FACING TIMELY COMPLETION OF ROAD PROJECTS MANAGED BY KENYA NATIONAL HIGHWAYS  
AUTHORITY**

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**ABSTRACT**

*The time required for the completion of road construction projects is influenced by a variety of factors both external to internal. Completion of a project within time stipulated at the tender a ward stage is a universally accepted measure of project success. Most projects would delay before they eventually take off. Helping the construction companies to identify the critical attributes responsible for achieving the desired efficient level (success factors) and also to find the attributes adversely affecting the project efficient (failure factors) has been the motivating factor behind this study. It is realized that maximization of the success factors and minimization of failure factors will ensure the construction industry realizes its efficient goals. The study was seeking to assess challenges facing timely completion of road projects managed by Kenya national highways authority. More specifically, it aimed at examining how budgetary provision and procurement procedures affected timely completion of road projects by Kenya National Highway Authority. The study adopted a descriptive survey design. The target population of the study was all the road engineers, middle managers and a few staffs (361) in the construction department of KeNHA. The sample size was 190 respondents. The researcher used stratified random sampling method to select the desired sample size of 150 respondents from the project Managers, top managers and few staffs. Data collected was cleaned, pretested, validated, and coded, summarized and analyzed using statistical package of SPSS V 23. The study findings were presented using graphs, histograms, bar charts and pie charts. Conclusions were derived based on the P. value and the coefficient of determination. The findings indicated that majority of the respondents agree that budgetary provision and Procurement procedures strongly affected timely completion of road projects in KENHA implemented road projects in Kenya.*

**Key Words:** Budgetary Provisions, Procurement Procedures, Road Projects

## INTRODUCTION

According to Greer (2009), a project is successful if it satisfies all three legs of the triple constraint, namely, performance (specification), cost and time. Thomsett (2002) in an extensive examination of 20 failing projects over a period of 18 years expanded this criterion of success as:

Satisfies stakeholder groups, meets functional requirements, meets quality expectations and requirements, within cost, within deadline, delivers sustained and actual benefits and provides the team with professional satisfaction and learning.

The time required for the completion of road construction projects is influenced by a variety of factors both external to internal. Completion of a project within time stipulated at the tender award stage is a universally accepted measure of project success. Most projects would delay before they eventually take off (Samasian & soon, 2007). This study presents the background of the statement of the problem, purpose of the study, research objectives and questions, study justification and significance, limitations and delimitations of the study of delay of completion of road projects in Kenya.

The consequences may rather be in terms of loss in productivity, additional expenditures by way of rework and repair, re-inspection and retest in the short term. In the long term, poor efficient can hurt reputation, and if the company continues in the same way it might have to close its shop for want of new projects. If a number of construction companies of a country start neglecting the efficient aspects in their projects, this also starts reflecting on the reputation of the country (Hyvari, ). Helping the construction companies to identify the critical attributes responsible for achieving the desired efficient level (success factors) and also to find the attributes adversely affecting the project efficient (failure factors) has been the motivating factor behind this study. It is realized that maximization of the success factors and minimization of failure

factors will ensure the construction industry realizes its efficient goals. Realizing these aspects, the present study was undertaken to suggest ways to improve efficient as well as to take care of certain critical factors that may lead to loss of efficient (KeNHA, 2011).

Although the causes for project success and failure have been the focus of numerous research studies, there has been no consensus on the issue. In a survey of west Bank in Palestine, Mahamid (2011) indicated that the most severe factors affecting time delay in road construction projects from owners perspective are poor communication between construction parties. Examining the factors that cause delay in construction projects in Malaysia, Alghbari et al. (2007) tested 31 variables. The main finding of the study was financial factors. Faridi & El – Sayeh (2004) concluded the most significant causes of road construction delay are approval of drawings, inadequate early planning and delays in owners' decision making process

Project success and failures have become a contemporary topic within the construction industry. Research shows that construction companies are vulnerable to bankruptcy (Wong & Ng, 2010). For example only about 43% of construction firms that began operations in 2008, survived after four years of operations in the US (Ganaway, ). Similarly delays and time overrun are prevalent on construction projects (Al-Momani, 2000). Research shows that 10% - 30% of projects are delayed in Saudi Arabia (Assaf & Al-Hejji, ) and 70% projects suffered delays during their execution in Nigeria (odeyinka & Yusuf, 2007 Cited in sambassvan & soon, 2007). Ganaway, () Key contributors to project failures are poor project management practices and lack of skills/experience of management personnel.

In Kenya, road is the predominant mode of transport accounting for 93 percent of all freight and passenger traffic in Kenya, but costs are high (KACC, 2007). The road sub-sector is relatively large, with a total classified network of 160,886 km (of which 11,197 km are paved and 149,689 km are gravel or earth) and over 60,000 km of unclassified community roads (with corridors typically less than nine meters wide). This provides a reasonable network of roads in the densely populated parts of the country and some access throughout the rest. Unlike the neighbors, which have major areas without all-weather roads, the key challenge for Kenya is to bring the network in poor condition (56 percent) to good condition (currently just 11 percent), while ensuring that adequate maintenance is carried out on the rest. This has seen this Government initiate several road constructions projects which includes Thika road, expansion of outer ring road, southern bypass and many others.

The road transport industry includes large companies and individual owner operators; it is highly competitive and rates are determined by the market; the industry responds quickly to changes in demand, and road conditions and regulations. Even so, weak legal and regulatory framework has impacted negatively on the quality and reliability of services and on safety to the users (Kenya Transport Sector Support Project (KTSSP) Project Appraisal Document PAD, (2011). International development funds have had a big role in improving major routes. But these improvements are not long lasting, and soon after a road project is completed, its condition deteriorates fast resulting in huge potholes, broken bridges and culverts and muddy sections. Industrialists and other observers have attributed the poor state of Kenyan roads and road transport to the government's failure to efficiently allocate financial resources and to raise additional funds for road extensions and maintenance (IEA 2008; Watts 2000).

### **Kenya National Highway Authority (KeNHA)**

The Kenya National Highway Authority (KeNHA) is an autonomous agency for the management, development, rehabilitation and maintenance of truck roads linking centers of international importance and crossing international boundaries or terminating at international ports (class A). In addition it is also in charge some national truck roads links internationally important centers (class B), and primary roads linking provincial centers or two higher class roads (class C). Kenya National Highway Authority core functions are to construct, upgrade, rehabilitate and maintain Class A, B, C roads, implement road policies on National roads and ensure adherence to guidelines on axle load control in the traffic Act. Its other roles are to ensure that the quality of roads is in accordance with defined standards and to collect data on use of national roads (KeNHA, 2011).

The Authority is 100% owned by the Government as a state corporation established under Kenya Roads Act, 2007. The organization operations are also governed by relevant legislations and regulations such as the Finance Act, the Public Procurement Regulations, and Performance Contracting.

### **Statement of the problem**

Globally, transport infrastructure is an important factor in the development of a nation through its direct and indirect contribution to economic growth. It is in view of this that the Kenya Government has invested heavily in the road construction project and according to the Road Sector investment plan (2010-2024) the Government has allocated and continues to allocate significant resources toward improvement of transport infrastructure.

The information held by Kenya Roads board Website indicates that in the financial years 2009/10, 2010/2011 and 2011/12 the government of Kenya allocated Ksh 19 billion, Ksh 20 billion and

Ksh 23.3 billion respectively for construction of road projects( KeNHA, 2010). In the road sub-sector, the extent of cost and time overruns in the overall portfolio is high. As at February 2007, 35 on-going projects out of a total of 207 showed cost overrun, translating into a cost overrun of Kshs. 7 billion. With regard to time overruns 184 projects exceeded their original completion time agreed at the tendering stage. On average, the actual time for completion was more than two times that at the tender stage (World Bank, 2007).

The inability to complete projects on time continues to be a problem worldwide. According to (Ahamed *et. al* 2002) Overruns on Construction Projects are a Universal Phenomenon. Azhar (2008) states that, trend of time overruns is common worldwide and that is more severe to developing countries. In Kenya information held by KeNHA of a few sample of road construction in Kenya have showed delay in completion for instance Rehabilitation and Construction of Londian – Fortenan Muhoroni Road (KeNHA 2010) was awarded 27 April 2010 and received order to commence on 22 June, 2010. The initial completion period for works was 24 months with completion date of 19 July, 2012. The work was completed after additional 8 months. Similarly the Construction of KCC (Sotik) – Ndanai – Gorgor Road (15) (KeNHA 2011). The contract was awarded with commencement date of 7<sup>th</sup> September, 2011 to 6<sup>th</sup> September, 2013 but completion date revised to 7<sup>th</sup> February, 2014. A time overrun of six months (Al-Momani, 2010)

Homabay – Mbita road located in Homa bay and suba Districts of Nyanza in Western Kenya. Date of commencement of construction was 5-02-2010 for a period of 30 months with a completion date of 03-08-2012 but the completion was first revised to 23-10-2013 and a gain revised to 13-01-2014. (KeNHA, 2013)

In view of the above, the study, therefore, intends to establish the challenges facing timely completion of road projects in Kenya.

### **Objectives of the study**

The main objective of the study is to establish challenges facing timely completion of road projects managed by Kenya National Highways Authority.

The specific objectives were:

- To establish how budgetary provision affect timely completion of road projects managed by Kenya national highway authority.
- To establish how procurement procedures affect timely completion of road projects managed by Kenya national highway authority.

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Theory of Constraints**

The basic premises of the Theory of Constraints assume that people can think, they are good and systems are simple (The Choice, Eliyhau M. Goldratt, North River Press, 2009). Yet, there must be something missing. Why do good, thinking people have so much trouble with projects? After all, projects are simply a set of tasks which must all be done within some precedence order before the project is complete. What is missing? It must be something that is a hidden understanding of how project systems perform. Or, it must be something acting upon the project management system: good, thinking people that do things to actually make the problems worse.

Theory of Constraints argues that an organization facing challenges in cost management, poor performance and chronic conflicts is as a result of poor management practices and lack of necessary intervention. Eliyahu developed the theory of

constraints in the early 1980s to help organizations decide what to change, identify a desirable new condition and how to trigger the change. He recommended first identifying the main factors affecting budget estimates in an organisation. He then suggested that the managers figure out how to handle the constraints or barrier to success within prescribed budget. By focusing on fixing the main problem, overall performance could be improved (Eliyahu, 2004). Additionally, Baloi& Price observed that most organizations fail to examine their operations as a whole when developing cost estimates (Baloi& Price, 2003). By focusing only on short-term goals, long-term success becomes jeopardized so he suggested establishing a long-term view. According to this theory, all systems operate in an environment of cause and effect. One event causes another to happen thus prompting for factors analysis as a measure. Adherence to cost estimates is either a constraint or has the potential to become a constraint. This cause-and- effect relationship can be very complex, especially in complex systems such as those of construction projects. Capturing the essence of cause and effect within the system and identifying factors that emulate these relationships are the keys to system performance and excellent adherence to cost estimates.

The Theory of Constraints (TOC) approach focuses on successful on-time completion of the entire project. According to TOC, the main constraint in any project is the time taken for completion of the critical chain. Therefore emphasis is laid on completing activities in the critical chain without wasting any time. Hence, cutting safety time from individual activities eliminates the major cause of time wastage, thereby removing the constraint. However, this does not mean that the project is to be left unprotected against any unforeseen delays in any individual activity. The project is to be guarded against delays by providing time buffers.

Projects involve a high level of uncertainty and depend heavily on the contributions of individuals. Project manager needs to work with different departments involved in the project to estimate lead times so that they meet the needs of the critical chain. The critical chain concept starts with a set of talented and driven project managers and assumes that the resource constraints are within the scope of the project but not in its leadership.

### **Complexity Theory**

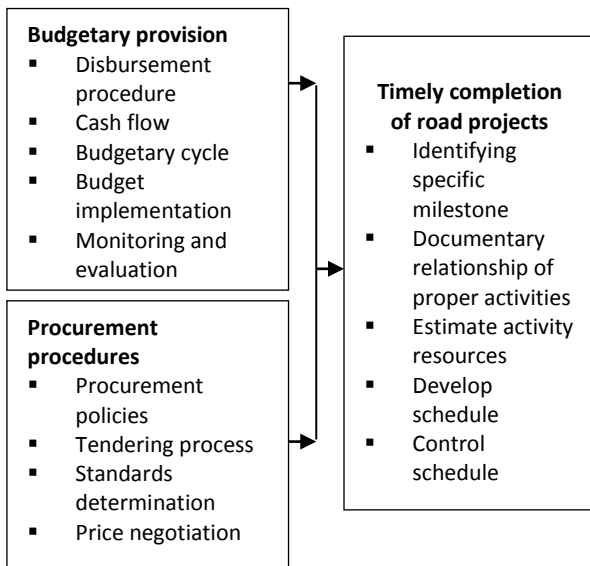
The theory of classifying problems based on how difficult they are to solve. A problem is assigned to the P-problem (polynomial-time) class if the number of steps needed to solve it is bounded by some power of the problem's size. A problem is assigned to the NP-problem (nondeterministic polynomial-time) class if it permits a nondeterministic solution and the number of steps to verify the solution is bounded by some power of the problem's size. The class of P-problems is a subset of the class of NP-problems, but there also exist problems which are not NP. A prominent author in the field of complexity is Terry Williams who shares the view of other scholars on complexity but extends it by one additional dimension of time estimates.

In addition to the two components of complexity, vis-à-vis the number of factors and the interdependency of these factors, he introduces the third factor which is uncertainty. Since uncertainty adds to the complexity of a project, time estimates therefore can be viewed as a constituent dimension of project complexity that can be as a result of various factors (Williams, 2008). Projects occasionally demand for more additional funds as there is an increasing desire to reduce time to market thus affecting the cost estimates of the project (Williams, 2008). Kahane on the other hand puts a lot of emphasis on talking and listening to each other when solving tough problems when developing estimate costs. His approach to

complexity is deeply rooted in a social environment. He distinguishes complexity in three ways. These are; Dynamic Complexity which means that the cause and effect are far apart and it is hard to grasp from firsthand experience.

It should be noted that complexity-based factors related to project dynamic are often abound. This is due to the difficulties in well understanding the nature of dynamic in construction project in order to identify relative complex factors. In other words, planning for a dynamic system is difficult due to changes in environment and circumstances. It is even more difficult to estimate when considering dependent on environmental conditions and other unknowns. There is an ongoing research in this regard and more details need to be revealed and findings explored. Project management systems are considered dynamic systems, similar to those in nature, which means they change over time and are hard to predict. This increasingly fast-paced system is creating a complexity explosion, which is affecting the way project managers need to govern. Although they are changing, there is usually an underlying predictability that can be identified.

**Conceptual Framework**



**Independent Variables      Dependent Variable**

**Figure 1: Conceptual Framework.**

**Budgetary Provision**

Budgeting is the process of allocating finite resources to the prioritized needs of an organization. In most cases, for a governmental entity, the budget represents the legal authority to spend money. Adoption of a budget in the public sector implies that a set of decisions has been made by the governing board and administrators that culminates in matching a government's resources with the entity's needs. As such, the budget is a product of the planning process. The budget also provides an important tool for the control and evaluation of sources and the uses of resources. Using the accounting system to enact the will of the governing body, administrators are able to execute and control activities that have been authorized by the budget and to evaluate financial performance on the basis of comparisons between budgeted and actual operations. Thus, the budget is implicitly linked to financial accountability and relates directly to the financial reporting objectives (Chan, 2006).

Kaliba, Muya and Mumba (2009) found that the major causes of delays in construction projects in road construction projects in Zambia were delayed payments, financial deficiencies on the part of the client or the contractor. One of the major sources of funding for road works in the country is the fuel levy fund which was introduced in 1993 and is mainly used for the maintenance of roads. The fuel levy fund is collected by KRA and administered by KRB, which was established by an Act of Parliament in the year 2000, with the responsibility of presiding over planning, development and maintenance of roads. The KRB has three main agencies through which funds for roads rehabilitation, maintenance and repair are disbursed. These are: The Department of Roads at the Ministry of Roads and Public Works, which deals with Class A, B & C roads. These are international highways, the national

highways and trunk roads; the District Roads Committees (DRC), which deals with Class D, E, and other roads. These are rural access roads and feeder roads and the Kenya Wildlife Service (KWS), which deals with all the construction and maintenance of roads in the national parks and game reserves (KeNHA, 2011).

The fuel levy fund that the KRB administers is distributed amongst these agencies, in accordance with a formula that is spelt out in the Act: 57% goes to the Department of Roads of the Ministry of Roads and Public Works; 24% goes to the District Roads Committees, Roads Department, Local Authorities and Kenya Wildlife Service; 16% goes to Constituencies through District Roads Committees and 3% goes towards the overhead costs of the KRB. The other major source of funds for road works is budgetary allocation by the Exchequer. This is directly allocated to the Ministry of Roads and Public Works. The Government also receives substantial amounts of funding for road works from development partners. In addition to disbursements from KRB, KWS also occasionally receives funds from development partners for specific road projects and allocates part of the internally generated funds for road works. Local authorities allocate part of their LATF and internally generated funds to road works. Other players in the roads sub-sector such as KTDA and tea factories, KSB and sugar companies do not receive any government funding (Mbeche 2000).

Effective participation of the Kenyan people in budgetary allocations remains an elusive mirage owing to a number of factors including: inadequate information on the devolved funds, exclusion of citizenry in decision making processes regarding the funds, poor coordination resulting in projects duplication, the culture of political patronage, wanting citizenry capacity to demand accountability from the ruling elite, unresponsive government

structures, unaccountable political class, weak legislative regimes on the devolved funds, apathy among the citizenry, and corruption among others as Kimenyi (2005) explains.

Kenya Roads Board (KRB) manages road maintenance funds from the Fuel Levy Fund by disbursements in tranches to appointed agents for roads maintenance. Disbursement of funds to districts by the Ministry of Roads and Public Works is done after receiving funds from KRB. Upon receiving the funds, the Ministerial allocation committee sits to deliberate on its distribution (KeNHA, 2011).

### **Procurement Procedures**

The understanding of dynamics of procurement management has been predominantly seen through experience as dissatisfying where the procurement unit was viewed from other entities in the organization as an insignificant, reactive and an administrative part of the business. The potential, however, for the procurement organization to be significant in the company was argued to be vast (Ammer2012, Ellram& Car 2012, Van Weele 2005). In order to change the situation of the procurement organization, procurement management was informed that they should in gradual steps develop the procurement organization towards more sophisticated and significance (Reck& Long 2008) producing strategies that were aligned with overall company strategy including the development of policies, procedures, systems, tools and processes (cousins 2002, cousins *et al* 2008). This process changed the perspective of the procurement organization which among other things, allowed the procurement entity to contribute to implementation of supply chain management (freeman &Cavinato 1990).

Gesuka and Namusonge (2013) conducted a study on the factors affecting compliance of PP in Kenya



with 70 respondents that were purposively selected from the Butere district commissioner's office, procurement committees, procurement unit, user departments and suppliers. Primary and secondary data was collected through the administration of a structured questionnaire, interviews and records analysis respectively. The findings indicated some level of compliance to the legal requirements, but also revealed weak familiarity of procurement rules of all the stakeholders. Eyaa and Oluka (2011) also conducted a cross sectional study on the causes of non-compliance in public procurement in Uganda that targeted was 120 Central Government Procuring and Disposing Entities (PDEs). The authors' model indicates a 52.4% variation in compliance with the regulations.

In the context of road construction, procurement is very critical in the sense that for the projects to be completed at the right time, procurement of the project requirements should be done at the right time and right quality, according to Kagiri and Wainaina (2007), donors require the recipient to follow specific rules (i.e procurement guidelines) for identifying the contractor who constructs the road and to set up specific financial right systems to oversee the use of donor funds. Basheka (2008) undertook a study among 99 local government stakeholders selected from 11 Districts of Uganda, using a correlation research design. The data was analyzed using principal component factor analysis that aimed at identifying the critical components of procurement planning and accountable local governments systems in Uganda. Results of the study indicated a significant positive relationship between procurement planning and accountable local government procurement systems. He critically analyzed the contribution of the roles of a manager one of which is planning.

However, the scholar failed to acknowledge that while planning is key in the roles and responsibilities of managers, there are other roles

including; coordinating, organizing, leading and controlling. This study dwelt on planning only and did not take cognizance of other roles. Further study fell short of explanation on the sample. It did not highlight whether the sample was representative of the local government agencies to enable generalization of findings.

Kenya through the Public Procurement and Disposal Acts 2005, created the Public Procurement Oversight Authority (PPOA), the Public Procurement Advisory Board (PPAB) and the continuance of the Public Procurement Complaints, Review and Appeal Board as the Public Procurement Administration Review Board (PPARB). The PPOA is mandated with the responsibility of ensuring that procurement procedures established under the Act are complied with, monitoring the procurement system and reporting on its overall functioning, initiating Public Procurement Policy and assisting in the implementation and Operation of the public procurement system.

### **Empirical Review**

#### **Budgetary Provision**

Various studies have been conducted on organization resources and projects. Weiss, Hoegl and Gibbert (2014) conducted a study on the perceptions of Material Resources in Innovation Projects: What Shapes Them and How Do They Matter? This paper focused on team members' perceptions of the provided material resources' adequacy to address this gap. Various studies have been conducted on organization resources and projects. Weiss, Hoegl and Gibbert (2014) conducted a study on the perceptions of Material Resources in Innovation Projects: What Shapes Them and How Do They Matter?

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Projects: What Shapes Them and How Do They Matter? This paper focused on team members' perceptions of the provided material resources' adequacy to address this gap.

### **Procurement procedures**

According to Huberts (2010), compliance with the formal elements gives an indication of knowledge of the rules. Gelderman et al. (2006) maintained that private purchasers will comply with the rules if they perceive them as clear. They added that the simple fact that the management of a private agency is familiar with the essence of the EU rules could function as an organizational incentive to comply. It is further argued that Lack of clarity is believed to increase the possibilities for (un)deliberate non-compliance. Educating and training private purchasers will be an effective tool for increasing the compliance with the directives (Gelderman et al., 2006). Eyaa and Oluka, (2011) stated that lack of familiarity with procurement rules results into poor compliance levels. They also found out that in the Kenyan context, familiarity with procurement regulations significantly predicted compliance with procurement regulations. A study by Heneghan and O'Donnell (2007) indicated that the high levels of non-compliance were partly attributable to the complex legislative requirements of the procurement policy and legal framework. Lazarides (2011) also adds that compulsory compliance is the result of among other factors clarity or lack of vagueness of provisions. Thus increasing knowledge of the law can possibly improve compliance.

According to De Boer and Telgen (1998) as quoted by Gelderman et al. (2006), one of the factors causes of non – compliance with procurement regulations is the level of familiarity with the procurement regulations. De Boer and Telgen (1998) assert that during the early days of the inception of private procurement regulations in The Netherlands, many

municipalities could not comply to the regulations because they were not familiar with them.

Gelderman et al.(2006) confirmed this position in a survey on compliance with EU procurement directives. Given that the procurement profession is still relatively new in Kenya, with the regulations having come into force in 2006, it is possible that the level of familiarity with the regulations is still low. On the other hand, it is possible that those who are familiar with the regulations know it so well that they know how to beat the loopholes to their advantage. It is worth noting that the ambiguity in the private procurement procedures may provide a chance for dubious acts including opaque tendering and discriminate supplier selection which may progress into poor compliance levels. Some theorists have noted that deficient familiarity of the procurement procedure by all the internal stakeholders may affect compliance.

### **RESEARCH METHODOLOGY**

The study embraced descriptive research design in order to provide a framework to examine current conditions, trends and status of events. Descriptive research design was more investigative and focused on a particular variable factor. Kenya National Highway Authority had a total of 188 Projects being undertaken . The study population therefore was project managers (total=188) in charge of the projects in KeNHA. A questionnaire was designed to collect information from engineers which contained open ended and closed ended questions. This provided a basis to identify the critical success factors affecting timely completion of road projects. This research study used self-structured questionnaires to collect primary data from respondents. Open and closed ended questions were included in the questionnaires so that each respondent was capable of receiving the same set of questions in exactly the same way.

Questionnaires may therefore yield data more comparable than information obtained through an interview. The questionnaire allowed respondents to express their opinions hence collection of objective data.

Data was analysed using both descriptive and inferential statistics. This is because descriptive statistics helps to describe the data collected and aim to summarize a sample while inferential statistics are used to interpret the meaning of descriptive statistics besides making propositions about populations and so helps in drawing conclusions. The filled in questionnaires were collected, cleaned, coded and fed in the computer for analysis by SPSS V22 for both descriptive and inferential statistics.

## FINDINGS

A total number of 188 questionnaires were administered to the sample selected. 130 questionnaires were collected back The response of 69% facilitated towards gathering sufficient data that was generalized to reflect the opinions of respondents. This was in tandem with Graham (2002) that a response rate above 60% of the total sample size contributes towards gathering of sufficient data that could be generalized to represent the opinions of respondents in the target population on the sought study problem.

The pilot study involved questionnaires from 8 respondents. Cronbach's alpha of well above 0.7 and most of it above 0.8 implying that the instruments were sufficiently reliable for measurement. The study accepted a Cronbach alpha of 0.7 and above. Since most items total correlations were reasonably high, the construct

validity of the instrument was considered reasonable (Brown, 2006)

The study sought to establish the age of the respondents in order to determine if the age corresponded with Timely completion of road projects in Kenya. Majority (57.6%) of the respondents were in the age category of 25-35 years, 26.9% both were in the age category of 36 and above years 15.38% were in the age category of below 25 years.

The study sought to establish the education level held by the respondents in order to ascertain if they were equipped with relevant knowledge and skills to understand the study.

From the study findings, majority (64%) of the respondents were post graduate students followed by 21% Graduate education level and 15% who were diploma education level.

The study sought to establish the length of service the respondents worked in order to establish the familiarity with the sector. 38.89% had worked less than five years, 25.5% had worked between 5 to 10 years, 11.11% had worked 11 years and 15 years, 6.35% had worked 16 years and 20 years, 7.94% had worked between 21 years and 25 years and 10.32% are not employed.

## Budgetary Allocation

The study sought to investigate the influence budgetary allocation on Timely completion of road projects in Kenya. 14.6 % strongly agree that budgetary allocation timely completion of road projects in Kenya, 32.2% agree while 21.5% disagree and 4.6% strongly disagree. These findings are in line with Ryder (2016) that budgetary allocation timely completion of road projects in Kenya.

**Table 1: Budgetary Allocation**

		Frequency	Percent
Valid	SD	6	4.6
	D	28	21.5
	N	30	23.1

A	42	32.3
SA	19	14.6
Total	130	100.0

**Procurement Procedures**

The study sought to investigate the influence of Procurement Procedures on Timely completion of road projects. The results in table 2 below, 8.1 % strongly agree that Procurement Procedures affects

Timely completion of road projects in Kenya, 25% agree while 25.8% disagree and 13.7% strongly disagree.

These findings tally with AGC (2011) that Procurement Procedures is a critical aspect of Timely completion of road projects in Kenya.

**Table 2: Procurement Procedures**

	Frequency	Valid Percent
SD	17	13.7
D	32	25.8
N	34	27.4
A	31	25.0
SA	10	8.1
Total	130	100.0

**Timely completion of road projects in Kenya**

This research sought to get from the respondents the status on Timely completion of road projects in Kenya. The findings indicate that 52.9% strongly agree that Timely completion of road projects in Kenya is a major issue in Kenya. 35.5% agree, 5.8% disagree and 5.0% strongly disagree. These findings are supported by ROK (2014) that Timely completion of road projects in Kenya is an issue that needs to be addressed with urgency.

NAP was an operational document – a methodology to steer country action on Timely completion of road projects in Kenya on the basis of a common agreement reached by all interested parties. All priority programmes were alignment to Kenya vision 2030 flagship projects and programmes. Basically the development plan was currently being implemented in a systematic manner under overall national macro policy framework of the sector Medium Term Plans (MTPs) for the spans of five year planning period. Within the macro context, empowerment was critical for the nation both in the short and long run.

**SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

**Summary of the findings**

The study established that Budgetary provision and Procurement procedures affected Timely completion of road projects in Kenya in Kenya. Rather, they require sustained and concerted action – by several actors over an array of policy areas. The Kenya National Highways Authority (KENHA) had developed the National Action Plan on Timely completion of road projects in Kenya (NAP). The

**Conclusion**

From the finding, the study concludes that Timely completion of road projects in Kenya is affected by Budgetary provision and Procurement procedures. Budgetary provision was a major factor in Timely completion of road projects in Kenya and that policy priorities for tackling timely completion of road projects in Kenya is essential. These policy priorities are not presented in any order of precedence.

An integrated approach (e.g. national action plans on Timely completion of road projects in Kenya), where not just the Ministry of transport, but also other key Ministries, address the issue of Timely completion of road projects in Kenya, could be helpful in this regard.

There need to prioritize the development of an Integrated system that the country meets the ever-increasing demands for timely and accurate completion of road projects.

### **Recommendations**

The study established that Budgetary provision and procurement procedure need to be checked in a more appropriate for change. Provision of accessible and practical skills training that has been developed with input, either additionally or independently of formal education. Training

programs should comply with nationally recognized quality assurance standards to ensure training is relevant and appropriate for development. Life-long career paths must be brought to the fore of Timely completion of road projects in Kenya rather than focusing on “short-term” isolated job interventions.

### **Suggestions for Further Research**

The results of this study can be further utilized to suggest several directions for future research. Finally, more research on this area is needed because this study has investigated a subset of the variables found to be important determinants. Other variables that may affect private label projects need be investigated. Further research can examine these possibilities and the extent of their influence.

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