

EFFECT OF PROJECT PLANNING ON PERFORMANCE OF CDF HEALTH FACILITIES CONSTRUCTION PROJECTS IN TRANS-NZOIA COUNTY KENYA

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Abstract: Project planning is an expectation of all human before one embarks on a project whether a minor or major, private or public. The planning aspect gives reason to signal that the project is a weighty affair needing great attention and strategies have to be considered to ensure that the accomplishment is accepted by all and the expectations are met. Through this analysis on the outcome of project planning on the achievement of CDF Health Facilities construction projects within the five Sub-Counties of Trans-Nzoia County, Kenya will be studied. The identified specific objectives in this study were to; assess the effect of timely project completion, examine the effect of cost estimation and evaluate the effect of stakeholder's satisfaction on Health Facilities construction projects performance in Trans-Nzoia County. The study based on the following theories; Resource based view theory, Complexity theory, Constraints theory and Utility theory. A descriptive design was used. A combination of Stratified and Purposive sampling techniques was used to draw the respondents who are directly linked to the construction projects and they included the Health Facility In charge of the facilities, the Public Health Officers, the Contractor on site, the Health Facility Committee members representing the community who are the major stakeholders of the projects. Self-administered structured and semi structured questionnaires was used to collect both quantitative and qualitative data. Pilot testing was conducted within the five Sub-Counties where 20 questionnaires were distributed to test the validity and reliability of the questionnaire. 86 questionnaires were then distributed to actual sample frame for the study. The study received 81 responses from the sample frame. Quantitative and Qualitative data collected was coded, computed and analyzed using descriptive statistics with software of Statistical Package for Social Sciences program version 21 and Qualitative data was analyzed on thematic mode and presented in prose. Frequency tables were used in presentation of the information generated and converted into percentages. Multiple regression analysis was used to judge the significant relationship between the dependent and independent variables and the findings were that all the independent variables had a strong positive relationship with the dependent variable., shown by 26.2percent indicating the performance of Health Facilities construction projects in Trans-Nzoia County. Findings conclusively recommend that timely project completion, cost estimation and stakeholders satisfaction are key indicators that can be measured to judge the performance of projects especially the Government related projects, they can be related to a yardstick measure by any mwananchi awaiting to utilize the projects. It also recommended that the projects of any kind funded by the County and National Governments must be comprehensively planned, have a knowledgeable and experienced project management teams to responsibly execute, monitor and evaluate the project progresses, certified contractors and skilled construction workers who are accredited to be used as well as prioritized adequate funding of projects from initiation to completion of projects through adequate budgetary allocation from the National Budgetary Committee.

Keywords: Timely project completion, Cost estimation and Stakeholder satisfaction.

I. INTRODUCTION

Background of the study

Projects are instituted in people's minds every day, the same projects can be major or minor, public or private depending on the outcome at end of it. Construction projects currently are the most prominent with the initiators having different goals depending on their use. These projects however major or minor must be planned for to achieve their potential expectations. Planning is essential to the existence success or operation of a project. When thoughtfully an endeavor is planned for, it's an evidence that the venture to be undertaken is to be carried out in a serious manner and whole sequence of events in place must be adhered to because they have been thoughtfully and strategically looked into. When these projects purposefully adhere to the course of events of course they will be accomplished as expected and the stakeholders will evidently support the others because of the effectiveness and efficiency of performance.

Project Management Institute (2013) explains about projects as temporary undertakings with a defined start and end time. He also goes ahead and justifies that it's also unique with a set of operations that are not routine but with specific set of operations that are designed to accomplish certain goals. Several studies have been conducted with the aim of determining the various factors that influence project performance. Project management is a requirement with an outstanding core component of project planning to ensure an effective and efficient utilization of resources for adequate and quality delivery of the deliverable. The crucial step in project management is therefore to achieve successful project performance with resources available.

Researchers have explored the major challenges that if adhered to then most of the construction projects will minimize their consequence intended. The strategies undertaken throughout this defining moment facilitates the organization to manage the resources projected to be utilized. Delays can cause substantial damage to a firm, project or organization, they do not always result from a single catastrophic event. Kikwasi (2012) school of thought on these delays and disruptions is that they are the points of origin; in addition to this revelation an art in planning has been carried out in other investigations to make less these disruptions. It's against this backdrop, Governments and County Governments are turning to effective planning process of these projects according to Engel, Fischer & Galetovic, 2010.

Griffith and Gibson (1995) also agree to it that decisive effects undertaken at the crucial period of project planning processes improves the accomplishment. Planning is the initial aspect of projects performance because if it's well undertaken as apriority then all the other aspects will sequentially be carried out.

Global perspective on Project Planning.

The challenge of delay in construction project is phenomenon that is also experienced in developing countries, so many projects which have stalled in different phases of construction have given an impression that a significant fact finding needs to be carried out. Leach (2014) in his fact-finding research reveals that every project must pass through the intended operational aspects following the acceptable cycle as expected; Conception phase, Definition phase, Planning and Organizing phase, Performance phase and project closure/ Hand over phase which is the termination phase. Construction projects takes place all over the world, it entails building works, water civil works, road works and many others. Construction industry has been frequented with occasional delays and disruptions. This issue of inadequate planning or incompetent planning has led to inefficiency of the works being undertaken throughout the construction process. Evidence has also shown that a number of executed construction projects have been in the rear of schedule days by more than 40percent beyond their original completion schedule plans. Another evidence in Omans after a study carried out by Alnuaimi and AlMohsin, (2013) reveals that within the Gulf region plainly that the insufficient planning and poor scheduling of project activities, ineffective design stages, poor coordination between project stakeholders and little knowledge about project requirements are amongst the most critical factors causing schedule deviations and cost overruns. Scholars like Dvir and Lechler, (2004) have strongly believed that better project planning would lead to better outcome; therefore, project achievement and in agreement to these findings, all the projects which have been planned for perfectly well have been a great deliverable and joy to the users following client's fulfilment. This has been a thorn in the flesh of many stakeholders who only come to realize later that the project is on- going yet they had inputs, such controversies have led to change orders which either delay or lead to incompleteness of the same projects that were started with good and great intentions. Activities involving crucial factors that must be addressed prior to actual initiation of these projects, this has also been echoed by Thomsett, (2002). In this noble realization, the overwhelming majority of PM scholars out rightly come out to encourage project managers to do more planning and monitoring if they wish to succeed as accomplish their initial objectives of starting their endeavours.

Clarke(1999), seemed only to have studied companies, but currently the Government through the National Construction Authority, the private sectors and also individuals have also embraced the system of applying tools and techniques used in project planning embraced and utilized by project managers to ensure a quality deliverable. Paraphrasing the Eisenhower historical dictum, he stated that plans are nothing, planning is everything. Dvir and Lechler (2004) stressed on that paraphrase and added his wisdom and emphasized that while plans are nothing, changing plans are everything. This being an eye opener to processes of the implementers, they have an obligation to update the stakeholders with the project plans so that the changes if present can be embraced and still achieve the ultimate goals.

Regional perspective on project planning

One of the most common problems that bring about project failure is ultimate planning for the same. Mochal, (2005) and Pinto, (2013) investigated that if a project deliverable and how the processes would be achieved are not clearly outlined then failure is bound to be the obvious consequence. Projects as plans are nothing if planning cannot be done well to determine how they can be actualized, projects that start without understanding the full content or the project baseline/constraints of what the project seeks to achieve are susceptible to failure. Pinto (2013) specifically examined the factors to trace the root cause of project failure to the poor initial planning phase of projects. Research shows that ineffective planning accounts for most project failure. A study conducted by Pourrastam and Ismail, (2011) identified this same problem in the Iranian construction industry. Assaf and AL-Hejji, (2006) describes the similar problem with regard to large construction projects, the same reason was found to account for project delays. A survey study to analyze the predisposing factors leading to lag in construction projects from contractors and consultants' point of view also insinuates that improper planning accounts for delays as focused in their research (Odeh & Battaineh, 2002).

In Africa delays in construction of Government funded projects delivery is a common reality, most of these projects which were started through good will to assist and facilitate Government oriented activities which would have great impact to the users. These scholars Aibinu and Jagboro (2002) in their study on construction project they concluded that delay has become endemic in Nigeria, they therefore advance the need to create awareness of the extent to which delays can adversely affect project delivery. In Kenya, it may seem much worse because of the current devolution which poses as a great disadvantage and an avenue of corruption and misappropriation of funds hence funding has never been enough despite being done in phases. Previous research works by experts such as Whittaker (1999) and Shenhar (2003) provide evidence beyond reasonable doubt that poor project planning as a key reason for project failures in developing countries planning. Studies carried out in Tanzania, Uganda, Nigeria, South Africa and Mozambique as examples of countries within the African continent as well as developing countries reveal that managerial and environmental impacts also result in unnecessary disruptions which are a disservice to the awaiting consumers of the project deliverable. As investigated by Bennett and Gordon (1999) they made an analysis that out that major causes of delays are poor project planning, poor management, information delays, design changes, funding difficulties problems, miscommunication on project worth to the stakeholders and key players.

Local perspective of the study.

In Kenya the situation may seem more worse, in all the counties, there has been information of construction projects which are termed as 'white elephants' featured in media as incomplete for many years from the time of their execution. Majorly, the projects are Government either through National or County Governments. Among the many stalled project's, they include but not limited to Health Facilities, Schools including Primary, Secondary and Tertiary levels of schools, Cattle dips, Government offices of various departments, Markets, Buses and Matatu Terminus are some of the infrastructures being worked on by the Government to improve the livelihoods of the Kenyan people as included in Vision 2030. Kenya like many other countries reformed its systems of County Government with the aim of strengthening the capacity of county authorities to effectively fulfil their responsibilities particularly in regard to urban planning, management and service delivery and improving urban institutions. Kenya as a Country has been investing resources in large amount of money to facilitate projects of which some of them are industries aimed at improving the socio-economic status, provision of jobs to the unemployed and eventually provide accessible and affordable services to Kenyans who are beneficiaries. Few people understand and embrace the power of project planning; suffice it so say, if all people would embrace the project planning power, then all the projects would be effectively and efficiently be undertaken. The projects which were Health Facilities still stand terminated in these Sub-Counties and others have even been turned to other projects which were initially not intended. Studies need to be carried out especially with the significant projects which are

Government funded to provide explanations for their low and poor outcomes. The Constituency Development Fund (CDF) Act, 2003, was the law that first established the CDF fund in Kenya. Originally, according to the Act, 2.5 percent of the nation's total revenue collection was channelled directly to the 210 constituencies through their sitting Members of Parliament (MPs). This was later revised to 3.5 percent in the 2006/7 fiscal year. The CDF Act has gone through a series of amendments over the succeeding years in order to keep up with the dynamic unfolding in the Kenyan society considered adopting the constitution in 2010.

Constituencies Development Fund Act {No. 30 of 2013}, (2013) explains the CDF fund as the funding portioned from the National Annual Budget for the infrastructural development, improvement of socio-economic state of constituencies through poverty eradication and creation of wealth. Basing on the CDF Act, Section 21 defines the types of CDF projects under the Act. Section 21(1), (2), and (3) states that: (a) The projects funded by CDF shall belong and be managed by the community members where they are instituted to ensure the first beneficiaries being the community members who inhabit the area. (b) The monies disbursed by the CDF will be used for completion of the projects or the agreed stages of construction projects but not limited to buying land and erecting construction. (c) Not but limited to technical expertise, studies, planning and design which will be excluded in the operational costs of an expedite. (9), (10) and (11). With legal provisions put in place to govern the CDF funding and projects through the Act, The CDF projects lack clear management guidelines and framework at local levels. In addition, budgetary misappropriations especially during procurement cause stalling, incompleteness and unsatisfactory completed projects where the stakeholder does not benefit. For instance, Lumiti (2008) notes that it has been a challenge in some constituencies to have success of projects due to lack of project planning. Since introduction of devolution in the country, there has been tremendous increase in the number of construction projects in different counties in Kenya. According to Gwayo (2014) he outlined in his paper that there is growing concern regarding the reasons why the requisite objectives are not achieved as per the client's expectations. Under the CDF Act, the County Government of Trans-Nzoia has responsibility in Section 37(4), The Constituency Development has instituted a team of stakeholders whose mandate is to responsibly assess the project progress. The question is whether this has been done, and if it has been done was it objectively to ensure that the gaps realized are dealt with.

Statement of the problem

Projects were started with good intentions to achieve a definite goal. For, instance the Health Facilities projects were started to achieve 'Health for All' and 'Universal Health Care'. One of the goals for 2012 (Vision 2030, 2007) was improving efficiency and effectiveness of the infrastructure development process at all levels of planning, contracting and construction. In pursuit of this goal the strategy was to strengthen institutional framework and accelerate speed of project completion. Raising efficiency and quality of projects and increasing the pace of implementation of projects so that they are completed in specified time frames (Vision 2030, 2007). Various organizations have been crying foul over the many projects whose performances fall below target and scarce resources go down the drain as outlined in his paper Muriungi, (2011). Following devolution, monies were disbursed to the baskets of counties and through these many projects in Trans-Nzoia county were initiated, majorly Health Facilities were to improve health coverage. The CDF in conjunction with County Governments approved construction plans and projects were funded to facilitate the same. Along the construction process, the projects could not be completed and that's how they got terminated and stalled without a tangible explanation to the stakeholders on what went wrong and if the problem could be mitigated or not. A project is delayed because the crucial endeavours of the projects have not been put in place. This implies that the activity was started later than expected and/or because the activity required an unexpectedly extensive duration to complete. Yang et al, (2013) made an investigation that could expose the origin of delays following a thorough analysis from start times or extended durations. As stated by Al-saggat and cited in Yang et al (2013) the examined factors identifying the causes that affect the critical path and consequently the accomplishment of the project as a definitive factor of time beyond expected period.

Schedule durations have become a significant challenge evidenced by projects superseding the defined time period as scheduled. As for costs, the projects have incurred cost over runs that cannot be defined yet the project was planned for, whatever happens that precipitates these shortcomings cannot be explained. With such analysis made, a question that stands out is whether the relevant persons from the construction docket in the ministry and private sectors have taken an initiative to understand what project planning and its significance is all about. Poor planning and control often lead to unrealistic schedules and budgets and lack of a visible milestones to assess whether the project is producing the intended deliverables and these has been investigated by Wallace et al (2004). Project managers are expected to play a significant

role to carry out the correct estimates using varied estimation methods until they conclusively determine the accurate estimates. Without accurate estimates, project managers do not know what resources to commit to a development effort. The net result is often excessive schedule pressures or unrealistic schedules that can increase project risk. Alias et al (2014) examined the factors from a project management perspective which reveal that understanding the critical success factors impacting practices of the project management concept in construction projects are more useful in decision making support especially at earlier stages of a project. For instance, a study carried out on Canadian megaprojects by Gharaibeh (2013) revealed that the problems of cost overruns contributed to unsatisfactory outcomes for project stakeholders despite the use and integration of new schedule and cost control techniques. Gharaibeh examined the major reasons behind cost overruns in two case projects and found that unclear project scope, inaccurate initial estimates of project cost up front, lack of contingency resources and misunderstanding of scope by contractors were major issues. A number of studies within the geographical boundary, the Gulf region and the findings from these studies showed that many construction projects have been affected by time and cost overruns. However, there is currently no clear indication that this problem is a major consequence of a lack of understanding of poor statement giving the exact meaning of putting activities that would lead to accomplishment of the projects. Evidence from a survey on the schedule performance of Saudi construction projects, reported that 45 out of 76 projects investigated were delayed by more than 30 percent beyond the originally scheduled completion date Assof and AL-Hajji (2006). Experts on another study revealed that more 50 percent of the sample of construction projects in UAE experienced varying of schedule deviations and cost overruns (Faridi and El-Sayegh, 2006). A question concerning the level of understanding of current practice of project planning seems relevant are planning and scheduling theories properly understood and effectively applied in practice? This is important in order to manage a more realistic plan and an integrated schedule. In other words, the application of project planning based on the knowledge and perspectives of project stakeholders is an important area that needs further assessment. Project stakeholders are identified in this research as beneficiaries (surrounding community), project managers, contractors, Public health officers/technicians, Ministry of Health and County Government of Trans-Nzoia. Such assessments are important for improving and supporting the understanding and application of project planning theories in practice to ensure successful project performance. In other words, the transfer of a project from planning (theoretical plans) to implementation (physical actions) without understanding planning theories including scheduling and related matters can result in poor performance of a project. Proper application of project planning should incorporate aspects such as understanding of, or familiarity techniques and tools, knowledge about underlying theories and concepts of planning and ability to re-organize the activities as need arises. In addition, identifying the shortcomings in the current practice of project planning requires the assessment of project stakeholders' roles and behaviour in the project planning context.

General objective

The general objective of the study is to analyze the effect of project planning on performance of CDF Health Facilities construction projects in Trans-Nzoia County.

Specific objectives

- I. To assess the effect of timely project completion on health facilities construction projects performance in Trans-Nzoia County.
- II. To examine the effect of cost estimation on health facilities construction projects performance in Trans-Nzoia County.
- III. To evaluate the effect of stakeholder's satisfaction on Health facilities construction projects performance in Trans-Nzoia County.

Research questions.

- I. What is the effect of timely project completion of health facilities construction projects performance in Trans-Nzoia County?
- II. How does cost estimation affect the health facilities construction projects performance in Trans-Nzoia County?
- III. What is the effect of stakeholder satisfaction on health facilities construction projects performance in Trans-Nzoia County?

Justification of the study.

Projects can only bring satisfaction to the stakeholders if they are completed in a timely fashion as scheduled during the planning phase. For those involved with a project, project success is normally thought of as the achievement of some pre-determined project goal as stressed on by (Nixon et al 2012). Lim and Mohamed focused in their research that project success needs to be considered from the perspectives of stakeholders and they identified two perspectives: a macro perspective, which aggregates all stakeholders and a micro perspective, which considers only those directly involved with the implementation of the ideology. Delayed completion of a project of a project has serious consequences including cost overruns and delayed use of the project which may lead to the project not meeting the set objectives. If the County fails to meet set objectives, realizing the set strategic plan may not be possible which would eventually impact negatively on the vision, mission and core mandate. This would affect the service delivery to the residents thus violating their constitutional right to better and quality services. Further, this research is important because the knowledge generated from it will assist in informing policy formulation by relevant authorities in project planning and implementation process. Stakeholders need to be identified and their power and influence mapped so that their potential impact on projects can be better understood. Appropriate strategies can be formulated and enacted to maximize a stakeholder's positive influence and minimize any negative influence. Failure to appreciate this has led to countless project failures as stated by Bourne and Walker, (2005). Poor stakeholder's management can lead to many serious problems in construction projects, such problems are poor scope and work definition, inadequate resources assigned to the projects, poor communication, changes in the scope of work and unforeseen regulatory changes all of which may be the major source of delays and cost overruns as emphasized by Yang et al, (2009). The construction industry has complexity in its nature because it contains a large number of stakeholders as clients, contractors, consultants, regulators and others. Disagreement among participating parties during the implementation of projects, within the time and allocated budget and to the expected level of quality. The performance of construction projects via the cost is a key success factor for project funding. The completion of construction projects within the initial estimate have been challenging for the construction industry. Construction work plans and budget estimates are usually prepared with a view to achieving the desired quality within scheduled completion time and cost efficiency.

According to Akintoye, (200), cost estimating is a critical component of construction contract, providing a template for stating the likely cost the individual resources being tendered for. He opined that the impact of improper cost estimate on contracting concern is significant; overestimation can result to higher tender estimates being tendered by a contractor thereby leading to rejection by the client. On the other hand, underestimation of tender estimates could equally result to the incurring of loss on the part of the contractor. Either way, overestimation and underestimation of tender estimates can create serious consequence and dent the opportunity of a contractor in a construction contract. Love et al, (2013) has also opined that cost overruns have also been attributed to misinterpretation of information during the preparation of cost estimates. Ssemwogerere, (2011) in his study has also made an observation that the construction industry is faced with numerous challenges one of which is that most of the projects are usually completed at a cost of about 25%-35% increase of the initial cost earlier budgeted thus leading to cost overruns. He further concluded that, in as much as contingency is usually included in the construction projects estimates, such projects still end up being completed higher than their initial cost estimates. This indicates that cost estimation is a complex process that includes a multitude of tasks. A major challenge in planning is realistic cost estimation. This study will be of value to policy makers, academicians and stakeholders who are prime beneficiaries once this project is a success. The policy makers will use the recommendations of the study in coming up with an effective model of involving sector stakeholders for effective work schedule. This study intends to help construction professionals, County Government of Trans-Nzoia, individual architects, Public Health Officers, Health Facility Managers, Project Managers and site agents increase satisfactory outcomes of Health Facilities construction projects completion by managing well the factors that will help their successful completion of projects without delay and realize full function as intended. They may also apply the findings of this study in ensuring planning challenges faced in project implementations are successfully mitigated. The findings of this study will be important to the public who are the beneficiaries, they are the people who ensure project sustainability through ownership and will understand the problems that hinder full performance of a project. The study will help in development of the nation in achievement of Kenya's Universal Health Care plan such that Health Facilities will be constructed satisfactorily and optimize their full function of Health services delivery with ease accessibility to all who need the services especially beneficiaries who are the members of the surrounding community where these facilities are located. According to WHO, the aim of ensuring everybody gets service delivery to Kenyans and individuals in need of it. Achievement of Sustainable

Development Goal number 3 on Health services provision among the 17 global goals set by the United Nations General Assembly that has been shortened to '2030' agenda on Health services delivery and provision. This study will also instill the principles of project management in CDF projects planning components and performance in order to ensure desirable outcome to the common citizens, provision of adequate resources to ensure that the CDF projects are effectively funded and efficiently managed to meet the set objectives.

Scope of the study.

The study will be conducted in Tran-Nzoia County. The sampled respondents will be drawn from 5 Sub-Counties within Trans-Nzoia County where these Health facilities. These are the Sub-Counties where these Health Facilities are located. Trans-Nzoia County has 78 registered public Health Facilities and within this are the expansive construction projects initiated. This is attributed to the proximity to the researcher's work place.

2. LITERATURE REVIEW

Introduction:

This chapter covers the Literature Review of the study, to relate the study with different authors on the effect of project planning on performance of health facilities construction projects. The section is categorized into how timely project completion, cost estimation, stakeholder's satisfaction, theoretical framework, conceptual framework, review of variables, critiques of the existing literature, research gap and summary.

Theoretical Framework.

Complexity Theory

A system can only be effective if the right mechanisms of operation are adhered to without causing complications in projects. Complexity theorists view projects in a different light, a project is non-linear and dynamic where the project has within itself the capacity to interact with its environment resulting in a whole that cannot be understood by analyzing its constituent parts. This perspective mandates that project team members should not be viewed mechanistically, where control, order and predictability are common. Instead, project team members should be viewed as having more engagement and influence the project team environment and processes in order to encourage learning, creativity and most importantly adaptation. In this study, complexity theory analyzes the fact that some of the Health construction projects are viewed as complex because of their nature of activities that would be carried in thereof; they are therefore in their complex and complicated nature expected to operationalize and the systems put in place. Control of their execution should be adhered to through the relevant authorities following the required guidelines to the latter.

Though there has been challenges on how to control costs effectively especially in the developing countries, organizations are also taking up the challenge to adopt modalities that have thrived in other countries though slowly but with time the issue will be dealt with. These professional disciplines cost their consultancy services so expensively that some organizations find it a challenge to engage them because of cost implications. Cost estimation is key before a project is executed. Funding agencies would always ask for a proposal with inclusion of cost estimated by a professional consultancy agency on cost matters to ensure that the project is not affected by cost overruns hence delay and incompleteness. Developing countries have had major setbacks of their projects due to limited funding budgets. China provides a good example of the global impact of major emerging countries. China has taken up global funding to many of the countries whose Governments are unable to fund for their own projects, China has taken up the advantage of funding mega projects and at the same time leave these countries in debt and eventually take control. This risk can be mitigated timely to ensure project performance following ideal planning.

Constraints Theory

Although during the planning process, the project managers are very optimistic that if there would arise constraints, then they would be minimal and easily mitigated issues related to resources, these constraints may be of greater magnitude that expected. Constraints can be from within or without the organization executing the project. McKinsey (2001) describes that the internal constraints are often caused by equipment, people and policies. The constraints theory has provided a substantially better insight into the dimensions and complexity of the problem facing work breakdown structures in project management. In constraints theory, it considers reducing the resources that are of minor implication to the project if they are not undertaken. Such mitigation ensures that the major and vital endeavors 'of great importance are not overlooked as they may jeopardize the whole implantation process. Reserve resources in terms of financial resources can be planned for prior just in case change orders ensue the activities may not face the constrain but sail through smoothly.

Resource-Based View Theory

Resources are key components for any project. Resources can be outsourced from available entities or can be provided by the organization carrying out the project if self-sufficient to do so. Stakeholders will want to be involved in projects that have the resources available and well managed. In the context of the current study, the County Government funded projects in line with project management undergo transformation. According to Daniel, W and Kiprono, P, (2016) focused in their research the core premises of the resource- based view is that organizational resources and capabilities can vary significantly across firms and that these differences can be stable. An organization can never be fully dependent on their resources however best they may be, that's why there will need to seek other opinions from professional bodies leading to outsource what is best and what will ultimately be a quality deliverable. Project inputs are in form of funds they get from the County Government in the Ministry of Finance and Planning. The funds are supposed to be implemented in order for the projects to be successfully completed. The outputs as illustrated by the project managers do not necessarily have the required competencies or perform the full activities required to promote and implement the changes that they are leading as part of their projects. Resource based theory recognizes the existence of cost factors and resources and therefore informs proper planning so as to realize proper utilization an allocation of the resources towards achieving the project objectives.

Utility Theory.

Utility is the ability of a commodity to satisfy needs or wants, this satisfaction is experienced by the consumer of that commodity. In this context, members of the community are the stakeholders who wait upon completion of these Health Facility construction projects so that they can attend form in, the distances from their residences can be shortened to a Health Facility which can offer the services that they require. Value of a project depends on its ability to fulfil their expected functions efficiently. This is in agreement that a project completed within the expected time period, will be useful in-service provision to the stakeholders as the impact of it can be evaluated.

Conceptual Framework.

Mugenda and Mugenda, (2003) made an analysis of a conceptual framework and defined it as an element of the scientific research process in which a specific concept is defined as a measurable occurrence or in measurable terms that basically gives a clear meaning of the concept.

In this study, the dependent variable is performance of health facilities construction projects while independent variables are timely completion, cost estimation and stakeholder's satisfaction as shown.

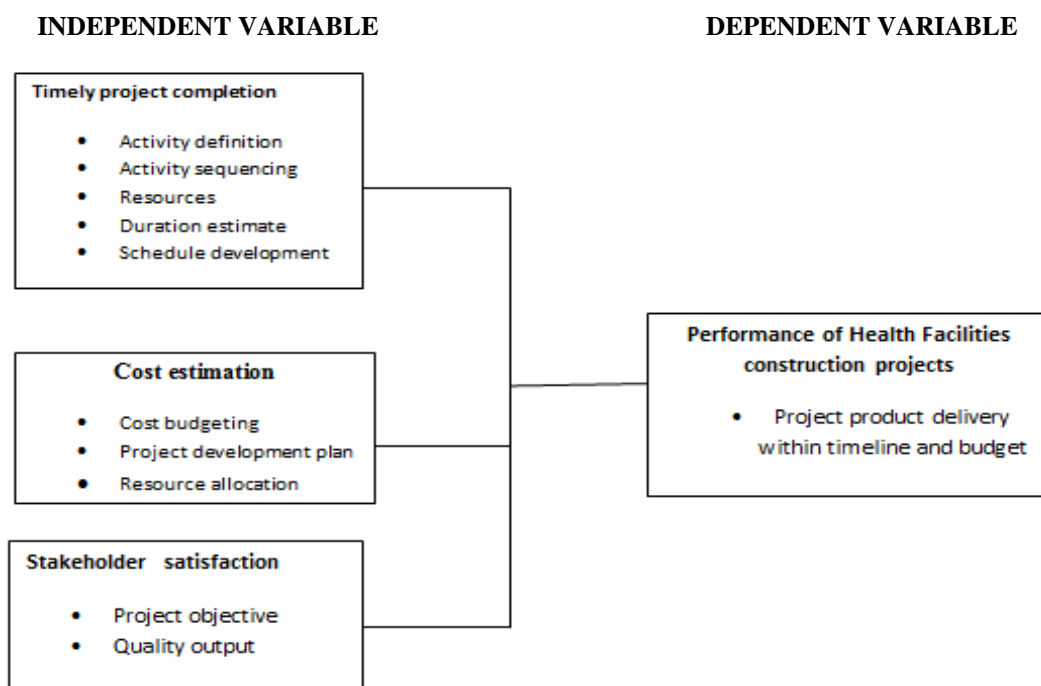


Figure 2.1: Conceptual Framework.

Review of Variables:**Timely completion of the project.**

In Kenya, the Ministry of public works which is mandated to provide and maintain projects for the public sector (2012) gives 38.60percent as the average percentage project completion rate for 2005-2011. According to MOPW, (2009) describes the overall observations providing a rationale as to wherefore slow progression as information provided for by the chief architect in the government funded projects constitute extra activities in relation to what was initially planned, the contractors having been engaged in more than one projects leading to inefficient performance of the obligations, inefficient finances provided to implement the activity and making slow decisions by the contractors this affecting operations. The observations made are true and key factors of concern that have propagated delays. The Ministry of Public works has chains of bureaucracy that affects the performance of construction projects especially in terms of payments. In Kenya, from a study carried out by Munano examined the factors and included inadequate resources, non-performance by the contractor and delayed payments as the major issues affecting project delivery in Kenya. The county government of Trans Nzoia through the ministry of lands housing, physical planning and urban development lists the following as the challenges that is affecting timely project completion, i) litigation issues; ii) limited funding; iii) lack of comprehensive legislations to guide the housing sector; iv) slow adoption and application of Appropriate Building Technology (ABT); v) weak mainstreaming of monitoring and evaluation in projects implementation; vi) rapid rate of urbanization leading to proliferation of informal settlements; vii) high cost of housing inputs; viii) environmental degradation as a result of infrastructural development; ix) lack of maintenance culture in the built- environment; x) increasing landlessness in the county; xi) inadequate capacity of the county land office; xii) uncoordinated land administration between Nairobi headquarters, the county land office and offices at the sub county level (CIDP 2013-2017). This assertion points to corruption and incompetence on the part of the county officials in ensuring that projects are implemented in an effective and efficient environment for the benefit of the residents. Vision 2030 report points out that poor infrastructure were identified under ERS as a major constraint to doing business. From her findings she recommends that; (a) NCA sets up fully equipped and staffed offices in all 47 counties to supplement the 10 regional offices currently in operation, (b) The NCA should conduct rigorous sensitization programs to educate contractors on the rationales for the NCA regulations and code of conduct and possible means of compliance, (c) The NCA should make proposals for the revision of the NCA Act in order to provide the Authority with prosecutorial power. (d) The NCA should come up with programs to fund upcoming contractors in order to enhance contractor capacity to comply with NCA regulations. What is evident is however that there have been failures from different sources and that a solution is required. The NCA has participated in the failure of major construction projects according to the defined findings. They have slacked in their structures of operation giving a loop hole for them never to be taken seriously. They have not efficiently worked on their mandate to control all the relevant stakeholders involved in the construction projects. Contractors who have been engaged in building activities seem out of control and their code of conduct wanting. Stringent measures need to be undertaken by the Government to foresee an active and serious NCA for these construction projects challenges to come to a halt or be minimal.

Cost Estimation.

Cost estimating process is an important element to be undertaken during the crucial process of planning for a project. Comprehensive information, expanded knowledge, considerable expertise, and continuous improvement are needed to obtain accurate cost estimation. Researchers and experts have different definitions for cost estimating. Outlined in his study Uppal (1997) considers that cost estimation is the determination of quantity and the predicting or forecasting within a defined scope of the costs required to construct and equip a facility, to manufacture goods, or to furnish a service. Cost estimating is evaluating all the activities of a defined project and quantitatively determining the resources that would be efficiently utilized to complete the task. In conclusion, cost estimating is the means of forecasting and foreseeing the future costs of a construction project before it actually exists. However, the final project cost will not be known until the construction is finished and facility is operated. This is because they may necessarily need to include some of the contingency allocation till the project is complete. Cost Variance $CV = \text{budgeted cost of work performed (BCWP)} - \text{actual cost of work performed (ACWP)}$. A negative cost variance indicates that the activity is running over budget (AACE 2013). Cost variance in this research is calculated by subtracting the estimated cost from the defined work packages to be undertaken from the real cost incurred when carrying out the same activities of the project.

Stakeholders Satisfaction.

According to Molwus, J, J, (2013) he defines Project stakeholders in different ways by various researchers and professional bodies. Some have argued, that some of the definitions are too constricted while some argue that the definition is too wide. According to Waghmare & Bhalerao et al. (2016); Prabhu, P.G. (2016) and Winch, G.M(2010) in particular, classified construction project stakeholders into two categories according to their relationship with the client: Internal stakeholders which are those who have legal contracts binding with the client, and External stakeholders which are those who although have direct interest in the project but not necessarily having direct contracts with the client. Outlined in his paper Winch, G.M(2010), further broke the two groups down as internal stakeholders as those grouped around the client on the demand side and those on the supply side, while external stakeholders are subdivided into private and public actors. Despite the various definitions of stakeholders available, one common factor that researchers agree with is the level of influence they can wield on a project and the comprehension of and effective management of stakeholders' demands on the project decision making process is critical to project success as emphasized by Aaltonen, K (2010). Consequently, empirical studies have admitted to the challenges and conflicts that have risen from the project's external stakeholder environment in construction projects. The majority of the research has focused on the complex make-up of the project itself, ignoring the external stakeholder context of the projects Aaltonen, K (2010). Construction projects in the public sector are often affected by major challenges with regards to project ownership by stakeholders particularly with the co-operation of local communities. Local community participation is a requirement for various development initiatives in South Africa. Various government policies and regulations exist, to support the free and fair participation of small and medium scale enterprises within the built environment, particularly with public sector projects.

Critique of existing literature.

Different types of literature have existed to justify on project performance, various research and experts have defined and explained key factors that predisposes the existence of these factors that have predisposed effective and efficient project performance as well as the challenges to attain such goals in most of these projects globally, regionally and locally Kenya being a developing country which is much worse affected. Construction time has always been used as a benchmark for assessing the ultimate outcome and efficiency of the implementing organization. It is very important to the stakeholders especially the users because they are waiting to use the product as soon as possible. Timely completion therefore as observed earlier in this study is a success factor. Research studies have come up with causes of untimely completion of construction projects as wrong resources estimation, change of projects plans in the course of the construction process, poor project planning processes whereby there is inadequate involvement of all the stakeholders associated with the project; however other studies have come up with improvement strategies of timely project completion which include but not limited to proper planning using the project planning techniques sequentially ,project leadership by use of a competent project manager with skills in project management, adequate resource estimation during cost estimation and budgeting, proper management of resources availed for the project. Kerzner, (1998) also made a criticism that project success was stated in terms of meeting the following objectives: completed within planned time, planned budget and the required quality level. According to studies carried out by Gwaya (2014) he supports that all the three objectives related to the project that do not necessarily indicate the preference of the client. After the TQM, a project was considered to be a success by not only meeting the above three objectives but also making sure that the project is accepted by the client. A successful project therefore, needs to be completed on a schedule that is satisfactory to the client. As stated by Griffith and Gibson (2012) they analyzed and found out that found that greater project planning efforts lead to improved project performance on projects in areas of cost estimation, timely completion and in addition to his findings Millis and Merken (2006), in their study they provide much evidence that a well-set cost estimation project plan plays a vital role in project success. According to Keider, (2004) he also provides evidence that lack of good project plan, the project is susceptible to failure especially in terms of budgeting because that's the avenue for prompt acquisition of relevant resources including human and materials. Researchers have advised that it is imperative for stakeholders to understand their roles and responsibilities during project processes. However, it appears that not majority of the critical stakeholders are involved right from the inception of a project. Stakeholders are the primary users of the project once completed; therefore, as a system they should be incorporated to give their views, inputs beneficial to the project and actively participate to increase their sense of ownership and actively involved in their use once the project is completed .Achievement of the project within the initial estimate have been challenging for the construction industry. It should be noted that achieving the objectives of a construction project is very crucial to the parties involved, mostly the client. Construction work plans and

budget estimates are usually prepared with a view to achieving the desired quality within scheduled completion time and cost (budget) efficiency. In his Research, Akintoye, (2000) explains that cost estimating is a critical component of construction contract, providing a template for stating the likely cost of the individual resources being tendered for. Again, on the same emphasis Akintoye (2000), opined that the impact of improper cost estimate on contracting concern is significant. He further emphasized that overestimation can result to higher tender estimates being tendered by a contractor thereby leading to the rejection by the client. While on the other hand, underestimation of tender estimates could equally result to the incurring of loss on the part of the contractor. Either way, over estimation and underestimation of tender estimates can create serious consequence and dent the opportunity of a contractor in a construction contract.

Research gaps.

Construction projects are notorious for failing to complete in time, being under budgeted, late and saddled with scope creep as well as poor communication protocols and inadequate controls around scope change management this especially pronounced in non-profit entities. Equally, there is limited literature on factors that influence successful completion of such projects in Africa and in Kenya specifically financed by CDF. The CDF fund projects whose completion is normally uncertain even with the funding of monetary resources. There are different causes for project failure or fall short of realizing into full potential. It is major and most common problem faced by many projects and become abundant on some stage of its completion. Mostly, such problems result from a lack of proper planning. Without adequate planning, it is difficult to really understand what it be to accomplish the project objectively. Planning controls a project and establishing a baseline with which to gauge progress. As stressed by Anto, (2003) he made an analysis and concluded that without planning there is no control. This is totally agreeable because a plan is nothing but planning is everything because whatever that has been planned for comes into being.

Summary

This chapter discusses the Literature review of the previous studies done by other researchers in relation to project planning on performance of construction projects. The theories discussed related to the study includes Complexity theory which argues that projects are complex systems, these systems must be sequentially followed until something tangible and of quality comes. Theory on constraints supports the constraint of all kind of resources, these constraints are the key factors which lead to untimely project completions, delays and other factors which affect the effectiveness and efficiency of projects, Resource-based view theory describes the different kinds of resources that must be made available for the projects to be executed, it these resources cannot be available from within an organization, out sourcing can be of great help to the organization

There are a number of variables which affect the performance and successful outcomes of construction projects. For a project to succeed, accurate project cost estimation, timely completion and stakeholder satisfaction should be seriously and accurately worked out. As stated by Chan et al (2014) investigated that project time management is considered one of the major contributors to project success and a serious responsibility to ensure that project managers follow it up to the later. The expert Bigelow (2011) can be critiqued as he claims that cost estimation planning is the most important yet the most undervalued element of project management. It's perceived as being the map that sets the direction for a project. Cost estimation because all the resources can never be acquired without monetary inclusion based on the planning aspect which consolidates all the others, cost estimation being among. Implementers of these projects cannot be able to show evidence of the benefits of such projects and whether these projects are actually helping to achieve better services to the beneficiaries and stakeholders.

3. RESEARCH METHODOLOGY

Introduction

Research Design.

According to Chandran (2004), he analyzed and described research design as an understanding of conditions for collection and analysis of data in such a way that combines their relationships with the research to the economy of procedures. This study will use descriptive research design. Descriptive research describes data and characteristics about the population being studied. Descriptive research answers the questions who, what, where, when and how as examined by Perez & Kyle, (2005). The research experts Mugenda and Mugenda (2003), analyzed the purpose of descriptive

research as determining and reporting the way things are as focused on the specific objectives defined in the study. This type of research attempts to describe such as possible behaviour, attitudes, values and characteristics. In this context, the research tends to lie more on quantitative approach than qualitative.

Target Population.

Target population is defined as all the members of a real set of people, events, objects to which a researcher get information for the results. The study was carried out in Trans-Nzoia County which has 78 public Health facilities where these construction projects are situated.

Sample Frame.

The sampling frame of this study was the 78 health facilities construction projects being funded by CDF. The target population will be sampled from Health Facilities In charges, the Public Health Officers working around that are of jurisdiction, the contractor on site, the Health Facilities Committee Members who are the major stakeholders and run these projects and represent the community members.

Sample size and Sampling technique.

Sampling design describes a case where a representative sample is drawn from the entire population where the elements can be generalized as considered by Kothari,(2004) in his paper. The study used Stratified sampling to subdivide the five sub-counties from the list of 78 facilities where the construction projects are located and Purposive sampling will be used. According to Kothari (2004), a method of proportional allocation was adopted in which samples sizes from each stratum was kept proportional to the sizes of the strata. The selection is illustrated below:

i = Stratum

= The proportion of the population included in the stratum i

n = Total sample size

N = population size

The total number of selected elements from stratum i is $n.P i$

Sample size determination

where e is the error for this study, taken as 10percent; p is the population reliability taken as $p = 0.5$; $Z_{\alpha/2}$ is the normal reduced variable at 0.05 level of significance and $Z = 1.96$.

Table 3.1: Summary of the sampling process.

| Respondents Category | Population (N) | Sample proportion | Sample size |
|-----------------------------------|----------------|-------------------|-------------|
| Contractors | 78 | 0.1 | 9 |
| Health Facility In Charges | 78 | 0.1 | 9 |
| Public Health Officers | 78 | 0.1 | 9 |
| Health Facility Committee members | 546 | 0.7 | 59 |
| Total | 780 | 1.0 | 86 |

$$\eta = \frac{1.96^2(0.5)(0.5)780}{0.1^2(780-1) + 1.96^2(0.5)(0.5)} = \frac{749.112}{8.7604} = 86$$

The sample size is 86 respondents.

Data collection Instruments and Procedure.

The main tool of data collection for this study was questionnaires where primary data was collected. The questionnaires were self-administered, the advantage being that they are convenient and inexpensive particularly when administered

collectively to a population with ease collection of data. The questionnaires contained structured and semi-structured questions both qualitative and quantitative data since they are easy to analyze. The questionnaire was self-administered using the give and take method.

Pilot testing.

The Key informants in the categories of respondents were used to pilot test to establish validity and reliability of the instruments. A total of 20 questionnaires were administered to 20 respondents. The information collected was analyzed to test the validity. Any questions within the instrument found to be unreliable or invalid will be altered in order to result to reliability and validity.

Validity of the Research Instruments.

Borg and Gall, (2003) analyzed that a research instrument is said to be valid if it measures what it is supposed to measure. The draft questionnaires were given to an expert in research to ascertain the items suitability in obtaining information according to research objectives of the study. This process assists in eliminating any potential problems of the research instrument and to test the validity and workability of the instrument. Construct validity deals with how questions in the questionnaires were prepared in terms of being simple, clear and precise.

Reliability of Research Instruments.

Reliability of instruments concerns the degree to which a particular instrument gives similar results over a number of repeated trials and this is as focused in their research by Mugenda and Mugenda, (2003). This will be supplemented by Cronbach's alpha 0.7 which have been proven to give a more reliable score as analyzed by the following research experts cited in Kiiru, (2015) and this assertion is also collaborated by Cooper and Schindler, (2008). The researcher used 20 respondents to pilot test from the five Sub-Counties of the study population who were randomly selected to check the questionnaire structure and the sequence, meaning and ambiguity of the questions; the results were not included in the final study.

Data analysis and presentation.

The data collected from the respondents was examined and checked for completeness and clarity. The data intended to be collected was both quantitative and qualitative. Numerical data collected was consolidated, coded, entered as per the requirement and analyzed using descriptive statistics with the software of Statistical Package for Social Sciences (SPSS) program version 21. Frequency tables with various percentages were used to present the findings and tables of mean and standard deviation obtained from SPSS will be used. Qualitative data was analyzed basing on the content matter of the responses. Responses with common themes were be grouped together into coherent categories. Descriptive statistics were used of absolute and relative (percentages), frequencies, measures of central tendency and dispersion (mean and standard deviation). Quantitative data were presented in tables and explanation given in prose. The researcher used multiple regression analysis to establish the strength relationship between the dependent and the independent variable. Multiple regression analysis was adopted to test the significant levels of one variable to the other.

The regression model is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where Y is the dependent variable (Performance of project planning of Health Facilities construction projects).

β_0 is the regression coefficient/constant.

$\beta_1, \beta_2, \beta_3$ and β_4 are the regression coefficient to be estimated.

X_1 is the timely completion

X_2 is the cost estimation

X_3 is the stakeholder's satisfaction

ϵ is an error term normally distributed about a mean of 0 and for purpose of computation, the α is assumed to be 0.

4. RESEARCH FINDINGS AND DISCUSSIONS

Introduction

This chapter presents the findings of the study. It consists of the general information of the respondents targeted in the study. The findings are presented in raw data then explanation given in prose. The analysis was based on the specific objectives of the study and the independent variables. The analyzed data is presented in frequencies and converted into percentages where it is then presented in Tables for easy interpretation.

Response Rate.

Table 4.1: shows the Response rate of the respondents as per the proportional allocation.

| Category of Respondent | Frequency | Percentage |
|-----------------------------------|-----------|------------|
| Contractor | 4 | 5% |
| Health Facility In Charge | 9 | 11% |
| Public Health Officers | 9 | 11% |
| Health Facility Committee Members | 59 | 73% |
| Total | 81 | 100% |

The Questionnaires administered were 86 and 81 were returned. The five returned belonged to the contractor category of respondents who were reported to have relocated to other counties following their stalled construction projects, therefore they could not be replaced by another person. The rest of the respondents were readily available, within reach and reliable with the information about the construction projects.

Pilot study.

To determine the reliability of the findings, Cronbach's alpha correlation coefficient was computed at 95% confidence interval for all the variables investigated in the study. Total Cronbach's alpha correlation was found to be 0.842 which indicated that the level of internal consistency for the items was 84.2%. Fraenkel and Walker,(2000) analyzed that items are considered reliable if they yield a reliability coefficient of 0.70 and above. This indicated that this study showed the existence of acceptable level of inter-item consistence.

Sub-County of the respondent.

The data was collected from within the five Sub-Counties in Trans-Nzoia County. The respondents were represented as follows;

Table 4.2: Name of Sub-Counties in relation to respondents' rate.

| Sub-Counties | Frequency | Percent | Valid Percent | Cumulative Percent | |
|--------------|------------|---------|---------------|--------------------|-------|
| Valid | Kwanza | 19 | 23.2 | 23.5 | 23.5 |
| | Cherangany | 24 | 29.3 | 29.6 | 53.1 |
| | Kiminini | 14 | 17.1 | 17.3 | 70.4 |
| | Endebess | 11 | 13.4 | 13.6 | 84.0 |
| | Saboti | 13 | 15.9 | 16.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

From the data, majority of the respondents were from Cherangany Sub-County represented by 29.6 percent followed by Kwanza 23.5 percent, Kiminini 17.3 percent, Saboti 16 percent and Endebess Sub-County represented by 13.6 percent. This implies that, in Cherangany Sub-County there is a greater a number of Health facilities construction projects in relation to other Sub-counties and moreover the area itself is larger in square kilometers in comparison with other sub-counties with increased population.

Demographic characteristics of Respondents.

Gender of the respondents.

The study involved purposive sampling technique whereby both male and female respondents were involved as shown below

Table 4.3: Gender of the Respondents.

| Gender | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 60 | 73.2 | 74.1 |
| | Female | 21 | 25.6 | 100.0 |
| | Total | 81 | 98.8 | 100.0 |
| Total | 81 | 100.0 | | |

74.1percent of the respondents interviewed were Male while 25.9percent were Female. This implies that the Male gender still dominates in matters of construction projects and the one third female gender representation as per the Constitution of Kenya 2010 is not adhered to especially in terms of the government projects.

Age of the Respondents.

Age is a basic factor in relation to handling project matters. This age distribution provides a baseline analysis to the kind of people who had been mandated to handle projects. It is thought experience by age can provide a better outcome of a project than young people who are inexperienced.

Table 4.4: Distribution of respondents by Age bracket.

| Age (bracket) | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|-----------|---------|---------------|--------------------|
| 20 - 29 years | 4 | 4.9 | 4.9 | 4.9 |
| 30 -39 years | 16 | 19.5 | 19.8 | 24.7 |
| Valid 40 -49 years | 44 | 53.7 | 54.3 | 79.0 |
| 50 -59 years | 11 | 13.4 | 13.6 | 92.6 |
| Above60 years | 6 | 7.3 | 7.4 | 100.0 |
| Total | 81 | 98.8 | 100.0 | |

Majority of the respondents were represented by 54.3percent with a mean of 2.99 in the age brackets (40-49 Years),19.5percent represented respondents between 30- 39 years,13.4percent represented respondents between 50- 59 years, 7.3percent represented by age bracket of above 60 years and the minority was represented by 4.9percent. This shows that most of the middle- aged group actively participated in projects and activities due to their maturity, availability and reliability due to their nominations by members of the respective communities and would relate these projects to their benefit and even create their names for community positions in future.

Highest level of Education.

The researcher sought to find out the level of education of the respondents because it would ultimately have an effect on the project performance.

Table 4.5: Highest level of Education.

| Education Level | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------------|-----------|---------|---------------|--------------------|
| Primary | 1 | 1.2 | 1.2 | 1.2 |
| Secondary | 43 | 52.4 | 53.1 | 54.3 |
| A level | 1 | 1.2 | 1.2 | 55.6 |
| College | 33 | 40.2 | 40.7 | 96.3 |
| Graduate degree | 3 | 3.7 | 3.7 | 100.0 |
| Total | 81 | 100.0 | 100.0 | |

Majority of the respondent's level of Education was represented by 53.1percent having attained up to secondary education, this was followed by 40.7percent who had attained college, 3.7percent were graduates with a degree, 1.2percent at A level and 1.2percent at Primary level. This implies that most of the construction projects fail to attain their level of performance as expected because of the low level of education of the project team, this shows lack of knowledge, experience and expertise towards the projects a promotion of poor performance.

Position held in the construction project.

The position held by the respondents in the construction projects was of importance to the researcher because it defines the role played by each of them and how it would also affect the project performance.

Table 4.6: Position held in the construction project.

| Category | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------------------|-----------|---------|---------------|--------------------|
| HealthFacility In Charge | 9 | 11.0 | 11.1 | 11.1 |
| HealthFacility Committee Member | 59 | 72.0 | 72.8 | 84.0 |
| Public Health Officer | 9 | 11.0 | 11.1 | 95.1 |
| Contractor | 4 | 4.9 | 4.9 | 100.0 |
| Total | 81 | 98.8 | 100.0 | |

Majority of the respondents were Health Facility Committee Members represented by 72.8percent, the Health Facility in charges and Public Health Officer represented by 11.1percent respectively, the least respondents were the contractors represented by 4.9percent. This implies that the health facility committee members are the major stakeholders and play a vital role in the influence of project performance because they represent the community that elected them and the prime users of the deliverable.

Current status of the respective projects.

The respondents responded towards the state of their particular health facilities construction projects to which they were purposively interviewed from the various sub-counties.

Table 4.7: Current state of the respective projects.

| State of the project | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------|-----------|---------|---------------|--------------------|
| Valid Complete | 16 | 19.8 | 19.8 | 19.8 |
| Ongoing | 14 | 17.3 | 17.3 | 37.0 |
| Stalled | 51 | 63.0 | 63.0 | 100.0 |
| Total | 81 | 100.0 | 100.0 | |

The findings reveal that 63.0percent of the projects were stalled, 17.3percent were on-going and the complete represented by 19.8percent. This shows that in Trans-Nzoia county, a high percentage of Health Facilities are stalled meaning that recommendations must be sought further to specifically cite tangible reasons for this inevitable existence of stalled projects, in this study stalled projects mean those that have taken more than 24 months since they were last attended to.

Presentation of findings as per the specific objectives.

Timely project completion.

The respondents were asked to rate their level of agreement with the following statements about timely project completion in relation to project planning performance. SD-Strongly Agree, A-Agree, N-Neutral, D- Disagree and SD -Strongly Disagree.

Table 4.8: Level of agreement on Timely completion.

| STATEMENT | SA | A | N | D | SD |
|--|-------|-------|------|------|-----|
| Identifying and documenting the specific activities to be performed to produce the project deliverable is key. | 50.6% | 48.1% | 1.2% | 0% | 0% |
| Activities sequence is key as it defines the logical sequence of work to obtain the greatest efficiency given all project constraints. | 44.4% | 51.9% | 3.7% | 0% | 0% |
| Resources assigned to the project affect the success of performance of a project. | 71.6% | 25.9% | 0% | 2.5% | 0% |
| Activity durations estimates help to quantify assessments of work periods that will be required to complete the activity. | 63.0% | 21.0% | 8.6% | 77.6 | 0% |
| The schedule development process must be iterated prior to start of the project. | 50.6% | 45.7% | 3.7% | 0% | 0% |
| The ability of the PMT to track planned dates versus actual dates and to forecast the effects of the schedule changes real or potential makes it useful tool for evaluating performance. | 67.9% | 30.9% | 0% | 0% | 12% |

On identifying and documenting the specific activities, 50.6percent of the respondents strongly agreed, 48.1percent agreed, 1.2percent were undecided and none disagreed or strongly disagreed respectively. This means for project planning

performance all the relevant activities must be identified and documented to produce a project deliverable. On whether activity sequence is key 44.4percent strongly agreed, 51.9percent just agreed and 3.7percent were not sure. This implies that for logical flow of project activities activity sequence is key as it ensures efficiency of the project. On assignment of resources, 71.6percent strongly agreed, 25.9percent agreed, 0percent were neutral, 2.5percent disagreed and none disagreed. This means that resources affect the success of a project, adequate resources projects success; inadequate resources failure of a project. On activity duration estimates 63.0percent strongly agreed, 21.0percent agreed, 8.6 Neutral and 7.6percent disagreed. This means majority agreed that activity duration estimates help to quantify activities required to complete a projection schedule development process, 50.6percent strongly agreed, 45.7percent agreed and 3.7percent were undecided. Majority agreed implying that well documented activities prior to execution of the project is key to facilitate the smooth process. On the ability of the PMT, 67.9percent strongly agreed, 30.9percent agreed and 1.2percent strongly disagreed. This shows that majority agreed that the PMT is mandated to track on the progress of the project against the expected schedule to ensure performance.

Multiple Linear Regression.

The study was computed at a confidence interval of 95percent against a margin error of to show the relationship between the independent variable and the dependent variable.

Coefficient of Determination (R^2)

Table 4.9: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .512 ^a | .262 | .233 | .705 | .575 |

a. Predictors: (Constant), Stakeholders satisfaction, Timely completion, Cost estimation

b. Dependent Variable: Project performance.

The study showed a positive Correlation Coefficient (R^2) of 0.512. This shows a positive correlation coefficient between project planning and performance of Health Facilities construction projects in Trans-Nzoia County. The coefficient determination (R^2) showed 26.2percent performance of Health Facilities construction projects in Trans-Nzoia County and the adjusted R^2 indicated by 23.3percent indicated how project planning affects performance of Health Facilities construction projects.

5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter presents the discussions about data findings, conclusions and recommendations on the study conducted. The key data findings focused on the three specific objectives, the and evaluate the effect of stakeholders' satisfaction on Health Facilities construction projects performance in Trans-Nzoia County.

Summary of Findings.

The summary sequentially follows the findings of the specific research objectives and the data accrued.

The assessment of timely project completion.

The study found out that majority of the respondents at 98.7percent agreed that identification and documenting the specific activities to be performed is key to produce a project deliverable. This means that all relevant activities must be identified and documented to produce a quality deliverable. About activity sequencing, 96.3percent agreed on this aspect, this shows that for logical flow of project activities, sequencing ensures efficiency and effectiveness of all undertakings. On assignment of resources, 97.5percent agreed that assignments of resources to project activities predispose project success, well assigned resources predispose a success story of a project. On activity duration estimates, 84percent of the respondents agreed to the statement, this implies that independent activities durations estimates help to quantify the expected time period the project would take ensuring approximate time duration for the whole project.

On whether schedule development process is important, 96.3percent agreed, this implies that well documented activities prior to execution of the project facilitate the smooth implementation process. On the ability of the Project Management Team to track project progress, 98.8percent of the respondents agreed, this means that tracking is an important means of evaluating the project against the set indicators of expected schedule ensuring ultimate performance. The overall assessment from the respondents is that they agreed that timely project completion is an indicator to measure the performance of Health facilities construction projects.

Conclusion

The results strongly indicate significant relationship between the effects of project planning and performance of Health Facilities construction projects. For a construction project to be termed as well performed, timely completion is among the many key aspects which can be attained when the following sequence factors are realized, when there is identification and documentation of specific activities to be performed, the activities are carried out in a sequential order to ensure efficiency, resources are well assigned to all the activities of the projects, the various activities must be allocated duration timelines which enable consolidation of the appropriate time the whole project would be working towards, the schedule development must be well documented to show the hoe the activities schedules would be undertaken and the project management team must be obliged to track the project progress to ensure that it is within the timeline schedule.

Recommendations

The study recommends the following;

The County Governments that for any public projects to be funded, the projects must be comprehensively planned, with a project management team in place constituting persons with knowledge in project management to ensure performance.

The Constituencies Development Fund Committees to be proactive in carrying out their mandate of being responsible for monitoring the implementation of projects. The National Budgetary Committee, to have a prioritized list of projects that can be budgeted for from constituencies from the execution period to completion to actualize the CDF fund as defined according to the Act 2013 as monetary allocated to constituencies for purposes of infrastructural development, wealth creation and poverty eradication at the Constituency level. The National Construction Authority (NCA) should commission/undertake research into the matter relating to these construction projects and liaise with the CDF to complete the funding as the NCA is mandated to promote and stimulate the development, improvement and expansion of the construction industry.

Areas for further Research

Following the findings of the study, the areas suggested for further research are;

A study should be conducted on other construction projects including but not limited to roads, bus terminus, open air markets, schools (ECD, Primary, Secondary, Tertiary) construction projects, Stakeholders management on the implementation of Government facilitated construction projects, performance of project management team on the positive impact of construction projects, performance of Constituencies Development Fund Committees on the implementation of Government facilitated projects.

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