

INFLUENCE OF PROJECT MANAGEMENT PRACTICES ON PROJECT SUSTAINABILITY: A SURVEY OF TRANS NZOIA COUNTY GOVERNMENT, KENYA

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Abstract: The purpose of the study was to examine the influence of Project Management Practices on Project Sustainability in Trans Nzoia County, Kenya. The specific objectives of the study were; to determine the effect of Project Planning Practices on Project Sustainability, to assess the influence of Project Resource Mobilization Practices on Project Sustainability, to examine the effect of Project Monitoring & Evaluation Practices on Project Sustainability, and to assess the influence of Community Participation on Project Sustainability in Trans Nzoia County, Kenya. The Sustainability Theory, Systems Theory, The Participatory Theory and Freirean dialogue & Society Theory are the theories that guided the study. A descriptive research design was adopted for an in-depth study of the research objectives. The research targeted one hundred and fifty nine (159) respondents who were employees of the county government in whose docket county project are vested, elected and nominated MCAs and the Chiefs in the county. The study employed a census method with the aim of ensuring that the findings of the study were thorough and detailed enough. Piloting was carried out to test the validity and reliability of the data collection instrument. The study adopted a structured questionnaire in collecting the views of the respondents on the research objectives. The one hundred and fifty nine (159) respondents comprise of 3 from the Trade, Commerce & Industry department, education department (6), Water & Environment (6), Finance (10), Health (6), Transport & Infrastructure (4), Gender, Culture, Sports, Youth & Tourism (4), Agriculture, Livestock & Cooperative development (5), Public Service Management (7), Sub-County Administrators (5), Ward Administrators (25), Elected and Nominated MCAs (39) and 39 Chiefs in all the county locations who represented the community in the study. Data was collected and analyzed using the Statistical Package for Social Scientists (SPSS) for interpretation and inference in line with the study objectives. The relationship between the dependent variable and the independent variables was established through the multiple correlation and regression analysis. The study expects the results to contribute to the management of projects in Trans Nzoia County and beyond as well as contributing towards the existing body of knowledge in Project management field as forming a basis for scholars who may want to study issues related to project management practices. The study findings revealed a statistically significant regression effect. The prediction of the dependent variable was accomplished through the F distribution test ($F = 24.576$), greater than the 5% level of significance which indicated an overall model statistically significant with Project Planning Practices explaining 81.6% (at $t \sim 1.321$) of Project Sustainability, Project Monitoring & Evaluation Practices 51.7% ($t \sim 1.343$) of PS, Project Resource Mobilization Practices 76.6% ($t \sim 2.717$) of PS, and Community Participation 76.6% ($t \sim 1.631$) of PS Trans Nzoia County Projects. Of all the predictor variables, Project Planning Practices had the highest influence on Project Sustainability at 81.86% while Project Monitoring & Evaluation Practices had the least influence at 51.7% compared to other variables. The results are to act as a reservoir to the existing body of knowledge on Project Sustainability as well as forming a basis for scholars to study issues related to Project Management.

Keywords: Project planning practices, project monitoring & Evaluation practices, Project resource mobilization, community participation and project sustainability.

I. INTRODUCTION

Background of the study

Trans Nzoia County is county number 026 of the 47 counties in Kenya. It is one of the counties under the North Rift region in the republic of Kenya. The county has over 818,757 inhabitants (KNBS, Population Census 2009) of which about 95 percent of the population live in rural areas, whose livelihoods are majorly from agriculture and related activities. Poverty levels are high in the county while academic levels are low. This implies that civic education is important when it comes to county government project community involvement. The level of information and participation of the community in the local projects is important to the county's immediate and long term development goals, sustainability, rural poverty reduction, and for the overall economic development. Project sustainability is indicated by the ability to continue to meet objectives defined in terms of benefit levels. Project sustainability can be viewed as the ability of a project to initiate a process by which benefits are maintained (Sabbil and Adam, 2015). Project sustainability is determined by many factors, among them; community participation, Financial support & resource mobilization, Monitoring and Evaluation, Leadership Capacity, and Community awareness about the different projects (Harvey and Reed, 2007; Lachapelle, 2008; Nwankwoala, 2011; Nkongo, 2009 and Mrangu, 2018). Sustainable projects are indicators of the beneficiaries being capable on their own, without the assistance of outside development partners, to continue producing results for their benefit for as long as the problem the project intended to solve still exists (Lungo, Mavole and Otieno, 2017).

Sustainability is the cornerstone of any development as well as a challenging endeavor in project management and especially in many developing countries (Hassan, 2016). Lungo, Mavole and Otieno (2017), in their study "Determinants of Project Sustainability beyond Donor Support: Case of Caritas Norway Supported Governance Project in Mansa Diocese, Zambia" quoted The International Fund for Agricultural Development (IFAD), which defined sustainability as a continuation of benefit flows with or without the programs or organizations that stimulated those benefits. This implies the sustenance of realized benefits even after the supporting organizations have long stopped offering support to the project. However, many projects fail the sustainability test despite huge financial investments sunk in them. County government projects are initiated by the county government with the community involvement since they are meant to solve social and economic challenges that bedevil the region. The success of such community targeted projects to a large extent depend on community involvement especially on the pointing out of the areas of concern that the community feels should be given priority when initiating projects aimed at being beneficial to their day to day life. According to Oino (2015) and Mrangu (2018) county governments formulate different projects and implement them every year for purposes such as providing clean water supply, improving community health, poverty reduction, human rights and peace promotion, management of natural resources, climate change adaptation and many more similar projects. These projects are aimed at providing solutions and hope to communities especially in rural areas where majority of the populace are found.

Global Perspective of Project Sustainability

Most western countries are developed economies and project sustainability challenges are expected to be to their minimal levels. This seems to be a direct opposite in the developing world. According to Adhiambo (2012) quotes the World Bank (2009) and the ILO (2012) reports that globally, development agencies are championing for capacity development, establishment of sound community development structures and ensuring active participation in projects management. However, community capacity, weak development structures and poor community participation in the development projects are negatively impacting conceiving and eventual implementation of the projects in developing countries. In India, the NERCORMP's international and local partners collaborate and prioritize issues that concern the community with a view to improve the livelihood of vulnerable groups in a sustainable manner, through improved management of their natural resource base. They implement community projects with significant contributions of local labor and materials, an act that promotes a sense of ownership and ensure sustainability by the community (Lungo, Mavole and Otieno, 2017). The UNHCR (2016) report stated that due to the well-developed systems of monitoring project implementation, most of Community Based Projects in developed countries have long life cycle. The report, however, goes further to explain that about 40 percent of these new projects fall short of life after first few years since the termination of initial fund. Most of these projects fall in marginalized areas in the developed countries, especially areas like the state of Puerto Rico in the USA.

Norman (2012) in his study on the reasons for failure of community-based projects in the less privileged parts in the developed countries, revealed lack of funds, poor project management, poor funds management, lack of government (federal and National) commitment and motivation towards uplifting the standards of the affected areas, lack of community involvement, lack of monitoring and evaluation by government officials and community leaders, lack of training and lack of government involvement or willingness to address project challenges in the concerned areas. These are challenges are similar to those experienced in the developing countries too. A study on sustainability of community project is therefore imperative and hence this study seeks to address the influence of these factors to project sustainability in Trans Nzoia County, Kenya.

Regional Perspective of Project Sustainability

According to Lungo, Mavole and Otieno (2017), a review of the food security projects in Malawi showed that participatory approach significantly impacted on the sustainability of development projects. The study determined sustainability by how much the communities were empowered by the implementation process. The findings of the study also indicated that some compromises to participatory rural appraisal (PRA) occurred on the part of the staff whose preference for some technologies negatively affected sustainability of projects. Studies in Uganda indicated that community-based approach significantly increased sustainability of the projects initiated. There was a strong linkage between participation of community members, increased level of awareness and enlightenment and inclusion of rural people in project formulation, planning and implementation to ensure project sustainability.

The Local Perspective of Project Sustainability

Baariu (2015) opines that increased citizen participation has been made a priority in the Kenyan constitution, where several policies are directly addressing citizen involvement, sensitization and education being part of many development programs. By increasingly recognizing the need to incorporate target beneficiary's inputs in development agenda in addressing social aspects of development, the citizens tend to own the projects since they are borne out of their needs as a community. This leads to them embracing the projects fully. For example, lack of involvement in the acquisition of the mobile clinic by the then MP for Rarieda in 2004 led to the local community shunning the clinic and eventually rendering the entire project a white elephant. However, besides the constitutional requirement, many community development projects that are government funded have been unsuccessful or even left incomplete. Key examples being NG-CDF projects which have indicated low level or selective community participation thereby leading to low success rate (Nyaguthii and Oyugi, 2013; Baariu, 2015).

Statement of the Problem

Projects deemed sustainable are those that are able to effectively serve expected needs by being beneficial to the population without posing any threats on the ability of future generations to benefit from them (Bukhala, 2016). The researcher goes ahead to note that Project sustainability is a key predicament since most organizational projects stall after a short duration of time, he goes further and quotes Langran (2002) who posited that Project sustainability is the ability of adopted projects to maintain their intended operations, services and benefits during the anticipated project life cycle. Despite both Local and external funds flow into the country and county in particular, poverty levels continue to nag at the millions of poor people in recipient countries due to lack of continuity of the projects after phase-out. With devolution, county government management plays a key role towards ensuring project sustainability, by also involving the community in their planning, since they are the ones who engage in the steering of projects to attain community needs. The factors that should be put into consideration by the county government when setting in motion projects in order to influence project sustainability include; budgeting for the project, community involvement, monitoring and evaluation and project management capabilities.

Trans Nzoia County is one of the 47 regions in Kenya where there are reservations on the sustainability of many projects initiated with good intentions but end up being unsustainable. The unsustainability in the community projects may be stemming from a number of factors, among them; poor organization of the county project personnel which may be due to incompetency, improper policies, unqualified personnel, inadequate resources, lack of county management support, strict rules on bureaucracy or even deliberate inaccuracies with intentions of engaging in corruption. Lungo, Mavole and Otieno (2017) in their study conducted to assess community participation in sustainable rural infrastructures in Royom Local Government area of Plateau State, Nigeria, revealed that the community had very minimal participation as it was

restricted to receiving information whose source was through consultancy services who never went on the ground to meet the situation face to face, resulting in lower levels of participation. The study therefore recommended that there was need to increase awareness and enlightenment levels concerning community participation and inclusion in the project formulation, planning and implementation to increase chances of project sustainability. In relation to Trans Nzoia County, this study therefore sought to analyze the influence of project management practices on project sustainability in the County with a bias on the project planning practices, project monitoring & evaluation, project resource mobilization practices and community participation as the main areas of concern. This was imperative since many previous studies seemed to have focused on community participation in general without specifically narrowing down to such particular variables and how they influence project sustainability. On the other hand, there is no empirical evidence from most studies on this aspects targeting Trans Nzoia County. Baariu (2015) says that this kind of study is important because it provides improved knowledge and awareness expected to provide the basis for developing project planning, monitoring & evaluation, resource mobilization and community participation at different stages of the projects for them to be sustainable.

Research Objectives

General Objective

The overall objective for the study was to assess the influence of Project Management Practices on Project Sustainability in Trans Nzoia County, Kenya.

Specific Objectives

The specific objectives of the study were:

- I. To determine the effect of project planning practices on Project Sustainability in Trans Nzoia County, Kenya.
- II. To examine the effect of Project Monitoring & Evaluation Practices on Project Sustainability in Trans Nzoia County, Kenya.
- III. To assess the influence of Project Resource Mobilization Practices on Project Sustainability in Trans Nzoia County, Kenya.
- IV. To assess the influence of community Participation on Project Sustainability in Trans Nzoia County, Kenya.

Research Questions

The study sought to answer the following research questions;

- I. What is the effect of project planning practices on Project Sustainability in Trans Nzoia County, Kenya?
- II. What is the effect of Project Monitoring & Evaluation Practices on Project Sustainability in Trans Nzoia County, Kenya?
- III. How do Project Resource Mobilization Practices influence Project Sustainability in Trans Nzoia County, Kenya?
- IV. What is the effect of Community participation on Project Sustainability in Trans Nzoia County, Kenya?

Significance of the Study

The study will be beneficial to the following:

Policy makers

The study will be a source of information to county policy makers because it will be able to point out how the variables influence project sustainability. They will obtain guidance from this study in coming up with appropriate policies that will bring in noticeable changes since they will be better placed concerning the factors that influence project sustainability in the county. This study will focus on Trans Nzoia County and hence a great importance since it is easier to capture county's specific characteristics which may be ignored when one is carrying out a research on a wide region with mixed characteristics.

Academicians and Researchers

The study will contribute to the current literature in the field of project management and will also help in further research activities to be undertaken by future academicians and researchers.

The Community

The study will help the community to know their responsibility in the projects they need and also their contribution towards sustainability of projects put up in their areas.

The County Government

The study will be useful to the county government on how to coordinate the activities in relation to the community projects they carry out to avoid wastage of resources and how to meet the needs of the beneficiaries in sustainable projects. Other county governments will also be expected to benefit from the findings of the study in trying to right the wrongs or improve on the project situation in their counties.

The National Government

The study will be useful to the national government especially in comparing the situation in other counties and advice the affected county governments accordingly.

Scope of the Study

The study focused on Trans Nzoia County with more emphasis on the department of Economic Planning, Trade, Public Works and Infrastructure, Governance & Public Service Management, Water & Environment/Natural Resources and Education departments where most county project initiation and implementation is domiciled, elected and nominated MCAs and the community representatives, in this case the location chiefs. The scope of the study was designed to consider only four major factors that influence Project Sustainability in Trans Nzoia County namely; Project Planning Practices, Project Monitoring & Evaluation Practices, Project Resource Mobilization Practices and Community Participation. These four areas of focus gave the researcher a confined area of study which was easy to manage through the research process.

Limitations of the Study

Data collection was carried out within the targeted areas well, however, a number of challenges were experienced given that the country is now going through trying moments as regards war against corruption as per the executive order and its implementation by the Ethics and Anti-Corruption Commission (EACC), Directorate of Criminal Investigation (DCI) and the Directorate of Public Prosecution (DPP). This fight against corruption led to the respondents being skeptical as to whether the researcher was an officer from these government departments hiding behind an academic research. These challenges were surmounted through the production of an introduction letter from JKUAT stating that the researcher was actually a master's student undertaking research as part of the requirement towards acquiring the Masters' qualification.

2. LITERATURE REVIEW**Introduction:**

This chapter covered literature reviewed in the past by other scholars, particularly on the concept of project management practices and their influence on project sustainability, Theoretical Framework, Conceptual Framework, Empirical and Critical Review of Literature, Research gaps and Summary.

Theoretical Framework

The study was guided by the following four theories; Sustainability Theory, Systems Theory, The Participatory Theory and Freirean dialogue & Society Theory which are discussed here below:

Sustainability Theory

Baariu (2015) states that the sustainability concept dates back to early 1970s and was founded on economic theory of environmental limit, being the brainchild of Thomas Malthus (1766-1834) & David Ricardo (1772-1823), but gained popularity through a UN branch of world commission on environmental development (WCED). Sustainable development

implies the development which is capable of meeting the needs of the present generation without having a compromise on the ability of future generations meeting their own needs (WCED, 1987; Baariu, 2015). This study sought to adopt the term sustainability in terms of the county government and the community being able to ensure that the projects or program outcome are well taken care of in order to benefit the intended population without much difficulties or compromising the needs and expectations of future generation. The theory of sustainable development states that Sustainable development is the management of the process of change, as opposed to end-goal setting with rigid outcomes. The sustainability theory recognizes that uncertainties exist and hence necessitate possibilities of flexing the ongoing processes. The theory also considers the social, political, economic, and cultural factors that are fundamental and affect the development agenda in a particular region, particularly, Trans Nzoia County. This theory was important especially in facilitating the study since sustainability is the main variable. In this theory, both the local actions of the community/beneficiaries (in Trans Nzoia County) and global view of sustainable development will help greatly in constantly thinking critically on how to fine-tune the small intricacies of the relationships that ultimately shape these communities. Three key competencies namely; contextual, behavioral and technical skills are required for better management of projects. In regard to sustainability, approach to community development, project leaders and team require contextual competence to a larger extent without excluding behavioral and technical competence (Beata *et al.*, 2014; Baariu, 2015). Looking at the focus of this study, sustainable development theorist informs us that in order to identify community needs and set priorities, there is a need to determine community preferences and balance competing interests. In this argument, people and their social institutions must be included in the community planning process to increase the probability of achieving a successful and sustainable outcome because lasting change generally comes from local involvement (Nyaguthii and Oyugi, 2013; Baariu, 2015).

Failure to assess the community capacity in relation to the projects to be rolled out in a given region leads to most of the very great programs not taking off or being sustainable even after sinking in huge sums as capital. Initiators of community development projects ought to realize the community long-term goals which should be geared towards empowering the people, increasing community participation, fostering social cohesion, enhancing cultural identity, strengthening institutional development, and promoting equity and fairness (Carol, 2001; Baariu, 2015). Sustainable development theory requires that both human and social capital are to be treated like natural resources, whose efficient and effective use provides long-term, sustainable benefit to local communities. Sustainable development theorists emphasize that capacity assessment is a crucial foundation for community participation in development projects, most critically in the project planning and resource mobilization for proper project sustainability. The study was therefore anchored on this theory in order to link it to two specific variables; Project Monitoring & Evaluation Practices, Project Resource Mobilization Practices and Community Participation in bringing out the results of the research as key indicators of Project Sustainability.

System theory.

Without touching on systems theory, project sustainability may be considered incomplete since this theory involves the analysis of multidisciplinary fields aimed at understanding a problem. The origin of this theory is not clear but many scholars link it to Ludwig Von Bertalanffy (1968), a biologist who used it as a basis for the field of study known as general system theory (Baariu, 2015). Von Bertalanffy argued that the theory provides an approach to problem solving including community development programs that ought to be considered; the systematic thinking where any living entity is to be viewed as subject to influence by many other factors both from inside and outside the region or community (Midgley, 2003; Kerzner, 2006; Baariu, 2015).

According to Muniu (2018), systems thinking imply that for the world to be understood, it should be seen in terms of complex interacting wholes that have inherent characteristics in wholeness but not in terms of properties of component parts. He goes further and implies that the wholeness in community projects can be the source of the projects sustainability which can also be brought about during the interaction of the project beneficiaries' participation activities in resource mobilization. A close look at this theory and the sustainability theory shows that both theories embrace the role of harmony between people and their nature or environment. Proponents of the system theory further posit that sustainability of projects is achieved by considering interplays of different factors inherent to the environment.

In the context of this study, interplays included the Project Planning Practices, Project Monitoring & Evaluation Practices, Project Resource Mobilization Practices and Community Participation as the determinants of Project Sustainability.

System theory is based on the idea that projects and beneficiaries do not exist in isolation. That occupants of any environment whether natural or man-made exist in an environment characterized with several and complex interrelationships (Baariu, 2015). Community development project management involves systematic and logical processes involving several interplays. The idea behind system theory as applied in this study is those individuals, groups, organizations, institutions and other organs whether natural or manmade do not exist in isolation. As environmental occupants, they exist in an environment characterized with several and complex interrelationships. The way a project operates is in itself a system within other systems which is a very crucial approach on project management. The Socio-Political, cultural, economic, technological and legal environment determines how the project sustainability can be maintained.

According to the system theory, as developed by Ludwig von Bertalanffy and others, an analytical framework should be constructed for use in describing and analyzing the many factors involved in community project sustainability (Whitehorse, 2000; Baariu, 2015). This theory will be paramount in ensuring that key factors in project Sustainability like economic stress, dynamics of intergroup relationships, community project acceptance and community understanding and support because without putting them into consideration, the projects implemented within the county may be unsustainable since the main purpose of project implementation is to serve the interests of the community within the county. Although different regions exhibit different challenges when it comes to project sustainability, most regions have several similarities in the systems and subsystems that can be employed and yield the expected results in the community for the achievement of the required project sustainability. Project challenges stem mainly from the uncovered gaps at the planning stage. This theory envisaged to guide the study in relation to the Project Planning Practices in order to seal possible gaps that may later cause challenges to project implementation and later sustainability.

The Participatory Theory

According to Mrangu (2018), there is a lot to be gained from the participation theory concerning community based projects. The researcher quiped that it is provided for in the theory that effective participation of all key project stakeholders enhances enduring project impact. Participation is the total involvement by a local population and other stakeholders in the creation, content and conduct of a program or policy designed to change the lives citizens which is built on the belief that these citizens can also be trusted to shape their own future (Jennings, 2000; Mrangu, 2018). Participatory theory is based on the mutual involvement of all stakeholders', especially the main beneficiaries of the project, decision making and capacities which can be used to direct and define the nature of an intervention where necessary. When the local community embraces the community, they own it and therefore participate in the birth of the initial idea which then is picked by the county management personnel who have the required expertise, put in writing to become a goal, break it down into steps and subsections to make it a plan and then back it with actions to implementation and eventually serving the purpose of solving the community challenges/problems. With all these steps put into consideration, project sustainability will not be a challenge since all stakeholders will have been involved in the entire process of bringing the project into being. With the community being well involved from initiation up to implementation and thereafter, the three research objectives were well taken care of by this theory. The theory was paramount in the study of the influence of Project Management Practices on Project Sustainability in Trans Nzoia County, Kenya.

Freirean dialogue & society Theory

This study was well mirrored by Freirean theory of dialogue and society. The Paulo Freire's theory of dialogue (Freire, 1970) states that dialogue is an essential factor in project implementation and eventual sustainability. Dialogue between leaders and community, is essential to the liberation and education of the masses by challenging historically held methods via the use of critical thought (Githinji, 2013). Critical thought is imperative since it raises consciousness and interrogates the belief that people ought to fall into existing routines or systems, instead of them helping in forming new and improved systems that can very well address their critical challenges particularly those to do with projects intended to improve the living standards of the present generation and those to come. Gichinji (2013) opines that by doing so, it emphasis on conscious, collaborative action giving power to the community members to have the encouragement to redefine aspects of their cognitive systems.

For projects to be sustainable, dialogue and participation of community members by not only being part of the project design and implementation, but to also be explicitly invited to the entire process, either directly or through selected

representation, in order for the communities to get involved as well as own the solutions themselves. Community involvement should be simplified in a language well understandable and in appropriate context. This study advocated for dialogue and involvement in project idea generation, implementation and sustenance in order to extract maximum benefits and community need fulfillment and hence the inclusion of this theory.

Conceptual Framework

The conceptual framework explained the relationship between the independent variables (Project Planning Practices, Project Monitoring & Evaluation Practices, Project Resource Mobilization Practices and Community Participation) and the dependent variable (Project Sustainability) as shown below;

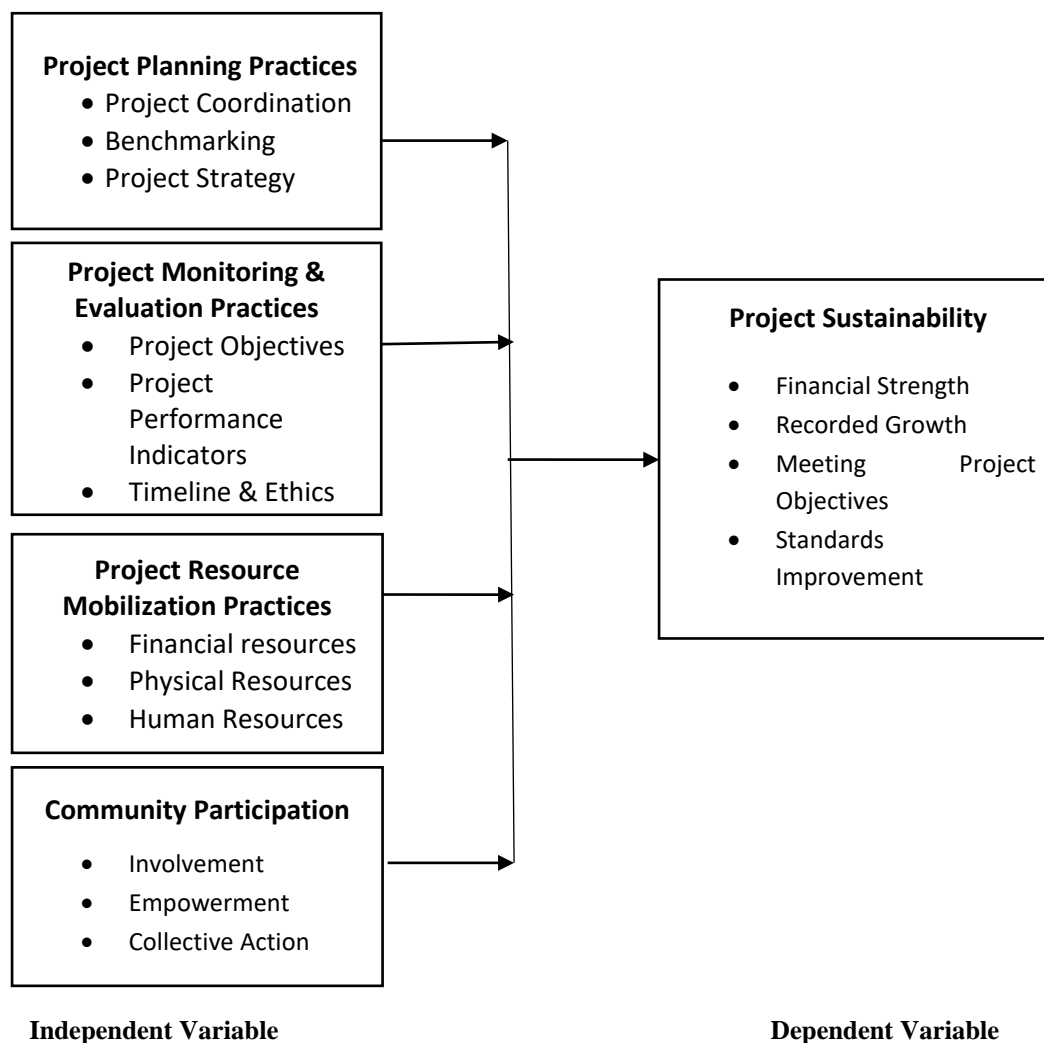


Figure 2.1: Conceptual Framework

Review of Variables

Project Sustainability

The sustainability concept in this study should be viewed within time and varying political, social and economic circumstances in Trans Nzoia County and Kenya at large. IFAD Strategic Framework (2007-2010) definition of sustainability by quipping that for the benefits to be realized, maintained and continued after the projects have been completed and put to use, it should be ensured that the institutions involved should be supported through projects. Sabbil (2015) indicated that sustainability of integrated rural development projects can be referred to as the percentage of project-initiated goods and services that are still delivered and maintained for at least five years past the termination of county government's direct involvement on further input of resources. The USAID points out that a sustainable

development program is one that is able to deliver appropriate levels of benefits for a reasonable period of time even after financial, managerial and technical assistance have been greatly slowed down or discontinued all together by the key financiers or project partners. Mrangu (2018) quotes the World Bank (1992) by defining Project sustainability as the ability of a project, throughout its valued economic life, to maintain flow of adequate level of benefits to its targets. Khan (2000) defined project sustainability is measured from the capability of a project to maintain its benefits for its projected life time. Project sustainability can be regarded in different aspects especially on the basis of various project purposes and objectives. According to the World Bank's definition in Sabbil (2015), project sustainability can be viewed as capacity of a project to continue to deliver its intended benefits over a long period of time.

It is the responsibility of the county government, in the devolved system of governance in Kenya, in collaboration with the national government to ensure that the local communities within their areas of jurisdiction are well served by having access to all the essential needs as contained in the country's constitution. This can be done through the objective of improving the livelihood of the locals either through direct participation or providing funding to supplement partner's budgetary allocation to the various projects within the county. A clear involvement of local people, as active participants and equal partners, in the county initiated projects is paramount to the sustainability of these projects because it is the locals whose concerns and experience are intrinsic to the project's success. From the level of support to the project from the community, it can be determined whether a project can be set up, how quickly and successfully it consolidates, and how it works out to meet changing needs of the target beneficiaries. Lack of communities and other stakeholders taking up ownership of projects quite often lead to community projects suffering from several huddles, i.e. financial huddles, which threaten their sustainability and more badly, termination. These huddles can be removed or reduced by involving local communities' right from the planning stage where decisions are made on the type of projects required (Williams, 2003; Sabbil, 2015). According to Odenyo (2018), project sustainability is the probability that the project will continue to meet the needs of the target beneficiaries for a long time even after the external support (county direct involvement) has been reduced or stopped all together. For sustainability of any project to be talked about positively, the community in which the project exists, the project outcomes and also the source of project funding must be mentioned. Sustainability comes out clearly in a project where beneficiaries and/or the community are able, on their own without relying on external support, from donors and other financiers to manage the project after being handed over to them. Project sustainability indicators include; projects financial strength, recorded growth, project meeting its objectives, improvement in the standards. These are the indicators that this study assessed whether the projects in Trans Nzoia County are able to experience through the study objectives set out.

Project Planning Practices

Project control process and Project planning are two very central components in project management. Planning is a decision making process that is meant to craft a desired future with ways of implementation and geared towards answering questions like what, how, by whom, with what and when. It is a process that comes before project execution (Gyorkos, 2011; Kihuha, 2018). According to Kelly and Magongo (2014), planning purposes to aid the project manager in fulfilling his primary functions of direction and control in the implementation of project components, coordination and communication with other stakeholders. Before they can affect project cost and schedule during implementation, potential problems are proactively identified at the planning phase (Kihuha, 2018). Zimmerer and Yasin (2011) posed that Project planning helps to create a benchmark for execution and proceeded in their argument that as events unfold, clear benchmarks are critical especially when used at execution to provide direction for the project team and that by taking cultural differences into consideration, a project manager has to assemble a highly competent team to help him accomplish project planning tasks. Proper project planning avoids open-ended requirements which are not advisable for project implementation but instead, in order to support sustainable project benefits, employing a project strategy that adopts phasing project activities over a longer period is plausible. From the beginning and well-articulated decision points at each project end phase, clear goals and objectives are needed during the phasing approach (Kihuha, 2018). A business case, than the exception, should be moved by an initial pilot phase that leads to a number of subsequent phases whenever there is ambiguity about local policy, capability or guarantee (Kalali, Ali and Davod, 2011; Kihuha, 2018). According to Maylor (2013), usual midterm planning horizon for development projects in terms of promoting sustainable benefits is important too, especially where behavioral and institutional transformation is predominantly included in the goals. Clarke (2011) opines that project planning teams that have developed comprehensive strategic/operational plans make the most

progress during project implementation and other project phases thereafter. This study sought to determine how these planning practices influence Project sustainability with a bias on projects in Trans Nzoia County, Kenya.

Monitoring and Evaluation Practices

Monitoring is the collection of information and eventual analysis of the same regarding a given program or intervention while evaluation is an assessment with a focus on answering related questions about a program or an intervention (Dyason, 2010; Kihuha, 2018). Monitoring and evaluation is the framework which ensures that the project has been correctly conceived and is being executed in accordance with best project management practices and within the wider framework of the organization's governance processes (CDPRD, 2014; Wanyonyi, 2016). Appropriate and timely project reporting is an important contribution to the government's governance monitoring role. M&E practices refer to the patterns that have been identified to be efficacious in improving project performance and have been accepted by practitioners as an effective way to implement M&E in projects (Webb and Elliot, 2000; Kissi *et al.*, 2019). Monitoring is a continuous process as regards the project set targets and the planned activities in the course of the planning stage of work as it is an exercise that aids in letting the management keep things on track and predict whether the operations are as per the plan or not in the course of undertaking the project. M&E practices start with baseline data collection through the gathering of basic information about a project (Estrella and Gaventa, 2010; Kissi *et al.*, 2019). The second practice of M&E deals with planning by taking in to consideration the project goal assumptions (Kissi *et al.*, 2019). According to Muzinda (2007), the third practice is the M&E structural framework target at singles out the reasons behind performance measurement and project elements and these two are related, and their underlying fundamentals. Kelly and Magongo (2004) points out that the fourth practice of the M&E is the budget which is important for the project to make a clear and adequate provision for the activities in order to ensure a proper M&E exercise. Scheduling is the fifth practice of M&E. to ensure that M&E is not carried out at the whims of the project manager, M&E should be scheduled and this scheduling also plays the role of giving the exercise the required importance (McCoy *et al.*, 2005; Kissi *et al.*, 2019). Scheduling is followed by a clear specification of the frequency of M&E data collection (Gyorkos, 2011). All stakeholders should be involved at this stage to fully embrace their participation which eventually acts as an empowerment tool to projects. The seventh practice is the ICT usage which has a very important value in the M&E practices process. According to Kelly and Magongo (2004) this is important because computers and computer-aided programs are the tools for data analysis to reduce too much paper work and guarantee efficiency in the operations. Kihuha (2018) quotes the International Fund for Agricultural Development- IFAD (2012) which relates monitoring and evaluation practices to design programs which contribute to a logical reporting which is the process that interconnects results and demonstration accountability, quantifies efficiency and effectiveness, guarantees effective resource distribution, stimulates learning that is continuous along with enhancing better decision making. Monitoring and Evaluation practices implementation are very costly in financial terms, time and human resource; however, they should not be overlooked at the beginning of the process because they are very vital for successful projects (Khan, 2013). The management of the projects together with any development partners (if any) is overly focused to the project overheads and implementation of the recommendations from the Monitoring and Evaluation (Dyason, 2010). It is from this understanding that this study aimed to assess the influence of M&E practices on Project Sustainability in Trans Nzoia County, Kenya.

Project Resource Mobilization Practices

Resource mobilization as a distinct perspective for understanding social movements, emphasizing the critical role played by material resources (John and Zald, 2001; Musundi, 2015). Resource mobilization (RM) involves all that has to be done in order to get in possession of recently discovered resources in an organization and also increasing the amounts of organization resources by using the available ones in a better way (Odenyo, 2018). RM need not necessarily be in financial terms but can take any form depending on individual circumstances, including being in-kind, labor or even local materials (White, 2011; Muniu, 2017). An organization well placed in relation to RM is an organization with a component of great value for becoming stronger day by day (Batti, 2014). With the present goings on in Kenya, where delayed resource allocation by the National government (National Treasury) to county governments has been dragged to the Supreme Court, resource mobilization for county projects is at risk. Some of the projects are funded in collaboration with the donors. However, there are also times that the donors may not be able to provide resources especially when sources dry up or experience difficulties due to unavoidable circumstances. These scenarios bring uncertainty over project funding thereby making it very difficult for the completion and eventual utilization of the projects which also leaves sustainability

in limbo. Efficient and effective utilization of resources is paramount since resources can either make or break a project. Odenyo (2018) notes that the main reason behind the need for efficient and effective utilization of resources is that they are hard to obtain and expensive and have a major influence on project sustainability. The recent global economic crisis has caused challenges in resource mobilization since the development partners have also been undergoing trying moments during the said economic crisis, which has caused an increase in competition on the environment on which the resources are mobilized. These challenges have led to the rise in development actors, vis-à-vis the scarcity of resources. Due to these challenges, RM therefore demands a mix of knowledge and skills in order to navigate the current situation. The unpredictability of continuity in project funding by the county government, especially when the county leadership changes after elections, leaves some projects to self-existence and sustenance which eventually makes it almost impossible for the carryout and maintenance of the project activities to enable them serve the indented purposes (Batti, 2014). Resource mobilization involves; acquiring financial resources, mapping human resources, acquisition of physical resources, community involvement and participation, accountability and transparency, financial accounting and management (Densford, Rosemary and Ngugi, 2018; Odenyo, 2018). Financial resources refer to funds that are required by project implementers to buy the necessary equipment and machinery required in running of projects and also meets other expenses related to the project such as salaries and wages for the workers (Miller and Lessard, 2011). Physical resources are items that take space, have value, and are used in operation of the organization. The type of physical resources greatly affects the sustainability of the projects (Schofield, 2013).

Community Participation

Participation, in the context of this research objective, is a process through which the beneficiaries/community influence and partake in the control of the project initiatives together with the decisions and resources that affect those projects (world Bank, 2009; Ngonyani, 2013). Community participation therefore refers to the contribution of the people in the area where the project is to be located in choosing and characterizing the problem and implementation of the particular project towards with an aim of solving the problem they face. Community participation is a major indicator of project sustainability because it leads to project ownership by the community (Ngonyani, 2013). For project sustainability to be attained, community projects require meaningful participation at all stages of the project cycle and ongoing external support long after project commissioning since community participation and management is instrumental as well as a prerequisite for the project sustainability in order to achieve efficiency, effectiveness, equity and replicability (Kamruzzaman *et al.* 2013; Spaling, Brouwer and Njoka, 2014). In order for the communities to be self-reliant and well empowered, their participation should be real in order to lead to ownership and commitment. Although FAO (1996) argues that it is difficult to achieve ownership and commitment unless the community considers the projects to be those able to meet their felt needs. Spaling, Brouwer and Njoka (2014) quoted Barnes *et al.* (2011) who posited that participatory approaches may not expressly lead to sustainable solutions since community decisions are limited by their understanding of the issues involved. However, their participation should be capable of stimulating village-level mechanisms for collective action and decision-making to address marginalization and inequity through elucidation of desires, priorities and perspectives of the community within a project area. These local community management limitations imply that community projects also need supportive links to other institutions for ongoing management services such as monitoring, capacity building, technical expertise, and periodic funding (Spaling, Brouwer and Njoka, 2014). Tato (2017) states that project management committees comprising the target group (community) should be set up to influence decisions relating to the service to be provided participate in the implementation of the project and give their different forms of contributions i.e. labor and materials. Although experience in project management is minimal, continuity of community participation in operation and maintenance of systems is required. There is need also for adjusting institutional arrangements to ensure that community members are comfortable and flexible in order to accommodate and adopt community level project design which gives freedom to suggest changes during project implementation period such as structures of management, responsibility assignments, or service type to be rendered.

Critique of the Existing Literature

Kiboi (2013) in his study on the factors that influence the sustainability of tree planting programs in Kinangop constituency, using purposive sampling method to obtain his sample of 70 schools, revealed in his findings that project teams' training together with sound financial administration practices by the project teams had a significant influence on the sustainability of tree programs in the Constituency. However, this study focused only on one type of project in the

entire county. Baumgartner (2010) concluded that sustainability of projects is fulfilled with a management system capable of sufficiently mobilizing resources like technology, manpower, finances, raw materials and information.

Kupeka (2013), by employing a cross sectional descriptive research survey, employed a descriptive analysis in studying the factors that affected the sustainability of housing projects in Kenya from which he revealed that manpower training and technological skills by management significantly influenced sustainability. The scope of the study was too wide and therefore caution should be called for when using the findings of this study because there is a possibility of a high error probability.

Research Gap

A perusal of available research work reveals a lack of empirical study in the area of Project Sustainability in Trans Nzoia County. The few studies available do not widely focus on Project planning practices as key determinants of Project Sustainability. It is due to this that this study will strive to cover this knowledge gap. Several scholars have however researched on Project management areas in different parts of the world, among them, Musundi (2015) on “The Influence of resource mobilization strategies on Total War against AIDS Youth Projects in Turbo Sub-County, Kenya” Although Turbo sub-County is not far away from Trans Nzoia County, the geographical as well as tribal and socio-cultural arithmetic in the two regions are very different. Mgonja and Tundui (2012) carried out a research on, “Institutional Impacts of the Local Government Reform Program on Good Local Governance in Tanzania” an area outside the country where the mode governance defers from the Kenyan structure all together. Kihuha (2018) came close by researching on “Monitoring and Evaluation Practices and Performance of Global Environment Facility Projects in Kenya, A Case of United Nations Environment Program” with the scope of the study however being at UNEP, Nairobi. Finally, Githinji (2013) carried out a research in Mutomo Sub-County, Eastern Kenya about “Factors Affecting Sustainability of Community Based Projects: A Case Study of Mutomo Sub-County, Kitui County.” From the above studies, there seemed to be a consequent lack of research on the influence of Project Management Practices on Project Sustainability in Trans Nzoia County, an area which this study set out to venture into with a belief of starting off for other scholars to follow suit in the county.

Summary

The study investigated the influence of Project Management Practices on Project Sustainability in Trans Nzoia County, Kenya. Little or no record can be found from what has been written by previous scholars on this topic that relate to projects within Trans Nzoia County and therefore making it a field ripe for this study to explore. Since Trans Nzoia County is a rural county in Kenya, unique challenges exist in relation to project sustainability especially where Trans Nzoia is a border county on the Kenya Uganda border and residents tend to enjoy services across the border depending on which side of the border has operational projects. The study adopted the sustainability theory, systems theory, the participatory theory and the Freirean theory of dialogue & Society in bringing out the theoretical and empirical review together with the formulation of the conceptual framework that guided the entire research study.

3. RESEARCH METHODOLOGY

Introduction

This chapter presented the procedure that was adopted during the research process. It details how data was collected, how it was analyzed, and interpreted. This chapter therefore explained the research design, target population, sampling design, data collection & presentation and data analysis.

Research Design

A research design is a detailed plan of how a research study is to be completed; operating variables measurement, sample selection, collection of data and analyzing the results of the study and testing the hypotheses (Wabuge, 2019). According to Yin (2002), a research design is the logical sequence that connects the empirical data, research questions and conclusions. The study adopted a descriptive research design. Descriptive research design majorly describes the state of affairs as it exists at present (Kothari 2010). Descriptive design is appropriate to obtain information concerning the current status of the situation with respect to the variable under study. Irungu (2016) avers that a descriptive design is the most preferred research design where a report is needed on things as they actually are.

Research Population

The study targeted Trans Nzoia County. The county government personnel in selected departments, county MCAs (both elected and nominated) and representatives of the community at the grassroots was the target population for the study which was intended to include senior departmental heads like the CECs and other Team leaders. Target population is the entire collection of respondents that meet the selected set of criteria (Kothari, 2010). Ngechu (2014) further defines target population as a set of all members of a real or hypothetical set of people, events or subjects to which a researcher wishes to generalize his/her results. The departments either directly or indirectly involved in county projects will be targeted. The study collected data from one hundred and fifty nine (159) respondents comprising; county personnel from eleven (11) county departments as obtained with the help of the county human resource office, elected and nominated county members of county assembly and the chiefs in Trans Nzoia County.

Sampling Frame

The sampling frame is the list of all items in the research population from which a sample will be drawn (Wabuge, 2019). While Saunders *et al.*, (2007) defines a sample as a subsection of the target population which can be used to derive inferences about the population if appropriate sample size is used. With the help of the county human resource office, the sampling frame was as shown in table 3.1 below.

Table 3.1: Sampling Frame

Department	No of Personnel
Trade, Commerce & Industry	3
Education	6
Water & Environment	6
Finance	10
Health	6
Transport & Infrastructure	4
Gender, Culture, Sports, Youth & Tourism	4
Agriculture, Livestock & Cooperative development	5
Public Service Management	7
Sub-County Administrators	5
Ward Administrators	25
Elected and Nominated MCAs	39
Chiefs	39
TOTAL	159

Sampling size and sampling technique

Creswell (2013) defines a study sample as the subjects from which study information was obtained. There is no widely recommended formula for determining the size of the sample for any study. On the other hand, sampling technique refers to methods or mode of selecting a sample from the population. This study adopted a census method since each of the respondents had unique characteristics that were very important for the study. Each respondent occupied a unique position from which the feedback went a long way in ensuring that the findings of this study were thorough and well detailed.

Data Collection Instruments

Data collection was carried out using questionnaires. A questionnaire is a potent tool that can capture valuable data from the targeted population (Wekesa, 2016). Questionnaires were used to collect data from the target population; this data was treated confidentially. A Likert-Scale type (showing respondents agreement or disagreement) was employed when designing the questionnaire, with a five point scale adopted with the lowest scale representing strongly disagree (SD) while the highest scale representing strongly agree (SA) (Likert, 1932). The researcher preferred questionnaires for this study because they allowed investigation with an ease of accumulation of data in a highly economical way. The data

collected by the questionnaire was both qualitative and quantitative, and included the respondents' opinions on the study research objectives. Respondents' opinion was advantageous because the respondents were not limited on to the questionnaire covered areas.

Data Collection procedure

Data collection was carried out for both primary and secondary data.

Primary Data

Namusonge (2009) states that primary data is the data collected for the first time for a particular purpose or study. The researcher agreed with the respondents on a questionnaire drop-and-pick later method at the respondents' offices for the collection of primary data for this study. The researcher collected primary data using the self-administered structured questionnaires capturing the research objectives to be contained in both open-ended and structured questions.

Secondary Data

According to Orodho (2005), secondary data is the data collected for other purposes in the past other than the purpose for study undertaken. The researcher assembled secondary data from scholarly journals, government documents, library books and from other forms of relevant written literature at the university library, internet and other available sources among others.

Pilot Test

The researcher carried out a pre-testing of the questionnaire on ten (10) respondents in Bungoma County (an area outside the target scope of the study), Bungoma County a county neighbouring Trans Nzoia County on the southern border. The choice of Bungoma County was strategic because it is a county that can very well aid in ensuring the validity and reliability of the questionnaire as a research data collection instrument. The pre-testing results were to be used in the adjustment of the order of questions and the language to be used in framing questions in the questionnaire in order to obtain more information from the targeted respondents. It should however be noted that the research instrument, as fine-tuned by the supervisor, met the test requirement and needed no adjustments.

Reliability of Research Instruments

Reliability analysis measures the consistency of the research instrument to be used in the study, essentially to reflect the overall reliability of the study variables (Cohen and Sayang 2010; Wekesa, 2016). Scores obtained in this approach are correlated with other scores obtained from other items in the instrument (Kamanga, 2016). A computation to test internal consistency and determine how items correlate among themselves was carried out using the Cronbach Alpha Coefficient. Cronbach's alpha is the most commonly used measure of reliability for scored data.

Validity of Research Instruments

Validity of a research instrument illustrates the degree to which results obtained from the analysis of data actually represent the phenomena under study (Kothari, 2010). Wambui (2018) defined validity as the accuracy and meaningfulness of inferences based on research results. Validity can therefore be said to be the point to which an instrument can measure what it is supposed to measure. Validity considers the extent an instrument asks the right questions relation to the required accuracy and the degree to which obtained data analysis results represents the phenomenon under study. The study conducted a factor analysis to extract the items that were fit for the study. Factor analysis is a method of data reduction by seeking underlying unobservable (latent) variables that are reflected in the observed variables (manifest variables). Beaumont (2012) opined that correlation matrix is the point for factor analysis purposely for checking the strength of the inter-correlations among the factors/variables.

Data Processing and Analysis

Data collected was analyzed and presented using descriptive statistical measures such as frequency tables, percentages, mean, and standard deviation. The collected data was also analyzed and presented using Statistical Package for Social Sciences (SPSS) version 23. Inferential statistics methods used included; Multiple regression analysis, Analysis of Variances (ANOVA) and correlation analysis to determine the relationship between the predictor variables (Project Planning Practices, Project Monitoring & Evaluation Practices, Project Resource Mobilization Practices and Community

Participation) and the dependent variable (Project Sustainability).The analyzed data was then presented using a multiple regression model shown below:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$$

Where:

Y:	Project Sustainability
$\beta_1, \beta_2, \beta_3, \beta_4$:	Regression Coefficients
X_1 :	Project Planning Practices
X_2 :	Project Monitoring & Evaluation Practices
X_3 :	Project Resource Mobilization Practices
X_4 :	Community Participation
β_0 :	Constant
ϵ	Error Term

4. RESEARCH FINDINGS AND DISCUSSIONS

Introduction

This chapter discussed the research findings and there presentation. Based on the study objectives, the chapter presented the analyses and findings of the collected data. The descriptive and inferential statistics were used in analysis of data. The response rate, the results of the reliability analysis, the regression and correlation results and finally the hypotheses testing results were also included in this chapter.

Pilot Results

Pilot test on the reliability and validity of the research instrument was carried out and the following results recorded;

Reliability of Research Instruments

For purposes of measuring the reliability of the research instrument, a computation to test internal consistency and determine how items correlate among themselves was carried out using the Cronbach Alpha Coefficient. According to Cohen and Sayang (2010), the most acceptable alpha coefficient is 0.70 and above since values range from 0 to 1. This study considered all variable Cronbach Alpha coefficients to be sufficient because they were above the threshold of 0.7 as shown in the table below;

Table 4.1: Reliability Analysis

Variables	Cronbach Alpha	Cronbach Based Standardized items	Number of items after elimination
Project Planning Practices	0.813	0.829	5
M&E Practices	0.723	0.725	5
Project Resource Mobilization Practices	0.743	0.753	5
Community Participation	0.711	0.711	5
Project Sustainability	0.701	0.701	5

The table above indicated the reliability level of pilot study using Cronbach alpha. The Cronbach alpha for Project Planning Practices, M&E Practices, Project Resource and Mobilization Practices, Community Participation and Project Sustainability had internal consistence that met the required threshold therefore considered reliable for subsequent analysis.

The overall reliability statistics table was as shown below;

Table 4.2: Reliability Statistics

Cronbach's Alpha	Based on	Standardized
Cronbach's Alpha	Items	N of Items
.738	.741	5

Validity of research instruments

The inferences based on the analyzed data were accurate and meaningful because data was concluded to be a true reflection of the variables. The research instruments for the study were rated according to their effectiveness in sampling significant aspects of the study purpose and fulfilment of the study objectives. The study computed the Kaiser-Meyer-Olkin (KMO) measure of sampling on all the variables as indicated in the Table 4.3 below;

Table 4.3: KMO and Bartlett's Test

Variables	Kaiser-Meyer-Olkin of Sampling Adequacy	Barlett's Test of Sphericity Approx Chi-square	df	Sig
Project Planning Practices	0.565	69.377	26	0.000
M&E Practices	0.524	59.763	38	0.005
Project Resource Mobilization Practices	0.520	136.279	75	0.000
Community Participation	0.448	45.728	38	0.008
Project Sustainability	0.766	87.59	26	0.000

The test on Kaiser-Meyer-Olkin of sampling adequacy indicated that all the variables i.e. on Project Planning Practices, M&E Practices, and Project Resource Mobilization Practices, Community Participation and Project Sustainability had values above 0.5 as recommended by Kaiser (1974). Since all variables had values above the recommended KMO sampling adequacy threshold, no items on variables needed revising and therefore none was revised, reformatted or more questions added to any variable to make it viable.

Descriptive statistics

Response rate

The researcher distributed 159 questionnaires to the respondents, 151 of them were satisfactorily filled and returned, 6 questionnaires, though returned, were not fully filled and were considered inadequate for inclusion while 2 questionnaires were not returned. This summed up a response rate of 95% which was considered admissible for research purposes. The researcher resolved to adopt a significant level of 5% for data analysis purposes. The table below represents the response rate.

Table 4.4: Response Rate

	Frequency	Percent
Filled and Returned	151	95
Partially Filled	6	4
Not Returned	2	1
TOTAL	159	100

Respondents Gender

Data on the respondents' gender was collected and tabulated as shown below;

Table 4.5: Respondents Gender

Gender	Frequency	Percent
Female	76	48
Male	83	52
Trans-Gender	00	00
Total	159	100

Table 4.5 above presented the information from the data collected on the gender of the respondents. 52% of respondents were male, 48% were female respondents with no Trans-gender respondents. From the table above, the respondents gender was almost equal with male respondents being higher by only 4%.

Age of Respondents

The respondents' age findings were tabulated as shown in table 4.6;

Table 4.6: Respondents' Age

Age bracket (Years)	Frequency	Percent
20 – 29	53	34
30 – 39	67	42
40 – 49	24	15
50 - 59	10	6
60 and Above	5	3
Total	159	100

The study found that respondents aged between 30 and 39 years were the majority at 42%, followed by 34% of the respondents who were aged between 20-29 years, 15% were the respondents aged between 40 and 49 years, 50-59 years of age constituted 6% with those 60 and above year olds at 3%. With majority of the personnel being on the lower age bracket, the continuity of the departments and project sustainability is somehow secured ceteris paribus.

Education Level of the Respondents

Table 4.7: Respondents Education Level

Category	Frequency	Percent
KCSE	8	5
Certificate	26	16
Diploma	33	21
Degree	68	43
Postgraduate	17	11
Others	7	4
Total	159	100

Since the research was on sensitive matters that required proper understanding of imperative facts and project phases and proper planning, the research found it necessary to include the education levels of the respondents. The data on education levels of the respondents was then presented in table 4.7 as shown above. From the table on education level above, majority of the respondents had degree and diploma qualifications, 43% and 21% respectively. Certificate holder respondents constituted 16% while those under the postgraduate qualifications were 11% of the respondents with 5% being KCSE certificate holders and 4% were holders of unspecified qualifications, probably secondary or primary drop outs. From the qualifications, the researcher concluded that the respondents had the required levels of academic qualifications to execute the necessary duties assigned to them in relation to project planning all the way to sustainability.

Employees Period of Service

Table 4.8: Respondents' Period of Service

Period in Years	Frequency	Percent
0 -2	27	17
3 -5	53	33
6 -8	79	50

Table 4.8 above showed the period in years that the respondents have been in service in their respective positions or departments. The period of service was included in the study because work experience of the respondents influence performance or service delivery hence a direct influence on Project sustainability. With the Majority of the respondents having served in the same position or department for between 6 and 8 years, constituting 50% of the total population, 3 to 5 years were 33% being the second largest; with 17% of the respondents having been in service for the shortest period.

Analysis of Project Sustainability

Collected data on Project Sustainability was presented in table 4.9 as below;

Table 4.9: Project Sustainability

Item	SD %	D %	N %	A %	SA %
Stakeholders feedback is well captured and analyzed for implementation and sustainability	5	7	10	40	38
There is enough community involvement and awareness with regard to county projects and there implementation	3	8	9	48	32
Enough budget is allocated to cover all the project phases and overall the projects have a good financial health.	10	6	15	34	35
Technical skills are highly valued and are a huge determinant on Project Sustainability.	2	2	5	26	65
Project training need analysis is done to ensure the right skills are acquired to manage the project activities after completion and handover.	1	1	9	35	54

From Table 4.9 above, on Project Sustainability (the dependent variable), 5% strongly disagreed as to whether the stakeholders feedback is well captured and analyzed for implementation and sustainability, 7% disagreed, 10% of the respondents were neutral. 40% of the respondents agreed that truly, the Stakeholders feedback is well captured and analyzed for implementation and sustainability. 42% strongly agreed to this statement. When asked about whether there is enough community involvement and awareness with regard to county projects and there implementation, 3% strongly disagreed, 8% disagreed, with 9% of the respondents remaining neutral. 48% agreed while 32% strongly agreed as to whether the There is enough community involvement and awareness with regard to county projects and there implementation. As to whether enough budget is allocated to cover all the project phases and overall the projects have a good financial health, 10% strongly disagreed, 6% disagreed, and 15% of the respondents remained neutral. 34% agreed

while 35% strongly agreed that indeed enough budget is allocated to cover all the project phases and overall the projects have a good financial health. In relation to whether the Technical skills are highly valued and are a huge determinant on Project Sustainability, 2% strongly disagreed, 2% disagreed, with 5% of the respondents remaining neutral. 26% of the respondents agreed that the technical skills are highly valued and are huge determinants on Project Sustainability with 65% of them strongly agreeing that indeed the technical skills are highly valued and are a huge determinant on Project Sustainability. The final question was as to whether Project training need analysis is done to ensure the right skills are acquired to manage the project activities after completion and handover, where 1% strongly disagreed, another 1% disagreed while 9% elected to remain neutral. 35% of the respondents agreed while 54% strongly agreed that Project training need analysis is done to ensure the right skills are acquired to manage the project activities after completion and handover.

In summary, data collected, analyzed and presented in table 4.9 above on Project Sustainability is a reflection of the views of the respondents according to the questions posed to them. A total of 78% of the respondents either agreed or strongly agreed that the Stakeholders feedback is well captured and analyzed for implementation and sustainability, leading to a conclusion that Trans Nzoia County captures and analyzes stakeholders feedback well for implementation and sustainability. This conclusion was reached because, only 12% of the respondents returned a negative opinion as regards this statement with 10% remaining neutral thereby not making it possible for the researcher to know exactly why they opted to be indecisive. On the other hand 80% of the respondents agreed/strongly agreed on whether there is enough community involvement and awareness with regard to county projects and there implementation. Only 11% of the respondents either disagreed or strongly disagreed, leaving to a conclusion that enough community involvement and awareness with regard to county projects and there implementation is observed. For proper project sustainability and financial health of the projects to be upheld, it was necessary that the researcher finds out on issues budgeting, 69% of the respondents agreed/strongly agreed that the enough budget is allocated to cover all the project phases and overall the projects have a good financial health. However, a massive 31% of the respondents strongly disagreed, disagreed or remained neutral which lead a conclusion that there is need for investigation on the budgeting aspect in this regard. Given a high number of respondents returned a positive verdict on whether technical skills are highly valued and are a huge determinant on Project Sustainability, the researcher concluded that technical skills are highly valued and play a big role in project sustainability. Finally to the respondents, there was no reason whatsoever not to conclude that project training need analysis is done to ensure the right skills are acquired to manage the project activities after completion and handover, since a whopping 89% of the returned verdict was in affirmative with 9% of the respondents remaining neutral while a paltry 2% of the respondents shared equally between those who strongly disagreed and those who disagreed.

Analysis of the specific objectives

Project Planning Practices on Project Sustainability

The findings on the influence of Project Planning Practices on Project Sustainability were presented in Table 4.10 as shown below;

Table 4.10: Influence of Project Planning Practices on Project Sustainability

Item	SD %	D %	N %	A %	SA %
Project planning processes are usually well detailed and utilized	3	6	12	47	32
County project planning team ensures that projects are designed to be flexible in order to achieve better project results	7	14	10	39	30
Project planning ensures developed control mechanisms to keep the project on track	6	12	10	48	24
Planning process support decision making during project implementation	3	1	5	45	46

Table 4.10 above presented the respondents' feedback on whether Project planning processes are usually well detailed and utilized. 3% of the respondents strongly disagreed, 6% disagreed, while those that remained neutral were 12%. 47% of the respondents agreed that Project planning processes are usually well detailed and utilized while 10% strongly agreed to this statement. On whether the County project planning team ensures that projects are designed to be flexible in order to achieve better project results, 7% of the respondents strongly disagreed, 14% disagreed while 10% of the respondents elected to remain neutral on the statement. 39% of the respondents agreed that it was true County project planning team ensures that projects are designed to be flexible in order to achieve better project results with 30% strongly agreeing. On whether Project planning ensures developed control mechanisms to keep the project on track, 6% of the respondents strongly disagreed with the statement, 12% disagreed that Project planning ensures developed control mechanisms to keep the project on track, and 10% of the respondents remained neutral. 48% of the respondents agreed that Project planning ensures developed control mechanisms to keep the project on track; while 24% of them strongly agreed that indeed Project planning ensures developed control mechanisms to keep the project on track. As to whether the Planning process supports decision making during project implementation, the findings were that 3% strongly disagreed, 1% disagreed while 5% of the respondents decided to remain neutral. With majority of the respondents; 45% agreeing and 46% strongly agreeing that Planning process support decision making during project implementation, it was evident that a convincing majority of 91% returned a positive verdict on the statement. It was however worthy noting that as regards to whether County project planning team ensures that projects are designed to be flexible in order to achieve better project results, 31% of the respondents had either a negative feedback or remained neutral. This was a rather high percentage worth investigation. Regression Results for Project Sustainability .In order to explore the indicators of the dependent variable (Project Sustainability), independent variables in the model were used. On the other hand, the study used the co-efficient of determination (R-Squared) to identify the variance to which the independent variables affected the dependent variable in the mode. The larger the value of R squared, the better and reliable the model.

Table 4.11: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.941 ^a	.885	.888	.154

a. Predictors: (Constant), Project Planning Practices, Project Monitoring & Evaluation, Project Resource Mobilization Practices and Community Participation

The overall contribution of Project Planning Practices, Project Monitoring & Evaluation, Project Resource Mobilization Practices and Community Participation accounted for 88.5% ($R^2 = 0.885$) of the predictability on Project Sustainability as depicted in table 4.11 above, the difference of 11.5% to 100% was represented by other variables not included in this study, contributed to the variations in the dependent variable, Project Sustainability.

Relationship between variables

In order to measure/test the nature of relationship between the independent variables and the dependent variable, the regression equation was used. Predictions were then made about the collected data from the research analysis and presented in the ANOVA table below;

Table 4.12: ANOVA

ANOVA ^a					
Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	806.216	4	100.777	24.576	.0000 ^b
1 Residual	733.340	147	4.585		
Total	1539.556	151			

a. Dependent Variable: Project Sustainability

b. Predictors: (Constant), Project Planning Practices, Project Monitoring & Evaluation, Project Resource Mobilization Practices and Community Participation

The F-test from the analysis was provided by the ANOVA table above for the null hypotheses that the specific variables significantly had a relationship to the explained/dependent variable; Project Sustainability in Trans Nzoia County projects. This was clearly reflecting that the results negated the null hypotheses and was therefore advisable to reject the null hypotheses at $F = 24.576$, $p < 0.001$.

5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Chapter five of the study presented the summary, conclusions and recommendations from the analysis of the data. The chapter therefore provided the summary of the findings, conclusions, recommendations and the suggestions on the areas for further study.

Summary

The data analysis results reflected that the independent variables (Project Planning Practices, Project Monitoring & Evaluation Practices, Project Resource Mobilization Practices and Community Participation) had a positive and significant influence on the dependent variable (Project Sustainability). Although there were some respondents who returned the neutral verdicts in a number of questions/statements, overall the predictor variables in general convincingly proved to be fit enough for predicting the dependent variable (Project Sustainability). In general therefore, the predictor variables (Project Planning Practices, Project Monitoring & Evaluation Practices, Project Resource Mobilization Practices and Community Participation) predicted the dependent variable (Project Sustainability). The independent variables of the study had a positive and significant influence on the dependent variable with a remainder small ratio of the unexplained variation/influence to the dependent variable that might have been due to other factors or variables not covered by this study.

Influence of Project Planning Practices on Project Sustainability

The respondents' feedback on the Project Planning Practices objectives' influence on Project Sustainability in Trans Nzoia County projects reflected the highest influence on Project Sustainability compared to other predictor variables. This led to the researcher observing that for proper project sustainability, project planning practices are major determinants, and so the county ought to really plan well and put in resources at the planning stage because these are the initial stages that will influence the other project phases that follow. The correlation statistics results from the analysis depicted a positive relationship between the predictor variable (Project Planning Practices) and the dependent variable (Project Sustainability).

Conclusion

From the research analysis results, project sustainability is greatly influenced by the study variables, although at different levels of magnitude, as indicated by the correlation and regression results above. However, with almost forty per cent of the respondents not being convinced that community awareness and sensitization on project implementation is always prioritized in the county, there was need for the county personnel in charge of project implementation to put in more effort in order to get the community be involved in the project implementation processes in order for the community to own and support the projects to increase chances of their survival and sustainability. Otherwise the other variables only seemed to require just a bit of attention in order to deliver results hitchlessly or with minimal hitches. From the analysis, the Project Planning Practices variable was voted as the one with the highest influence on Project Sustainability although more effort is required. The county seems to be performing well with regard to the project implementation although some respondents were forced to mention that the number of projects implemented in the county was too minimal.

Recommendations

The research findings and conclusions in this study indicated a generally positive verdict of the predictor variables (Project Planning Practices, Project Monitoring & Evaluation Practices, Project Resource Mobilization Practices and Community Participation) on the predicted variable (Project Sustainability). However, since not all respondents were convinced about the positives, it is paramount to make the following recommendations with regard to the gaps in the analysis results: that the county leadership, and in particular relevant departments, should ensure that the County project planning team ensures that projects are designed to be flexible in order to achieve better project results. This is so because

over a third of the respondents were not positive about this aspect when questioned. Secondly; the variable community participation had higher, though not alarmist, neutral or disagreeing respondents on whether; gatherings are organized to collect views on appropriate projects for the community; Community views are incorporated in the projects implemented in the county and whether there is a sense of collective action by the county and the local community as regards project implementation. Due to this observation, the researcher recommends that there is need to put measures in place to ensure that the community within whose locality the projects are located should be involved in all phases of project implementation phases in order to increase chances of project sustainability through making the community feel part and parcel of the projects plus letting them own the projects through giving their contributions/opinions proper consideration during decision making sessions.

Areas for further Research

Since no single study can exhaust any research topic, a number of areas come up during the research period which makes it imperative that a recommendation for further study is necessary by other future scholars. In this regard, the researcher suggested that a further study be carried out by other scholars on other variables affecting project sustainability in Trans Nzoia County. This study only focused on Trans Nzoia County which was in itself a limitation because it could not be representative enough on the basis of project sustainability in devolved units, it is recommended that using the same variables, a similar study be carried out in a number of different devolved units and comparisons made for concrete decision making on the project sustainability front since taxpayers' money is being used. Finally, by engaging in the study, the researcher came face to face with different aspects of challenges he looks forward to sharing with other scholars where possible.

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