MONITORING AND EVALUATION DRIVERS, TYPE OF PROJECT LEADERSHIP AND PERFORMANCE OF HORTICULTURE PROJECTS SUPPORTED BY KENYA NATIONAL FARMERS FEDERATION, NAKURU COUNTY, KENYA

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BY

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DECLARATION

This doctoral thesis is my original work and has not been presented for award of degree in any other university.

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DEDICATION

This doctoral thesis is dedicated to my son Collins, my parents, Samuel Murei, Late Mother Esther Cherono my brothers Simon, Late Peter, John, my sisters, Hannah, Susan, Linah and Rose for their invaluable support, and great desire to see me through great heights of academic excellence.

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LIST OF ABBREVIATIONS AND ACRONYMS

AGM	Annual General Meeting
AIDS	Acquired Immune Deficiency Syndrome
ANOVA	Analysis of Variance
APR	Annual Progress Report
CD	Capacity Development
CDF	Constituency Development Fund
CEO	Chief Executive Officer
CIG	Common Interest Group
CIPP	Context, Input, Process, Product
CLRM	Classical Linear egression Model
CPM	Critical Path Method
CT	Contingency Theory
DPME	Department of Planning Monitoring and Evaluation
CSFs	Critical Success Factors
CPFs	Critical Performance Factors
FAO	Food Agriculture Organization
FC	Farmers Congress
FGD	Focus Group Discussion
GOK	Government of Kenya
GST	General System Theory
IFAD	International Organization for Agricultural Development
KENFAP	Kenya National Farmers Producers
KENAFF	Kenya National Farmers Federation
KNFU	Kenya National Farmers Union
MED	Monitoring and Evaluation Directorate
M & E	Monitoring and Evaluation
MfDR	Managing for Development Results
MR	Managing Results
NACOSTI	National Council of Science Technology and Innovation
NDPC	National Development and Planning Commission

NFA	National Farmers Assembly
NGO	Non-governmental Organization
NIMES	National Integrated Monitoring and Evaluation System
PERT	Project Evaluation Review Technique
PMB	Project Management Book
PMDM	Project Management Decision Making
PM & E	Participatory Monitoring and Evaluation
PMI	Project Management Institute
PMIS	Project Management Information System
RBM	Results Based Management
R & D	Research & Development
SARS	South Africa Service Revenue System
SFS	Special Federation Summit
SPSS	Statistical Package for Social Scientists
ST	System Theory
UNDP	United Nations Development Program

ABSTRACT

Monitoring and evaluation (M & E) and type of project leadership are some aspects that contribute to high project performance. This study was meant to identify the influence of monitoring and evaluation drivers and type of project leadership on performance of horticulture projects supported by Kenya National Farmers Federation (KENAFF) in Nakuru County. Seven objectives guided the study .The first four objectives determined the influence of each of the independent variables under M &E drivers on performance of horticulture projects namely; M & E culture, human resource capacity for M& E; monitoring and evaluation budget and utilization of M & E information. The fifth objective sought to establish the combined effect of M & E drivers on performance of horticulture projects. The sixth objective examined the influence of type of project leadership on performance of horticulture projects. The seventh objective sought to determine the moderating influence of type of project leadership on the relationship between M &E drivers and performance of horticulture projects. Pragmatic paradigm guided the study employing Cross Sectional, Correlation descriptive survey design. The study was guided by Interdependency theory, System theory, and Contingency theory. The study population comprised of 28 groups implementing horticulture projects, out of which a sample of 15 groups was drawn using purposive, cluster, and proportionate sampling. Respondents for the study were 154, out of which 135 were drawn from the farmers' groups, 19 from KENAFF secretariat. Collection of data was done using a structured questionnaire of Likert type for farmer groups and KENAFF staff. Interview schedule and Focus Group Discussions were used to triangulate study findings. Descriptive statistics was used to analyze data using means standard deviations, frequencies and percentages. Pearson's Product Moment Correlation Coefficient(r) was computed to test the influence of M &E drivers and type of project leadership on performance of horticulture project. Hierarchical Regression (R^2) analysis indicated that the influence of the independent variables were significant at .05 significant levels. F Test was used to test the hypotheses and established that M & E drivers separately and jointly influence performance of horticulture projects. It was also established that type of project leadership had a moderating influence on the relationship between M &E drivers and performance of horticulture projects. However the influence of type of project leadership on performance of horticulture projects on its own is not as significant as when introduced as a moderator. The study recommends that issues of M & E need to be factored in a the design stage &E be part of the organization mission and vision as this will attract management support including allocation of sufficient resources. There is need to carry out a study to establish the actual influence of specific M &E drivers in other sectors beyond horticulture. A study using longitudinal design is recommended to establish the long term effect of M &E drivers. There is need to also carry out a study on the influence of evaluation results and their usability in gauging project performance.

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Organizations focusing on rural farming globally have promoted the development of farmer-owned institutions as a new agenda especially horticultural farming. This recent development has depicted the many challenges encountered by farmers' cooperatives in the sector of small and medium-scale farmers' enterprises(Sangole, Kaaria, Njuki & Mapila,2014).New initiatives such as adopting project orientated approaches give hope for a renewed, member-owned, community-committed and independent agricultural farmer movement. These associations among farmers are viewed to be instrumental in agricultural transformation and boosting productivity while maintaining high performance (Prince et al., 2013).

In Africa, and for some decades, farmer federations have been playing remarkable roles towards growth and development of national economies in many countries such as Nigeria, South Africa, Kenya and Uganda working with organized farmers' groups (Saliu & Ijo, 2009).Through implementation of various projects such as dairy, mixed farming and horticulture, farmer associations have been contributing to empowering farmers. In order to provide services and products, the federations have initiated various projects to meet the needs of their members. However, empirical research indicates that despite engaging in projects to serve their members federations are faced with various challenges (Saliu & Ijo, 2009). In a study conducted in Nigeria, it revealed that famers' cooperative organizations are involved in agricultural development and that factors influencing their performance include income, experience in farming, leadership training and membership size (Yamusa & Adefila, 2014).In another study of why projects fail, (Zuofa & Ochieng, 2014) observes that lack of mechanism to monitor progress have contributed to poor performance of projects coupled with weak leadership. The groups run by farmers in Kenya play a significant role in the promotion of agricultural productivity mainly by providing credit access to farmers, value addition and linkage to markets especially for those involved in horticulture production. In recognition of the decrease in agricultural performance, the Kenya government has come up with a strategy to revitalize agriculture.

This was later strengthened through the Economic Recovery Strategy for Employment and Wealth Creation (ERS), Kenya Vision 2030 and the agricultural policy which recognizes the role played by farmer's federation (GOK, 2014).

1.1.1 Performance of Horticulture Projects

Worldwide, organizations are striving to put in place systems that are aimed at improving project implementation, tracking achievements, impact as well as effective and efficient performance. Global initiatives such as result based monitoring and evaluation, increasing customer awareness quest for satisfaction, accountable leadership, have transformed the project management environment (FAO, 2010). These recent trends in project management have created new opportunities, which are fundamental to the demand for project results, increased income, specialized technical assistance, quality of project performance and meeting heightened expectations by project beneficiaries (IFAD, 2013).

In project management environment, there are several factors that contribute to project performance. Researchers have identified Critical Performance Factors (CPFs) such as behaviour, terms, and variable which could result in major impact on the project performance when implemented and monitored to sustain results (Milosevic & Patanakul, 2005) some researchers have established diverse Critical Success Factors (CSFs) which don't have consensus according to researchers verdict on the mode of gauging performance of a project or the aspects that contribute to performance of different projects. (Fortune & White, 2006).This is more so for horticulture projects where there is very scanty information regarding what affects their performance. In another study addressing project performance, it is observed that the impact of context on which factors are considered most critical for assessing project performance are those that may contribute to success or failure (Muller & Jugdev, 2012). Nevertheless, most studies focus on the traditional 'Iron triangle' which encompass cost, quality and schedule (Walker & Shen, 2002).This focus on Iron Triangle created an interest among researchers to look at other factors that contributed to good project performance, such as involvement of project teams, level of skills among project teams, resources, quality of project outcome and integrated project delivery method which are usually not taken as performance factors (Muller &Jugdev, 2012).Performance

of projects means that certain expectations for stakeholders, implementers and project beneficiaries are met, in an efficient and effective manner. However, these project performance expectations need to be assessed through a monitoring lens by assessing the drivers and establish the extent to which each driver contributes to improved performance (Ika, 2012).

1.1.2 Monitoring and Evaluation Drivers

Monitoring and evaluation is essential in management of projects and delivery of quality project results. As projects become more complex, coupled with the demand to meet the needs of project beneficiaries, this shift of results based project management required tracking project performance (Kusek & Rist, 2004). The push for results delivery necessitated more systematized way to monitor and evaluate projects with an aim of getting accurate and sufficient information for decision making regarding project performance. Monitoring in this study is defined as the systematic collection of project information during implementation according to pre-determined procedures and indicators which will be used to assess whether projects are performing as expected (Florin, & Critina, 2013). On the hand, evaluation is the systematic assessment of an ongoing or completed project against the set project objectives (FAO, 2010).To gauge the influence of M &E on project performance, there is need to establish the drivers in other terms referred as factors that contribute to good project performance(Mwangi, Nyangwa'ra & Ole Kulet, 2013). Monitoring and evaluation drivers such as M & E resources, skilled staff, M & E tools, and supportive management and results based culture contribute to a large extent on achievement of project outcomes (Muriithi & Crawford, 2003; Kamau & Bin Mohamed, 2015; Kroukamp, 2015). Philosophically, a driver in this study was taken to refer to an aspect of a variable that influences a change on another variable and contributes to the achievement of a specific outcome. Hence M &E drivers will be taken as the enabling factors that facilitate achievement of high level of project performance. While some scholars refer to them as pillars, indicators or enablers (Kusek, 2004; Ijeoma, 2010; FAO; 2010), in this study the use of M &E drivers is preferred and they are; M &E culture, M &E budget, human resource capacity for M & E and utilization of M &E information.

Worldwide, organizations and governments are striving to provide good value for money and results by applying specific aspects of M &E to measure performance of projects (Pinto, 2010). For instance, over the past 50 years, the United States of America Congress and previous administrations have laid important groundwork for government wide performance improvement, including Government Performance and Results Act and the Program Assessment Rating Tool (Bamberger, 2000).Likewise, in Sri Lanka, the government has adopted Managing for Development Results (MfDR) as an essential aspect of good governance to improve development efficiency and effectiveness, transparency, accountability, and informed decision making (Steyn, 2014). In Spain the creation and strengthening of Government Evaluation Agency is seen as a commitment of improving quality service delivery through providing supportive environment for M & E (World Bank, 2005).The establishment of monitoring and evaluation in South Africa brought about the modernization and transformation of high performance in service delivery(Pretorius & Schurink, 2007). In Kenya, tracking of various project performances is coordinated under the Monitoring and Evaluation Directorate (MED) that ensures that monitoring data from ministries and departments feed into the Vision 2030 Delivery Secretariat. Further, performance contracts of the various ministries and agencies, the Public Expenditure Review and the Annual Progress Reports (APR) all feeds into National Integrated Monitoring and Evaluation System (GoK, 2011).Farmers organization have not been left behind in this shift, they have embraced M & E as one of the pillars in the implementation of Management for Results (MR) in project implementation, also known as Management for Development Results (Wholey, 2001).

Monitoring and evaluation have traditionally been considered separate activities although they are inter-related and important tools for management decision making (Kamau & Mohammed, 2015). In the context of this study, 'monitoring and evaluation' are referred to collectively by the combined acronym 'M & E', with the understanding that together, they constitute a two-pronged terms which can be applied to measure and promote high project performance. Monitoring will be taken to mean tracking of projects while evaluation as periodical assessment as per annual work plans (Kusek & Rist 2001). In order to gauge the performance of horticulture projects supported by Kenya National Farmers

Federation in Nakuru County, four drivers of M&E were taken into consideration: M & E culture, M & E budget, human resource capacity for M & E and utilization of M & E information.

1.1.2.1 Monitoring & Evaluation Culture

Culture that exists within projects implemented by an organization is important for a number of reasons. For a project or projects to perform as expected, congruence need to exist between project values, its resources and the environment (Morrison, Brown & Smith, 2008).These values, beliefs and expectations referred to as culture shared by project groups, produce norms that powerfully shape the behaviour of individuals and project teams to achieve certain results that determines performance of projects (Stare, 2011). Project culture is one of the factors that influence project set up and implementation.

Empirical studies indicate that project culture plays significant role in performance outcomes of various projects. Culture guides the way activities are implemented and how teams relate to deliver on their mandates in project environment. This recognition has been expressed in several studies (Eberlein, 2008; Anantatmula; 2010; Gregory, Harris, Armenakis & Shook2009). According to these authors most project oriented organizations have a cultural quality that is relevant for assessing performance of projects and was recognized as far back as the 1970s. For instance, the hard to change values that explain performance defined by success or failure were instrumental in popularizing aspects of culture that led to project effectiveness. In another study it is observed that particular cultural orientation showed correlations between strong cultures and strong project performance where strong culture is measured by the degree to which all units of an organization tasked with projects buy into key aspects of culture (Eberlein, 2008). Systematic research into project culture is limited and looks at selected items in certain contexts. For instance in assessing culture at project level, there has been studies that looked at issues such as project chemistry and project harmony (Eberlein, 2008).In the context of project management, attention has been on culture and implementation of management philosophies in relation to international project management (Gregory et al.,

2009).All these studies demonstrate the growing interest of the critical part that culture plays in project performance (Anantatmula, 2010).

1.1.2.2Human Resource Capacity for Monitoring & Evaluation

Human resource capacity is of essence in contributing towards performance of projects. Effective implementation of monitoring and evaluation is achieved if it is implemented by skilled human resource. Nevertheless, those tasked with M & E function requires the support from the leadership to perform effectively (Aquinas & Kraiger, 2009). Similarly, motivating M & E staffs through training to improve performance of project is critical (Tidac & Pivac, 2014). To enhance delivery of project outcome, recruitment of qualified and skilled M & E staff is a prerequisite for organization intending to sustain quality project performance (Midida, Gakure & Orwa, 2013). To achieve this, M & E roles and responsibilities need to be embedded in the job descriptions with clear terms of reference, duration of service and be linked to performance measurement of targets that have been set for overall project performance (Tuckermann, 2007).

1.1.2.3 Monitoring & Evaluation Budget

Performance of any project which can be measured through the extent to which results have been achieved is depended on availability of resources including itemized project budget. Allocation of resources to many organizations is an accountability issue requiring a system to help measure the value for resources against achievement of organizational goals. Implementation of an effective M & E requires a participatory approach in planning and budgeting (Khake & Worku, 2013). Involving those tasked with the M & E function in budgeting promotes ownership and improves delivery of results. Nevertheless, committing resources for M & E is a political process requiring the support of top management (Mavhiki, Nyamwanza & Dhoro, 2013). In spite of this, M & E is gaining traction and seen as a tool for strategic learning especially in project management. As such many organizations, project leaders and even project sponsors are setting aside financial resources for monitoring and evaluation (Bayraktar, Hastak, Gokhale & Safi, 2011). Though this is the case, the process is top down, creating a scenario that is seen as an afterthought. As such a certain percentage for monitoring and evaluation activities need to

be factored in, ranging from the design and planning stage of the project (Hood & Dixon, 2010).

1.1.2.4 Utilization of Monitoring and Evaluation Information

Utilization of M & E information for decision making is of essence to organizations especially in managing projects to deliver some outcome. This recognition of value addedby M&E information has led such organization to initiate ways of collecting and collating project information in a more structured form to gauge the performance of projects (Raymond & Bergeron, 2008). One way of collecting information is the establishment of an information management system to help capture monitoring and evaluation data not only for reporting but also for lesson learning and strategic decision making. Management and utilization of M & E information need to be consistent and participatory for it to be sustainable (Fadel & Brown, 2010). While overall project management information system (PMIS) for organizations have been considered important. Specific strategy for utilization of M & E information is more ever necessary in project performance monitoring (Bendoly & Swink, 2007). This is so because it provides for a systematic way of collecting information in the whole continuum of inputs, outputs, and outcome and impact levels. The utilization of M & E information is advantageous to the project leaders and teams as it helps in quality decision making, this ensures better allocation of resources and consistent monitoring of activities including having a sense of overall project performance (Karim, 2011).

1.1.3 Type of Project Leadership

Project leaders consider great number of decisions during project design, implementation, monitoring and evaluation in order to gauge performance of projects. If project leaders are not aware of the criteria that would influence achievement of set goals from inception they may not likely be able to assess how their projects are performing (Papke-Shields, Beise & Quan, 2010). Moreover, project managers are now considered as change agents hence adding to the project management the soft aspects of management (PMI, 2014). Due to these developments, most project managers' strife to be accountable for the successful

delivery and high performance of projects. With time, it is noted that project performance is depended on project managers' skills and competencies (Melchar & Bosco, 2010).

Leadership is commonly taken as an important variable affecting organizational as well as project performance. More so a leader is seen as a key factor in planning, controlling, coordinating and aligning project implementation processes (Gwaya, Munguti & Oyawa, 2014). Comparatively, as with any aspect of organizational functioning, leadership should focus on performance of projects, most important to achieve the desired outcomes in an effective manner. However, leaders can improve performance of projects by influencing performance determinants (Midida, Gakure & Orwa, 2015). One form of influence is the use of specific leadership behaviours in interactions with subordinates, peers, and outsiders. A second form of influence involves decisions about management programs, projects and systems including those of monitoring and evaluation (Kroukamp, 2015).

The type of leadership is important in driving organization M &E strategy and implementation of M & E as a whole. More over strategic leaders' engage in two types; transformational and transactional leadership behaviours to affect organizational learning. Transformational behaviours encourage organizational staff to challenge institutionalized learning and to adopt generative thinking. Transactional behaviours, on the other hand, encourage organizational staff to improve and extend existing knowledge (Koech &Namusonge, 2012).

1.1.4 Horticulture Sub-Sector in Kenya

The horticulture sub-sector of agriculture in Kenya has grown since 2000 to become a major foreign exchange earner, employer and contributor to food needs in the country. Currently the horticulture industry is the fastest growing agricultural sub- sector and is ranked third in terms of foreign exchange earnings from exports after tourism and tea. Fruits, vegetable and cut flower production are the main aspects of horticultural production in Kenya. About two million are employed in the sub-sector, most of them small-scale growers who constitute 80 per cent of producers (Ngugi, Muigai & Muhoro, 2014). With the onset of devolution in Kenya, operations of the agriculture sector including horticulture

have changed with a number of functions largely, service oriented such as extension services and support to farmers has been devolved to the Counties. Nakuru County is one of the Counties in Kenya that has created mechanisms for collaboration and consultations with institutions like KENAFF in implementation of projects as well as empowerment of farmers (Kariuki,2014).Nakuru County is divided into nine administrative Sub-Counties; Naivasha, Gilgil, Nakuru, Rongai, Nakuru North, Subukia, Njoro, Molo, and Kuresoi. The county has 11 constituencies and 55 Wards. Agriculture is the mainstay of Nakuru's economy. The county's weather is conducive for large-scale farming, horticulture and dairy farming. Therefore majority of small holder farmers' embraced horticulture farming as the main source of income. Growth and expansion of smallholders farmers is the most important employer tying the County to national and international markets, hence considered as an alternative source of income for majority of farmer household(Ulrich, 2014).

1.1.5 Kenya National Farmers Federation (KENAFF)

The phenomenon of varied forms of organization and groupings of farmers is ancient in Africa. These groups mostly deal with rural development to improve farmers' capacity in agricultural production. The role of farmer organization in achieving social development widely recognized (FAO, 2010). In Kenya it is noted that traditional forms of community groupings for mutual help at the village level still exist, some growing to modern concept of farmers' organizations and federations. With the introduction of the structural adjustment policies in the 1980s in Kenya, government agencies and institutions saw their roles and work space reduced. This led to emergence of liberated farmers' organization in form of associations or federations with strengthened capacity to serve their members through national platforms such as the Kenya National Farmers Federation (Sangoleet al., 2014).

KENAFF is a membership based umbrella organization whose main focus is to provide services to her members as articulated in the service charter. The federation represents the interests of farmers and has a membership base of about 2.1 million farm families (by December 2014). Established in 1946 as a Farmers' union, the federation has undergone

institutional and structural changes over the years with an aim of improving delivery of services to her members. As such the federation has changed from Kenya National Farmers Union (KNFU) to Kenya National Farmers Producers (KENFAP) in 2003 and to KENAFF in 2012, (KENAFF, Brief 2013).The leadership and governance structure runs from the ward level through sub county to county and national levels. This is supported through forums such as; Farmers Congress (FC),Annual General Meeting (AGM),National Farmers assembly(NFA), Regional Representation, Special Federation Summit (SFS),KENAFF Board and KENAFF secretariat headed by the Chief Executive officer(CEO).

With the adoption of Kenya's new constitution in 2010, KENAFF operates through the devolved system targeting groups at the Counties and Sub Counties. By end of 2014 KENAFF was operating in 44 counties out of 47.The smallest unit of members to the federation is a common interest group (CIG). The membership begins with various groups' formation at the village level, forming sub county Sub branches at the ward level which builds up to the sub county constituency branches of county associations. These form into a regional functional formation which builds up to national level. At this level, membership extends to Large Scale Farmers and Farming Firms, Commodity Associations and Cooperative Societies and Unions.

The federation is guided by a five year strategic plan (2013/2018), which comprise of short and long term plans of influencing change in the agricultural sector environments and promoting agri-organizations through targeted interventions and projects for the farmers(KENAFF Strategic Plan 2013/2018).Key projects implemented by farmers groups include dairy farming(5), rabbit keeping(3), Poultry(1), poultry and cereal (1),dairy goat (1),Cereals(5), mixture of aquaculture and cereals(1), youth project (1) and horticulture (28).

In order to strengthen the achievement of project outcomes especially for horticulture projects KENAFF has put in place a monitoring and evaluation framework to support effective and efficient service delivery to the members. KENAFF monitoring plan is based

on the results-based monitoring (RBM) approach and follows underlying logical model that link all results from outputs to the outcomes and eventually to the overall goal of KENAF.The main purpose of implementing the M & E plan is to provide a framework for tracking progress of the KENAFF activities, generate information for each activity, and continuously inform whether implementation of the strategic plan is being done efficiently as a gauge to the overall performance for all projects implemented and supported by the organization(KENAFF Brief, 2013).

1.2 Statement of the Problem

Although, perceptions of the role and function of monitoring and evaluation may vary, the importance of monitoring and evaluation (M & E) in achieving project outcomes and gauging performance of projects cannot be understated. This coupled with the introduction of results based M & E, has made monitoring and evaluation for projects gain a higher importance, even for farmer organization like KENAFF, and more so for horticulture projects implemented by sixty percent of KENAFF groups in Nakuru County. Despite these performance based developments, projects implementers still report poor performance of projects (Nzekwe, Oladejo & Emoh, 2015). Concerns have emerged whether implementation of M &E influences or contributes to better project performance. Though there is increasingly lots of information on implementation of M &E in project management, there appears to be limited empirical evidence as to what extent M &E related factors or drivers influence performance of projects (Naido, 2011; Ika, 2012; Okello & Mugambi, 2015). From literature reviewed, studies focus more on the existence of M & E system as a standalone framework that is used to adhere to donor requirements and to collect data for reporting in line with prescribed indicators (Muriithi & Crawford, 2013; Okello &Mugambi, 2015). This directional requirement of M & E makes it difficult to gauge the influence of implementation of M &E in performance of projects considering that there are various factors and/or drivers that lead to effective implementation of M &E. This is not different for horticulture projects in Nakuru County.

While it has been noted performance of projects is a concern in project implementation for many years, performance of projects have been based on traditional critical success

factors using the triple criteria of time, budget and quality (Jugdev & Muller, 2005).Despite these set critical standards gauging performance, different projects are characterized by varying sizes and inherent complexities that provide an opportunity to assess unique individual projects using other criterion such as finances, capacities and social related dimensions.(Nzekwe et al.,2015).This has a bearing in assessing performance of projects since stakeholders interpret performance differently. However, some researchers argue that these criterions are too limited and therefore suggest alternatives, such as benefits for the stakeholder, project results and project environment (Muriithi & Crawford, 2003; Pinto, 2000; Styne, 2014). With the growing development in project management field, other dimensions of project performance considered and used to measure project performance include customer satisfaction, accomplishing organizational and project objectives (Pinto& Slevin, 1998; Eberlein, 2008; Prabhakar, 2008; Ika, 2012). Nevertheless, with the exception of construction projects performance in the context of farmers' federation as influenced by M &E drivers has received less attention. Likewise, project leadership as a moderating factor in project performance has rarely been empirically tested.

From empirical literature reviewed the influence monitoring and evaluation has been established in social development projects such as in health and education (Naidoo, 2011; Steyn 2014) However, the combined influence of selected M & Edrivers namely M&E culture, human resource capacity for M &E, M &E budget and utilization of M &E information as moderated by project leadership on performance of horticulture projects supported through a farmers' federation has not been established. This study therefore sought to assess the influence of M & E drivers, type of project leadership on performance of horticulture projects supported by KENAFF in Nakuru County. Methodologically, most of research on M&E in the past has applied one of the pure approaches of qualitative or quantitative. For this study mixed method approach was preferred because of its flexibility and adaptability (Tashakkori & Creswell, 2007).

1.3 Purpose of the Study

The purpose of this study was to assess the influence of monitoring and evaluation drivers and type of project leadership on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County.

1.4 Objectives of the Study

The following are the objectives of the study

i. To establish the influence of monitoring and evaluation culture on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.
ii. To assess the influence of human resource capacity for monitoring and evaluation on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.
iii. To establish the influence of monitoring and evaluation budget on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.
iv. To assess the influence of utilization of monitoring and evaluation information on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.
v. To establish combined influence of monitoring and evaluation drivers on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.
vi. To establish the influence of type of project leadership on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County.
vii. To assess the influence of moderating role of type of project leadership on the relationship between monitoring and evaluation drivers on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

1.5 Research Questions

The following are the research questions;

i. In what ways does monitoring and evaluation culture influence performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County?
ii. How human resource capacity for monitoring and evaluation influence performance of horticulture projects does supported by Kenya National Farmers Federation in Nakuru County?
iii. In what ways does monitoring and evaluation budget influence performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County?
iv. How does utilization of monitoring and evaluation information influence performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County?
v. In what ways does combined influence of monitoring and evaluation drivers influence performance of horticulture projects supported by Kenya National Farmers Federation projects?
vi. In what ways does type of project leadership influence performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County?
vii. How does the moderating role of type of project leadership influence the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County?

1.6 Research Hypotheses

The following are the research hypotheses for the study

i. **H_1:** Monitoring and Evaluation culture has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County.

H_{A1}: Monitoring and evaluation culture has a significant influence on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County.

ii. **H_{02}:** Human resource capacity for monitoring and evaluation has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation Projects in Nakuru County.

H_{A2}: Human resource capacity for monitoring and evaluation has a significant influence on performance of horticulture projects supported by Kenya National Farmers Federation Projects in Nakuru County.

iii. **H_{03}:** Monitoring and evaluation budget has no significant influence on influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

H_{A3}: Monitoring and evaluation budget has a significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

iv. **H_{04}**: Utilization of monitoring and evaluation information has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

H_{A4}: Utilization of monitoring and evaluation information has significant influence performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

v. **H_{05}:** The combined monitoring and evaluation drivers have no significant influence on performance horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

H_{A5}: The combined influence monitoring and evaluation drivers have significant influence on performance horticulture projects supported by Kenya National Farmers Federation in Nakuru County

vi. **H_{06}:** Type of project leadership has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

H_{A6}: Type of project leadership has significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

vii. **H_{07}:** Type of project leadership has no significant moderating influence on the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

H_{A7}: Type of project leadership has significant moderating influence on the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

1.7 Significance of the Study

The study findings are relevant to project implementing organizations, including, farmer organizations, and government and development practitioners. The findings provide a basis for the organizations to reexamine their project environment including factors/drivers as well as leadership and consequently improve performance of projects. The study contributes to the better understanding of the influence of monitoring and evaluation drivers and performance of horticulture projects as moderated by project leadership. This understanding will help organization and government institutions plan better on how to improve project performance of projects. The understanding of the contribution of M &E drivers and project leadership to performance of project will facilitate better allocation of resources and ensuring adequate M &E capacities for achieving intended project results. More so, better management of information provides the required support for decision making hence improving project delivery.

Study findings will add to the existing body of knowledge and evidence based research that will inform government, farmer organizations and development agencies to improve the process of performance of projects. Further, the findings will fill the gap in literature by identifying influence of monitoring and evaluation drivers that include M &E culture, human resource capacity for M & E, M&E budget and utilization of M &E information on performance of horticulture projects. The study is also expected to contribute to research

on the moderating role of type of project leadership on the relationship between M &E drivers and performance of horticulture projects.

Study findings will add to the existing methodologies on the study of causes of poor performance of projects hence providing information to project managers, M & E practitioners and organizations implementing and managing varied type of projects. The variables to be examined will provide information to famer groups and project implementers on how to implement projects efficiently while ensuring sustained good project performance.

Further, the study will provide an opportunity for future researchers who might wish to explore the same field of research while incorporating other variables not covered in this research.

1.8 Limitations and Delimitation of the Study

One of the limitations of the study was accessibility to the respondents during data collection. Majority of the targeted respondents grow horticulture crops most of which requires much attention and supervision. To address this data collection schedule was drawn with the team leaders and coordinators to allow for a flexible schedule that will not interfere with key activities. The interviews were conducted within the location of where farmers carry out their activities, mostly at household level. The study focused on a single sector of horticulture limiting the generalizability of findings to other sectors. The study was done in one county out of 47, hence generalization was done with caution. The cross sectional design was a limitation because data was collected at one point in time. As such the long term influence of M &E drivers on project performance could not be determined. Future studies can use longitudinal research design.

1.9 Scope of the Study

The study was carried in Nakuru County. The focus on Nakuru County is because out of the 44 Counties implementing KENAFF supported projects, majority of KENAFF groups are active in Nakuru County and implement most of the horticulture projects. Farmer groups implementing horticulture projects are spread in ten (10) out of twelve (11) sub

counties hence provide a good representation. The focus on group leaders is because they are in charge of implementation of projects and have also been trained on project management including monitoring and evaluation. KENAFF secretariat guides the implementation of all projects including implementation of M & E framework. The groups have been supported by KENAFF in form of technical and financial support hence Nakuru County provide a project environment where the project variables can be assessed.

1.10 Assumptions of the Study

The assumptions considered for this study was that group leaders and KENAFF leadership would be willing to divulge information regarding management support in implementation of M &E and its influence on performance of projects and that all respondents would respond to the research questions correctly and honestly.

1.11 Operational Definition of Terms

Monitoring	The systematic collection of project information during implementation according to pre-determined procedures and indicators which will be used to assess whether projects are performing as expected
Evaluation	Is the systematic assessment of an ongoing or completed project against the set project objectives
M & E Drivers	Enablers/factors that facilitate the implementation of monitoring and evaluation to achieve project outcomes within KENAFF supported projects and they include M & E culture, Human resources capacity for M & E and, utilization of M & E information.
M & E Culture	Set of agreed upon collective norms and values that guide project team behaviour, govern how projects are implemented by KENAFF teams as measured by task orientation, team orientation and results orientation.

M & E budget Refers to financial resources allocated for specific M & E activities measured by the budget is allocated, utilization and how it is reviewed.

Human resource capacity for M & E Ability of project staff and stakeholders to carry out M & E function in project implementation, measured by knowledge, skills, competency and training.

Utilization of information Use for M &E information for decision making and improving project performance, measured by collection of information, availability and usability of information.

Type of Project leadership Refers to leadership style defined by transactional and transformational type of leadership.

Transformational leadership Refers to that type of leadership that influence followers' level of consciousness about on the value of desired outcomes and the ways of attaining the outcomes. Indicators of this type of leadership considered include idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration

Transactional leadership Refers to that type of leadership that focuses on the exchanges that occur between leaders and followers, direct behavior of followers toward achievement of established goals, and focus on improve organizational efficiency. Indicators considered under this type of leadership are contingent reward, management (active) and management by exception (passive

Performance of Projects Refers to the extent to which projects deliverables are achieved measured by economic status of farmers, technical performance of project, beneficiary satisfaction and staff satisfaction.

1.12 Organization of the Study

The study is organized into five chapters. The first chapter covers the background of the study including the main concepts of the study, the statement of the problem, the purpose of the study, study objectives, research questions and hypotheses. This is followed by significance of the study, limitations and delimitations of the study and definition of significant terms.

The second chapter of this study is the literature review which includes other scholars work based on the study objectives, the theoretical framework and the conceptual framework. The chapter also contains a summary of empirical studies that help identify knowledge gap. A conceptual framework has been designed to model the relationship of variables in the study.

The third chapter of the study deals with research methodology. The research methodology contains the research design, target population, sample size and sampling techniques, data collection instruments, data collection procedures, research instruments and data analysis techniques.

The fourth chapter covers data presentation, analysis, interpretation and discussion. Chapter five of the study covers study findings, conclusions, recommendation and suggestions for further research.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter is a review of theoretical, empirical and conceptual literature. The literature reviewed is from journals, books and research reports. In the first section of this chapter, empirical literature was reviewed on the relationships of variables under study and to establish the knowledge gaps from various studies. Section two of this chapter explains the theories used in the study; Interdependency theory, System theory and Contingency theory. Finally the chapter concludes with a conceptual framework which forms the model that guides the relationships of the variables under study.

2.2 Performance of Projects

Performance of projects remains an issue of concern in project management globally (Zuofa & Ochieng, 2014; Nzekwe& Emoh, 2015).This is so because projects involve defined objectives which need to be achieved and numerous resources that are expected to be efficiently utilized. Performance of projects is considered as a concern to both public and private sector organization implementing projects (Makanyeza, Kwandayi & Nyaboke, 2013). Performance of project may be considered as an assessment of how well project teams have done in pursuit of specific project goals (Ulrich, 2014). These goals vary from project to project but generally they touch on achieving desired results including satisfying project stakeholders and beneficiaries, improved productivity and some positive results concerning return on investment. Other measures for performance of projects include time, budget, safety, quality and overall client satisfaction (Muller & Jugdev, 2012). From a project management perspective, performance of projects' measurement is considered as monitoring and controlling of projects on a regular basis using specific indicators to measure performance (Prabhakar, 2008). Similarly, Ika, (2012) states that project performance measurement is related to many indicators such as time, budget, quality, specifications and stakeholders' satisfaction. More so, performance of projects may also be viewed as relating to such factors as increasing profitability, improved service delivery or obtaining the best results from project implementation (Zoufa & Ochieng, 2014).

Performance of projects are influenced by various inter-related factors like support from senior management, clear realistic objectives, detailed plan kept up to date, good communication, user/client involvement, skilled and sufficient staff, competent project manager, proven technology, realistic schedules, project size and complexity (Ngugi, Muigai & Muhoro,2014;Ulrich, 2014).These critical performance aspects of a project need to receive some attention from project leaders to ensure attainment of project goals. In seeking to improve performance of horticulture projects, it is necessary to understand each of these factors and to investigate how each impact on performance outcomes of projects, and how they all interact to influence performance outcomes of projects. Researches undertaken in this domain in respect to each of these factors have yielded valuable insights. Notable examples include studies by (Prabhakar, 2008; Muller and Jugdev, 2012; Ulrich, 2014; Ngugi Muigai and Muhoro, 2014; Tengan et al., 2014 and Nzekwe, Oladejo & Emoh, 2015).

Various project performance measures and measurement frameworks exist for the purpose of measuring performance of projects, notable among them is the 'iron triangle' comprising of time budget and schedule (Mullen & Jugdev, 2012). In view of the various literature reviewed on performance measurement, there is no 'one-fits-all' approach to project performance measurement. It is therefore argued for this research, there are other factors that may influence performance of projects including those of horticulture in nature. Of particular relevance are M &E drivers that include M &E culture, human resource capacity for M &E, M&E budget, utilization of M &E information moderated by project leadership. These are treated as controllable factors that may result to bearing some amount of control or influence resulting in the course of project implementation.

With developments in project management field over the years, other dimensions project performance that are considered and applied to measure project performance include stakeholders and customer satisfaction, resource management, capacity and accomplishing project objectives (Nzekwe et al., 2015). Performance of projects may vary from one stakeholder to another and project to project. More over project performance factors vary from diverse dimensions and requires incorporation of additional criteria in assessing the

same. Project performance indicators for measuring success as identified by PMI (2004) indicate that project performance factors can be grouped under five main categories. They include human-related factors, project-related factors, project procedures, project management actions and external environment.

From most of the dimensions on project success factors examined, it can be concluded that the perceptions of success differ among individuals, industry and project typologies (Eberlein, 2008). From literature reviewed, the studies were conducted in construction, infrastructural and information technology projects (Tengan, et al., 2014). There is little evidence on factors that influence project performance of projects implemented under farmers' federations especially horticulture projects. While the debate on what may exactly be considered as performance of projects may linger, this study positions its perspective on assessing performance of projects based on achieving projects within supportive project leadership , enabling monitoring and evaluation culture, budget, competent human resource and utilization of project monitoring and evaluation information.

In this study which sought to examine the extent to which M &E drivers and type of project leadership influence project performance, an appropriate approach will be to focus on those measures of performance of projects, beyond the iron triangle' measures of cost, time and quality (Fortune & White, 2006; Pinto & Slevin, 1998).These criteria are a common feature of virtually all frameworks examined in project performance measurement. Despite the inclusion of various other measures (Nzekwe & Emoh, 2014: Tengan et al 2014, and despite the fact that cost, time and quality are not always an accurate reflection of performance some projects are justifiably over-budgeted or delayed (Kwaviyah, 2010)). These three measures still represent useful measures is assessing performance of project (Muller & Judge, 2012). Some of the additional measures that have been used include cost control, on schedule completion, technical completion of project and functionality, beneficiary and employee satisfaction, productivity and profitability. Since these measures represented the bottom line measures of performance in various projects, some can be used in performance measurement of horticulture projects.

2.3 Monitoring and Evaluation Drivers

Monitoring and Evaluation is a critical function of project management which starts right from the planning stage of the project cycle. M & E is an essential process of project support system that could provide valuable information on the ongoing project operations and performance of projects including making accurate and timely decisions. Monitoring in this study is defined as the systematic collection of project information during implementation according to pre-determined procedures and indicators which will be used to assess whether projects are performing as expected (Florin, & Critina, 2013). On the hand, evaluation is the systematic assessment of an ongoing or completed project against the set project objectives (FAO, 2010)

Organizations' major challenge is to become more effective in managing projects to achieve optimum value for money as well better returns in performance of their projects. Studies have been carried out with the aim of determining whether M& E is a critical performance factor in assessing performance of projects (Sebedi, 2012). In assessing the role of M &E in promoting good governance in social development, the study indicated that M &E related factors such as M &E knowledge and supportive leadership are critical (Naidoo, 2011). According to another study, on determinants of effective monitoring and evaluation system for projects, factors that influence project performance include support from project sponsors, skilled project staff, availability of M & E tools and resources (Okello & Mugambi, 2015). But despite the knowledge that effective M & E may contribute to project performance, some organization still register poor performance of projects though majority have an M & E framework, plan or system in place. A study by Kamau and Mohamed (2015) on efficacy of monitoring and evaluation function in achieving project performance pointed out that key monitoring and evaluation factors /drivers including M &E feedback, availability of M &E resources, skilled staff as well as role of management/leadership contribute greatly to some level of good project performance.

Constant monitoring of project enhances the probability of projects performing better. Moreover, monitoring and controlling is important in the management of project scope

time, cost, quality, human resources, communicating progress and controlling risks(Papke-Shields et al.,2010).Similarly, in another study by Hwang and Lim(2013), it showed that monitoring and evaluating budget, performance schedule and quality of performance may lead to overall good performance of a project or projects. In more analytical approach, and looking at the relationship of critical performance factors of World Bank funded projects, by use a regression analysis the findings showed that there was a statistically significant relationship between each of the five critical performance factors and project performance (Ika, 2012;Okello & Mugambi, 2015). These factors include monitoring, coordination, design, skills training, institutional environment and culture. Moreover, most prominent performance issue for project leaders are design and monitoring of projects which is consistent with practice and theory in project management. As such, M&E and its related factors are ranked as one of the major enablers in project delivery performance (Ika, 2012).

According to another study on project resources, one of the components of project management in achieving high level project performance is monitoring project progress and its inputs that include human and financial resources (Florin & Cristina- Elena, 2013). Reflecting on the various studies on M & E, there seems to be a consensus that monitoring and evaluation is a contributor to better performance of projects. Overall project management guidelines that have been consistently adopted and applied in projects, stresses the importance of monitoring and evaluation in achieving better performance of project (PMBOK, 2001).

Implementation of M & E is crucial because it assists organizations implementing projects to evaluate their performance and identify drivers that contribute to good project performance outcomes (Okello & Mugambi, 2015). M & E is uniquely oriented towards providing its users with the ability to draw causal relationships and connections between the choices of project deliverables, project performance measurements priorities, resourcing for project delivery and skilled personnel (Bamberger, 2000). However, implementing M & E in a project set up can be complex and skill intensive. M &E for horticulture projects is even more so, since it requires detailed knowledge and interactions between planning, budgeting, implementation and achievement of the set project

performance indicators. Hence concerted efforts by the management to facilitate inter linkages towards enhancing project performance in a timely and cost effective manner is of essence (Brumby & Robinson, 2004). The ultimate goal is to meet the needs of those served and that the importance of a well-designed M & E should be that which help identify the inputs required for achievement of certain outcomes, outputs and results (Wholey, 2012). The inputs are all resources that contribute to production of project delivery outputs that facilitate achievement of intended results. In this case inputs include personnel, finances, training, equipment and working space. These in short are those project implementers would refer to as what is used to do the work of delivering project outcomes (Florin & Cristina- Elena, 2013). Nevertheless, the inputs need to be translated into outputs through key activities which the project implementer carries out to produce the outputs and ultimate outcomes (Prabbhakar, 2008; Okello& Mugambi, 2015).

When an M&E is integrated with existing management and decision-making system, it may receive the required recognition and attention by the leadership. This include decisions on how M & E information and results will be used to inform strategic and operational planning, budget formulation and execution(Ika, 2012).Other issues that need to be considered are those concerned with skills building. This include having a capacity building plan detailing how the organization will put in place the human capacity to fulfill its M& E functions, and how it will liaise with other stakeholders in influencing this capacity building plan (Reid et al., 2003).Whatever the structure of M & E, it is important that it has sufficient visibility within the organization to attract the attention and support of the management. Nevertheless, of importance is to consider both soft and hard components that facilitate implementation of an effective M & E in project delivery and performance (Kerzner & Saladis, 2009). Literature on M &E as it influences performance of projects has used a holistic approach in assessing the role of M & E. Some authors referring to them as factors, determinants or drivers such as M &E resources, tools culture and capacities (Mackay,2007; Tuckermann,2007; Naidoo,2011; Tengan,2014; Okello & Mugambi, 2015). The current study the focused on the specific drivers namely M &E culture, human resource capacity for M &E, M &E Budget and utilization of M &E information.

2.3.1 Monitoring and Evaluation Culture and Performance of Horticulture Projects

Monitoring and evaluation culture in a project oriented environment is considered to be one of the significant factors in project implementation and monitoring of how the project is performing. Culture is formed by a set of values, beliefs, assumptions, common understandings, expectations, attitudes, behaviours, thinking, norms and tradition of the people (Kuo & Kuo, 2010). M &E culture which is treated as s subculture of organization culture plays a significant role in performance outcomes including performance of projects. This revelation is expressed mostly in the mainstream organizational behaviour and management literature (Eberlein, 2008; Gregory et al., 2009; Pinto, 2010). Despite the scanty literature on M &E culture and performance of specific projects, it is worth noting that certain cultural orientations lead to organizational effectiveness and strong performance of projects (Issa & Issa, 2013).

A well functional project M & E culture could give tremendous impetus to the work and performance of project(s). Whereas its functioning depends on creating the right working environment and building capacity; acceptability of the M &E culture depends on making it part of the overall organization's culture (Morrison, Brown and Smith, 2008). Moreover, M & E functions need to be incorporated in the mandate of the organization at the planning stage of project initiation (Okello & Mugambi, 2015).

During the planning process just like in any value system the core values of integrity, transparency and accountability need to be included in the M & E function and inculcated as the M &E culture. These values are reflected in the behaviour of people associated with the projects being implemented as members, partners, stakeholders and collaborators (Pinto, 2000: Naidoo, 2011).

In creating and sustaining an effective M & E culture, there is need to create a trusting environment in which project teams are not hesitant to talk about their experiences, providing constructive criticism and feedback. Similarly, establishing an internal system that supports coordinating activities that include information collection, consolidation, analysis and dissemination is of essence for an M & E culture (Pinto, 2000).Nevertheless,

defining relationships and interdependence of various project activities and functions enhance the M &E culture and creates synergy among project teams hence contributing to improved project performance(Stare, 2011).M & E culture need to be based on strong value system taking into consideration transparency, accountability and shared responsibility for success, failure and overall performance. Creating and sustaining an M&E culture in a project environment may in some cases call for rethinking and renovating the existing organizational behaviour.

The role of M & E culture in achieving quality performance of projects is an issue of concern. Studies on various dimensions of culture carried out include those touching on organizational strategy, behavioural patterns and M &E processes of an organization that determines the internal environment required for successful project delivery (Gregory, Harris, Armenakis& Shook, 2009; Eberlein, 2008). Similarly, another study indicates that type of culture including attitude towards project monitoring and evaluation impact on overall performance of projects. This further has an indirect influence of employees' involvement, mission and goal as well as internal consistency with shared values (Kuo & Kuo, 2010). More evidence from another study showed that culture contributes to organization directions, decisions making rationale on projects, personal competency process as well as performance management including delivery of quality project results (Morrison, Brown& Smith, 2008). It is further noted that there is direct influence between project M & E culture and top management supportive attitude, project monitoring, project staffing, team orientation and cooperation(Gregory et al., 2009).Overall, project team with an M &E result oriented culture contributes to overall achievement of better project performance (Pinto, 2000).

Monitoring and evaluation culture is one of the influential dimensions of project climate and consecutively the main driving force of achievement of project results. It is reflected in the way tasks are realized, goals are set and on how people are guided towards the achievement of goals (Gregory et al., 2009).Moreover, monitoring and evaluation culture affects M & E related decisions, for instance it affects how project staffs are chosen for a particular task because such decision affects performance. Nevertheless, M & E culture

serves as a foundation for the methods of project operation as well as well as set project practices and behaviours that promote quality service delivery. M & E project culture is the attitude to projects by all those who are involved in project implementation. It includes promoting and thinking in result oriented mindset (Morrison, Brown & Smith, 2008).

Projects do operate within the overall organization environment hence there is need for project leaders to facilitate an enabling environment for implementation of projects and inspire project teams to embrace a strong M & E culture. In a study of understanding politics in project management, four ways in which organization culture affect project monitoring and evaluation management are cited. First it may affect how project teams are expected to interact and support each other to achieve project goals. Secondly, the culture may influence the level of employee commitment to achievement of project goals. Thirdly, the organizational culture may influence project planning, implementation and monitoring including how resources are allocated. Fourthly, culture has an effect on how managers monitor and evaluate performance of project teams and how they view project outcomes (Sebedi, 2012; Pinto, 2000).More so, most important in promoting M & E culture is top and management support. The leadership needs to be consistent in providing an enabling culture that ensures good relationship between executive, implementing teams. In project management terms, the culture of organizing, managing and leading teams should be that of ensuring delivering results but meeting beneficiaries need (Kuo & Kuo, 2010).However, some questions are critical in assessing performance of projects; how these organizations determine what works and what does not work in assessing performance of projects is determined by the M & E culture set. Such an M &E culture needs to promote impact evaluation as well as utilization of M & E information for project improvement (Sebedi, 2012)

2.3.2 Human Resource Capacity for Monitoring and Evaluation and Performance of Horticulture Projects

Performance of projects is dependent on several parameters one of which is human resources capacity. As such organizations are not only focusing on excelling in project delivery but also provide value for their workers. For those implementing projects, a

deliberate effort is put on human related factors such as improving the technical capacity for those tasked with delivery of project results (Oladipo, 2011). Similarly, to achieve sustained project performance, management needs to meet the needs of employees within the work place by equipping project staff through training (Aquinis & Kraiger, 2009).Despite human resources capacity being of importance to project implementers, performance of project is largely based on specific indicators such as time, budget, quality specifications and stakeholders satisfaction(Ika,2012).

In reviewing various literature relating to project teams, it is argued that in most cases monitoring and evaluation staff will be responsible for actual collection, recording and reporting of project data. Hence staffs responsible for monitoring and evaluation need to have the required skills to deliver on their M & E function(Tuckermann, 2007; Chand& Katou;2007;Ubels,Fowler&Acquaye-Baddoo, 2010;Imran et al., 2011;El Mouallem & Analoui, 2014). More so the link between human resource's capacity and competitive advantage have been established borrowing largely from behavioural psychology. To this end, researchers Lado& Wilson (1984) established that competent human resource's capacity have the potential of contributing to better performance and competitive advantage. Similarly, Ubels et al. (2010) in their study on resource volume capacity development argues that the ability to perform and attain the set goals at individual and institutional levels qualifies to be defined as capacity. In another study on impact of human resource performance management on project outcome, Imran et al. (2010) established that there was a correlation between performance monitoring of human resource and project results. To a large extent, the competency of project staff was a factor in determining the extent to which projects were deemed successful. In another study Chand &Katou (2007) established that hotel performance was positively correlated to human resources management defined by recruitment, job design, training and development. In view of the forgoing literature competent human resources is seen to reinforce the role of behaviours in enhancing result oriented project delivery. More over contribution of human resources to performance is prevalent where organizational climate nurtures and rewards quality practices of employees known to meet customer expectations (Reid et al., 2003). Equally, motivation of staff tasked with M & E functions through skill training improve project

effectiveness and performance. However, providing the much-needed support resource allocation including specific budget for recruitment and training of M & E staff is an important consideration (Imran et al., 2011). Importantly, M & E roles and responsibilities need to be embedded in job descriptions and performance agreements. Specifically, individual performance needs to be linked to overall project performance outcomes. To the extent possible, considerations regarding the role and support of project staff should be encompassing capacity aspects of M & E (Tidac & Pivac, 2014).Beyond the needed cooperation from M & E staff and focal points, providing incentives and resources needed to ensure for instance collection and recording of quality data happen (Rejaul et al.,2012). Furthermore, monitoring and evaluation needs to be positioned as far more than a technical instrument for change. In particular, and as suggested by Ubels et al. (2010), it is not enough to simply create a highly-trained evaluation capacity and expect that organizations to become more effective. For this reason, there is need to ensure that trained staff and stakeholders understand their M & E roles, participate in M & E planning and development of related systems and tools. To achieve the objective of sustained project performance, improving the capabilities for M & E human resource through training is of priority as noted by Chand &Katou (2007). Additionally, having the right M& E human resource capacity can be beneficial regarding other outcomes at both individual, team and project level.

2.3.3 Monitoring and Evaluation Budget and Performance of Horticulture Projects

Projects involve defined objectives that need to be achieved. Measures for performance of projects according to Ika (2012) include time, budget, safety, quality and overall client satisfaction. For this study M &E budget will focus on the financial resources allocated for M &E activities based on specific budget allocated for M &E and budget review process. Monitoring and evaluation in many of today's organizations is ad hoc, not aligned to strategy, and in most cases underfunded. These have been found to be true regardless of sector, type or size of projects as argued by Okello & Mugambi (2015) in their study of determinants of effective M & E systems. Often times, this situation has led to monitoring and evaluation efforts being perceived as adding little value to organization decision makers noted Kuwaviyah (2010), to the extent that monitoring and evaluation efforts are

perceived to be not worth their cost. Nevertheless, Mavhiki et al. (2013) reported that monitoring and evaluation as a tool for strategic learning is gaining traction in project management especially at strategic level for managing projects budgets. As such M &E budget is being considered for under results based management. In spite of management consideration for adoption of results based M & E organizations implementing projects are doing it cautiously when it comes to resource allocation for M & E function as notes Bayraktar et al. (2011).

Though concerns about the value of monitoring and evaluation continue, some organizations are increasing their investments in monitoring and evaluation as value addition function. This experimentation of new approaches is aimed at improving effectiveness and impact of M & E in achieving high level of project performance. In their study of factors affecting municipal service delivery, Khake & Worku (2012) argues that providing resources for implementation of M & E requires planning and consistent commitment by management. Similarly, another study by Guo & Neshkova (2013) on citizen input on budgetary process established that citizen participation is positively correlated with higher organizational performance.

One of key activities of M & E is performance accountability for project managers, is allocation of resources and finding value for those resources especially those allocated for monitoring and evaluation observed Mwangi, Nyang'wara & Kulet (2015). Besides development of monitoring and evaluation, it would not be meaningful, effective and efficient if the required resources needed to transform its achievement into concrete and practical results are not available (Mavhiki et al., 2013). According to a report by IFAD (2013) allocation of financial resources to monitoring and evaluation involves budgetary planning, management and control of the same resources to achieve desired results. More so involving those tasked with M & E function in the budgeting process increases the chances of ownership (Agusti, 2012). Equally important, when M & E staff or focal points are part of the budgeting process and understands the investment put into M & E, they are likely to work towards ensuring that M & E system is effective. Though, this is desired, many organization budgeting and planning process is top down argues Ijeoma (2010). The

meaningfulness and usability of monitoring and evaluation information has been limited because of its disconnection from strategic and organizational level decision making including finances and budgetary decisions. Moreover, monitoring and evaluation budgets are a mystery (Ifrah, Kerosi & Ondabu, 2015).There is rarely a dedicated organizational-level budget line item for monitoring, evaluation. Because of the limited or no allocation of resources for monitoring and evaluation, there are few processes, systems, and opportunities for learning from and about monitoring and evaluation. This limits the ability of organization to make sense of project monitoring and evaluation information /findings and to translate them into action and results including assessing how projects are performing argues Agusti (2012).

The decision to put in place monitoring and evaluation is political in nature, requiring top management support and requires resource commitment where the project budgets provide a clear and adequate provision for monitoring and evaluation activities According to Kuwaviyah (2010) in a study on relations between budgeting and performance specific budget for priority items such as tracking budgets should be clearly delineated within the overall project budget. This will give the monitoring and evaluation function the due recognition it plays in project management. Yuni &Siti (2016) in their study on participatory budgeting role in improving the performance, the authors argues that for successful implementation of budgets it is advisable to involve all human resources as this will increase accountability. More so because each will be responsible for ensuring that budgetary allocation under them are utilized well. This therefore calls for a more scientific decision making of allocating resources for M & E. One way is to involve those tasked with M & E in budgeting process since they understand what is required to carry out a result based M & E function that helps determine the cost of best performing projects as suggested by (Kuwaviyah, 2010;Agusti,2012;Yuni & Siti, 2016). M & E budgets are therefore crucial for delivery of expected project outputs as well assessing how projects perform. Adopting a participatory approach in budgeting process including reviews provides a mechanism to gauging how projects perform.

2.3.4 Utilization of Monitoring and Evaluation Information and Performance of Horticulture Projects

Over the past decade, development organizations have been faced with increasing pressure to become more effective. As a response to this demand, many organizations have launched results-orientated based management systems including that of managing and utilizing project M & E information. More so there is renewed focus on M&E information reflects an interest within organizations implementing projects to better demonstrate the effectiveness of development interventions. In this context, M&E information is recognized to be a key element of overall project management information system (World Bank, 2005). At the same time, weakness in managing and utilizing M&E information has emerged as a general problem in development work, and requires improvement. Though perceptions on the role of M & E information vary. IFAD (2002) emphasize the importance of using M &E information for programming and project improvement. Placing M & E information at the heart of managing for impact is a priority in all development interventions including feedback and learning derived from project results (Steyn, 2014).

For these development organizations, the focus is that M & E is designed to generate meaningful information that inform project management, assess whether implementation is progressing as planned or whether corrective action is needed. Monitoring provide information on tracking of inputs, outputs and outcomes, while, evaluation information establish the attribution and causality, may be used as a basis for accountability, learning and develop new policies or projects for better project management and performance (IFAD, 2002).Further an efficient supply of M & E information contribute to better decision making by project leaders and builds the capacity of the project teams (Raymond & Bergeron, 2008). More so, recognizing the balance between the demand side for creating appreciation for utilization of the M & E information and the supply side which includes skills, procedure, methodology data systems including collection, collation and analysis are very critical. Data collected during M & E processes constitute an important foundation for actions by project leaders and stakeholders in ensuring adherence to continuous tracking of how projects are performing (Kusek & Risk, 2004). Utilization of M &E information, provide guidance on what corrective actions are to be taken, to improve

project performance and delivery. M & E information provides critical assessment that help demonstrate whether or not projects satisfy target groups needs and priorities. Organization utilizing M & E information have reported benefits such as being able to know the impacts of their projects, whether learning derived from M & E can improve overall quality of ongoing projects (IFAD, 2013).

In a study conducted by FAO (2010), on utilization of M & E information indicate that learning occurs through monitoring especially for ongoing projects. Project leaders need to act on M & E findings and apply lessons learned to modify projects to achieve the intended project outcomes. The learning by doing of project leaders provides an immediate feedback opportunity for quality improvement in projects (Kamau & Mohamed, 2015). Effective monitoring and evaluation, is vital for tracking and measuring results and throwing light on the impact of development interventions, remain challenging. Although much literature exists on M&E as a tool in project work, weaknesses in utilization of M&E information and results persists (Fadel & Brown, 2010). To promote utilization of M & E information, project leaders need to demonstrate commitment to having a way of managing the information for use. As such results orientation means that collecting and collating M&E information management system should be part of the project design process. Therefore a project leader should start, by determining the type of information that need to be collected, establish the most efficient way to collect information and how to manage and use M & E information for improving performance of projects (Raymond & Bergeron, 2008).

Organizations have increasingly focused on harnessing and managing information for competitive advantage. This has led organizations to engage in not only implementing projects but more so managing project information for decision making and gauging performance of projects (Raymond & Bergeron, 2008). As such development and implementation of M &E should provide for a way of collecting and collating information that informs decisions concerning performance of projects. Putting in place a monitoring and evaluation information management system at every stage of project implementation is critical (Fadel & Brown, 2010). While large amounts of time and resources are dedicated

to selecting and designing projects including putting in place an M & E system; it is important that the system provides for a way of collecting, collating, managing and utilizing project information adequately and consistently (Karim, 2011).

Organizations implementing projects prefer to adopt a project management information system (PMIS) that is responsive to organization and stakeholder's information needs. PMIS have become comprehensive systems that support entire life-cycle of projects. PMIS is to support project managers in their planning, organizing, control, reporting and decision making tasks on the one hand and evaluating and reporting (Raymond &Bergeron, 2008). Accurate, timely and relevant information is essential for decision making. Despite all these facts, project staff often fails to deliver the types of information needed by top management to ensure project performance (Bendoly & Swink, 2007). Putting in place a monitoring and evaluation project management information system is one way to address critical project information needs. The process of putting in place and implementing an M & E PMIS need to be participatory to foster ownership and meet the supply and demand side of information (FAO, 2010).

2.4 Type of Project Leadership and Performance of Horticulture Projects

Leadership is a social process which the leader seeks to a large extent voluntary participation of subordinates and other followers to reach organizational goals or achieve some specified results. This involves influencing implementers as individuals and collectively as teams. Effective leadership is the extent to which an organization leader continually and progressively leads and directs his/her followers to achieve some agreed goals (Ramesh, 2002). Leaders have the potential of improving project. The two types of leadership used in this study is Transformational and Transactional leadership. Transformational leadership will be defined as that types of leadership that influence followers' level of consciousness about on the value of desired outcomes and the ways of attaining the outcomes. Components of this type of leadership considered include idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Hamstra et al, 2011). On the other hand, Transactional leadership will be taken as that type of leadership that focuses on the exchanges that occur between leaders

and followers and allows for accomplishment of performance objectives, complete required tasks, motivate followers through contractual agreement, direct behavior of followers toward achievement of established goals, and focus on improve organizational efficiency. Components considered under this type of leadership are contingent reward, management by exception using as active and management by exception as passive(Liu & Zeng,2011)

Although studies have touched on factors contributing to project performance outcomes, surprisingly type of project leadership is not one (Muller &Turner, 2005; Melchar & Bosco, 2010).This may be due to the fact project managers themselves are not able to defend their position and influence of their leadership on project performance. More so, the impact of project leader is rarely measured. For instance Pinto and Prescott (1988) suggested that personnel are not a performance factor. Similarly, Pinto and Slevin (1998) identified ten project success factors, project manager is not clearly mentioned. However, is some other empirical literature it showed that selection of type of project leadership from the onset influence performance of a project (Kerzner & Saladis, 2009; Papke-Shields, Beise & Quan, 2010). Accordingly, selection of a project manager should be based on an individual's capability and their competency in the discipline. A project manager with the right capability will necessarily have the ability to successfully manage project outcomes (Tidac & Pivac, 2014). Further, project manager and project team are essential for good outcome of the projects. This would be the transactional leader (Lai, 2011). The project leader is responsible for leading the project team towards achieving desired outcome(Lui & Zeng, 2011;Kroukamp,2015).

Various projects continue to fail because of many reasons, despite the advances made in improving project delivery and performance. Lack of appropriate influence type of leadership is cited as one of the main cause of poor performance of project (Melchar & Bosco, 2010: Koech & Namusonge, 2012). In the field of project management the need for effective leadership is gaining traction for practitioners and project sponsors. Despite some studies in project management leadership, the extent to which type of leadership influences project performance is gray including that of style of leadership. More so, it is observed

that projects continue to perform poorly due to ineffective leadership. It is further acknowledged that the type of leadership could contribute to overcoming the various project leadership related challenges. To improve the performance of various projects, focus should be on both on organizational and human aspects of project management (Tidac & Pivac, 2014).

Performance of projects is depended on human factors such as type of leadership and top management support. Nevertheless, project leaders face challenges as they manage and lead project implementation. They include leadership style, stress, motivating their teams through learning and teamwork (Hamstra et al, 2011). Similarly, in a study on the role of servant leadership information technology projects in Kenya, Gwaya et al. (2014) confirms that human factors has a direct correlation on the performance of projects. More studies established the importance of human factors increased concurrently as projects became more complex coupled with this, project manager's leadership ability have been reported to have a direct correlation with project outcome (Kroukamp, 2015; Melchar & Bosco, 2010; Koech & Namusonge, 2012).Though project leadership in some cases is singled out as an individual contributor to poor performance of projects, it is seen to transcend all other project and organizational factors. Overall, Type of leadership affect project culture, project strategy and project team spirit (Gwaya et al., 2014).

There exists number of dimensions of type of leadership. These dimensions or forms of leadership can be used to assess the extent to which each type of a leader influences achievement of intended project goals (Hamstra et al, 2011; Koech & Namusonge, 2012). One such type of leadership behaviour is the transactional; type of leadership that involves initiating structures and systems. This form is task oriented and tells subordinates exactly what they are supposed to do. Such type of a leader also assesses employees performance, describe roles that each employee is supposed to do to achieve organizational goals (Muller & Turner, 2007).Transformational type of leadership on the other hand, is considerate and people oriented, shows concern for subordinates (Gwaya et al., 2014;Melchar & Bosco, 2010).

However, there is no one best behavior of type of leadership. The effectiveness of a particular type of leadership is dependent on organizational situation. Manager's behavior imposes working attitudes, behaviours and performance to achieve consistent good performance of projects (Koech & Namusonge, 2012). In spite of this, it is important to establish clear standards for assessing performance of projects. When participative leadership behaviour is adopted employees are committed to their organization goals, are satisfied and their performance are high leading to improved service delivery to customers (Tidac & Pivac, 2014).

Leadership styles adopted by organizational managers have been argued to either influence positively or negatively the effectiveness of project delivery (Lai, 2012). Despite the believe that a specific type of leadership is a needed competency for performance of project outcomes, there is limited empirical research linking leadership as a moderating variable in assessing performance of horticulture projects.

2.5 M& E Drivers, Type of Project Leadership and Performance of Horticulture Projects

Project performance can be considered as an assessment of how well an organization or team have done in pursuit of special goals. These goals vary from project to project but generally they focus on achieving desired results including satisfying project stakeholders and beneficiaries (Kamau & Mohamed, 2015). Several factors contribute to good performance of projects; they include M &E culture, human resource capacity for M& E, utilization of M &E information and project leadership. The extent to which these factors interact determines the extent to which they influence performance of projects (Tenganet al., 2014).

Monitoring and evaluation culture, including thinking and acting in impact terms, are much too important to be left just to external monitoring and evaluation specialists. In the study of effects of leadership in adopting integrated system, the need for involvement of management in realizing impact is of importance (Sebedi, 2012). This means that senior management in organization implementing projects need to take ownership, provide

leadership, and encourage everyone within the organization to think in terms of results. More so, having a well knowledgeable and skilled M&E personnel is crucial M &E function. Capacity includes providing resources to enable meaningful implementation of organization strategy and ensuring that monitoring and evaluation take place (Tengan et al., 2014).The type and level of skills for M & E staff contribute to a large extent achievement of results. More over proper management of human resources in project set up can be beneficial regarding other outcome both at individual and team level (Tidac & Pivac, 2014).

M & E related decision making requires that, proper systems are put in place to collect and collate information. Effective utilization of M &E information is a major contributor to project performance. M & E information is important for managing stakeholders, project teams and monitoring the actual progress of the projects as well as having insights on where and when a corrective action is required(Karim, 2011).Existence of a shared understanding of the interpretation of monitoring and evaluation results boosts excellent performance of projects.

The type of leadership contributes to a large extent in good achievement of organizational goals. In the context of institutional strengthening, importance of organization culture in implementation of an M & E system cannot be under estimated. Besides the formal elements of an M & E system, equally important is the informal "culture" of the organization (Keoch & Namusonge, 2012). If organizational managerial culture is a supportive one, it will ensure that M &E is implemented as planned. Much of successful implementation of M & E is dependent on the attitude and tone set by the management (Ramesh, 2002; Turner & Muller, 2005). Where a management culture does not demand performance information especially on project performance, M & E could degenerate into tick and check list. This approach many organizations find it easy to do but it may undermine the spirit of an M & E result based system culture in an organization (Sebedi, 2012).

Most organizations are investing increasing resources in projects with an aim of improving performance of projects and delivery of project results. Despite these efforts by organizations, several studies have demonstrated that most projects fail to perform as expected or satisfy customers' expectations or even meet time and budget goals (Aquinis & Kraiger, 2009). Thus allocated specific budget for M &E is critical. Having the required resources and the common culture is not all, skilled and competent human resources (staff and stakeholders) have been reported to have an effect on performance. Mostly, it is considered that indicators used for monitoring the projects do not take into account all the aspects that should be incorporated to visualize the state of their performance. Traditionally the focus has been on the scope, time, contracts and scheduling (Engwall & Jerbrant, 2003).Rarely, does utilization of information generated from project implementation is considered an important factor or driver. In appreciating the use of M &E information for not only competitive advantage, organizations are investing in systems for harnessing project information for decision making and tracking project performance(Raymond & Bergeron, 2008).

Institutional design of M & E whether for an organization or government institution is guided by the type of leadership. The leadership should provide mission and vision, including a system for capturing, processing, storing and communicating monitoring and evaluation information. Monitoring helps managers and policymakers understand whether the money invested in service delivery is achieving intended results and whether plans are being followed (Bamberger et al.,2012).The role of management in promoting a responsive culture especially in ensuring achievement of planned results runs across many sectors including service delivery. Majority of organizations are putting in place M &E with performance measures that cover other internal and external factors that may affect service excellence. These include resources (financial and human) and utilization of M &E information for decision making and gauging project performance (Nzekwe, Oladejo & Emoh, 2015).

2.6 Theoretical Framework

Theoretical approach in this study was anchored on interdependence related theories which acknowledges that there exist interdependencies between various variables during project implementation. It is recognized that interdependencies is a common feature of project management for many organizations due to the fact that projects are made of up of many activities and are not implemented in isolation. In understanding the aspect of project interdependencies, there are theories that explain this phenomenon, they include contingency theory, decision making, resourced based, network theory, information processing theory, and system theory. Theories that guided this study were system theory and contingency theory. In reference to the study, it is assumed that the variables under the study are interdependent. Project performance depends on the each of the M &E drivers of culture, human resource capacity for M &E, M &E budget and utilization of M &E information. Further project performance is dependent on the combined effect of all the M &E drivers moderated by type of project leadership. System theory was preferred for this study because understanding of system theory provides an enhanced appreciation of how each of the subsystems of a project interacts to achieve a set goal. In the case of this study, the individual M &E drivers and type of project leadership were treated as subsystems that all works towards achieving high level of project performance. Thirdly, contingency theory acknowledges that the relationships exist between two or more variables is influenced by other variables and these relationships are contingent to each other. In this it is assumed that there is a relationship between the individual M &E drivers and project performance; there exist a relationship between combined effect of M &E drivers moderated by type of leadership. From contingency theory, it can be implied that these influence performance of projects.

2.6.1 Interdependence Theory

Interdependency Theory is drawn from project interdependence which treats a project as collection of activities which consists of other elements/variables that interact and depend on each other. Interdependence theory was first used in Psychology where interdependence was seen as the mutual reliance between two or more groups. Later it was adopted and used

in other fields such as managing resource interdependencies (Engwall & Jerbrant, 2003). It has been used in assessing interdependencies in organizational structures, multi project environment interdependencies (Killen, et al., 2009).

Projects contain various interrelations. Reviewed literature indicates that projects are seen to be interdependent when the performance of a project depends upon variables that together contribute to the overall success in performance (Stare, 2011;Tengan,2014;Zoufa& Ochieng,2014;Nzekwe& Emoh,2015) For instance there may be resources interdependencies (the need to share financial and human resources to achieve certain project objectives; outcome dependencies (need to use result from one variable to improve a future process; learning dependency (where information or knowledge gained from monitoring is used in evaluation or for taking corrective action (Killen, Kjaer, & Durant, 2009).

There are various benefits got from an interdependent perspective, many organizations implementing projects prefer this approach as it promotes the aspect of mutuality among project teams. Interdependencies between project variables need to be understood and managed for best projects and outcomes. Projects variables are said to be interdependent when the success of one variable depends upon other variables(Muller & Jugdev, 2012; Tengan et al., 2014).For example, projects may experience resource interdependencies (the need to share resources or wait for scarce resources until they are released by another activity), market or benefit interdependencies (complementary or competitive influences), outcome dependencies (the need to use the end result of another activity – these can be technical or other outcomes), learning dependencies (the need to incorporate the capabilities and knowledge gained through another project), and financial dependencies including budgets are shared across various activities (Killen et al., 2009;Tengan,2014).

In reference to this study, it assumed that variables under the study are interdependent. Project performance depends on each of the M &E drivers (M& E Culture, human resource capacity for M &E, M &E budget and Utilization of M &E information). Further, project performance is dependent on the combined influence of all the M &E drivers and another

compound interdependence is that of combined influence of M &E drivers moderated by type of project leadership. The ability by KENAFF to understand and manage the interdependencies between these study variables will help improve project delivery specifically quality of service delivery. For instance, in resource dependencies which may include human and financial can be managed by scheduling optimization. More so, applying dependency matrices may also be used to provide a view of interdependencies between projects implemented by the organization. This provides an opportunity for utilizing project variable synergies a dimension that contribute to mitigating identified project challenges manage project risks, and resource requirements towards expected performance(Zoufa & Ochieng,2014). Furthermore, use of interdependency approach reveals that efficient human resources utilization derived from an interdependent perspective is seen beneficial not only in terms of cost-optimization. It is worth noting that negative influences could occur as a result of failed project interdependence such as misuse of resources, demotivated project teams, conflict of interests which sometimes leads to inter team or inter project competition. If the project leadership is aware of the potential negative impact of interdependency, they are likely to put in place mechanisms to minimize the negatives and maximize on its benefits (Verma & Sinha, 2002).

2.6.2 System Theory

Systems Theory (ST) advanced by Ludwig Von Bertalanffy and later improved to become General System Theory by Kenneth Boulding, Daniel Katz, and Robert Kahn in 1964 (Dubrovsky, 2004). The system theory emphasizes the way in which organizational projects are seen as an organized system comprising of human and non-human that respond in a way to cope with significant changes in their environment but still keep their structures intact. In this sense, the ST concept views organizations as constantly interact with both their internal and external environment. In reference to system theory, multi project environment is taken as complex but adaptive system, characterized by interrelationships that exist between variables or components (Kerzner, 2003).

In the context of this study, KENAFF as an organization will be taken as a system with various components including projects, her internal processes and its interaction with the

outside actors (KENAFF members& other stakeholders) and how it is responding to and how its pre-existing response mechanisms works to maintain good project performance. In other words, KENAFF as an organization is a system that has various subsystems; culture, human resources, top management, financial processes and information processing systems. Further, a system comprises of subsystems whose inter-relationships and interdependence move toward an equilibrium within the larger system. The M &E drivers under the study M & E Culture, M &E human resource capacity, M &E budget, Utilization of M &E information and project leadership are sub systems and through the interactions and interrelationship influence the performance of horticulture projects supported by KENAFF in Nakuru County. Moreover, Yoon, & Kuchinke (2005) observes that Katz and Kahn collaboratively viewed organizations as comprising of patterns of behavioural events, which represents a culture. In the case of KENAFF, other patterns include human resource capacity for M &E. M &E budget and utilization of M&E information are interdependent need to be understood in terms of their interaction with each other, and to their influence on project performance.

More so the concept of input-throughput output in describing organizational environments in the context of a system inter related with subsystems is of relevance in system theory (Alter, 2007). Comparatively since systems theory considers the input-throughput-output component and their interactions both within themselves and with the external environment, the elements of purpose (project performance), people (culture), structure, techniques and information must be coordinated(Yoon & Kuchinke, 2005). This coordination need to be integrated by the managerial system/leadership, in order to maximize value for the organization. In analyzing KENAFF as organization, ST is appropriate because KENAFF takes into consideration the cycle of inputs and transformation of outputs to outcomes. These relationships comprise of KENAFF project, organizational systems and subsystems in holistic approach that is aimed at maintaining high project performance. The subsystems include management, financial, human resource and information management. All these systems work towards ensuring achievement of the set project outcomes including quality of products and services for federation members

and stakeholders. For instance, information processing theory sees organizations implementing projects as open systems that must collect, collate and process information in order to accomplish specific tasks, coordinate various activities to achieve some outcomes. Project environment within KENAFF can be treated as open systems where projects are implemented with an aim of achieving specific project goals. In order to gauge project performance information need to be collected and analyzed. The system theory and information processing theory confirm the existence and importance of project interdependence (Killen et al., 2009).

System theory was preferred for this study because; an understanding of systems theory provides an enhanced appreciation of how each of the sub systems of an organization interconnects and interacts to achieve a set goal. The nature of the interplay between various organizational components /sub systems, have a compound influence in the overall achievement of project goals including meeting beneficiaries needs. Understanding an organization from the ST perspective help organization and project leaders' knowhow to plan better, how to obtain and allocate resource, as well as manage information generated from various subsystems for decision making. In this study a large extent guided the M &E information based aspects.

2.6.3 Contingency Theory

The term Contingency Theory (CT) was coined by Lawrence & Lorsch (1967), in an empirical study, showing that influences from organizational structure on relative economic performance were contingent upon environmental attributes. CT was further developed from the sociological functionalist theories of organization structure such as the structural approaches to organizational studies. Common to all contingency approaches is the proposition that performance is a consequence of the fit between several factors: such as structure, people, technology, strategy, and culture (Islam & Hu, 2012). CT two main models include that advanced by Morgan (2006) which looks at organizations as open systems that need careful management to satisfy and balance internal needs and to adapt to environmental circumstances. It concludes that there is no one best way of organizing. On

the other hand, Fiedler and Garcia's (1987) contingency model focuses on the relationship between leadership style and the favorableness of the situation (Bass & Aviolo, 1990).

The contingency theory is closely related to system theory and acknowledged that relationships that exist between any two or more variables are influenced by other variables. This analogy is as in question answer scenario is associated with the "it depends" answer when one is assessing the influence of a variable or variables to the other (Verma & Sinha, 2002). Though some researchers focus on the contingent environment context, emphasis is recently given to project complexity /project types, information available, managerial style and intra project context (Killen, et al., 2009; Islam & Hu, 2012).As such, it can be implied that from this theory there may be certain contingencies that influence the way organizations manage interdependencies. In this study M & E drivers are contingent and influence project performance as moderated by project leadership. Similarly, high project performance depends or is contingent to the type of leadership.

Overall the three theories were preferred for this study because; an understanding of interdependence theory, systems theory, and contingency theory provides an enhanced appreciation of how each of the sub systems of an organization interconnects and interacts to achieve a set goal. The nature of the interplay and interdependence between various organizational components /sub systems, have a compound influence in the overall achievement of organizational goal of quality delivery of service to the beneficiaries. In the context of this study contingency theory guided the components of KENAFF human resource capacity for M &E, M &E budget, and type of project leadership which are contingent and contribute towards project performance. Within the other sub systems there is those mandated with project development, allocation of resources, selection and recruitment of M & E staff and managing of project information. Understanding projects from the interdependency perspective help organization leader's knowhow to plan better, how to obtain and allocate resource, as well manage information generated from various subsystems for decision making. Comparatively, Alter (2007) notes that understanding of systems paradigm can offer organizational leaders a fresh perspective on the fundamentals

of planning, resource allocation, implementing and monitoring of organizational activities to deliver the expected results.

2.7 Conceptual Framework

From literature reviewed is it evident that project performance is dependent on various factors including those chosen for this study;(M&E culture, M& E budget, M & E human resource capacity and utilization of M &E information) and project leadership. While designing projects the interdependencies of all these variables need to be taken into consideration as they influence project performance. The individual independent variables have got a direct relationship with the dependent variable. . For instance while M &E culture will provide the opportunity for shared values that shape how teams perform their tasks towards improved performance; M &E budget and human resources in M & E forms the core inputs that constitute human capabilities and financial resources required to sustain project performance. More over project staff and stakeholders need to have the required skills and competency to achieve the desired project performance. On the other hand utilization of M& E information ensures that timely supply of quality that is accessible for decision making including performance based decisions. The role of the type of leadership as the moderating variable provides the strategic guidance and control required between the M&E drivers and performance of projects. The type of leadership will determine how the M &E budget and human resources are re allocated and managed as utilization of M E information. Type of leadership is assumed accelerate the achievement of high project performance designed to meet the needs of beneficiaries. Ultimately the interplay between these variables under study would lead to high level of project performance.

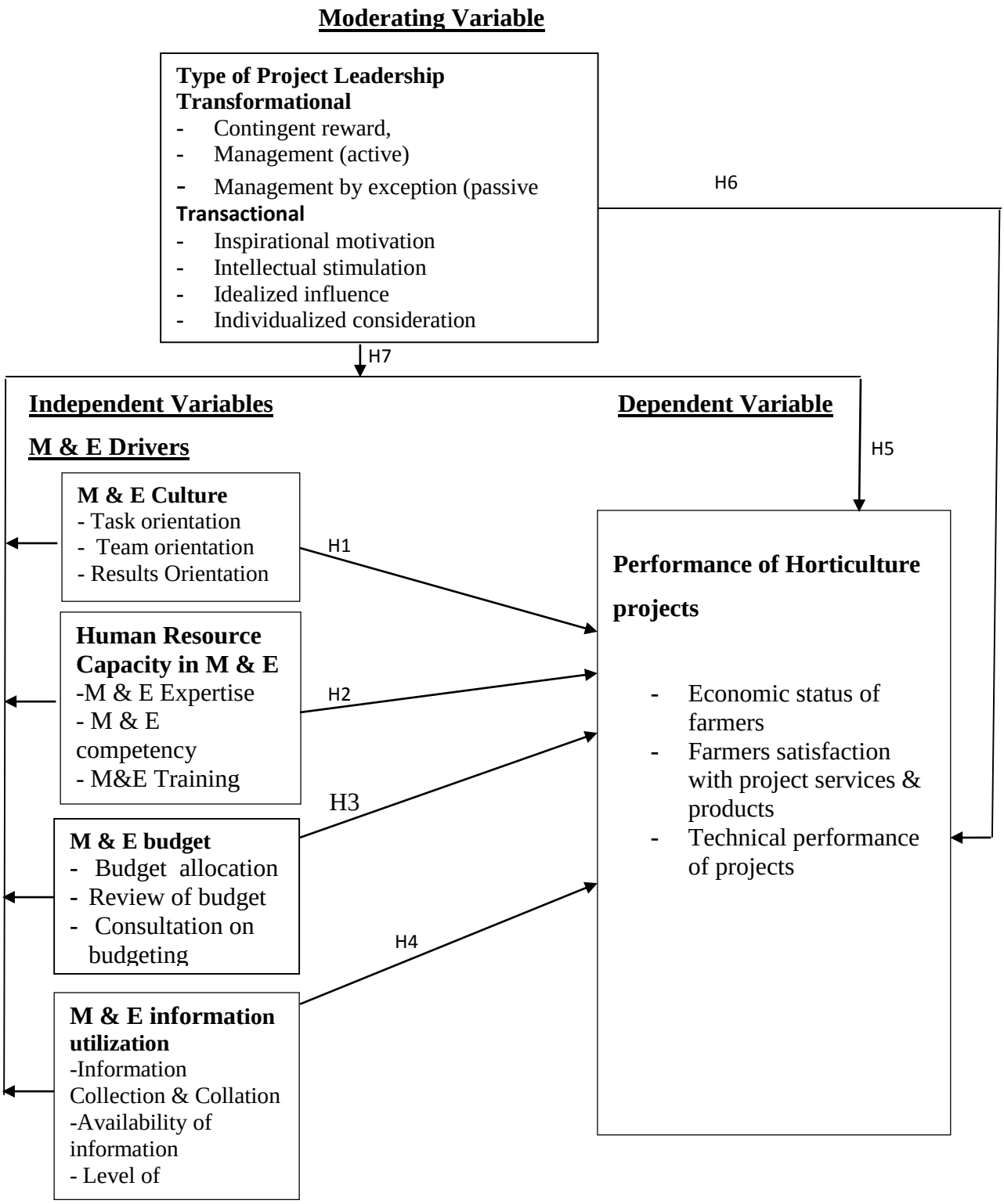

Figure 2.1: Conceptual Framework Showing Relationship between M &E Drivers, Type of Project Leadership and Performance of Projects

(Source; Author)

2.8 Summary of Literature

The purpose of reviewing related literature is among other concerns to examine how certain factors which have possible influence on the problem under the study are inter related. The literature reviewed shaped the conceptual framework and was intended to identify gaps in knowledge hence create an entry point to the new study. From literature reviewed it indicated that there were various factors that influenced performance of projects, they include M &E related and type of leadership. Literature reviewed, showed that performance of projects remains an issue of concern in project management globally (Muller &Jugdev, 2012; Prabhakar, 2008;Ika,(2012).Further performance of projects seem to be influenced by various factors(Ngugi, Muigai,& Muhoro,2014;Ulrich, 2014).Other studies that have yielded valuable insights on performance of projects include (Prabhakar,2008; Muller & Jugdev 2012;Ulrich, 2014; Ngugi Muigai & Muhoro, 2014;Tengan et al.,2014 and Nzekwe, Oladejo & Emoh,2015). All these studies suggest that there is no 'one-fits-all' approach to measurement of performance of projects.

Several authors suggest that M & E is a critical function of project management which starts right from the planning stage of the project cycle and is important in making accurate and timely decisions (Naidoo, 2011; Okello & Mugambi, 2015; Kamau & Mohamed, 2015). More studies have also shown that specific M &E evaluation factors /drivers influence performance of projects. On culture several studies were reviewed (Elberlein, 2008; Gregroy et al., 2009; Stare, 2011; Sebedi, 2012) who suggests that culture plays an important role in performance of projects. On issues of human resource and performance of projects ((Bamberger, 2000; Tuckermann, 2007, Tidac & Pivac, 2014 & Papke-Shields et al., 2010), posits that M & E program staff, should be given incentives and resources needed (skills, time, equipment) so as to play their rightful role in accelerating performance of projects. Trained human resources contribute to various project related outcomes (Rejaul, Huda & Khan, 2012).

On budget and resource allocation for M & E function, several authors suggests that it important for high project performance as well as finding value for such resources including finances (Kuwaviyah, 2010; Agusti, 2012)Mwangi, Nyang'wara & Kulet, 2015).

Concern is not only allocation but also planning, management and control of the same resources to achieve desired performance results (Mavhiki et al., 2013; Khake & Worku, 2013). Some authors pointed out that M &E budget is important sometimes it's under budgeted and rarely considered in decision making (Bambaerger, Rugh & Mabry, 2012; Bayrakar et al., 2011;Agusti, 2012; Aruomoaghe &Agbo,2013: Guo, & Neshkova, 2013; Ifrah, Kerosi &Ondabu ,2015).

On utilization of project information, literature reviewed revealed that the renewed focus on M & E information reflects an interest within organizations implementing projects (World Bank, 2005, IFAD (2002;(Steyn, 2014).Other authors have suggested that an efficient and effective supply of M & E information contribute to better decision making by project (Raymond & Bergeron,2008;FAO,2010;IFAD, 2013). Weakness in utilization of project information was also pointed out (Raymond & Bergeron, 2008; Fadel & Brown, 2010; Kamau & Mohamed, 2015). Utilization of project M &E information has been reported as critical and provides support project managers in their planning, organizing, control, reporting and decision making tasks (Karim, 2011;Bendoly & Swink, 2007).

On type of leadership, several studies acknowledges that type of leadership is a critical factor in improving performance of projects and that selection of leadership should be from the onset of a project (Muller &Turner, 2005; Kerzner& Saladis, 2009; Kroukamp, 2015; Melchar& Bosco, 2010).More evidence indicate that various projects continue to fail because of lack of effective leadership and type of leadership (Melchar & Bosco, 2010: Koech & Namusonge, 2012; Tidac & Pivac, 2014). Gwaya et al. (2014) confirm that human related factors have a direct correlation on the performance of projects. More studies established the importance of human factors increased concurrently as projects became more complex (Kroukamp, 2015; Melchar & Bosco, 2010; Koech & Namusonge, 2012). Lai, 2011, Imran, et al, 2011 and Hamstra, 2011) are of the view transformation and transactional leadership are important type of leadership styles in most performance assessment.

The scholars quoted have provided scanty evidence on the relationships of the variables under this study. Though the authors dealt with selected critical performance factors that

contribute to performance of projects, few have looked at the relationship between monitoring and evaluation drivers and type of project leadership as they impact on performance of horticulture projects. These gaps have persisted in various forms of organization even in farmers' organization such as KENAFF. The authors seem to recommend further investigation into the cause of continued poor performance of projects.

Table 2.1: Summary of the Empirical Literature

Author	Title of the study	Methodology	Findings and conclusions	Gap in knowledge	Focus of Current study
Theme one: M & E Culture and Performance projects					
Eberlein,M (2008).	Culture as a critical success factor for successful global project management in multi-national IT service projects	A qualitative research was used and guided by interpretivism paradigm. Data gathered through interviews.	Identifies culture and communication as core issues framed by a project management methodology, organizational systems, processes and infrastructure as well as the external environment and stakeholders	Qualitative research needs to be performed including other project types and other cultures	Influence of M &E culture on Performance of Horticulture projects
Gregroy, T, Harris, G., Armenakis, A (2009).	Organizational culture and effectiveness: A study of values, attitudes, and organizational outcomes	Used survey and sample of 99 through interviews and Key informant interviews. Analysis was done through MANOVA and ANOVA	positive relationship between group culture and patient satisfaction provides empirical support for the notion that organizations that value teamwork, cohesion, and employee involvement will tend to outperform organizations that do not focus on these values	Future research is needed to identify other mediating variables in the culture–effectiveness relationship, as they would help expand our current understanding of "how" and "why" an organization's culture has an impact on its effectiveness.	Influence of M &E culture on Performance of Horticulture projects

Theme Two: Human Resource Capacity for M & E and Performance of projects					
Tuckermann B.C. (2007)	Assessment of staff capacity to use M&E as a learning tool.	Survey, random sampling, sample of 42 respondents. Used individual and group semi structured interviews& observation.	Understanding M & E helps in accomplishing tasks, leads to changing behaviours and attitudes towards M & E.	Strengthening M &E elements can lead to empowerment of individuals and organizations willing to engage in M&E.	Influence of human resource capacity for M & E on Performance of Horticulture projects.
Tidac, I. & Pivac, S.(2014).	Defining Human Resources "Bundles" and Its' Correlation with Companies' Financial Performances.	Survey was used, self-administered questionnaire and multivariate statistical analysis was done.	Human resources are finally perceived as the crucial element in establishing future existence and growth. Devotion to proper HR tasks and will generate productive, satisfied, secure, reliable employees, willing to strive for Organizational overall success.	Further research on relationship between specific human resource bundle and performance.	Human resource capacity for M & E on Performance of Horticulture projects.
Theme Three :M &E Budget and Performance of Projects					
Mavhiki, S. Nyamwanza, T. Dhoro, L. (2013).	Results Based Monitoring (RBM) implementation in the civil service sector in Zimbabwe.	Survey, used Convenience sampling, & Semi structured interviews.	Incentives, skills, culture, resources and performance indicators noted as challenges Leaders have a crucial role to play in RBM.	Implementation of RBM has been challenged lack of leadership commitment, resources, incentives, culture, and structure.	Influence of M &E Budget on Performance of Horticulture projects.

Khake, S & Worku, Z(2013)	Factors that Affect Municipal Service Delivery in Gauteng and North West Provinces of South Africa.	Descriptive & cross-sectional, Stratified random, sample of size of 300 respondents. Pearson's Chi-square tests were used.	Insufficient resources and lack of skills hampered achievement of service delivery.	M & E resource allocation was established as one of the factors that influence quality of service delivery.	Influence of M &E Budget on Performance of Horticulture projects.
Theme Four: Utilization of M & E information and Performance of Projects					
Karim, J. A. (2011)	Project Management Information Systems (PMIS) & their Impact on Project Management Decision Making.	A survey, random sampling, sample size of 170 respondents. Used Questionnaire, analysis -Cronbach's alpha test and Regression (ANOVA).	Strong and positive correlation between decision makers' quality and affecting Project Management Decision Making.	Need to explore the role of decision maker in effective implementation of PMIS in other project set up.	Influence of Utilization of M &E information on Performance of Horticulture projects.
Raymond, L& Bergeron, F. (2008).	Assess the quality of the PMIS presently used in organizations and to examine their impact on project managers and project performance, based on a PMIS performance model.	Cross sectional, survey. A sample of 224 respondents. Used questionnaire that was sent via email and tested 4 hypotheses.	Quality of information is directly and strongly related to PMIS use and to the system's impacts on the project manager.	Future studies of PMIS performance could evaluate project performance or performance from the client's perspective.	Influence of Utilization of M &E information on Performance of Horticulture projects.
Theme Five: Type of Project Leadership, Monitoring and Evaluation drivers and Performance of projects					
Tengan C. et al (2014).	Assessing Driving Factors to the Implementation of Project Monitoring and Evaluation (PME) Practices in the Ghanaian Construction Industry	Survey was used; data was collected using survey questionnaire, total of 40 questionnaires were administered. Sample size determined purposively. One	Drivers in order of importance influences the implementation of project & Performance; budget, the project duration,	Assess M&E drivers in the context of other projects.	Influence on M & E Drivers, type of project leadership and Performance of Horticulture projects.

		sample t-test was used with significance level was also set at 95%.	the project scope and size, the overall goal or desired Change of effect of the project.		
Nzekwe, J. Oladejo, E, Emoh, F, (2015).	Assessment of Factors Responsible for Successful Project Implementation in Anambra State, Nigeria.	Used survey design, sample of 100 was obtained through Random sampling. Five likert scale questionnaire. SPSS was used for Analysis.	The factors responsible for project success are numerous but there is a good level of correlation between them.	There is need for more research to provide enlightenment about the factors that may lead to project success.	M & E Drivers, type of project leadership and Performance of Horticulture projects.
Theme Six: Type of Project leadership and Performance of Projects					
Melchar E & Bosco, M (2010).	Achieving High Organization Performance through Servant Leadership.	Was a survey used questionnaire as a tool and interviews? Analysis was ANOVA and descriptive statistics.	Results also indicate that senior leaders who exhibit servant-leader behaviors may be able to encourage others.	Study of servant-leader practices increase understanding and positive work cultures and enhanced organizational performance.	Influence of type of project leadership on Performance of Horticulture projects.
Gwaya, et al (2014).	The Role of Servant Leadership in Project Management in Kenya.	Used survey approach covering a sample of 500. Design was a quantitative descriptive inquiry where non-parametric tests of significance, using chi-square tests, were performed.	There was positive correlations between the project manager (servant leader) behaviors being aware of the project team needs and the factors for successful project outcomes.	Further research as to why many projects continue to fail and explore the role of other leadership competency required for successful project outcomes be looked into.	Influence of type of project leadership on Performance of Horticulture projects.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides an overview of the research methodology; it includes research design, research location, target population, details of the sample size and sampling procedures, methods of data collection, issues of validity and reliability. The chapter further provides operational definition of variables of the study and the methods of data analysis.

3.2 Research Paradigm

A paradigm is regarded as an accepted model or pattern, with deeper philosophical position that explain the nature of social phenomena. It is the choice of paradigm that sets down the intent, motivation and expectations for research argues Johnson and Onwuegbuzie (2004). This study was guided by pragmatic/realist paradigm. Pragmatic paradigm was preferred because of its ontological epistemological, methodological and axiological are appropriate in retrospect of other paradigms. It is an alternative paradigm, because philosophically, it accepts that there are singular and multiple realities. These realities are open to empirical inquiry and orients itself towards solving practical problems in the ‘‘real world’’ as noted by Creswell & Clark, (2011). More so, pragmatists are of the view that measurable world relates to an existing reality, encompassing some objective, some subjective and sometimes a mixture of the two (Creswell, 2012). This mixed view makes pragmatic paradigm appropriate for this research because the phenomenon was measured from KENAFF management, staff and farmers' perspective of the variables that were studied.

Pragmatism is not committed to any one system of reality or philosophy but rather focus on what and how with regard to research problem. Comparatively, Mackenzie & Knipe (2006) observed that pragmatists take the research problem as central and data collection and analysis chosen as those likely to provide greater insight into the question with no philosophical loyalty to any alternative paradigm. While positivism concerns a single reality and interpretivism focus on multiple realities, pragmatism is concerned with multiple perception of a single reality (Krauss, 2000). Further pragmatists are value laden

as opposed to positivism that is value free. As such pragmatists/ realists observe empirical domain by discovering it through a mixture of theoretical reasoning and experimentation, naming and describing generative mechanism that operate in the world. Overall pragmatists/realists framework, find both qualitative and qualitative methodologies appropriate for researching underlying mechanisms that drive actions and events.

This study befitted pragmatic paradigm since it allowed for free of mental and practical constraints that sometimes is a challenge when considering the dichotomy between positivism and constructivism. Epistemologically, pragmatism allowed the researcher to decide how to interact with the research. Ontologically, pragmatism offers a middle ground providing for a balance between fixed nature in construction of reality as advocated by positivist, constructivism and emancipatory paradigms in qualitative designs. Comparatively from the axiological view, Johnson &Onwuegbuzie (2004) observes that pragmatism offers the value free with no research bias. Methodologically, pragmatism balances between deductive and inductive logic as proposed by Tashakkori& Creswell (2007) unlike positivism and post positivism that is guided by deductive logic only. Positivism and post positivism would limit the researcher in this study. On the other hand, emancipatory paradigm advocates for the disadvantaged in the society who are not the focus of this study, as such the paradigm was not taken into consideration.

3.2.1 Research Design

The study employed cross sectional, descriptive survey design and correlation research design. The choice of the two research design was informed by data collection and analysis methodology. The design allowed for both descriptive and inferential methods. Mixed method approach offers a bridge and a continuum by using quantitative methods to measure some aspects of the phenomenon under study and qualitative methods for others (Johnson & Onwuegbuzie,2004).Further, mixed method approach provided for complementarity, completeness, expansion, corroboration or confirmation, compensation and diversity in data collection and interpretation. This flexibility of mixed method was advantageous in data collection, analysis and interpretation. The choice of a mixed method research approach allowed the use of both qualitative and quantitative data analysis.

This study made use of survey. A survey was chosen because it helped describe data and characteristics of the phenomenon being studied. Survey also helped answer the questions who, what, where, when and how (Cresswell, 2012). Correlation design was employed as it allowed for the measurement of two or more variables as well as the determination of the extent to which values for study variables are related.

This study looked into the causal influence of relationships as well as the extent to which combination of predictor variables influence the outcome of the dependent variable. Hence both descriptive research design and correlation research design befitted this study. While descriptive research design helped in describing the phenomena under the study, correlation research design provided an opportunity to identify predictive relationships by use of correlations and regression models.

3.3 Target Population

The target population for this study was farmers groups implementing various projects supported by KENAFF in Nakuru County. The projects include dairy, poultry, cereals, rabbit keeping and horticulture projects. There were a total of 45 farmer groups and out of these number, 28 implement horticultural projects. The sampling frame was a list of all farmer groups supported by KENAFF (Appendix VII). Out of 45 groups implementing various projects, 28 groups implementing horticulture projects were purposively selected for the study. The focus of 28 groups is that they are spread across 10 sub Counties out of a total of 12 sub Counties in Nakuru County hence had greater representation in terms of the farmer population constituting 742 out of 1296 farmers in total.

3.4 Sample Size and Sampling Procedure

In this section sampling techniques and sampling procedures as well as derivation of sample are discussed.

3.4.1 Sample Size

Increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population. Sampling is necessary

as it provides an acceptable method to get information from the targeted respondents that was sampled from the various categories of target groups.

The targeted 28 groups were clustered and through proportionate sampling, where 15 groups were drawn as sample as indicated in shown in Table 3.1.

Table 3.1: Sample Size Determination

Name of Cluster	No of Groups	Sampled Groups
Kuresoi North	5	3
Molo	8	4
Nakuru Town East	2	1
Bahati	2	1
Nakuru Town West	2	1
Njoro	9	5
Total	**28**	**15**

3.4.2 Sampling Procedure

Sampling procedure for this study was guided by the research design which is mixed method research. Both parametric and non-parametric methods were used hence the study employed both concurrent and sequential mixed approaches. Concurrent mixed sampling was preferred, because it allowed triangulation of results, confirm, cross validate or corroborate the findings within a single study (Rao, 2000). Concurrent sampling allowed use of a single sample generated from probability (random) and non-probability (purposive) techniques to generate data for quantitative and qualitative strands for the study using both closed and open ended survey questionnaire.

Sampling frame for groups implementing horticulture was the project register while the sampling frame for individual respondents from the specific groups was the membership register that indicate the designation of each individual member. Out of a total of 45 groups, 28 implementing horticulture projects were purposively selected and then clustered per the sub counties and wards. This ensured that there was representation across the County. Hence a sample of 15 groups was sampled using proportionate sampling. To get the specific 15 groups, groups per cluster were arranged in alphabetical order and the number of groups per cluster was picked randomly.

Respondents were drawn from the sampled groups and at KENAFF secretariat. As such respondents included leaders of the groups who comprise of the chairperson, vice chairperson, secretary, vice secretary, treasurer and three other committee members representing special interest. The leaders of the groups have been trained by KENAFF in project management including monitoring and evaluation of projects. A second category of respondents was KENAFF staff supporting implementation of horticulture projects in Nakuru while the third category included KENAFF top leadership that oversee the overall implementation of projects by the groups.

For individual respondents, purposive sampling was used to draw respondents from each of the sampled 15 farmer groups. The respondents from the groups were purposively selected as per their designation in the group, out of which five must have been elected officials comprising of chairperson, vice chairperson, secretary, vice secretary, treasurer and at least four member representatives. Each group has a leadership management team of nine who are also farmers in their own capacity. Hence from each group nine (9) respondents were drawn giving a total of 135 respondents from the 15 groups. Purposive sampling for the group leaders was preferred because they have been trained in project management including monitoring and evaluation hence were best suited to provide the information sought under this study.

For triangulation purpose, respondents from KENAFF secretariat were sampled through stratified random sampling and purposively sampling respectively. A total of 33 KENAFF staffs supporting horticulture projects were sampled at the different levels (stratum) including those at the secretariat and the county level. At the secretariat level stratified random sampling was done per department to select managers and program officers supporting horticulture projects in Nakuru County, hence six(6) project coordinators, one (1) regional coordinator, three project managers(3) and two (2) project officers were selected. For the top management level, one (1) chief executive officer and four (4) board members were purposively selected since they sit in the project management board and make decisions regarding project implementation, allocation of resources, monitoring and evaluating. At the county level one county coordinator was purposively selected. A

summary of total respondents from farmers' group and KENAFF secretariat is summarized in the following Table 3.2.

Table 3.2: Sampling of Respondents

Category of respondents	No. of respondents
Group Respondents- nine respondents per group (15 * 9)	**135**
Top Management	
• Board including CEO	5
• Regional Back stopper	1
KENAFF Secretariat Implementing Team	
• Project coordinators	6
• M & E Project officers	2
• County Coordinator	1
• Project Managers	3
Total	**154**

The overall total respondents for this study was 154, comprising of 135 drawn from the groups, 19 from KENAFF secretariat

3.5 Research Instruments

This being a mixed research the study used quantitative and qualitative methods for data collection. However quantitative method was the main method used and utilized survey method of collecting data. The instruments used in this study included questionnaires for farmers and KENAFF implementing team while interview schedule was used for key informants that comprise of KENAFF top management. Focused group discussions were used to gather information from farmers who did not participate in responding to the questionnaires. Research assistants were trained and administered the survey questionnaire to respondents from the farmer groups. Survey questionnaire for respondents from KENAFF implementing teams was self-administered. For top management an interview schedule was used to get responses.

3.5.1 Questionnaire

The questionnaire contained both open and closed ended questions and was used to seek responses from the sampled respondents; leaders and farmer representatives from farmers groups and KENAFF implementing teams. For the leaders of farmer groups the questionnaire was administered by the researcher or research assistants. This was preferred because of the level of education of the farmers could have caused a challenge to understand the questions on their own. The respondents were informed about the purpose of collecting the information before the questionnaire was administered. For the KENAFF implementing teams it was self- administered since their literacy level allowed. In closed ended questions, the respondents were asked to select from a fixed list of answers, where the respondents selected any one of the options given. This method facilitated coding and helped in quantifying the answers to the questions**.** Open ended questions gave the respondents an opportunity to express their opinions. The questionnaire was organized in various parts based on variables of the study. The questionnaire was divided into eight sections. Section A was concerned with demographic information; section B sought information on performance of projects; Section C was on M & E culture; section D sought information of Human Resource Capacity for M &E; Section E covered information on M &E Budget; Section F was on Utilization of M &E information; Section G sought information on Type of Project Leadership. Section B to G contains Likert type scale format using a scale of SD- Strongly Disagree, D- Disagree, N – Neutral, A- Agree, SA- Strongly Agree and DN- Don't Know. Indicators for the Leadership section G have been adopted from Multifactor leadership Questionnaire by Bass and Aviolo (1992).

3.5.2 Focus Group Discussion Guide

This being a mixed method study, focus group discussions (FGD) was used to collect information from famers who did not participate in responding to the questionnaire. FGD is preferred because it helped in triangulating findings from the survey questionnaire. Additionally group leaders who are also farmers share similar characteristics; they are elected leaders and have been trained on project management including monitoring and evaluation. Data obtained from FGD groups were qualitative; descriptive hence helped to gather more in-depth information on group leaders' perceptions, insights, attitudes,

experiences, or beliefs regarding the relationships among the variables under a study (Bloo et al., 2001). Moreover, group dynamic provided useful information that individual data collection collected from questionnaire does not provide. Importantly, FGD was useful in gaining insight into a topic that may be more difficult to gather through other data collection methods (Creswell & Plano, 2011).Data collected from FGD was qualitative hence non parametric analysis was applied.

3.5.3 Key Informant Interview Schedule

For sufficient information to be collected regarding monitoring and evaluation drivers, project leadership and project performance, KENAFF top management were interviewed by use of open ended interview guide. This method was preferred for these categories of key informants because majority of them work on part time basis especially the board except for the CEO. Due to the nature of their availability, interview schedule was the most appropriate for this category of respondents. More so, this method allowed for probing on an in-depth information on the study variables that could not have been un-earthed by the survey questionnaire. The data gathered through interview is qualitative, hence analysis was non-parametric.

3.5.4 Pilot Testing of Research Instruments

The outcome of a study is determined by the quality of research instruments (Creswell & Plano, 2001). To check the validity of the research instruments, expert opinion was sought through university supervisors. Testing for reliability the survey questionnaire was administered to 30 respondents; 20 from the farmer groups that did not participate in the survey while for KENAFF secretariat 10 staff were selected from departments that did not participate in the study. For KENAFF implementing teams, those who participated in the pilot study were exempted from the study. After piloting testing the instruments were improved as appropriate with input from the university supervisor.

3.5.5 Validity of Research Instruments

A research instrument is valid if it actually measures what it is supposed to measure and when data is collected through it accurately represents the respondents' opinions as stated

by Creswell and Miller (2000).Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are, suggests Golafshani (2003**)**. Validity of research instruments was ensured through pilot testing to help refine the instruments. This ensured that the instructions are clear and all possible responses to a question are captured. Prior to pre-testing, expert and peer opinion was sought on the representativeness and suitability of the questions. Suggestions for improvement were made as per necessary amendments and recommendations.

Construct validity, was taken care of through operationalization of the research variables and ensured that translation reflected the true meaning of the constructs. This was in line with Zohrabi (2013) who postulates that construct validity is how the researcher translates or transforms a concept or an idea into functional and operating reality. University supervisors were consulted in validating the operationalization of research variables.

To ensure content validity, theoretical definitions of the variables and selected indicators covering the domain and dimensions of each of the research variables was provided. Further the judgment of university research supervisors to determine content validity was sought. Research instruments were reviewed and improved as per the supervisors' comments to ensure that the instruments were able to address the objectives of the study.

3.5.6 Reliability Research Instruments

Reliability is the extent to which results are consistent and accurate representation of the total population under study and if the results of a study can be reproduced under a similar methodology. Using different types of procedures for collecting data and obtaining that information through different sources augments the reliability of the data and their interpretation, as suggested by Zohrabi (2013). Therefore, reliability of instruments for this study was assured through methodological triangulation, which strengthened the study by combining methods. This study used both quantitative and qualitative methods.

Questionnaire of likert type was the main instrument hence it was important to test the internal consistency to check how well they fit the concepts used in the study. . Cronbach's

Alpha Reliability Coefficient was calculated. .A reliability coefficient range between zero (0) and one (1) is deemed fit (Tavakol & Dennick, 2011) A coefficient of zero implied that the tool has no internal consistency while that of one implies internal consistency. Creswell (2012) indicate that a reliable research instrument should have a composite Cronbach's Alpha Reliability Coefficient of at least 0.7 for all items under the study. Table 3.3 shows all the variables under this study are more than 1 hence affirming the results of the study.

Table 3.3: Reliability Summaries

Variables	Cronbach's Alpha	Number of Items in the scale
Performance of horticulture projects	0.844	3
M&E culture	0.822	3
Human resource capacity for M&E	0.837	3
M&E budget	0.849	3
Utilization of M&E information	0.817	3
Project leadership	0.772	8

3.6 Data Collection Procedures

Permission was sought from relevant authorities to conduct the research including National Council for Science, Technology and Innovation (NACOSTI), relevant County offices and KENAFF leadership.

Planning meetings were held with KENAFF project team to help plan for data collection schedule in a manner that it did not distract program activities. Four research assistants were recruited and trained to assist in data collection and data entry. The research assistants were taken through the training to clearly understand the purpose of the research, and ethics of research to be considered. The research assistants administered the questionnaires to respondents.

3.7 Methods of Data Analysis

Data analysis for study employed both descriptive and inferential statistical analysis to test the study hypothesis. Non parametric was analyzed descriptively by central tendency and measures of dispersion. The arithmetic mean was measure for central tendency while

standard deviation was the measure of dispersion. Due to the relative homogeneity of groups guided by common organizational vision and implemented through a uniform strategy approach of uniform activities, the finite research population is expected to be normally distributed and data is expected to cluster around statistical averages. Data was therefore measured to assess whether it had strong or weak central tendency.

Parametric data analysis was employed by use Pearson's Product Moment Correlation Coefficient (r) and Hierarchical Regression (R^2). Developed by Karl Pearson, Pearson's Product Moment Correlation Coefficient (r) is a measure of linear dependence (correlation) between two variables Pearson's Product Moment Correlation Coefficient (r) was used to analyze the linear relationship between the main predictor variables and the dependent variable. Hierarchical Regression (R^2) was used to analyze the influence of moderating variable on the relationship between independent variables and the dependent variable. The choice of Correlation analysis method was preferred because it was used to measure and explain the relationship between independent variables and dependent variable as well as the relationship among the independent variables. Further, analysis of data by use of Regression Coefficient was used to measure the influence of the moderating variable on the relationship between the independent and dependent variables of the study.

In testing the hypothesis Pearson's Product Moment Correlation Coefficient(r) and Hierarchical Regression (R^2), F -Test was used. Pearson's product correlation coefficient was preferred since the variables under study were parametric variables; nonetheless the spearman's correlation would have been used in the event the variables were non-parametric. Hierarchical regression was preferred because in practice F- Test are the most commonly used to test confidence intervals and hypotheses. If for a given sample f(r) is the Fisher transformation of r, and n is the sample size then F(r) approximately follows a normal distribution given the assumption that sample pairs are independent and identically and follow a bivariate normal distribution. Hence an approximate value was obtained from a normal probability table. For a large enough sample where $n>30$ as is the case in this study, then F values was obtained using Fisher transformation and the hypotheses was tested normally using F- Tests as proposed by Moriya, (2008).

Qualitative data from Key informant interviews (KII) and Focus Group Discussion was first categorized and organized by identifying major themes through coding. Analysis was done using key themes in line with the research questions. Non parametric data analysis was used for Qualitative data from Key informant and FGD.

3.7.1 Multicollinearity Diagnosis

To ensure that the actual influence of independent variable on the dependent is obtained, a Multicollinearity diagnosis was done by examining the variance inflation factor (VIF) and the tolerance factor. If the VIF value is greater than 10, then there is a very big problem of multicollinearity, it is recommended that the VIF to be below 5 for any good data series that doesn't have multicollinearity. The values of the VIFs in Table 3.4 range from 1.603 to 4.917 indicating absence of collinearity among the variables.

Table 3.4: Collinearity Statistics

Model	Collinearity Statistics	
	Tolerance	**VIF**
1.Coefficients of M&E Culture		
Task Orientation	0.532	1.879
Team Orientation	0.415	2.411
Results Orientation	0.503	1.989
2. Coefficients of Human Resource Capacity		
M&E Expertise	0.279	3.58
M&E Competency	0.217	4.61
M&E Training	0.418	2.391
3. Coefficients of M&E Budget		
Budget Allocation	0.553	1.809
Budget Review	0.58	1.724
Information Collection	0.33	3.034
4. Coefficients of Utilization of M&E information	0.624	1.603
Availability of M&E information		
Information Use	0.418	2.391
Inspirational motivation	0.236	4.242
Intellectual Stimulation	0.276	3.622
5. Coefficient of Type of leadership		
Transformational Type of Leadership		
Idealized Influence(attributed)	0.203	4.917
Idealized Influence(Behavioral)	0.184	4.427
Individual Consideration	0.279	3.589
Contingent Reward	0.239	4.186
Transactional Type of Leadership		
Management- by Exception (Active)	0.336	2.977
Management- by Exception (Passive)	0.477	2.094

a. Dependent Variable: Performance of Projects

The tolerance factor indicates how much variability of some independent variables are not explained by other independent variables in the same model. A very low (below 0.10) value of the tolerance factor suggests a presence of multicollinearity. However for the data that

was used in this analysis in Table 3.4 shows the least value of tolerance factor was 0.184 hence an affirmation that the data series did not have multicollinearity amongst themselves.

3.7.2 Normality Test

To test for normality Shapiro-Wilk test (SW) test were used since the sample size was less than 2000. The test was based on the correlation between the data and the corresponding normal scores and provides better power. The statistic ought to be positive and less than or equal to one. Being close to one indicates normality. The judgment followed these guidelines; W is insignificant if the variable's distribution is not different from normal. W statistics = 1 when a sample variable data is perfectly normal. When W is significantly smaller than 1, then the distribution is non-normal.

Table 3.5: Test of Normality

Variables	Shapiro-Wilk		
	Statistic	df	Sig.
Performance of Horticulture projects	.910	146	.006
M&E Culture	.817	147	.002
Human resource capacity for monitoring and evaluation	.716	147	.014
Monitoring and Evaluation Budget	.862	146	.005
Utilization of M&E Information	.862	146	.000
Type of Project Leadership	.853	147	.004

From Table 3.5 the least statistic was .716 and highest .910 for performance of horticulture projects. All these values are statistically significant and close to 1, showing they all have a normal distribution.

3.7.3 Likert Scale as a Measurement Interval Measure

A Likert scale was used on all the seven sections of questionnaire , and as such a value of 1 indicated the 1st response(Not at All), 2 indicated the 2nd(Small Extent), the 3rd(Moderate Extent), 4 the 4th (Great Extent)and 5 the 5th (Vey Great Extent).In all cases means were approximately to absolute terms in order to gauge the scale in which they laid upon (a mean for instance of 1.57 was approximated to 2, implying most of the responses were around the response number 2). Standard deviations of the cases, was used to measure

the spread of the values from the mean, a large standard deviation indicated a large range of response from the mean.

The descriptive statistics recommended for interval scale items include the mean for central tendency and standard deviations for variability. Additional data analysis procedures appropriate for interval scale items used included the Pearson's r, t-test, ANOVA, and regression procedures. This study used one verbal anchors; 1=not at all (NA); 2= to a little extent (LE); 3= to a moderate extent (ME); 4= to a great extent (GE); 5= to a very great extent (VGE). Therefore the judgment rule followed this argument; Not at All would be for values lying between 1<NA>1.8; to a little extent for values between 1.8<LE>2.6; To a moderate extent for values between 2.6<ME>3.4; To a great extent for values between 3.4<GE>4.2; To a very great extent for values between 4.2<VGE>5.0. This created a scale that had an equidistance of 0.8.

3.7.4 Linearity Test

To explore the linear relationships of the variables a scatter plot of the composite means of the dependent variables and independent variables was done and presented in appendix IX. Composite means of performance of horticulture projects was used as the dependent variable to test its relationship with M &E Drivers as the independent variables which include composite means of; M &E Culture, Human Resource Capacity for M &E , M &E Budget and Utilization of M & E Information. All the variables were closely scattered around the trend line implying they had a linear relationship and as such warranting for inferential statistics on them.

3.7.5 Hypothesis Testing

Correlation and Regression models were used to test the strength of the independent variable as far as their influence on the dependent variable was concerned. As such the contribution of each of the M &E Drivers on performance of horticulture projects supported by KENAFF in Nakuru County was determined using the Coefficient of Determination. F statistics were used to test the hypothesis of the study since the sample was 154. Each variable with corresponding indicators have been assigned values that guided correlation

and regression models used to test the study hypotheses. Table 3.6 shows models for hypothesis testing.

Table 3.6: Model for Hypothesis Testing

Objective	Hypotheses	Model for Hypothesis Testing
1. To establish the influence of monitoring and evaluation culture on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County	**Hypothesis 1** **H_{01}:**Monitoring and Evaluation culture has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County	$y= \beta_0 + \beta_1 X_1+ \varepsilon$ y =Performance of Horticulture projects - β_0= Constant term β_1= Beta Coefficient X_1= M & E Culture ε= Error term
2. To assess the influence of human resource capacity for monitoring and evaluation on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**Hypothesis 2** **H_{02}:**Human resource capacity for monitoring and evaluation has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation Projects in Nakuru County	$y= \beta_0 + \beta_2 X_2+ \varepsilon$ =Performance of Horticulture projects - β_0= Constant term β_2= Beta Coefficient X_2= Human Resources Capacity for M & E ε= Error term
3. To establish the influence of monitoring and evaluation budget on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**Hypothesis 3** **H_{03}:**Monitoring and evaluation budget has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County	$y= \beta_0+ \beta_3 X_3+ \varepsilon$ y=Performance of Horticulture projects - β_0= Constant term β_3= Beta Coefficient X_3= M & E Budget ε= Error term
4. To assess the influence of utilization of monitoring evaluation information on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County	**Hypothesis 4** **H_{04}:** Utilization of monitoring and evaluation information has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County	$y= \beta_0 + \beta_4 X_4+ \varepsilon$ y=Performance of Horticulture projects - β_0= Constant term β_4= Beta Coefficient X_4=Utilization of M & E information ε= Error term

5. To establish combined influence of monitoring and evaluation drivers on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**Hypothesis 5** **H_{05}:** Combined influence of monitoring and evaluation drivers has no significant influence on performance horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	$Y=\beta_0 + \beta_1 X_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ Y=Performance of Horticulture projects - β_0= Constant term X_1 = M & E Culture X_2= Human Resource Capacity in M &E X_3= M &E Budget X_4= Utilization of M & E information ε= Error term
6. To establish the influence of type of project leadership on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County	**Hypothesis 6** **H_{06}:** Type project leadership has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	$y=\beta_0 + \beta_{5a} X_{5a} + \beta_{5b} X_{5b} + \varepsilon$ β_0 = Constant term X_{5a} = Transformation leadership style X_{5b} = Transactional leadership style ε= Error term
7. To assess the moderating influence of type of project leadership on the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**Hypothesis 7** **H_{07}:** Type of project leadership has no significant moderating influence on the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County	**Hierarchical Regressions** 1. $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ 2. $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{5a} X_{5a} + \varepsilon$ 3. $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{5b} X_{5b} + \varepsilon$ 4. $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{5a} X_{5a} + \beta_{5b} X_{5b} + \varepsilon$

3.7.6 Modeling the Moderating Variable

The moderating variable in this study is type of leadership. It is expected that the moderating factor transmit an effect to the independent variable in this case the Monitoring and evaluation drivers. The moderating influence of type of project leadership in this study was tested according in line with Baron & Kenny (1986) who argues that moderation happens when the influence of an independent variable on dependent variables varies according to the level of a third variable the moderator. In this case the type of project leadership is to improve the role of M&E drivers for better performance of horticulture

projects in Nakuru County. In reference to previous studies, using moderation in research is necessitated when situational conditions or individual difference influence the strength of relationship between a predictor and an outcome (Edwards & Lambert, 2007).

In testing the influence of type of project leadership on the relationship between M &E Drivers and Performance of horticulture projects; hierarchical regression technique was used. The regression is a hierarchy of three models, one of the models is the relationship between M&E drivers and performance of horticulture projects, model two comprises of the M&E drivers, type of project leadership and performance of horticulture projects, finally model three has both the M&E drivers' variable, type of project leadership and the interactive term. In all the three models, performance of horticulture projects is the dependent variable.

The relationship is in the form below:

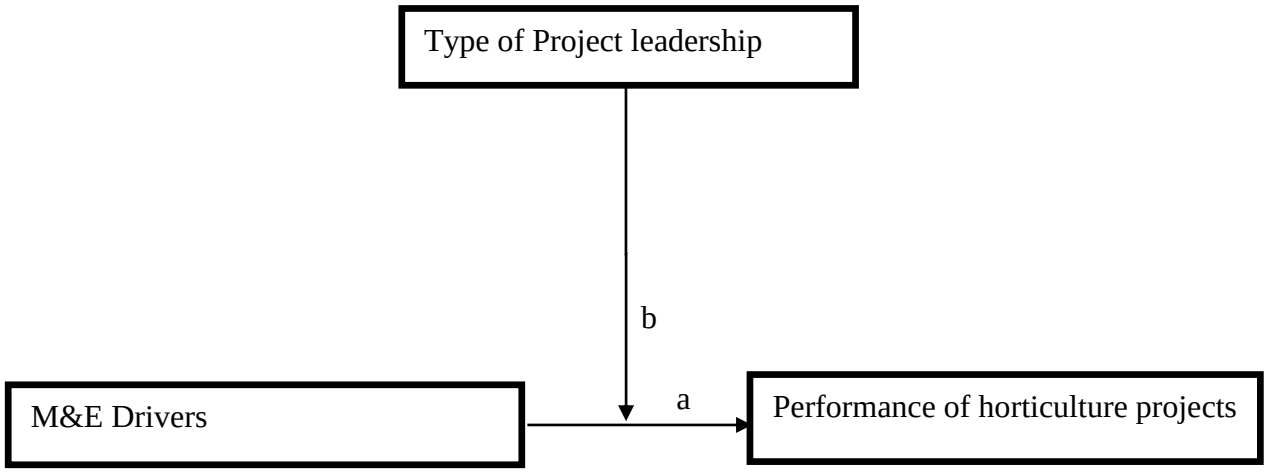

Figure 3.1: Modeling Moderating Variable

3.8 Ethical Issues

Ethical considerations were observed through the study. Written communication seeking permission to carry out the research was done to National Council for Science, Technology and Innovation (NACOSTI). Letters to the targeted respondents were used to seek voluntary informed consent to participate in the research. The research was carried within the general understanding that activities implemented by KENAFF are beneficial to their

respective farmer groups, KENAFF as an organization as well as to the general public. Respondents were assured that the information sought would only be used for the purpose of research and that disclosure will not be made on the identity of the respondents. Every respondent was respected, treated with dignity and was made to understand that whatever role they played will be greatly appreciated. Throughout the research exercise, ethical principles were observed in the constitutional rights of every person and as such informed consent was sought from the respondents and were assured of confidentiality of the data and information to be collected.

3.9 Operationalization of Variables

This section provides an operational explanation of the variables as used in the study. The variables to be studied were performance of horticulture projects as the dependent variable & E drivers which included; M& E Culture, M & E human resource capacity for M &E, M &E Budget, Utilization of M &E information, as independent variables and type of project leadership as the moderating variable .

Table 3.7 gives a summary of the operational definition of the study variables including their respective indicators, measurement, measuring scale and tool of analysis.

Table 3.7: Summary of Operational Definition of Variables

Objective	Variables	indicators	Measurement	Measuring scale	Tools of Analysis
1. To establish the influence of monitoring and evaluation culture on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**Dependent variable** Performance of Horticulture projects	- Economic status of farmers -Technical performance of projects -Farmers satisfaction with products and services -Project Staff satisfaction	-Income levels -Level of technical -level of satisfaction - Level of Satisfaction -Level of impact	Interval	Persons Correlation Persons Correlation
	Independent Variable M &E culture	-Task orientation - Team orientation -Results orientation	Orientation Type	Ordinal	Arithmetic mean & Standard Deviation
2. To assess the influence of human resource capacity for monitoring and evaluation on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	Human resource capacity for M & E	- M & E Expertise - M & E competence	Type of M & E skill Level of Competency -Type of training	Ordinal Interval Ordinal	Arithmetic mean & Standard Deviation Pearsons Correlation Arithmetic mean & Standard Deviation
3. To establish the influence of monitoring and evaluation budget on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	Independent Variable M & E budget	- Budget allocation - Consultation in budget allocation - Review of budget	- Amount allocation -Level of Consultation -Level of participation in Budget -	Ordinal Interval Interval Ratio	Arithmetic Mean and Standard Deviation Pearson's correlation

4. To assess the influence of utilization of monitoring and evaluation information on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	Independent variable Utilization of M & E information	- Collection & Collation of information - Availability of M &E information - M&E information use	-Type of information -Level of Information use - Frequency of availability of information	Ordinal Interval Interval	Arithmetic Mean & standard deviation Persons correlation
5. To establish combined influence of monitoring and evaluation drivers on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**Independent Variable** Monitoring and Evaluation Drivers	-M & E Culture - Human resources capacity for M &E -M & E Budget - Utilization of M & E information	Strength of Relationship	Ratio	All possible Subset Regression/ best subset Regression (R^2)
6. To establish the influence of type of project leadership on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County 7.	**Moderating Variable** Type of project leadership	-Transactional -Transformational	Type of leadership	Ordinal	Arithmetic mean & Standard Deviation
8. To assess the moderating influence of type of project leadership on the relationship between monitoring and evaluation drivers and performance of horticulture	**Independent Variable** Monitoring and Evaluation Drivers	-M & E Culture - Human resources capacity for M & E -M & E Budget - Utilization of M & E information	Strength of Relationship	Ratio	All possible Subset Regression/ best subset Regression (R^2)

projects supported by Kenya National Farmers Federation in Nakuru County.					
	Moderating Variable Type of Project leadership	Transactional Transformational	Type of leadership	Interval Ratio	All possible Subset Regression/ best subset Regression (R^2)

CHAPTER FOUR
RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter of the study presents the data output of the study, basing on the methodology discussed in chapter three. The chapter starts with descriptions of respondents, interpretation and discussions of findings. Data has been analyzed and presented first in descriptive format followed by inferential with interpretation of correlation of the variables. Hypotheses have been tested and discussions made to link the study findings with the existing body of knowledge. This section is presented according to the research objectives.

4.2 Questionnaire Return Rate and Profiles of the Respondents

The sample size of the study was 154 comprising of 135 farmers and 19 staff from the KENAFF secretariat working with horticulture projects supported by KENAFF in Nakuru County. Questionnaires were used as the main tool for data collection. Out of the 154, a total of 150 were filled which was a return rate of (97.4%) which was adequate for the study. A response rate of 85% or more is desirable for social science research (Fan & Yan (2010). The high responses rate was attributed to administration of the questionnaires at sites that were convenient to the respondents. For farmers' groups the interviews were conducted at the project meeting venues while for the KENAFF staff questionnaires were self-administered. Informing respondents about the purpose and use of the study results; had a great impact on the responses. Results from the questionnaires were triangulated using those from key informant interviews and focus group discussion. By use of interview guide, face to face key informant interviews were conducted to six senior management who are also board members. Three focused group discussions were held to get in depth information on farmers perception, insights, and experiences regarding the relationships among the study variables. Normality of the distribution of population was achieved by ensuring that there was no bias in picking respondents from farmers' groups and the secretariat. Three variables that were considered to be useful for the study these were respondent designation, demographics level of education and years spent in the project.

4.2.1 Designation of the Respondents

Table 4.1 shows that out of the 135 farmers that were interviewed; 60% (the largest proportion) were ordinary farmers. A number of the respondents (14.8%, 9.6% and 6.7%) were farmers' representatives in the committee, chairpersons and secretaries in the groups. M&E officers and project officers represented the large numbers of staff whom the study was administered on, revealing a good representation of the picture of the project environment.

Table 4.1: Designation of the Respondents

Designation	Farmers		Designation	Staff	
	Frequency	Percent		Frequency	Percent
Chairperson	13	9.6	Project Manager	2	13.37
Deputy chairperson	7	5.2	Project Coordinator	2	13.37
Treasurer	5	3.7	Project officer	4	26.67
Secretary	9	6.7	M&E officer	5	33.33
Farmer representative	20	14.8	County coordinator	2	13.37
Others	81	60.0	No response	4	0
Total	135	100.0		19	100

4.2.2 Periods the Respondents have been Involved in Projects

A big percentage, (53.3%) of the farmers under the study had only been involved in projects for less than 5 years as shown in Table 4.2. However among the staff members respondents, 60% of them have had more than 5years of experience in the field, as such showing stability of the information that was obtained since it is guided by experience of being involved in the projects.

Table 4.2: Periods of Existence/ Involvement Projects by the Responses

Years	Farmers		Staff	
	Frequency	Percent	Frequency	Percent
Below 5 years	72	53.3	4	26.67
5-10 years	30	22.2	9	60.00
Over 10 years	33	24.4	2	13.37
Total	135	100.0	15	100

4.2.3 Education Levels of the Respondents

Large proportions of farmers (46.7% and 34.1%) as shown in Table 4.3 had only primary certificates and high school certificates, showing the levels of education for farmers is not very high. However the staff members involved in the horticulture projects have at least a college certificate and above, with the larger proportion of 40% having a bachelor's degree as shown from Table 4.3, and a closer similar large proportion of 33.33% having at least a master's degree, indicating staff members are well educated.

Table 4.3: Levels of Education of the Respondents

Qualifications	Farmers		Staff	
	Frequency	Percent	Frequency	Percent
Primary certificate	63	46.7		
High certificate	46	34.1		
College certificate	9	6.7	1	6.67
Diploma certificate	2	1.5	3	20.0
Bachelor's Degree	6	4.4	6	40.0
Master's Degree	2	1.5	5	33.33
Total	128	94.8	15	100
No response	7	5.2		
Total	135	100.0	15	100

4.3 Descriptive Analysis of Study Variables

The study was conducted in Nakuru County, respondents being farmers, staff and management. The variables were measured on a 5 point Likert Scale as such all the mean values ranged from 1 to 5, a mean of 1-2 indicating the lowest measure and that of 4-5 indicating the highest measure of any category respectively. The Standard deviation (SD) was used to measure the spread of the variables, where a small SD of less than 1 showed a small spread (indicating the responses were scattered close to the mean value) and that of more than 1 showing the responses were more scattered (most of the responses away from the mean value). The frequencies (reported relatively with their percentages) were used to report on the particular proportions of the responses that were in agreement or disagreement with any indicator.

4.3.1 Descriptive Analysis of Project Performance

It was necessary to establish the extent of performance of horticulture projects supported by KENAFF in Nakuru County. The indicators for performance of horticulture projects that were measured were; economic status of farmers, technical performance of projects and farmers satisfaction of products and services. Economic status was measured in terms of: source of income to farmers, improved opportunities for income generation for farmers, connection of farmers to markets, differences in lives of farmers, satisfactory of profits and creation of job opportunities to farmers. Technical performance of projects was based on: engagement of project leaders to successful project performance, contribution of skilled project leaders/managers to high project performance, quality of produce being improved by M&E, improvement of overall project performance due to provision of technical advisory. Farmers' satisfaction of products and services was based on; relevance of project products and services, positive impact of project products and services to beneficiaries, satisfaction and dissatisfaction of project products and services by majority of the farmers.

Results for the mean of the performance indicators in Table 4.4 indicate that both farmers and staff members were of the view that technical performance had a significant influence on performance of horticulture projects in the County. This is according to the 5 point Likert scale indicator which produced a mean of 3.801 and an SD of 0.849 for this category. This was followed by farmers' satisfaction of products and services which had a mean of 3.197 and an SD of 0.758, and finally economic status of farmers with a mean of 3.103 and a standard deviation of 0.874. Notably, the highest proportions of 31.5%, 39.4% and 33.5% were all on the response of great extent, indicating generally that the respondents were of the view that performance of horticulture projects have greatly been influenced by all the three categories of economic status of farmers, technical performance and farmer's satisfaction of the products and services.

Table 4.4: Performance of Horticulture Projects (Staff and Farmers)

Description	Frequency and Percentages						Mean	SD
	NA	SE	ME	GE	VGE	N		
Economic status of farmers	21	19	38	46	22	146	3.103	0.874
	14.0%	13.0%	26.2%	31.5%	15.3%	97.6%		
Technical Performance of projects	0	15	49	58	26	148	3.801	0.849
	0.0%	10.3%	33.8%	39.4%	17.8%	98.9%		
Farmers satisfaction of products and services	21	17	33	49	25	144	3.197	0.758
	14.5%	11.4%	22.4%	33.5%	16.7%	96.2%		
Composite mean						146.33	3.37	2.48

NA = Not at all, SE = To a small extent, ME = To a moderate extent, GE = To a great extent, VGE = To a very great extent, n = number of responses, N = sample size, SD= Standard deviation

Results from farmers alone as showed in Table 4.5, indicate that 38.5% with a mean of 3.590 and a standard deviation of 0.886 were of the view that performance of horticulture projects in Nakuru County had to a great extent been influenced by technical performance, followed by farmer's satisfaction and economic status of farmers in the area.

Table 4.5: Performance of Horticulture Projects (Farmers)

Description		Frequency and Percentages					Mean	SD
	NA	SE	ME	GE	VGE	N		
Economic status of farmers	18	16	36	41	21	132	3.221	1.072
	13.8%	12.3%	27.0%	30.9%	16.0%	97.4%		
Technical Performance of projects	0	14	47	51	21	133	3.590	0.886
	0.0%	10.6%	35.7%	38.5%	16.3%	98.8%		
Farmers satisfaction of products and services	20	14	30	43	24	129	3.226	0.880
	14.8%	10.8%	22.4%	32.3%	17.9%	95.7%		
Composite mean						131	3.346	2.838

NA = Not at all, SE = To a small extent, ME = To a moderate extent, GE = To a great extent, VGE = To a very great extent, n = number of responses, N = sample size, SD= Standard deviation

Results from staff members alone had the highest mean of 4.012 and a standard deviation of 0.813 for the category of influence of technical performance on overall performance of projects in the County as shown in Table 4.6. On the other performance indicators, staffs were also of the view that farmers' satisfaction of products and services has been rated higher than the economic status of farmers in regard to influencing performance of horticulture projects in Nakuru County.

Table 4.6: Performance of Horticulture Projects (Staff)

Description	Frequency and Percentages						Mean	SD
	NA	SE	ME	GE	VGE	N		
Economic status of farmers	2	3	3	6	1	15	2.985	0.675
	15.7%	19.1%	19.1%	37.1%	9.0%	100.0%		
Technical Performance of projects	0	1	2	7	5	15	4.012	0.813
	0.0%	6.7%	16.0%	46.7%	30.7%	100.0%		
Farmers satisfaction of products and services	2	3	3	7	1	15	3.168	0.636
	11.7%	16.7%	21.7%	43.3%	6.7%	100.0%		
Composite mean						15	3.388	2.123

NA = Not at all, SE = To a small extent, ME = To a moderate extent, GE = To a great extent, VGE = To a very great extent, n = number of responses, N = sample size, SD= Standard deviation

In view of the results in Table 4.4, 4.5 and 4.6 it appears to be a general view that performance of horticulture projects in Nakuru County was greatly influenced by technical aspect then followed by farmer's satisfaction of products and services and finally economic status of farmers. However on the cases of farmers, staff and a combination of the two, the composite means were approximately 3, showing all the three aspects of economic status of farmers, technical performance and farmers' satisfaction with the products and services had a significant influence on performance of horticulture projects in Nakuru County.

Technical performance was an issue of concern for all respondents. As noted from key informant interviews one board member said:

> "*Technical performance of project is like a backbone, it is that we can attribute to overall performance and say the project is technically sound*".

On the same issue, farmers also agreed that technical issues of the project make a great difference and to a large extent had an influence overall achievement of project goals. This was reflected from the focused group discussions, where majority were in agreement and echoed that:

> "*It is through technical support such as training or having skilled project personnel that you can be assured that there is some level of high technical performance like in our projects"*

Those interviewed were of the view that satisfaction of beneficiary with services and products is of importance to many as it influences achieving high project performance.

From the focused group discussion, majority of the farmers indicated that not all projects were performing well, because there are various factors that influence performance as noted from one participant who said:

> "*Some of our projects are not performing well not because of weak technical support from leaders or field staff but sometimes there is lack of focus on quality of services and products……in such circumstances farmers would rate this a poor performance by the project"*

From the interviews and focused group discussions, it was revealed that technical performance, beneficiary satisfaction with products and services are viewed as key project performance factors for KENAFF supported projects in Nakuru County. In most studies, technical performance is looked from high specialized projects as reported by previous studies (Prabhakar, 2008; Muller and Jugdev, 2012; Ulrich 2014). Contrary to these studies, this study recorded moderately high rating from farmer respondents in all the three factors of technical performance, and beneficiary satisfaction. This study finding therefore indicates that technical performance is of great importance even for farmer led projects.

4.3.2 Descriptive Analysis of Monitoring and Evaluation Culture

Monitoring and evaluation culture was one of the M&E drivers that were investigated. M&E Culture was based on; task orientation, team orientation and results orientation. In rating the influence of M&E culture on performance of horticulture projects goals, the composite mean of 2.386 and a standard deviation of 0.863 on Table 4.7 shows that a combination of the farmers and staff members agree that M&E culture has been an important driver and influence performance of horticulture projects in Nakuru county. The largest influence had been from results orientation and team orientation which have small means of 2.223 and 2.274 respectively and standard deviations of 0.855 and 0.831 respectively. Likewise response from (results orientation and team orientation) formed the largest two proportions of responses (58.1% team orientation and 57.6% results orientation). This showed there was a culture of achieving results as teams. Nonetheless there were a close similar number of responses (49.3%) who were in agreement that task orientation had an influence on performance of the horticulture projects in Nakuru County.

Table 4.7: Descriptive Statistics of Response on M&E Culture (Farmers and Staff)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
Task Orientation	16	72	28	24	5	145	2.662	0.904
	10.9%	49.3%	19.0%	16.3%	3.3%	96.4%		
Team Orientation								0.831
(Cooperation)	34	85	21	7	2	148	2.274	
	22.9%	58.1%	14.3%	4.9%	1.0%	98.3%		
Results Orientation	25	84	22	13	3	148	2.223	0.855
	17.3%	57.6%	15.2%	9.1%	2.0%	98.9%		
Composite Mean						147	2.386	0.863

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

Results of the responses from farmers alone in Table 4.8 shows the least mean of 2.014 to be on team orientation (cooperation), indicating majority of the farmers agree that team orientation has been the most important aspect of M&E culture and influence performance of horticulture project in Nakuru County. This was followed by results orientation which has a mean of 2.217 and a standard deviation of 0.739 and lastly followed by task orientation which has a mean of 2.491 (close to 3) indicating most of the farmers were neutral on the aspect of the importance of task orientation to performance of horticulture projects. This result may imply that farmers are not involved in designing the tasks for M &E related functions.

Table 4.8: Descriptive Statistics of Response on M&E Culture (Farmers)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
Task Orientation	14	67	24	20	4	130	2.491	0.896
	11.0%	51.0%	18.3%	15.1%	3.1%	96.0%		
Team Orientation								
(Cooperation)	32	79	15	5	2	133	2.014	0.871
	24.3%	60.1%	11.7%	3.9%	1.1%	98.1%		
Results Orientation	21	78	20	12	2	133	2.217	0.739
	15.9%	59.6%	15.3%	8.9%	1.6%	98.8%		
Composite Mean						132	2.241	0.836

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

Staff members on their own had a slightly different perspective on the indicators of M&E culture as shown in Table 4.9., in which majority with a mean of 2.228 and a standard deviation of 0.972 being of the view that results orientation had been the most important aspect of M& E culture and had an influence on performance of horticulture projects followed by team orientation with a mean 2.535 and a standard deviation of 0.791. Nonetheless like farmers, staff members were also neutral about the influence of task orientation on performance of the horticulture projects in the County.

Table 4.9: Descriptive Statistics of Response on M&E Culture (Staff)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
Task Orientation	2	5	4	4	1	15	2.833	0.912
	10.0%	33.3%	25.0%	26.7%	5.0%	100.0%		
Team Orientation (Cooperation)	2	6	6	2	0	15	2.535	0.791
	10.0%	40.0%	36.7%	13.3%	0.0%	100.0%		
Results Orientation	4	6	2	2	1	15	2.228	0.972
	29.3%	40.0%	14.7%	10.7%	5.3%	100.0%		
Composite Mean						15	2.532	0.891

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

Board members interviewed indicated that result orientation, task orientation and team orientation are dependent of each other; as such all influence performance of horticulture projects. One board member said

> *"For a project to succeed as a leader, one need a competitive team that understands their tasks, the tasks need to be aligned to achieving results*".

This finding is in line with observations by Gregory, et al, (2009) who argues that team orientation and cooperation contribute to good project performance, and each team member need to be clear on their tasks as individuals as well as teams.

From focused group discussion, farmers indicated that the most important aspect of culture is to have a team in place, just like the way groups came together to implement the various projects. In implementing projects, tasks are assigned by management to achieve some specific project goals or results. As teams or groups some culture need to be embraced by all.

Overall, respondents acknowledged that strong M &E culture is evident through tracking project implementation and overall project performance and to a great extent M &E has contributed immensely to good project performance. This is in line with findings of previous studies, which indicate that M &E culture is one of the main drivers of achievement of results (Kuo & Kuo, 2012; Sebedi, 2012). Nevertheless, Morison, et al, (2008) suggests that promoting and thinking in result oriented mindset is a critical driver in project performance assessment.

4.3.3 Descriptive Analysis of Human Resource Capacity for Monitoring and Evaluation

Human resource capacity for monitoring and evaluation was another M&E driver that was analyzed, in order to identify its influence on performance of horticulture projects in Nakuru County. The main elements that were used to measure the influence of human resource capacity on performance of horticulture were M&E expertise (skills & knowledge), M&E competency and M&E training.

From the results as shown in Table 4.10, a combination of farmers and staff members a cumulative frequency of 72.2% (17.9%-Strongly agree and 54.3%-Agree) of the view that M&E expertise (skills and knowledge) had a significant influence on performance of horticulture projects in the County. A similar trend was observed where 70.3% (15.1%-strongly agree and 55.2%-agree) of the response were of the view that M&E competency influenced project performance and finally 60.7% (11.6%-strongly agree and 49.1%-agree) were of the view that M&E training also had some influence on project performance. This shows M&E expertise had the greatest influence, followed by M&E competency and finally M&E training. The composite mean of 2.438 and a standard deviation of 0.757 shows that all the three factors of human resource capacity was rated high(agreed) by both farmers and staff members as having a significant influence on performance of the horticulture projects in the County.

Table 4.10: Descriptive Analysis for Human Resource Capacity for Monitoring and Evaluation (Farmers and Staff)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
M&E Expertise (Skills & Knowledge)	26	80	17	19	6	147	2.507	0.735
	17.9%	54.3%	11.6%	12.7%	4.3%	98.2%		
M&E Competency	22	81	21	18	6	147	2.468	0.734
	15.1%	55.2%	14.0%	12.0%	4.1%	98.1%		
M&E Training	17	72	22	23	14	148	2.641	0.802
	11.6%	49.1%	15.0%	15.7%	9.2%	98.4%		
Composite Mean						147	2.438	0.757

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

From results in Table 4.11, the mean of 2.296 and 2.330 shows majority of the farmers were in agreement regarding the influence of both M&E expertise (skills and knowledge) and M&E competency had an influence on performance of horticulture projects in Nakuru County. M&E training had a mean of 2.616 which was approximately 3(an indicator of neutral on the response) but from the composite mean of 2.414 and a standard deviation of 0.732 it was evident that farmers view all these factors of human resource capacity for monitoring and evaluation to be important influencers of performance of horticulture projects in Nakuru County.

Table 4.11: Descriptive Analysis for Human Resource Capacity for Monitoring and Evaluation (Farmers)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
M&E Expertise (Skills & Knowledge)	24	73	14	16	5	133	2.296	0.686
	18.6%	55.5%	10.8%	12.5%	3.5%	98.2%		
M&E Competency	21	74	18	15	5	132	2.330	0.710
	15.7%	56.0%	13.4%	11.5%	3.8%	97.9%		
M&E Training	17	65	17	22	13	133	2.616	0.798
	12.9%	49.0%	12.9%	16.9%	9.5%	98.7%		
Composite Mean						133	2.414	0.732

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

In reference to results from staff members alone, there was a similar response rate on M&E expertise (skills and knowledge) and M&E competency as shown in Table 4.12. In all the three categories majority of the staff members (7 out of 15) in all cases agreed that M&E expertise, M&E competency and M&E training were important aspects of human resource capacity and influenced performance of horticulture projects in Nakuru County.

From the key informant interviews, it was indicated that M&E competency was the major driver in human resource capacity for M &E. This is noted by one board member who said:

> "*In recruiting M &E staff, priority is to get a skilled person with the right competencies; we also strive to build M &E capacity of staff that has worked for a long time in the projects"*.

This study finding is in contrast with opinions by Rejaul, Huda &Khan, (2012) who observe that, what is important is not only skills but equipment and financial support in any project setup. Farmers through focused group discussions were of the view that M &E training at all levels was necessary as this is the best way to have competent people in all projects. Majority of the farmers reported that they have been trained in some aspects of M & E though not in all project. This resonates with Tuckmann, (2007), who observes that staff responsible for M &E should have the required skills to perform M &E tasks. Majority of the respondents through the focused group discussions were of the view that on job training would be of use especially through mentorship and coaching.

Table 4.12: Descriptive Analysis for Human Resource Capacity for Monitoring and Evaluation (Staff)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
M&E Expertise (Skills & Knowledge)	2	7	3	2	1	15	2.605	0.759
	10.0%	47.8%	18.9%	15.6%	6.7%	100.0%		
M&E Competency	2	7	3	2	1	15	2.605	0.759
	10.0%	47.8%	18.9%	15.6%	6.7%	100.0%		
M&E Training	0	7	5	1	1	14	2.667	0.806
	0.0%	51.2%	34.9%	4.7%	7.0%	100.0%		
Composite Mean						15	2.663	0.783

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

4.3.4 Descriptive Analysis of Monitoring and Evaluation Budget

The need for allocation of financial resources for M & E has been of emphasis by many studies. This study sought to establish the influence of monitoring and evaluation budget on performance of horticulture projects. In this respect, M & E budget was analyzed in terms of budget allocation and review. Budget allocation was assessed in terms of necessity to allocate a specific M &E budget, adequacy of M &E budget and whether M &E was an afterthought and whether M&E budget is a priority like any other budgets. On budget reviews, it looked at whether respondents are consulted in budget allocation for M &E, respondent's involvement in budget review, budget known to only those tasked with M&E activities and whether M &E budget is outlined in the project document.

In reference to Table 4.13 for the responses of both farmers and staff members on influence of M&E budget on performance of horticulture projects in Nakuru County, showed they are neutral about the two aspects of budget. This is because of the means of 2.633(approximately3-Neutral) for budget allocation and 2.779 (approximately 3-Neutral) for budget review, and a composite mean of 2.706 for the two categories. However a large proportion of 43.3% of the respondents agreed that budget allocation was important for project performance in the County though not all the project members are involved in budget issues.

Table 4.13: Descriptive Analysis of Monitoring and Evaluation Budget (Farmers and Staff)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
Budget allocation	9	63	46	22	6	146	2.633	0.943
	6.0%	43.3%	31.5%	14.7%	4.1%	97.0%		
Budget Review	7	48	53	31	7	146	2.779	1.041
	5.0%	32.6%	36.4%	21.1%	4.9%	97.5%		
Composite Mean						146	2.706	0.992

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

Farmers were generally neutral on all the aspects of budget as seen in Table 4.14, this is reflected from the mean of approximately 3 on both budget allocation and budget review. The large proportion of farmers responding to "neutral" on aspects of budget allocation and review imply that farmers may not be involved in such processes hence are not on the know-how. Nevertheless, a large proportion (43.2%) of farmers agreed that budget allocation was important for performance of horticulture project in Nakuru County.

However, responses from focused group discussions indicated that in most instances, only group leaders comprising of chairperson, secretary and treasurer are involved in budget allocation as well as reviews. This finding resonates with the observation of previous studies that indicate that budgeting process can sometimes be a mystery only known to a few (Bamberger et al 2012).In spite of management consideration for adoption of M &E plan of system; allocation of resources for M &E is done cautiously(Engwall& Jebrant, 2003). This could explain why the rating for farmers was neutral with a mean of 3. On the specific item of whether M &E budget was a priority, majority of the respondents to a large extend agreed it is of priority despite them not being involved in these processes. In another FGD, it was noted that at group level a specific M &E budget is planned for the monthly review meetings. From those interviewed; one board member pointed out that:

> "*At the secretariat level, budget is allocated for all M & E functions covering costs for M &E staff and for monitoring activities and evaluations. The M &E staff is assigned to specific groups implementing projects."*

Another board member noted that:

> *"Allocating M &E resources is considered a priority like any other, KENAFF projects are guided by a results framework with indicators and targets that guides implementation…. M &E staff is involved in budget allocation process as well as reviews since they understand better what is required to carry out M & E activities."*

These study findings corroborate with previous studies which indicate that besides developing an M &E plan, it would not be meaningful if resources are not allocated to transform it to achieve its intended objective (Mavhiki et al., 2013). More so, involving

those tasked in M & E function in budgeting process increases the chances of ownership as well as improved performance (Khake & Worku, 2013; Mavhiki et al., 2013; Ifah, Kerosi & Ondabul 2015).

On the same aspect, another board member interviewed noted that:

> ” *Initially we had a challenge of how to allocate M &E resources, this has improved since we adopted a result base M &E system, where there is a budget line for each activity, however we need to strengthen M &E at the group level so that more are involved… this way we will create a sustainability path for the projects we support*”.

These views are in line with other study observations which pointed out that the decision of putting in place M &E system is a political one requiring top management support and resource commitment(Pinto, 2000: Brumby & Robinson, 2004; Kwaviyah, 2010; Nyang’wara & Kulet, 2015).

Table 4.14: Descriptive Analysis of Monitoring and Evaluation Budget (Farmers)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
Budget allocation	7	57	44	19	5	131	2.683	0.877
	5.0%	43.2%	33.2%	14.3%	3.8%	96.9%		
Budget Review	6	43	50	27	6	131	2.867	0.909
	4.6%	32.7%	38.2%	20.2%	4.2%	97.2%		
Composite Mean						131	2.775	0.893

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

Results on monitoring and evaluation budget indicated that staff members also depicted similar observations as that of farmers as seen in Table 4.15. Staff mean of both budget allocation and budget review are approximately 3, indicating averagely the responses were close to 3(neutral).However majority of the staff (44.1%-budget allocation) and (31.1%-Budget review) agreed that the two are important and influence performance of horticulture projects supported by KENAFF in the County.

Table 4.15: Descriptive Analysis of Monitoring and Evaluation Budget (Staff)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
Budget allocation	2	7	3	3	1	15	2.583	1.009
	15.3%	44.1%	16.9%	18.6%	6.8%	100.0%		
Budget Review	1	5	3	4	2	15	2.690	1.172
	8.9%	31.1%	20.0%	28.9%	11.1%	100.0%		
Composite Mean						15	2.636	1.091

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

The composite mean of 2.636 and a standard deviation of 1.091 implying most of the distributions were closely skewed towards neutral (3), as such staff members are neutral about influence of monitoring and evaluation budget on performance of horticulture projects. The staff being neutral implies that they may not be involved in budgetary issues. This finding agrees with Ifrah, Kerosi & Ondabu, (2015) who argued that involving those tasked with managing resources promotes ownership.

4.3.5 Descriptive Analysis of Utilization of Monitoring and Evaluation Information

Utilization of monitoring and evaluation information was another M&E driver that was analyzed. This was based on information collection, availability of M&E information, and information use. From Table 4.16, most of the respondents were in agreement that information collection and availability of M&E information had an influence on performance of horticulture projects supported by KENAFF in Nakuru County. This was evident from the means of 2.448, 2.376 and standard deviations of 0.793, 0.786 respectively. The distribution of information use had a mean of 2.817 indicating neutrality in distribution of the responses but majority of them (35.2%) were in agreement that information use is important and influence performance of horticulture projects supported by KENAFF in Nakuru County.

Table 4.16: Descriptive Analysis of Utilization of Monitoring and Evaluation information (Farmers and Staff)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
Information Collection	21	79	16	27	3	146	2.448	0.793
	14.3%	54.3%	10.8%	18.5%	2.2%	97.5%		
Availability of M&E Information	18	70	23	17	4	131	2.376	0.786
	13.5%	53.2%	17.3%	12.5%	2.7%	96.7%		
Information Use	22	46	10	41	13	132	2.817	0.703
	16.9%	35.2%	7.6%	31.2%	9.5%	97.8%		
Composite Mean						136	2.564	0.761

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

Similar observations were also noted in the FGD conducted, where majority were of the view that collection of M &E need to be participatory and that the information collected need to be used towards improving project implementation. One of the FGD participants said

> ” *For project to succeed you cannot bring outsiders(consultants) to ask those technical questions that in most cases we don't understand, if you involve farmers they will give information that is a true reflection of what happens on the ground”….*

However, participatory M &E in project management information system is not enough, it should provide a way of not only collecting and collating information needed to be used for decision making. More so where information is managed, utilized adequately and consistently by all, contributes to be better project performance (Fadel &Brown, 2011).

Another FGD participant echoed these sentiments and said that;

> ” *Our feedback is appreciated and has really given us confidence to work with the field staff because they take our views with the seriousness it deserves… we have seen decisions made resulting from our proposals”……Overall there is a functional system of sharing information either through SMS for urgent matters or meetings when resolutions have to be made…. It should be more participatory beyond the collaborative approach”.*

This study finding is in line with a previous study which reported that managing project M & E information for decision making as well as gauging project performance is a prerequisite to all those implementing projects (Raymond & Bergeron, 2008).Establishment of a project information management system is important for feedback at all levels. This further helps in decision making. From those interviewed; it was evident that collection of M &E information, its availability and use influence performance of horticulture projects supported by KENAFF in Nakuru County. From Key informant a board member interviewed said"

> *Our project management information is latent, however M &E tools incorporate a section to collect monitoring information, occasionally feedback from farmers is sort using specific designed tool on quality of services delivered by the projects*".

This study finding is in line with an observation by IFAD report (2002) which emphasizes the use of M &E information in programming and project improvement. On the same breath, placing M &E information and results in the heart of managing for project impact should be a priority for al development intervention including feedback and learning derived from project results(Steyn, 2014).On the importance of the 3 indicators (information collection, availability and use, a board member said that;

> "*One cannot separate the 3 items (information collection, availability and use), because it is irrelevant and expensive to plan for data collection and not avail it for use…… field reports and evaluation findings are discussed by the board and feedback is given to the M &E staff and managers responsible to take corrective actions"*

As noted from the key informant interview responses, renewed focus on utilization of M &E information and results reflects scaled up focus by organizations such as KENAFF to put in place systems that facilitate collection and collation of information for decision making. It was established that a participatory approach in collecting, collating and avail the information to all stakeholders would improve project implementation. As observed by other scholars, project leaders need to act on M & E findings and apply lessons learned to modify projects (Fadel & Brown, 2010; Kamau& Mohamed, 2015).

Table 4.17 shows farmers viewed information collection availability and use of M&E information to be important aspects influencing performance of horticulture projects in Nakuru County. This was reflected by a mean of 2.376 for both cases but a different standard deviation of 0.792 for information collection and 0.786 for availability of M&E information. The mean for information use of 2.817 indicated a skewness of the data towards neutrality since there was a large proportion (35.2%) of the farmers who agreed on information collection. Another closer similar proportion (31.2%) disagreed about the influence of information use on performance of horticulture projects supported by KENAFF in Nakuru County.

Table 4.17: Descriptive Analysis of Utilization of Monitoring and Evaluation Information (Farmers)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
Information Collection	19	73	13	24	3	131	2.376	0.792
	14.6%	55.3%	9.7%	18.3%	1.9%	97.2%		
Availability of M&E Information	18	70	23	17	4	131	2.376	0.786
	13.5%	53.2%	17.3%	12.5%	2.7%	96.7%		
Information Use	22	46	10	41	13	132	2.817	0.703
	16.9%	35.2%	7.6%	31.2%	9.5%	97.8%		
Composite Mean						131	2.523	0.760

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

In reference to the results in Table 4.18 on the distribution of the responses for staff members, majority of the responses 44.4%, 48.3% and 40.0% agree that information collection, availability of M&E information and information use influence performance of horticulture projects supported by KENAFF in Nakuru County respectively. However the mean distributions for all the categories of utilization of monitoring and evaluation information for the staff members including the composite mean are approximately 3, an indicator that the distributions are converging to nearly neutral implying staff responses are not clear on the influence of utilization of M & E information on performance of horticulture projects supported by KENAFF in Nakuru County.

Table 4.18: Descriptive Analysis of Utilization of Monitoring and Evaluation Information (Staff)

Description	Frequency and Percentages						Mean	SD
	SA	AG	NE	DS	SD	N		
Information Collection	2	7	3	3	1	15	2.620	0.793
	11.1%	44.4%	20.0%	20.0%	4.4%	100.0%		
Availability of M&E Information	1	7	3	3	0	15	2.633	0.841
	6.7%	48.3%	21.7%	21.7%	1.7%	100.0%		
Information Use	2	6	0	5	2	15	2.853	0.826
	15.0%	40.0%	0.0%	31.7%	11.7%	100.0%		
Composite Mean						15	2.702	0.820

SA = Strongly agree, AG = Agree, NE = Neutral , DS= Disagree, SD = Strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

4.3.6 Descriptive Analysis of Combined M&E Drivers

Results from M&E drivers on their own showed that a different outcome, in all cases each M&E driver had a significant influence on performance of horticulture projects. The combined influence of M &E drivers on performance of horticulture showed similar responses as shown in Table 4.19.

Table 4.19: Descriptive Analysis of the Combined M&E Drivers

Description	Frequencies and Percentages						Mean	SD
	SD	DS	NE	AG	SA	n		
M&E Drivers (Farmers & Staff)	7	23	28	71	19	147	4.012	0.986
	4.43%	15.67%	18.91%	48.04%	12.95%	97.83%		
M&E Drivers (Farmers)	5	20	25	65	17	132	3.786	1.125
	3.99%	15.21%	18.63%	49.05%	13.12%	97.41%		
M&E Drivers (Staff)	1	3	2	7	2	15	3.989	1.237
	6.67%	21.67%	13.33%	43.33%	11.67%	100%		

SA = strongly agree, AG = Agree, NE = Neutral, DS= Disagree, SD = strongly disagree, n = number of responses, N= Sample size, SD = Standard deviation

On the case of both staff and farmers 48.04% agreed that the M&E drivers have a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County. This ratio was also highly supported by the mean of 4.012, which means

that the distribution of the response was averagely on the scale of 4 (4-an indicator of agree). The standard deviation of 0.986 was very small indicating most of the responses were around the mean of 4 (not very scattered).

Results from farmers responses showed that also a of 49.05% of the farmers were in agreement that all the M&E drivers under the study are important factors and greatly influence performance of horticulture projects supported by KENAFF in Nakuru County. The mean response was 3.786 which were approximately 4, showed that the response rate was on the indicator of "Agree", ascertaining the influence of the M&E drivers on the horticulture projects. Likewise staff members as indicated a percentage of 43.33% were in agreement that M&E drivers are important and influenced performance of horticulture projects supported by KENAFF in Nakuru County.

Generally as seen by large proportions of responses on "Agree" for staff members alone, farmers alone and a combination of staff and farmers; it is clear that M&E drivers had a significant influence on performance of horticulture projects in the county. From those interviewed, it was established strong M & E is crucial for good performance of a project. One of the respondents said that:

> " *For a project to succeed, all project stakeholder need to be aligned to the strategy this can only happen if there is an M &E culture that is embraced by all…. in our project we value achievement of results hence we have to be and not only monitor but use the information to improve our projects*." Another respondent added that "*For project to perform there is need for qualified and competent staff as well as adequate financial resources to achieve the set target".*

These findings are in line with other studies. In a study by Tengan et al. (2014) it indicated that senior management in organization implementing projects need to take ownership, provide leadership, and encourage everyone within the organization to think in terms of results. More so, having a well knowledgeable and skilled M & E personnel is crucial M & E function &E capacity includes providing resources to enable meaningful implementation of organization strategy and ensuring that monitoring and evaluation take place. The type and level of skills for M & E staff contribute to a large extent achievement

of results. More over proper management of human resources in project set up can be beneficial regarding other outcome both at individual and team level (Tidac & Pivac, 2014).

FGD outcomes indicated that all the M & E drivers are important to achieving project performance nevertheless having the right leader who supports a results based M &E culture and utilizes project information for decision is an added advantage to organizations implementing projects. A key informant interviewed said that;

> ” *All these M &E drivers referred in this study, need to be factored in the design of the project, this means a budget for M &E must be set aside, M &E staff recruited need to be competent or receive on job training…. overall the leaders need to be on the forefront in promoting a unifying M &E culture. Information generated from the project need to be used for decision making. We have witnessed this in most of our projects”*

These study findings corroborate with other studies which indicate that effective utilization of M &E information had significance influence on project performance. Moreover, M & E information is important for managing stakeholders, project teams and monitoring the actual progress of the projects as well as having insights on where and when a corrective action is required (Karim, 2011).

However, the findings contradict with an earlier study finding which established that traditionally the focus of project performance has been on the scope, time, and scheduling (Engwall & Jerbrant, 2003). Rarely, does utilization of M &E information generated from project implementation is considered an important factor or driver of assessing how well a project performs.

Making reference to all the responses, M &E drivers under the study (M&E culture, human resource capacity for M & E, M &E Budget, Utilization of M &E information) it is evident from the study that they had a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County.

4.3.7 Descriptive Analysis of Type of Project Leadership

To analyze the impact of type of project leadership on performance of horticulture project in Nakuru; two types of leadership styles were used transformational leadership style and transactional leadership style. Results from the distribution of farmers and staff responses in Table 4.20; majority of the responses (50 out of 147 and 72 out of 147) agree that transformational leadership style had a significant influence on performance of horticulture project performance in Nakuru County. This distribution is also supported by the mean distribution of 4.047 and a standard deviation of 0.892 which coincide with the Likert scale of 4(great extent). Transactional leadership style has a mean of 3(moderate extent), implying it is important but not influential as that of transformational leadership style. However the composite mean of 3.577 indicate that both transformational and transactional leadership styles are important on performance of horticulture projects supported by KENAFF in Nakuru County.

Table 4.20: Descriptive Analysis of Type of Project Leadership (Farmers and Staff)

Description	Frequency and Percentages						Mean	SD
	NA	SE	ME	GE	VGE	n		
Transformational Leadership style	2	7	17	50	72	147	4.047	0.892
	1.2%	4.4%	11.9%	33.9%	49.1%	97.8%		
Transactional leadership style	27	21	33	39	26	146	3.106	1.056
	18.5%	14.7%	22.4%	26.6%	17.8%	97.4%		
Composite Mean						147	3.577	0.974

NA = Not at all, SE = To a small extent, ME = To a moderate extent, GE = To a great extent, VGE = To a very great extent, n = number of responses, N = sample size, SD= Standard deviation

According to farmers results as shown in Table 4.21; transformational leadership style to a great extent affect performance of horticulture projects in Nakuru County, as reflected by the mean of 4.297 and a standard deviation of 0.876. Farmers are of the view that transactional leadership style had an influence but to a moderate extent, as observed by the mean of 3.101 and a standard deviation of 1.066. However, the composite mean 3.699 is approximately 4, showing both transformational and transactional leadership styles are important and affect performance of horticulture projects supported by KENAFF in Nakuru County.

Table 4.21: Descriptive Analysis of Type of Project Leadership (Farmers)

Description	Frequency and Percentages						Mean	SD
	NA	SE	ME	GE	VGE	n		
Transformational Leadership style	2	5	14	43	69	132	4.297	0.876
	1.2%	4.0%	10.1%	31.8%	50.7%	97.8%		
Transactional leadership style	25	19	28	35	24	131	3.101	1.066
	18.4%	14.3%	20.9%	26.0%	17.6%	97.2%		
Composite Mean						132	3.699	0.971

NA = Not at all, SE = To a small extent, ME = To a moderate extent, GE = To a great extent, VGE = To a very great extent, n = number of responses, N = sample size, SD= Standard deviation

In reference to the key informant interviews and FGDs, similar responses noted that it was beneficial to have a leader who has the two attributes of transactional and transformational leadership style. One of the FGD participants whose opinion was supported by majority noted that:

> ” *we need a transactional leader who will be daring to help farmers venture into new opportunities that will create income generating opportunities,, but also transformative enough to listen and embrace our views in improving the performance of projects”.*

This study finding resonates with earlier studies which showed that the selection of the type of project leader from the onset of project implementation, influence to a large extent the performance of a project (Kerzner & Saladis, 2009; Tidac & Pivac, 2014; Kroukamp, 2015). From the study findings it was the opinion of the majority of the farmer respondents, that type of project leadership is important factor in gauging performance of projects.

However, another FGD participant was of the view that their leaders both at the group level and secretariat elucidate these types of leadership differently depending on what is supposed to be done at that particular moment when he said

> “*In most cases our leaders are guided by what is expected of them, if one is supposed to lead a group or a project attains its goals for instance getting the market for our farm produce, he or she will strive to achieve this……. This way we can classify such as a transactional”.*

On the same issue of type of leadership, another FGD participant added that" *Majority of our leaders fall in the category of leading and mentoring, as such we learn from them"…. But they need to have the right skills and competencies regarding managing projects to deliver results"*.

These study findings agree with an earlier observation by Koech & Namusonge (2012) who postulate that the two type of leadership namely Transactional and Transformative can be used to assess the extent to which each influences achievement of intended project goals. This is so because there is no one fit for all and at times the project environment may contribute to how a project leader handles implementation of a certain project.

On the line, one of the board members had this to say regarding type of project leadership:

"As leaders we are not permanent we are elected on some specified time, so we strive to create an environment for learning so that even staff or group leaders get to be board members in future". By contrast, another Board member said *"majority of the leaders are transaction because they are guided by targets to be achieved".*

This finding tends to agree with other studies. In some earlier study finding it was noted that, though type of project leadership may impact on project performance, in some cases an individual contributor may influence project performance either negatively or positively. It another study it was noted that type of leadership transcend all other project related factors (Gwaya et al., 2014).

Table 4.22: Descriptive Analysis of Type of Project Leadership (Staff)

Description	Frequency and Percentages						Mean	SD
	NA	SE	ME	GE	VGE	n		
Transformational Leadership style	0	1	4	7	3	15	3.798	0.907
	0.0%	8.0%	25.6%	44.9%	22.7%	100.0%		
Transactional leadership style	2	2	5	4	2	15	3.111	1.047
	15.0%	14.4%	30.6%	24.4%	15.6%	100.0%		
Composite Mean						15	3.454	0.977

NA = Not at all, SE = To a small extent, ME = To a moderate extent, GE = To a great extent, VGE = To a very great extent, n = number of responses, N = sample size, SD= Standard deviation

Staff members are of similar views as those of farmers regarding transformational leadership style as seen in Table 4.22, the mean of 3.798 is approximately 4, showing that

transformational leadership style had an influence on project performance according to the staff members. The staffs are also neutral about transactional leadership style's influence on performance of horticulture project.

4.4 Correlation Analysis

Correlation analysis was conducted using Pearson Moment Correlation, to explore the direction of the relationships between independent variables and dependent variable. This was determined by checking the positive or negative value before the (r). The strength of the relationship was based on looking at the correlation value of (r) where a rank (r) of 1 implies perfect positive correlation, a rank of $0.10<r\leq0.29$ implies a weak positive correlation, a rank of $0.30<r\leq0.50$ implies a positive moderate correlation, a rank of $0.5<r\leq1$ implies a strong positive correlation; a rank (r) of -1 implies a perfect negative correlation, a rank of $-0.29<r\leq-0.10$ implies a weak negative correlation, a rank of $-0.50<r\leq-0.30$ implies a moderate negative correlation, a rank of $-1<r\leq-0.5$ implies a strong negative correlation (Ratner, 2009) . Since the variables were measured on a Likert scale, Pearson Product Moment Correlation was used and these relationships were determined at a 95% confidence level, meaning that the sample proportion (p) was less than or equal to 0.05 is statistically significant. Table 4.23 shows the correlation between the independent variables and the dependent variables.

Table 4.23: Correlation of Performance of Horticulture Projects and M & E Drivers (staff and Farmers)

		Performance of Horticulture projects	M&E Culture	Human resource capacity for M&E	Monitoring and Evaluation Budget	Utilization of M&E Information
Performance of Horticulture projects	Pearson Correlation	**1**				
	Sig. (2-tailed)					
	N	**146**				
M&E Culture	Pearson Correlation	**.878***	1			
	Sig. (2-tailed)	**.041**				
	N	**147**	147			
Human resource capacity for M&E	Pearson Correlation	**.820***	.990**	1		
	Sig. (2-tailed)	**.040**	.001			
	N	**146**	146	146		
Monitoring and Evaluation Budget	Pearson Correlation	**.890***	.715	.684	1	
	Sig. (2-tailed)	**.043**	.175	.203		
	N	**146**	146	146	146	
Utilization of M&E Information	Pearson Correlation	**.724***	.944*	.970**	.661	1
	Sig. (2-tailed)	**.037**	.016	.006	.224	
	N	**146**	146	146	146	146

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

In general, there was a positive and statistically significant correlation between performance of horticulture projects and all the M&E drivers. Particularly there was positive correlation between performance of horticulture projects and M&E culture with [r=.878, n=146, p=.041<0.05].The Pearson correlation was very close to 1, implying that M&E culture was perceived to highly contribute to good performance of horticulture projects in Nakuru County.

Human resource capacity for monitoring and evaluation also had a very positive correlation with performance of horticulture projects in Nakuru County with [r=.820, n=146,

p=.040<0.05].This correlation coefficient implied that both farmers and staff perceive human resources capacity for monitoring and evaluation to have highly contributed to performance of horticulture projects in Nakuru County.

It was further noted that monitoring and evaluation budget had a great influence and contribution to performance of horticulture projects as reflected by [r=.890, n=146, p=.043<0.05].Similarly utilization of monitoring and evaluation information was also perceived to be important and influenced performance of horticulture projects, where it had a correlation coefficient of .724, which is statistically significant at 5% level of significance [p=.037<0.05].

According to the rankings of correlation coefficients; type of leadership had a strong correlation of .566, since it was in the range of 0.5<r>1.However the correlation was not as strong as that of the M&E drivers combined, nonetheless it is perceived to be an important factor to performance of horticulture projects supported by in Nakuru County.

Table 4.24 presents the correlation of performance of horticulture projects with the M&E drivers and type of leadership from farmers alone.

Table 4.24: Correlation of Performance of Horticulture Projects with M & E Drivers (Farmers)

		Performance of Horticulture projects	M&E Culture	Human resource capacity for M&E	Monitoring and Evaluation Budget	Utilization of M&E Information
Performance of Horticulture projects	Pearson Correlation	**1**				
	Sig. (2-tailed)					
	N	**131**				
M&E Culture	Pearson Correlation	**.843***	1			
	Sig. (2-tailed)	**.033**				
	N	**132**	132			
Human resource capacity for M&E	Pearson Correlation	**.772****	.991**	1		
	Sig. (2-tailed)	**.003**	.001			
	N	**133**	133	133		
Monitoring and Evaluation Budget	Pearson Correlation	**.885***	.679	.635	1	
	Sig. (2-tailed)	**.046**	.207	.249		
	N	**131**	131	131	131	
Utilization of M&E Information	Pearson Correlation	**.694***	.949*	.978**	.629	1
	Sig. (2-tailed)	**.018**	.014	.004	.255	
	N	**131**	131	131	131	131

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

The results in t Table 4.24 shows there were similar strong and statistically significant correlation between all the M&E drivers together with the type of leadership and performance of horticulture projects in Nakuru County.

Farmers perceive M&E culture to have had a significant influence on performance of horticulture projects with [r=.843, n=132, p=.033<0.05].The correlation coefficient of 0.843 was very close 1 indicating the strong relationship between M&E culture and performance of horticulture projects in the County. Human resource capacity for monitoring and evaluation in the same way had a very positive correlation with

performance of horticulture projects in Nakuru County with [r=.772, n=133, p=.003<0.05]. The farmers also perceived monitoring and evaluation budget to have had a major influence on performance of horticulture projects in Nakuru County as seen with [r=.885, n=131, p=.046<0.05].Similarly utilization of monitoring and evaluation information was also perceived to influence performance of horticulture projects, where it had a correlation coefficient of .724. This was statistically significant at 5% level of significance [p=.037<0.05]. Staff members share similar views as seen in Table 4.25 below.

Table 4.25: Correlation of Performance of Horticulture Projects with its Explanatory Variables (Staff)

		Performance of Horticulture projects	M&E Culture	Human resource capacity for M&E	Monitoring and Evaluation Budget	Utilization of M&E Information
Performance of Horticulture projects	Pearson Correlation	**1**				
	Sig. (2-tailed)					
	N	**15**				
M&E Culture	Pearson Correlation	**.959****	1			
	Sig. (2-tailed)	**.010**				
	N	**15**	15			
Human resource capacity for M&E	Pearson Correlation	**.969****	.969**	1		
	Sig. (2-tailed)	**.007**	.007			
	N	**15**	15	15		
Monitoring and Evaluation Budget	Pearson Correlation	**.892***	.932*	.867	1	
	Sig. (2-tailed)	**.042**	.021	.057		
	N	**15**	15	15	15	
Utilization of M&E Information	Pearson Correlation	**.882***	.860	.821	.969**	1
	Sig. (2-tailed)	**.048**	.061	.088	.007	
	N	**15**	15	15	15	15

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The correlation coefficients from data on staff members were all very close to 1, categorically for M&E culture[r=.959, n=15, p=.010<0.05], human resource capacity for

M&E[r=.969, n=15, p=.007<0.05], and type of project leadership[r=.904, n=15, p=.035<0.05]. This implied that according to the staff members; there is a one to one positive relationship between these M&E drivers and performance of horticulture projects supported by KENAFF in Nakuru County. Utilization of M&E information and M&E budget were also perceived by the staff members to have had some influence on performance of horticulture projects with [r=.882, n=15, p=.048<0.05] and [r=.892, n=15, p=.042<0.05] respectively.

The overall relationship between the M&E drivers and performance of horticulture projects using the Pearson product-moment correlation was done and results presented in Tables, 4.26, 4.27 and 4.28 for; a combination of farmers and staff, farmers alone and staff alone respectively.

Table 4.26: Correlation of Performance of Horticulture Projects with M&E Drivers (Farmers and Staff)

		Performance of Horticulture projects (Farmers and Staff)	M&E Drivers (Farmers and Staff)
Performance of Horticulture projects (Farmers and Staff)	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	147	
M&E Drivers (Farmers and Staff)	Pearson Correlation	.884*	1
	Sig. (2-tailed)	.046	
	N	147	147
*. Correlation is significant at the 0.05 level (2-tailed).			

In reference to Table 4.26 shows that all the monitoring and evaluation drivers had a strong correlation [r=.884, n=147, p=.046<0.05] with performance of horticulture projects. The positive correlation implied cumulatively that farmers and staff were in agreement that the monitoring and evaluation drivers were not only important but influenced performance of the horticulture projects supported by KENAFF in Nakuru County.

Table 4.27 shows farmers indicated that there was a significant relationship between the M&E drivers and performance of horticulture projects in Nakuru County, by the positive

correlation of [r=.863, n=132, p=.040<0.05] between M&E drivers and performance of horticulture projects in Nakuru County.

Table 4.27: Correlation of Performance of Horticulture Projects with M&E Drivers (Farmers)

		Performance of Horticulture projects (Farmers)	M&E Drivers (Farmers)
Performance of Horticulture projects (Farmers)	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	132	
M&E Drivers (Farmers)	Pearson Correlation	.863*	1
	Sig. (2-tailed)	.040	
	N	132	132

*. Correlation is significant at the 0.05 level (2-tailed).

The correlation coefficient of 0.863 for farmers was slightly smaller than that of both farmers and staff members of 0.884; the difference was contributed by the correlation coefficient of staff members of 0.973 as seen in Table 4.28 below.

Table 4.28: Correlation of Performance of Horticulture Projects with M&E Drivers (Staff)

		Performance of Horticulture projects (Staff)	M&E Drivers (Staff)
Performance of Horticulture projects (Staff)	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	15	
M&E Drivers (Staff)	Pearson Correlation	.973**	1
	Sig. (2-tailed)	.005	
	N	15	15

**. Correlation is significant at the 0.01 level (2-tailed).

The results in Table 4.28 shows there was a very positive correlation between the M&E drivers and performance of horticulture projects, with a coefficient of 0.973 which is approximately equal to 1. According to staff members there was a one to one positive

relationship between the M&E drivers and performance of horticulture projects supported by KENAFF in Nakuru County.

Correlation of type of project leadership as a moderating variable with performance of horticulture projects and M&E drivers was conducted and results presented in Table 4.29, 4.30 and 4.31 for farmers and staff, farmers alone and staff alone respectively.

Table 4.29: Correlation of Performance of Horticulture Projects with M&E Drivers and types of leadership (Staff)

		Performance	Transformation	Transactional	M&E culture	HR Capacity for M&E	M&E budget	Utilization of M&E Information
Transformational	Pearson Correlation	.949*	1					
	Sig. (2-tailed)	0.014						
Transactional	Pearson Correlation	0.643	0.71	1				
	Sig. (2-tailed)	0.242	0.179					
M&E Culture	Pearson Correlation	.959**	.902*	0.735	1			
	Sig. (2-tailed)	0.01	0.036	0.157				
HR Capacity for M&E	Pearson Correlation	.969**	.895*	0.763	.969**	1		
	Sig. (2-tailed)	0.007	0.04	0.134	0.007			
M&E budget	Pearson Correlation	.892*	0.759	0.46	.932*	0.867	1	
	Sig. (2-tailed)	0.042	0.137	0.436	0.021	0.057		
Utilization of M&E information	Pearson Correlation	.882*	0.726	0.296	0.86	0.821	.969**	1
	Sig. (2-tailed)	0.048	0.164	0.628	0.061	0.088	0.007	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficients for M&E drivers and performance of horticulture projects are still the same as earlier discussed. However the variable transformation leadership style has a strong positive statistical significant correlation of 0.949 with performance of horticulture projects in the County, basing on data from the Staff members. However, transactional leadership style also has a positive correlation with performance of horticulture projects but it is not statistically significant. Apart from a strong positive

correlation between transformational type of leadership with performance, data on staff members also show that there is a strong positive statistical correlation between transformational leadership style with culture and human resource capacity all as reflected in table 4.29 above.

Table 4.30: Correlation of Performance of Horticulture Projects with M&E Drivers and types of leadership (Farmers)

		Performance	Transformation	Transactional	M&E culture	HR Capacity for M&E	M&E budget	Utilization of M&E Information
Transformational	Pearson Correlation	0.348	1					
	Sig. (2-tailed)	0.566						
Transactional	Pearson Correlation	.879*	0.315	1				
	Sig. (2-tailed)	0.05	0.605					
M&E Culture	Pearson Correlation	0.843	0.487	0.84	1			
	Sig. (2-tailed)	0.073	0.405	0.075				
HR Capacity for M&E	Pearson Correlation	0.772	0.446	0.784	.991**	1		
	Sig. (2-tailed)	0.126	0.452	0.116	0.001			
M&E budget	Pearson Correlation	.885*	-0.055	0.668	0.679	0.635	1	
	Sig. (2-tailed)	0.046	0.929	0.218	0.207	0.249		
Utilization of M&E information	Pearson Correlation	0.694	0.381	0.649	.949*	.978**	0.629	1
	Sig. (2-tailed)	0.194	0.526	0.236	0.014	0.004	0.255	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Data from farmers showed that transactional leadership style was the one that was positively and strongly correlated with performance of horticulture projects in Nakuru County. This is in contrary to the output from Staff members as seen in table 4.29. Transformational leadership style was not correlated with both performance of horticulture projects and all the M&E drivers as seen from table 4.30 above.

Table 4.31: Correlation of Performance of Horticulture Projects with M&E Drivers and types of leadership (Farmers and Staff)

		Performance	Transformation	Transactional	M&E culture	HR Capacity for M&E	M&E budget	Utilization of M&E Information
Transformational	Pearson Correlation	0.411	1					
	Sig. (2-tailed)	0.492						
Transactional	Pearson Correlation	.922*	0.313	1				
	Sig. (2-tailed)	0.026	0.608					
M&E Culture	Pearson Correlation	0.419	0.661	0.586	1			
	Sig. (2-tailed)	0.482	0.224	0.299				
HR Capacity for M&E	Pearson Correlation	0.392	0.555	0.583	.990**	1		
	Sig. (2-tailed)	0.514	0.331	0.303	0.001			
M&E budget	Pearson Correlation	0.194	0.463	0.073	0.715	0.684	1	
	Sig. (2-tailed)	0.754	0.432	0.907	0.175	0.203		
Utilization of M&E information	Pearson Correlation	0.227	0.491	0.405	.944*	.970**	0.661	1
	Sig. (2-tailed)	0.713	0.4	0.499	0.016	0.006	0.224	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

From table 4.31 above, transactional leadership style had a positive and strong correlation with performance of horticulture projects in Nakuru County.

4.5 Tests of Hypothesis

Hypothesis testing was done to establish the statistical significance of the independent variables on the dependent variable. The testing was based on ordinary least squares (OLS) regression results, under OLS regressions, the values, R, R^2, F-ratio, t-values and p values were obtained. The R-value shows the strength of the relationship between the variables, R^2-(coefficient of determination) value shows the extent to which variations in independent indicators explain indicators of the dependent variable (goodness of fit or explanatory

power), F-value shows the statistical significance of the overall model, t-values represent the significance of individual variables, Beta values show the influence of the independent variable on the dependent variable (positive or negative) and p-values represents the confidence level at 95% or 0.05 significant level at which point a decision to confirm the hypothesis was made at values of F-ratio where $p<0.05$.

In determining the significance, F test was used; where the general rule is If $F_{Calculated} < F_{Critical}$ one accept the null hypothesis because $p>.05$ and when $F_{Calculated} > F_{Critical,}$ one should reject the null hypothesis because $p<.05$.

The decision rule adopted is; if p-value < α, reject the null hypothesis and accept alternative hypothesis and if p-value > α, accept the null hypothesis and reject the alternative. The models in these tests focus on determining the contribution of the independent variables being measured to the dependent variable and not the goodness of the model in explaining the phenomenon in totality. This therefore means that the coefficient of determination can go lower than 0.7 thresholds that qualify regression models as sufficiently explaining the phenomenon to be statistically significant (Petrisor, Farrokhyar & Bhandari, 2010).

Autocorrelation is a violation of the classical linear regression model in which the disturbance terms of the observations are correlated with each other. For a classical linear regression to be correctly specified then it should be free of autocorrelation. In this end, Durbin Watson Statistic was used at every stage of the regression model to verify presence/absence of autocorrelation in the models. According to autocorrelation (Albertson, Alen. & Limt, 2002), a value of Durbin Watson below 2 is an indication of presence of autocorrelation while above 2 is absence of autocorrelation. This study adopted this criteria all through the hypothesis testing process.

Hypothesis 1

H_{01}: Monitoring and Evaluation culture has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County

The hypothesis aimed at establishing whether M&E culture has a significant influence on performance of horticulture projects in Nakuru County. A composite index of performance of horticulture projects was used as the dependent variable. This composite was of economic performance, technical performance and farmers' satisfaction of products and services. The independent variable was a composite index of M&E culture, in which it composes task orientation, team orientation (cooperation) and results orientation.

To test this hypothesis a regression model of the form: $y= \beta_0 + \beta_1 X_1 + \varepsilon$ was estimated, where:

y = Performance of horticulture projects

β_0 = Constant

β_1 = Beta coefficient

X_1 = Monitoring and Evaluation culture

ε = Error term

The results are presented in Table 4.32. The correlation coefficient (r) of 0.878 indicates a very positive influence of M&E culture on performance of horticulture projects. The coefficient of determination (adjusted R-Square) statistics of .604 implies culture explains 60.4% of performance of horticulture projects, while 39.6% of performance is explained by other factors other than M&E culture. The adjusted R-square is used instead of the R-squared as it takes care of the adjustments in the degrees of freedom. The Durbin-Watson Statistic of 2.590 showed absence of autocorrelation as such indicating the model was statistically good. Hence, the effect of a disturbance in one period is not carried over to the next period.

Table 4.32: Regression Results of the Influence of M&E Culture on Performance of Horticulture Project

Model	Coefficients (β)	Std. Error	Z value	P>Z
(Constant)	15.437***	5.834	3.129	0.004
M&E Culture	.468**	.147	1.24	0.013

a. Dependent Variable: Performance of Horticulture projects.
b. Predictors: (Constant), M&E culture

F (1,145) = 10.089***, [p=0.000<0.05]
r = 0.878
R^2= 0.771
Adjusted R^2 = 0.604
Durbin Watson = 2.590

**** 1% level of significance, ** 5% level of significance * 10% level of significance*

The F-ratio of 10.089 is statistically significant at 5% [p=0.000<0.05] implying M&E culture has a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County. Thus from the regression results the null hypothesis was rejected.

In reference literature reviewed and though they did not report the variance of M & E culture and performance of projects in tangible figures; the findings agrees with various former studies (Elberlein, 2008: Gregory et al., 2009; Stare, 2011& Sebedi, 2012). These studies suggest that culture plays an important role in performance of projects. In this study, it was established that there is a positive correlation between performance of horticulture projects and M&E culture with [r=.878, n=146, p=.041<0.05], the Pearson correlation was very close to 1, implying M&E culture is perceived to highly contribute to good performance of horticulture projects.

More so, this implies that if M &E culture is maintained; performance of projects would continue to be achieved. This agrees with one of the goals of M &E culture as advanced by Stare (2011) who posits that M &E culture helps create synergy among project teams, hence contributing to improved project performance. Further, the finding also agrees with the view that delivery of quality results is dependent on existing project M &E culture.

This finding also agrees with the view that M &E culture to a great extent is guided result oriented mindset by those implementing projects (Morrison et al., 2008).

Similarly, the finding on M & E Culture agree with the view by Gregory et al. (2009) who proposes that that M &E culture is one of the influential dimensions of project climate and in most cases the main driving force of achieving project results. From this study, it was established that M&E Culture is seen to be responsible to a great extent for the performance of horticulture projects as determined by task orientation, team cooperation and results culture.

Hypothesis 2

H_{02}: Human resource capacity for monitoring and evaluation has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation Projects in Nakuru County

Performance of horticulture projects was the dependent variable, and it's the composite index being of economic performance, technical performance and farmers' satisfaction of products and services. Human resource capacity for monitoring and evaluation was the independent variable, and with a composite index of M&E expertise (skills and knowledge), M&E competency and M&E training.

To test this hypothesis a regression model of the form: $y= \beta_0 + \beta_2 X_2 + \varepsilon$ was estimated, where:

y = Performance of horticulture projects

β_0 = Constant

β_2= Beta coefficient

X_2 = Human resource capacity for M&E

ε = Error term

Results presented in Table 4.33shows that the correlation coefficient (r) of 0.820 human resource capacity for monitoring and evaluation has a significant influence on performance of horticulture projects. The coefficient of determination (Adjusted R-squared) of 0.599 suggest that human resource capacity explains 59.9% of performance of horticulture

projects while 40.1% is explained by other factors other than human resource capacity for monitoring and evaluation. The Durbin-Watson Statistic of 2.458 showed absence of autocorrelation as such indicating the model was statistically good.

Table 4.33: Regression Results of Human Resource Capacity for M&E on Performance of Horticulture Project

Model	Coefficients (β))	Std. Error	Z Value	P>Z
(Constant)	14.981**	7.383	2.425	0.018
Human resources	.480*	.193	.118	0.101
a. Dependent Variable: Performance of Horticulture projects b. Predictors: (Constant), Human resource capacity for monitoring and evaluation				
F (1,145) = 6.175***, p=0.000<0.05 r = 0.820 R^2 = 0.673 Adjusted R^2 = 0.599 Durbin Watson = 2.458				

**** 1% level of significance, ** 5% level of significance * 10% level of significance*

The F statistic of 6.175 was statistically significant at 5% [p=0.000<0.05] implying human resource capacity had a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County. Thus from the regression results r the null hypothesis was rejected,, implying there is a significant influence between human resource capacity for monitoring and evaluation and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

The findings showed that human resource capacity for monitoring and evaluation is necessary for the achievement of good project performance. This agrees with Oladipo (2011) who posit that to achieve the set project goals, deliberate effort be put on human related factors is a prerequisite which should include improving the technical capacity of those tasked with delivery of project results. To the extent possible project staff tasked with M &E roles need to have the necessary skills. They need to understand what information is required can identify challenges faced and propose corrective action when using an M &E system to measure project outcomes (Tidac & Pivac, 2014).

On M &E capacity, a report by IFAD (2002) indicated that there is need to invest in skilled personnel tasked with M&E roles. This can be done through hiring those already trained in M & E; or providing on training or hiring external support through qualified consultants. From those interviewed majority were of the opinion that hiring already trained personnel or training on job was preferred as this had a mean of 2.This result agrees with an earlier study by Aquinis & Kraiger (2009) who indicated that to sustain project performance; management should be actively involved in meeting the needs of staff within the workplace through training. Further, project staff should be given incentives and resources needed such as skills, time, and equipment and funding to support the M &E tasks (Rejaul et al., 2012).

On skilled human resource, type and level of skills determines the outcome of project results. As such M &E project staff requires an understanding of the M &E frameworks, project indicators and targets, type of monitoring data as well as type of evaluations. The M & E staff further need skills to carry all M &E related activities including writing and interpreting M &E project results (Tuckermann, 2007; Tidac & Pivac, 2014).

Reflecting on these findings and the correlation analysis, it indicates that human resource capacity for monitoring and evaluation had a positive correlation with performance of horticulture projects in Nakuru County with [r=.820, n=146, p=.040<0.05.

Hypothesis 3

H_{03}: Monitoring and evaluation budget has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County

The hypothesis aimed at establishing whether monitoring and evaluation budget had a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County and performance of horticulture projects in Nakuru County. A composite index of performance of horticulture projects was used as the dependent variable. It was a composite of economic performance, technical performance and farmers' satisfaction of products and services. The independent variable was a composite index of monitoring and

evaluation budget where it composed of budget review and budget allocation. To test this hypothesis a regression model of the form: $y= \beta_0 + \beta_3 X_3 + \varepsilon$ was estimated, where:

y = Performance of horticulture projects

β_0 = Constant

β_3= Beta coefficient

X_3 = Monitoring and evaluation budget variable

ε = Error term

Results from using Table 4.34shows that the correlation coefficient (r) of 0.890 indicates M&E budget had a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County performance of horticulture projects. The coefficient of determination (adjusted R-squared) of 0.694 suggested that M&E budget explained 69.4% of performance of horticulture projects while 30.6% was explained by other factors other than M&E budget. The Durbin-Watson Statistic of 1.012 showed absence of autocorrelation as such indicating the model was statistically good for estimation.

Table 4.34: Regression Results of the Influence of M&E budget on Performance of Horticulture Projects

Models	**Coefficients (B)**	**Std. Error**	**Z value**	**P>z**
(Constant)	11.063**	6.528	2.222	0.037
M&E Budget	.621***	.184	0.097	0.008
a. Dependent Variable: Performance of Horticulture projects b. Predictors: (Constant), Monitoring and evaluation Budget				
F (1,145) = 11.433***, p=0.000<0.05 r= 0.890 R2 = 0.792 Adjusted R2 = 0.694 Durbin Watson = 1.1012				

**** 1% level of significance, ** 5% level of significance * 10% level of significance*

The F-ratio of 11.433 is statistically significant at 5% [p=0.000<0.05] implying M&E budget had a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County. Thus from the results the null hypothesis was rejected.

These findings show that M &E budget has a significant influence and therefore facilitate the achievement of project performance. Both farmers and staff were of the view that M

&E budget should be a priority like any other budget with a mean of 3; and that budget review should be participatory to make it more meaningful. The study findings agrees with the views of Nyang'wara & Kulet(2015) who suggests that one of the key performance accountability for project managers is the extent to which they allocate resources for monitoring and evaluation. Besides developing an M &E plan or system; would not be meaningful and effective without the required resources to transform into concrete and practical results (Mavhiki et al., 2013).

Likewise, these results support the views of Khake & Worku (2013) who state that allocation of financial resources for monitoring and evaluation involves not the process of allocation but also planning, management and control of the same resources to achieve the desired results. As such involving those tasked with M &E function in budgeting and reviewing processes increases the chances of ownership. The outcome for budget review process indicated both staff and farmers were neutral implying that they may not be participating in budget allocation review.

On the contrary, the study result disagrees with the reports by Okello & Mugambi (2015) who observed that M &E in organizations is an ad hoc and underfunded. Though some concerns have being raised regarding the value for M & E, most organization including KENAFF is increasing their investment in monitoring and evaluation. Further, M &E budget need to be clearly delineated within the overall project budget to give the due recognition it requires. The findings show that M &E is given priority in budgeting and has contributed to great extent to performance of projects in Nakuru County.

Hypothesis 4

H_{04}: Utilization of monitoring and evaluation information has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County

Performance of horticulture projects was the dependent variable, and was a composite index of economic performance, technical performance and farmers' satisfaction of

products and services. Utilization of monitoring and evaluation information was the independent variable, and was a composite index of information collection, availability of M&E information and information use.

To test this hypothesis a regression model of the form: $y= \beta_0 + \beta_4 X_4 + \varepsilon$ was estimated, where:

y = Performance of horticulture projects

β_0 = Constant

β_4= Beta coefficient

X_4 = Utilization of M&E information

ε = Error term

The results presented in Table 4.35indicate that the correlation coefficient (r) of 0.724 indicates utilization of monitoring and evaluation information had a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County. The coefficient of determination (adjusted R-squared) of 0.507 suggests that utilization of M&E information explains 50.7% of performance of horticulture projects while 49.3% is explained by other factors other than utilization of M&E information. The Durbin-Watson Statistic of 2.424 shows absence of autocorrelation as such indicating the model is statistically good for estimation.

Table 4.35: Regression Results of Utilization of M&E Information on Performance of Horticulture Project

Model	**Coefficients (B)**	**Std. Error**	**Z value**	**P>z**
(Constant)	15.492*	9.405	3.221	0.093
Utilization of M&E Information	.469**	.258	0.063	0.011
a. Dependent Variable: Performance of Horticulture projects b. Predictors: (Constant), Utilization of M&E Information				
F (1,145) = 3.308***, p=0.000<0.05 r= 0.724 R2 = 0.524 Adjusted R2 = 0.507 Durbin Watson = 2.424				

**** 1% level of significance, ** 5% level of significance * 10% level of significance*

From Table 4.35; the F-ratio of 3.308 was statistically significant at 5% [p=0.000<0.05] implying utilization of M&E information had a significant influence on performance of

horticulture projects supported by KENAFF in Nakuru County. Thus from the results the null hypothesis was rejected.

From literature reviewed, it indicated that there is a renewed focus on utilization of M &E information within organization implementing projects to better demonstrate effectiveness of development interventions. A World Bank Report (2005), M & E information has been recognized to be a key element in overall project management information. The findings of this study are evidence that utilization of M &E information influences performance of projects. This agrees with a report by IFAD (2002) which emphasized the importance of using M& E information for project improvement. The study findings also concurs with Steyn(2014) who observed that placing M & E information at the heart of managing for impact is a priority for all development interventions including feedback and learning. More evidence in agreement with this finding is a report by IFAD (2013) which indicate that benefits gained from utilization of M &E information is beyond just learning but help knowing the impact of the project and how to improve the overall quality of projects.

In reference to the coefficient of determination (R-squared) of 0.524; utilization of M&E information explains 52.4% of performance of horticulture projects while 47.6% is explained by other factors other than utilization of M&E information. This implies that utilization of M &E information influences over 50% of performance of horticulture projects in Nakuru County. This agrees with Raymond & Bergeron (2008) who argued that organizations should focus more on managing and utilizing project information for decision making. Moreover, M & E PMIS need to provide timely and relevant information needed by top management to help assess project performance as noted by Bendoly & Swink, (2007). The finding corroborates with that reported by Karim, (2011) that M &E information system provides for a way of collection, collating, managing and utilizing project information adequately and consistently. From the correlation analysis, utilization of monitoring and evaluation information is also perceived to have had a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County as indicated by a correlation coefficient of .724, which is statistically significant at 5% level of significance [$p=.037<0.05$]. From the study findings that utilization of M

&E information had a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County.

Hypothesis 5

H0: Combined monitoring and evaluation drivers have no significant influence on performance horticulture projects supported by Kenya National Farmers Federation in Nakuru County

The hypothesis aimed at establishing whether all the M&E drivers had significant influence on performance of horticulture projects supported by KENAFF in Nakuru County. A composite index of performance of horticulture projects was used as the dependent variable. It was a composite of economic performance, technical performance and farmers' satisfaction of products and services. The independent variables were all the M&E drivers. To test this hypothesis a regression model of the form:

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

Was estimated, where:

y = Performance of horticulture projects

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$= Beta coefficient

X_1= M & E Culture

X_2=Human Resource Capacity for M &E

X_3 = M &E Budget

X_4 = Utilization of M&E Information

ε = Error term

As seen in table 4.36; in the combination of the M&E drivers, M&E budget is the most important variable in explaining performance of horticulture projects, followed by human resource capacity for M&E, then utilization of M&E information and finally M&E culture. All these variables are statistically significant, following from the F-distribution value of $F(4,145) = 16.890$, $[p=0.000<0.05]$, this also conforms to each P value of the individual variables, which are less than 0.05 (5% level of significance). The Adjusted R-Squared Statistic of 0.671, indicated that when all these variables are combined, they explain 67.1% variation of performance of horticulture projects in the County, while 32.9% is explained

by other variables that are not in the model. Thus from the results the null hypothesis was rejected

Table 4.36: Regression results of combined M&E drivers and performance of horticulture projects

	Coefficients	**Std. Errors**	**Z value**	**P>z**
Constant	14.443***	2.817	3.441	0.0033
M&E culture	0.524**	0.165	2.888	0.0144
HR Capacity for M&E	0.538**	0.216	2.741	0.0137
M&E budget	0.696***	0.206	1.128	0.0056
Utilization of M&E information	0.525**	0.289	2.703	0.0135

a) Dependent Variable: Performance of horticulture projects
b) Independent Variables: M&E Culture, HR Capacity for M&E, M&E Budget, Utilization of M&E information.

F(4,145)= 16.890***, [p=0.000<0.05]

R-Squared= 0.754

Adjusted R-Squared = 0.671

Durbin Watson Statistics = 2.753

**** 1% level of significance, ** 5% level of significance * 10% level of significance*

The results shows that putting in place all the M&E drivers namely M &E culture, human resource for M & E, M & E budget and utilization and M &E information is necessary for any project performance. As noted from literature reviewed, several factors contribute to good project performance; they include project M&E culture, capacity and competence to carry out M &E tasks, and using M &E information for decision making. However, the extent to which these factors interact determines the extent to which they influence performance of projects Tengan et al. (2014). The study findings on M &E drivers influence on performance further agrees that with the observations by Sebedi (2012) who argued that having knowledgeable and skilled personnel is crucial for M&E function. Moreover, type and level of skills or M &E staff contribute to a large extent achievement of project results (Tidac & Pivac, 2014). Monitoring and evaluation culture that include thinking and acting in impact terms are too important to be left to external consultant. The

study findings indicate that M & E related decision making requires that proper systems to be put in place to collect and collate information in the correct format. M &E information is important for managing stakeholders, project teams, and monitoring actual progress of projects and having insights on where and when to take corrective action. This study finding is in agreement with an earlier study which indicated that some level of good performance in projects is achieved if M &E information is utilized (Karim, 2010). Existence of a shared understanding and interpretation of M &E information as well as results boosts excellent performance of projects. In order to gauge project performance various factors are used in such assessment (human resource capacity, financial capacity, availability of tools and systems, existing project culture as have been demonstrated in this study.

Hypothesis 6

H_6: Type project leadership has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

In analyzing this hypothesis; performance of horticulture projects was the dependent variable, and was a composite index of economic performance, technical performance and farmers' satisfaction of products and services. The two types of leadership styles i.e transformation leadership style and transaction leadership styles were the independent variables. To test this hypothesis a regression model of the form: $y= \beta_{0} + \beta_{5a} X_{5a} + \beta_{5b} X_{5b} + \varepsilon$ was estimated, where:

y = Performance of horticulture projects

β_0 = Constant

β_{5a}, β_{5b}= Beta coefficients

X_{5a}= Transformation leadership style

X_{5b}= Transformation leadership style

ε = Error term

The results in Table 4.38 show that both transaction and transformation leadership styles are important In explaining performance of horticulture projects in Nakuru County, this is from the F-value of $F(2,145)= 6.541$, [$p=0.033<0.05$]. The adjusted R-Squared value of

0.735 indicates that, leadership styles alone explain 73.5% of the variation of performance of horticulture projects in the County, while 26.5% is explained by other variables not in the model. In comparison of the two types of leadership styles, transformation leadership style influences performance of horticulture projects more than the transaction leadership style, this is seen from the coefficients of 2.003 and 0.712 respectively, which are both statistically significant at 5% level of significance as seen in table 4.37 below:

Table 4.37: Regression results of types of project leadership and performance of horticulture projects

	Coefficients	**Std. Errors**	**Z value**	**P>z**
Constant	31.391***	17.555	1.788	0.0101
Transformation leadership style	2.003***	0.617	3.246	0.0003
Transactional leadership style	0.712***	0.142	0.498	0.0067

a) Dependent Variable: Performance of horticulture projects
b) Independent Variables: Transformation leadership style and Transactional leadership style.

F(2,145)= 6.541, [p=0.033<0.05]

R-Squared= 0.867

Adjusted R-Squared = 0.735

Durbin Watson Statistics = 2.182

**** 1% level of significance, ** 5% level of significance * 10% level of significance*

From According to these study findings, type of project leadership plays an important role and influences performance of projects and agrees with earlier studies that addresses the factors that contribute to project performance outcomes. Leadership has been cited as one of a major factor. In a study by Kerzner and Saladis (2009), they noted that selection of type of leadership from the onset of a project influence to a great extent how projects perform. As such selection of a project manager should be based on individual capability and competency in the discipline. The study findings further agree with the observation by Tidac & Pivac (2014) who state that a project manager with the right capability will necessarily have the ability to manage a project and achieve the intended outcomes.

Likewise the study finding also agrees with Krouukamp (2015) observations which indicate that a project leader is responsible for leading the project teams towards achieving desired project outcomes.

From the descriptive analysis majority of the responses (50 out of 147 and 72 out of 147) agree that transformational leadership style had had a significant influence on performance of horticulture projects supported by KENAFF in Nakuru County. This result was supported by the mean distribution of 4.047 and a standard deviation of 0.892 which coincide with the Likert scale of 4(great extent). Transactional leadership style has a mean of 3(moderate extent), implying it had some influence but not as that of transformational leadership style. However the composite mean of 3.577 indicate that both transformational and transactional leadership styles are important and had some level of influence on performance of horticulture projects supported by KENAFF in Nakuru County. This finding agrees with the views of Ramesh (2002) who observed that leadership is a social influence which a leader seeks to voluntarily inspire followers to reach organizational and projects goals. Transformational leadership is more likely to accelerate achievement of results. In the same vein, the study finding is in line with observation by Muller & Turner (2005) who noted that influence by project leadership depends on the type and form of leadership.

On the contrary, study finding disagrees with the view by Melchar & Bosco, 2010: Koech & Namusonge (2012) which indicate that some projects continue to fail because of poor leadership. However, though project leaders face various challenges as they lead and manage projects, project leadership remains a critical factor in achieving project outcomes. This study finding concurs with an observation by Gwaya et al. (2014) who observed that human factors have a direct correlation with performance of projects. Overall leadership affects project culture and project strategy and project team spirit. To improve on performance of projects, the focus should be human aspects of project management (Tidac & Pivac, 2014). This notion has been supported by the findings from this study.

Hypothesis 7

H_{07}: Type of project leadership has no significant moderating influence on the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

The analysis in this sub-section involves an investigation of whether a specific type of project leadership moderates the influence of M&E drivers on performance of horticulture projects. Moderated effect in regressions model shows the influence of an independent variable on the dependent variable as a function of a third variable. The aim of such investigation is to see how the influence of the explanatory variables changes when a moderator variable is introduced in the model. In this study the moderator variables are the types of project leadership in horticulture projects supported by KENAFF in Nakuru County.

To test this hypothesis hierarchical regression analysis was used, and it was an estimated of four equations notably:

1. $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$
2. $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{5a} X_{5a} + \varepsilon$
3. $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{5b} X_{5b} + \varepsilon$
4. $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{5a} X_{5a} + \beta_{5b} X_{5b} + \varepsilon$

Where:

Y = Performance of horticulture projects

β_0's= Constants

$\beta_{1....} \beta_{5b}$= Beta coefficients

X_1= M & E Culture

X_2 =Human Resource Capacity for M &E

X_3 = M &E Budget

X_4 = Utilization of M&E Information

X_{5a}= Transformation leadership style

X_{5b}= Transformation leadership style

ε = Error term

Four regression models in the Hierarchical regression analysis were used. Model 1 comprised a regression of the combined M&E drivers alone with performance of

horticulture projects. Model 2 used the variables in model 1 plus transformation leadership style as the criterion variable. Model 3 used all the variables in model 1 plus transactional leadership style as the criterion variable and model 4 used all the variables in model 1 together with the both transformation and transactional leadership styles as the interaction terms. The analysis was based on the change in the R square value; if the value in model 1 is statistically different from that in the other models then the moderator has an influence.

Step one: Influence of combined M&E drivers on performance of horticulture projects

The coefficient of combined drivers was earlier discussed under hypothesis 5. Notably with M&E drivers alone on the model, they explain 67.1% variation of the performance of the horticulture projects in Nakuru, while 32.6% of the variations is explained by other variables not in the model. These variables are all significant in explaining the performance, as the F-Statistics of F (4,145) = 16.890, [p=0.000<0.05], is statistically significant.

Step two: Influence of the interaction of the combined M&E drivers and Transformation leadership style on performance of horticulture projects.

The introduction of transformation leadership style variable in the model, increased the adjusted R-squared statistic to 0.713 (71.3%) up from 0.671 (67.1%) where only the combined variables were involved. The inclusion of the transformation leadership style still warranted the significance of the model as seen by the F-statistic of F (5,145) = 23.114, [p=0.003<0.05]. The Durbin-Watson was also very high at 2.925, affirming the validity of the transformation leadership style variable.

Table 4.38: Regression results of combined M&E drivers and transformation leadership style on performance of horticulture projects

	Coefficients	Std. Errors	Z value	P>z
Constant	13.901***	3.336	2.022	0.0009
M&E culture	0.552**	0.173	3.367	0.0168
HR Capacity for M&E	0.566**	0.228	2.195	0.0160
M&E budget	0.733***	0.217	1.316	0.0066
Utilization of M&E information	0.553**	0.304	3.151	0.0123
Transformation leadership style	0.808**	0.272	3.168	0.0158

a) Dependent Variable: Performance of horticulture projects
b) Independent Variables: M&E Culture, HR Capacity for M&E, M&E Budget, Utilization of M&E information, Transformation leadership style

F(5,145)= 23.114***, [p=0.003<0.05]

R-Squared= 0.801

Adjusted R-Squared = 0.713

Durbin Watson Statistics = 2.925

**** 1% level of significance, ** 5% level of significance * 10% level of significance*

Step three: Influence of the interaction of the combined M&E drivers and Transactional leadership style on performance of horticulture projects.

The inclusion of the variable transaction leadership style in the model further increased the adjusted R-squared statistic to 0.707(70.7%) up from 0.671 (67.1%) under combined M&E drivers alone. This was an indication of the importance of transaction leadership style to the performance of horticulture projects in the county. The variable's interaction with the M&E drivers to affect performance of projects was observed to be statistically significant, given from the F statistic of F(5,145)=26.904,[p=0.000<0.05] and the Durbin-Watson Statistic of 2.900.

Table 4.39: Regression results of combined M&E drivers and transactional leadership style on performance of horticulture projects

	Coefficients	Std. Errors	Z value	P>z
Constant	12.124**	2.773	2.172	0.0212
M&E culture	0.603**	0.189	3.108	0.0155
HR Capacity for M&E	0.618**	0.249	2.950	0.0147
M&E budget	0.800***	0.237	1.214	0.0061
Utilization of M&E information	0.604**	0.332	2.909	0.0145
Transactional leadership style	0.740**	0.249	3.432	0.0172

a) Dependent Variable: Performance of horticulture projects
b) Independent Variables: M&E Culture, HR Capacity for M&E, M&E Budget, Utilization of M&E information, Transaction leadership style

F(4,145)=26.904, [p=0.000<0.05]

R-Squared= 0.794

Adjusted R-Squared = 0.707

Durbin Watson Statistics =2.900

**** 1% level of significance, ** 5% level of significance * 10% level of significance*

Step four: Performance of horticulture projects with the interaction of both transformational and transactional leadership styles with combined M&E drivers.

The introduction of the two leadership styles in the model increased the adjusted R-squared statistic from 0.671 (under combined M&E drivers alone) to 0.772 (77.2%). This was a notable increase of 10%. This implied that a combination of all these M&E drivers, together with the two leadership styles explained 77.2% of the variations in performance of horticulture projects in Nakuru County, while 22.8% of the variations was explained by other variables not in the model. The inclusion of the two leadership styles in the model was statistically significant with the F-value of F (6,145) =32.115, [p=0.001<0.05] and a Durbin-Watson statistics of 3.66.

Table 4.40: Regression results of both leadership styles and M&E drivers on performance of horticulture projects

	Coefficients	Std. Errors	Z value	P>z
Constant	8.110***	1.984	2.873	0.0011
M&E culture	0.557**	0.175	3.160	0.0158
HR Capacity for M&E	0.571**	0.230	2.999	0.0150
M&E budget	0.739***	0.219	1.235	0.0062
Utilization of M&E information	0.558**	0.307	2.957	0.0148
Transformation leadership style	2.167**	0.534	2.660	0.0133
Transactional leadership style	0.746**	0.251	3.221	0.0161

a) Dependent Variable: Performance of horticulture projects
b) Independent Variables: M&E Culture, HR Capacity for M&E, M&E Budget, Utilization of M&E information, Transformation and Transaction leadership style

F(6,145)=32.115***, [p=0.001<0.05]

R-Squared= 0.867

Adjusted R-Squared = 0.772

Durbin Watson Statistics = 3.166

**** 1% level of significance, ** 5% level of significance * 10% level of significance*

The introduction of the leadership styles in the model increased the goodness of fit of the model, as observed by the increase in the R squared statistics, this shows that the null hypothesis can be rejected and therein have a conclusion that the type of project leadership has statistical significant moderating influence on M&E drivers and performance of horticulture projects supported by Nakuru County.

4.6 Summary of Chapter

The chapter discusses the findings from data on farmers, staff members and a combination of farmers and staff members. The data has been presented in Tables showing frequencies, means and standard deviations of all the indicators. Composite means were calculated for performance of horticulture projects, M&E culture, human resource capacity for monitoring and evaluation, M&E budget, utilization of M&E information and type of

project leadership comprising of transformation and transactional styles. These composite means were used to run a number of tests including correlation analysis and regression analysis which were carried out to determine the strength and direction of those relations and the F-test to test the Hypothesis and the influence of independent variables on the dependent variable. The study has tested seven null hypotheses and all of them were rejected. The judgments were made after tests were done at 0.05 significant levels.

The sample results from staff members were consistent with that of farmers in all the hypotheses statements that were being tested, in that, in all cases the null hypotheses were being rejected. The R-squared, R squared Adjusted-statistic, F-statistic and beta coefficients for the staff members were all larger than that of farmers. This was because the sample size for staff members was smaller than that of farmers. Despite this, the sample size of staff produced similar effects. Overall, type of project leadership on its own was the only explanatory variable that had a less significant influence on performance of horticulture projects in Nakuru County; however it had a much more influence when analyzed together with the M&E drivers.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summaries of major findings of the study. Conclusion have been drawn and presented based on data analysis in chapter four. The chapter also presents recommendations arising from evidence and contributions to the body of knowledge. Suggestions for further studies have also been indicated.

5.2 Summary of Findings

The study has come with a number of findings presented in the Table 5.1 and followed by discussions.

Table 5.1: Summaries of Findings.

Objective	Hypotheses	Model for Hypothesis Testing	Results	Remarks
1. To establish the influence of monitoring and evaluation culture on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**Hypothesis 1: H_{01}:** Monitoring and Evaluation culture has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County.	$y= \beta_0 + \beta_1 X_1 + \varepsilon$	$\beta_1= 0.468$ $R^2=.771$ Adj. $R^2=.604$ $F(1,145)=10.089$ $P=0.000<0.05$	Reject
2. To assess the influence of human resource capacity for monitoring and evaluation on performance of horticulture projects supported by	**Hypothesis 2: H_{02}:** Human resource capacity for monitoring and evaluation has no significant influence on performance of horticulture projects supported by	$y= \beta_0 + \beta_2 X_2 + \varepsilon$	$\beta_2= 0.480$ $R^2=.673$ Adj. $R^2= .599$ $F(1,145)=6.175$ $P=0.000<0.05$	Reject

	Kenya National Farmers Federation in Nakuru County.	Kenya National Farmers Federation Projects in Nakuru County.			
3.	To establish the influence of monitoring and evaluation budget on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**Hypothesis 3:** **H_{03}:** Monitoring and evaluation budget has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	$y= \beta_0 + \beta_3X_3+ \varepsilon$	$\beta_3= 0.621$ $R^2=.792$ Adj. $R^2=.694$ F(1,145)=11.433 P=0.000<0.05	Reject
4.	To assess the influence of utilization of monitoring and evaluation information on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**H_{04}**: Utilization of monitoring and evaluation information has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	$y= \beta_0 + \beta_4X_4+ \varepsilon$	$\beta_4= 0.469$ $R^2=.524$ Adj. $R^2=.507$ F(1,145)=3.308 P=0.000<0.05	Reject
5.	To establish combined influence of monitoring and evaluation drivers on performance of horticulture projects	**H_{05}:** Combined monitoring and evaluation drivers have no significant influence on performance horticulture projects	$y=\beta_0 + \beta_1X_1+ \beta_2X_2 + \beta_3X_3 +\beta_4X_4 +\varepsilon$	$\beta_1 = 0.524$ $\beta_2 =0.538$ $\beta_3 = 0.696$ $\beta_4 =0.525$ $R^2=.754$ Adj. $R^2=671$F(4,145)=16.890 P=0.000<0.05	Reject

	supported by Kenya National Farmers Federation in Nakuru County	supported by Kenya National Farmers Federation in Nakuru County.			
6.	To establish the influence of type of project leadership on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County	**Hypothesis 6:** **H_{06}:**Type project leadership has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County	$Y = \beta_0 + \beta_{5a} X_{5a} + \beta_{5b} X_{5b} + \varepsilon$	β_{5a}= 2.003, β_{5b}=0.712 R^2=.867 Adj. R^2 = 0.735 F(2,145)=6.541 P=0.033<0.05	Reject
7.	To assess the moderating influence of type of project leadership on the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.	**Hypothesis 7:** **H_{07}:** Type of project leadership has no significant moderating influence on the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru	$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{5a} X_{5a} + \varepsilon$ $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{5b} X_{5b} + \varepsilon$ $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_{5a} X_{5a} + \beta_{5b} X_{5b} + \varepsilon$	R^2=.754 Adj. R^2 = 0.671 F(4,145)=16.890 P=0.000<0.05 R^2=.801 Adj. R^2 = 713 F(5,145)=23.144 P=0.003<0.05 R^2=.794 Adj. R^2 = 0.707 F(5,145)=26.904 P=0.000<0.05 R^2=.867 Adj. R^2 = 0.772 F(6,145)=32.115 P=0.001<0.05	Reject

The purpose of this study was to determine the influence of monitoring and evaluation drivers on performance of horticulture projects supported by KENAFF in Nakuru County as moderated by type of project leadership. To establish these relationships seven

objectives were set and seven hypotheses were tested using correlation, linear and stepwise regression. Correlation was used to explain the direction of relationship between the dependent and independent variables. Simple linear regression was used to determine the linear relationship between each of independent variable which was: M &E culture, human resource capacity for M & E, M &E budget and utilization of M &E information performance of horticulture projects which was the dependent variable. Stepwise regression was used to determine the influence M & E drivers on performance of horticulture projects. To determine whether the type of project leadership had a moderating influence on the relationship between M &E drivers and performance of horticulture projects Stepwise regression was used.

5.2.1 Performance of Horticulture

Nakuru County has to a large extent recorded high project performance as measured by economic performance, technical performance, and satisfaction of farmers of products and services. Both farmers and staff members were of the view that technical performance had greatly been achieved by the horticulture projects; this was followed by farmers' satisfaction of products and services by farmers and finally economic status of farmers. It was further confirmed that performance of horticulture projects was greatly hinged on the technical aspect then followed by farmers satisfaction of products and services and finally on the economic status of farmers. A look at the mean of the performance indicators; both farmers and staff members had a view that technical performance had greatly been achieved by the horticulture projects in the County this is according to the 5 point Likert scale indicator which produced a mean of 3.801 and an SD of 0.849 for this category, this was followed by farmers satisfaction of products and services which had a mean of 3.197 and an SD of 0.758, and finally economic status of farmers with a mean of 3.103 and a standard deviation of 0.874. Notably, the highest proportions of 31.5%, 39.4% and 33.5% were all on the response of great extent, indicating generally that the respondents were of the view that horticulture projects have greatly performed on all the three categories of economic status of farmers, technical performance and farmer's satisfaction of the products and services.

Technical performance was an issue of concern for all respondents as it was taken to be the backbone of most of the projects. Moreover, majority of the respondents confirmed that technical issues of the project made a great difference and to a large extent influence overall achievement of project goals.

Satisfaction of beneficiary with services and products was also reported to be of great importance to many as it also drives the achievement of high project performance. However from focused group discussion, majority of the farmers indicated that not all projects were performing well and at times beneficiaries complained of poor quality of products and services.

In most studies, technical performance is viewed from high specialized projects. Contrary to these studies, this study recorded moderately high ratings from farmers in all the three factors of technical performance, and beneficiary satisfaction. This implies small projects implemented by farmer groups can also record high project performance.

5.2.2 Monitoring and Evaluation Culture on Performance of Horticulture Projects

Monitoring and evaluation culture was one of the M&E drivers that were investigated. From the study it was determined that M&E Culture was an important driver of performance of horticulture projects in Nakuru County. The first objective of the study was to establish the influence of monitoring and evaluation culture on performance of horticulture supported by KENAFF in Nakuru County. The null hypothesis tested showed that monitoring and evaluation culture has no significance influence on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County. The results were adjusted R^2=.604 $F(1,145)=10.089, P=0.000<0.05$.The F-ratio was statistically significant implying M&E culture has a strong influence on performance of horticulture projects in Nakuru County. The largest influence of M & E culture was from results orientation and team orientation, likewise results orientation and team orientation) formed the largest two proportions of responses and were rated to a large extent to influence performance of horticulture projects. This therefore is an indication that there is a culture of achieving results as teams. Further, there is positive correlation between

performance of horticulture projects and M&E culture with [r=.878, n=146, p=.041<0.05], the Pearson correlation is very close to 1, implying M&E culture is perceived to significantly influence performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. The null hypothesis was rejected that M & E culture had no statistically significant influence on performance of horticulture projects supported by KENAFF in Nakuru County.

5.2.3 Human Resource Capacity for M & E on Performance of Horticulture Projects

The second study objective was to assess the influence of human resource capacity for monitoring and evaluation on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. The null hypothesis tested was that human resource capacity for monitoring and evaluation has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation Projects in Nakuru County.

The coefficient of determination (adjusted R-squared) of 0.599 suggests that human resource capacity explains 59.9% of performance of horticulture projects while 40.1% is explained by other factors other than human resource capacity for monitoring and evaluation. The F statistic of 6.175 is statistically significant at 5% [p=0.000<0.05] implying human resource capacity has a strong influence and positive relationship with performance of horticulture projects in Nakuru County. Human resource capacity for monitoring and evaluation had a positive correlation with performance of horticulture projects in Nakuru County with [r=.820, n=146, p=.040<0.05].This correlation coefficient implies both farmers and staff perceive human resources capacity for monitoring and evaluation to have had a significant influence on performance of horticulture projects in Nakuru County. M &E training at all levels was also emphasized to be necessary as this is the best way to have competent people that embrace M &E in all projects. Majority of the farmers reported that they have been trained in some aspects of M & E. Overall, M&E expertise was rated to have had a significant influence, followed by M&E competency and finally M&E training. The null hypothesis was rejected that human resource capacity for

monitoring and evaluation had no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation Projects in Nakuru County.

5.2.4 M &E Budget on Performance of Horticulture Projects

The third objective of the study was to establish the influence of monitoring and evaluation budget on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. The null hypothesis was that monitoring and evaluation budget has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. The findings were R^2=.694F (1,145) =11.433,P=0.000<0.05.The coefficient of determination (adjusted R-squared) of 0.694 suggests that M&E budget explain 69.4% of performance of horticulture projects while 30.6% is explained by other factors other than M&E budget. The F-ratio of 11.433 is statistically significant at 5% [p=0.000<0.05] implying M&E budget has a strong influence and positive relationship with performance of horticulture projects in Nakuru County. Thus from the results the null hypothesis was rejected that monitoring and evaluation budget had no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

5.2.5Utilization of M &E Information on Performance of Horticulture Projects

The fourth study objective was to establish whether utilization of monitoring and evaluation information had a significant influence on performance of horticulture projects in Nakuru County. It was based on information collection, availability of M&E information, and information use. From the study findings it was established that information collection and availability M&E information had to a great extent contributed to good performance of horticulture project performance in Nakuru County. The null hypothesis tested was that utilization of monitoring and evaluation information has no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. Research findings were adjusted R^2=.507 F (1,145) =3.308, P=0.000<0.05. The coefficient of determination (adjusted R-squared) of 0.507 suggests that utilization of M&E information explains 50.7% of performance of horticulture projects while 49.3% is explained by other factors other than utilization of

M&E information. F-ratio of 3.308 is statistically significant at 5% [p=0.000<0.05] implying utilization of M&E information has a strong influence and positive relationship with performance of horticulture projects in Nakuru County. Thus from the results the null hypothesis was rejected that utilization of M&E information had no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

From the FGD, it was established farmers feedback and views are taken into consideration, this has given them confidence to work with field staff, this to a large extent has contributed to better decision making and improved project performance. This study finding is in line with previous studies which indicate that managing project M & E information for decision making as well as gauging project performance is a prerequisite. From those interviewed; it was evident that collection of M &E information, its availability and use; influence the performance of horticulture projects supported by KENAFF in Nakuru County.

5.2.6 Combined M & E Drivers on Performance of Horticulture Projects

The fifth study objective was to establish combined influence of monitoring and evaluation drivers on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. The null hypothesis tested was that combined monitoring and evaluation drivers have no significant influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. The research findings were adjusted R^2=0.671, F (4,146) =16.890, P=0.000<0.05. The results for (adjusted R-squared) of 0.671 suggests that the M&E drivers explain 67.1% of performance of horticulture projects while 32.9% is explained by other factors other than the M&E drivers, the most important variable among all the variables was M&E budget while the least important was M&E culture. The F-ratio of 16.890 was statistically significant at 5% [p=0.000<0.05] indicating the M&E drivers have a strong influence on performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. Thus from the results; the null hypothesis was rejected, that M&E drivers had no significant ion performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. This shows that putting in place all the M&E drivers (M &E

culture, human resource capacity for M & E, M & E budget and utilization of M &E information) is necessary for any project performance.

The combined influence of M&E drivers when analyzed on their own showed different outcomes, in all cases each M&E driver had indicated to be an important contributor to performance of horticulture projects. Similarly their combined influences showed matching responses in the same proportion of importance, particularly M&E budget being the most important variable and M&E culture being the least important in explaining performance of horticulture projects in the county.

On the case of both staff and farmers; a large percentage of 48.04% agreed that the M&E drivers are important and influence performance of horticulture projects .This ratio was also highly supported by the mean of 4.012, which means that the distribution of the response was averagely on the scale of 4 (4-an indicator of agree). Data on farmers alone showed also that a large percentage of 49.05% of the farmers were in agreement that M&E drivers are important factors in the performance of horticulture projects in Nakuru County. The mean response was 3.786 which were approximately 4, showing the response rate was on the indicator of "Agree", ascertaining the importance of the M&E drivers on the horticulture projects.

5.2.7 Type of Project Leadership on Performance of Horticulture Projects

The sixth study objective was to establish the influence of type of project leadership on performance of horticulture projects supported by Kenya National Farmers Federation projects in Nakuru County. The null hypothesis was tested for the two types project leadership transformational and transactional leadership. The revealed that both transaction and transformation leadership styles are important in explaining performance of horticulture projects in Nakuru County, this is from the F-value of $F(2,145) = 6.541$, [$p=0.033<0.05$]. The adjusted R-Squared value of 0.735 indicates that, leadership styles alone explain 73.5% of the variation of performance of horticulture projects in the County, while 26.5% is explained by other variables not in the model. In comparison of the two types of leadership styles, transformation leadership style influences performance of

horticulture projects more than the transaction leadership style, this is seen from the coefficients of 2.003 and 0.712 respectively, which are both statistically significant at 5% level of significance. Thus from the results of the study the null hypothesis was rejected that the two types of project leadership had no significant influence on performance horticulture projects supported by Kenya National Farmers Federation in Nakuru County

5.2.8 Moderating Influence of Type or Project Leadership on Performance of Horticulture Projects

The seventh research objective was to assess the moderating influence of type of project leadership on the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. The hypothesis was tested results showed that type of project leadership had no significant moderating influence on the relationship between monitoring and evaluation drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County. The research findings for model 1 were; the F (4,145) =16.890 [p=0.000<0.05] and the adjusted R squared was 0.671, showing that M&E drivers alone without any interaction explained 67.1% of the variation of performance of horticulture projects in Nakuru County. Model 2 was an interaction between M&E drivers and transformational leadership style, the results were an F(5,145)=23.144 [p=0.003<0.005] and an adjusted R squared statistic of 0.801, this showed that by introducing transformation leadership style to the model, the variables explained 80.1% of the variation of the performance of horticulture projects in Nakuru County. Model 3 was an interaction between M&E drivers and transactional leadership style, the results were an F(5,145)=26.904, [p=0.000<0.005] and an adjusted R squared statistic of 0.707, this showed that by introducing transformation leadership style to the model, the variables explained 70.7% of the variation of the performance of horticulture projects in Nakuru County. Notably however that transactional leadership style had a lower influence as compared to transformational leadership style. Model 4 was an interaction of both transformational and transactional leadership style, the results were an F (6,145) =32.115 [p=0.001<0.05] and an adjusted R squared of 0.867. This showed an inclusion of the two

types of leadership styles in the model together with the M&E drivers explained 86.7% of the variations of performance of horticulture projects in Nakuru County.

The results from the analysis showed that the two types of project leadership styles increased the goodness of fit of the model when introduced in the model, as observed by the increase in the R squared statistics. The null hypothesis was therefore rejected that type of project leadership had no statistical significant moderating influence on the relationship between M&E drivers and performance of horticulture projects supported by Kenya National Farmers Federation in Nakuru County.

Type of leadership was assessed using transformational and transactional leadership. The study established that majority of the responses agree that transformational leadership style has great impact on horticulture project performance in Nakuru County. This is supported by the mean distribution of 4.047 and a standard deviation of 0.892 which coincide with the Likert scale of 4(great extent). Transactional leadership style has a mean of 3(moderate extent), implying its important but not as transformational leadership style. However the composite mean of 3.577 indicate that both transformational and transactional leadership styles are important for project performance Nakuru County.

5.3 Conclusion

The focus on performance of projects remains an issue of concern in project management globally especially with the emergence and emphasize on result based monitoring and evaluating. This shift has been witnessed in KENAFF where both the staff and group members seem to be keen on how well the projects are performing in pursuit of set goals. Performance of projects' measurement provides an opportunity to monitor and control projects on a regular basis using specific indicators to measure performance. Performance of horticulture projects are influenced by various factors of particular relevance in this study where are M & E drivers mainly M &E culture, human resource capacity for M &E, M & E budget, utilization of M &E information moderated by project leadership. Commitment to a result based culture was seen to be the motivation of working towards achieving desired results including satisfying project stakeholders. The fact that there was

a positive correlation between performance of horticulture projects and M&E culture showed that M&E culture is perceived to highly contribute to good performance of horticulture projects supported by KENAFF in Nakuru County. Creating and sustaining an M & E culture in a project environment may in some cases call for rethinking and renovating the existing organizational behaviour. To maintain the M &E culture there is need to mainstream it into organizational behaviour since certain cultural orientations lead to organizational effectiveness and strong performance of projects. M & E culture needs to be based on strong value system taking into consideration transparency, accountability and shared responsibility for success, failure and overall performance.

Meaningful implementation of monitoring and evaluation for assessing performance of projects requires active involvement of program staff tasked with the monitoring function. In most cases monitoring and evaluation staff will be responsible for actual collection, recording and reporting of much of the project data. It is therefore worth noting that human related factors are necessary for success implementation of monitoring and evaluation .In this study, particularly human resource capacity for monitoring and evaluation had a very positive correlation with performance of horticulture projects in Nakuru County. The correlation coefficient implied that both farmers and staff perceive human resources capacity for monitoring and evaluation to be highly contributing to performance of horticulture projects in Nakuru County. To sustain the performance, management need to plan and intend to inspire, motivate and mentor employees in achieving the expected project performance excellence. More so, M & E roles and responsibilities need to be embedded in job descriptions, and link individual performance to overall project performance outcomes.

The value of monitoring and evaluation in project implementation and performance has made some organizations increase their investments in monitoring and evaluation. It is necessary for organization to consider resources for M &E as priority. Providing resources for implementation of M & E require planning and consistent commitment by management. Allocation of financial resources for M &E involves not only allocation but also planning, management and control of the same resources to achieve desired results. More so

involving those tasked with M & E function in the budgeting process increases the chances of ownership. The decision to put in place monitoring and evaluation is political in nature, requiring top management support and calls for resource commitment where the project budgets provide a clear and adequate provision for monitoring and evaluation activities. It is noted that monitoring and evaluation budget was a major contribution to high performance of horticulture as shown by a correlation coefficient which was statistically significant. Monitoring and evaluation budget should be clearly delineated within the overall project budget to give the monitoring and evaluation function the due recognition it plays in contributing to high project performance.

The positive correlation between utilization of M & E information and performance of project shows that utilization of M &E information is fundamental in not only making timely decisions. It provides opportunity for learning by project implementing teams and beneficiaries. Promoting a participatory data collection and availing the information in timely and usable helps organizations implementing projects to better demonstrate the effectiveness of their development interventions. Of great importance, project leaders need to act on M & E findings and apply lessons learned to modify projects to achieve the intended project outcomes. Putting in place project management information is crucial for managing project information for decision making and gauging performance of projects.

Appropriate leadership is an added advantage in maintaining high project performance as well as ensuring that M&E drivers are catered for. Type of leadership has varied impact on achievement of results. In reference to the rankings of correlation coefficients; type of leadership had a strong correlation of 0.566, since it is in the range of $0.5<r\leq1$, however the correlation is not as strong as that of the M&E drivers combined. Nonetheless it is perceived to be an important factor to performance of horticulture projects in Nakuru County. Project manager's leadership ability has been reported to have a direct correlation with project outcome. The selection of a project manager should be based on an individual's capability and competency. A competent project manager is more likely to accelerate and influence positively to the achievement of project goals.

In general there is a positive and statistically significant correlation between performance of horticulture projects and all the M&E drivers. Project performance depends on each of the M &E drivers &E Culture, human resource capacity for M &E, M &E budget and utilization of M &E information. Further project performance is dependent on the combined influence of all the M &E drivers moderated by type of project leadership. The extent to which these factors interact determines the extent to which they influence performance of projects. All the null hypotheses were rejected confirming that M &E drivers and type of project leadership influence performance of horticulture projects.

5.4 Recommendations

From the results of this study the following recommendations have been made for various groups.

5.4.1 Recommendations for Project Managers and M &E Practitioners

The study recommends that aspects of M & E in a project set up need to be factored in during the design of the project. This include specifying the indicators for measuring project performance, budget for M & E , type of information and how the information will be collected and used. Building M & E capacity at all levels with both institutional, M &E tools and human resource capacity will contribute to better delivery.

Organizations need to approach M &E in a strategic dimension linking M &E aspects, project performance to overall organization vision and mission. This will promote an inherent in built M& E into the overall strategic focus and result oriented culture where each one identifies with.

M &E information from project used for decision making should be clearly communicated vertically and horizontally through clear mechanism where project stakeholders can link better project management to use of M &E information. This attribution of benefits of M &E information promotes ownership and appreciation of importance of supplying timely and quality M & E information.

Project based indicators need to be aligned to the overall strategic objectives and results. Understanding of the influence of monitoring and evaluation drivers and performance of horticulture projects as moderated by project leadership will help organization and government institutions plan better on how to improve project performance of projects, better allocation of resources and ensuring adequate capacities for achieving intended project results.

Placing M &E information and results in the heart of managing for project impact should be a priority for all development intervention including feedback and learning derived from project results. As established from the interview responses, renewed focus on utilization of M &E information reflects scaled up focus by KENAFF to put in place systems that facilitate collection and collation of information for decision making.

The study findings have demonstrated the importance of type project leadership as a key performance factor. It is recommended that those implementing projects need to consider the right type of leadership while designing projects.

5.4.2 Recommendations for Policy Makers

It was established from project stakeholders, though the agriculture function have been devolved, there is no clear strategy or policy on how extension workers can support farmers groups implement and track performance at county level. It is recommended that in the devolved system, issues of project monitoring and evaluation be part of the county integrated development plans. Budget be allocated for carrying out monitoring and evaluation.

Putting in place management information system for learning and managing knowledge for the various projects at the county level would help in informing policy development at the national level. Retraining of agriculture extension workers and linking them to farmer groups will contribute to sustainability of the many projects being implemented at the counties. This would help to avoid duplications as well as provide opportunities for scaling up successful projects.

5.5 Study's Contribution to Knowledge

This study has established that M &E culture, human resource capacity for M & E, M & E budget, utilization of M &E information and type of project leadership influence performance of projects of horticulture. Literature reviewed has identified varied factors that influence performance of different projects. Most studies focus on the traditional 'Iron triangle' which encompass cost, quality and schedule majorly for construction and general rural development projects. Taking the theoretical approaches of these studies, this study has tested them empirically using opinions from farmers, project staff and management. In reference to the study variables and methodology this study may be first of its kind to show this kind of relationship in Kenya especially in the horticulture sector. Literature reviewed did not establish any other empirical study done on the influence of M &E drivers on performance of horticulture projects as moderated by type of project leadership. This study has provided an insight beyond the focus on Iron Triangle by looking at other factors that contribute to good project performance, which traditionally are not usually taken as performance factors.

The study also established that overall there is a positive and statistically significant correlation between performance of horticulture projects and all the M&E drivers. According to the rankings of correlation coefficients; type of leadership has a strong correlation however the correlation is not as strong as that of the M&E drivers combined. Nonetheless it is perceived to be an important moderating factor to performance of horticulture projects.

Methodologically the use of mixed method approach in data collection that included questionnaire, key informant interview and focused group discussions provided a reach data that informed conclusions and recommendation. This proved that mixed method provides value addition in triangulation findings.

5.6 Suggestions for Further Studies

Performance of horticulture was examined using the selected M &E drivers in a farmers' federation. From the study it was perceived that to a large extend the M &E drivers have

contributed to good project performance in the county yet in previous studies the variables have not been considered as performance factors. There is need to carry out a study that focuses on these M &E drivers in other project set up since literature reviewed indicated that some of these drivers could be a hindrance in achieving consistent project performance. The study is based on cross sectional research design which means that data was collected at one point in time; future research can use longitudinal research design to determine the long term effect of M &E drivers.

There was an indication that more emphasis was on monitoring information in relation to evaluation information. More so, linking M & E project information system to overall project design was desired. An independent study need to be done to establish and show the influence of evaluation results and their usability in gauging project performance.

From the interviews and focused group discussions, it was clear that all those involved in the implementation of projects were of the view that information collection need to be participatory rather than the collaborative approach. There is therefore need to carry out a study to show the benefits of a participatory data collection and use of M &E information and the extent of use of such information to influence performance of projects.

In general there is wide knowledge of the importance of M & E as a means of achieving project performance but the actual influence of specific M &E related factors need to be studied focus on farmers only as well as in other sectors. This study utilized cross sectional research design and data was collected at one point in time, future studies can use longitudinal research design to determine the long term effect of M &E drivers on project performance.

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APPENDICES

Appendix 1: Letter of Transmittal

Lily Chebet Murei

Ph.D Student in Project Planning and Management

School of Open and Distance Learning

University of Nairobi

P.O. Box 30197

Nairobi

Cell: 0722981655

Dear Respondent,

RE: REQUEST TO CARRY OUT RESEARCH

I am PhD Candidate at the University of Nairobi and currently conducting a research as partial fulfillment for the award of the degree of Doctor of Philosophy in Project Planning and Management. My research topic is "**MONITORING AND EVALUATION DRIVERS, TYPE OF PROJECT LEADERSHIP AND PERFORMANCE OF HORTICULTURE PROJECTS SUPPORTED BY KENYA NATIONAL FARMERS FEDERATION, NAKURU COUNTY KENYA''.**

The purpose of this letter is to request you to participate as a respondent in this study by providing responses to the attached questionnaire as accurately as possible. The information you provide will contribute to the improvement of performance of projects implemented by your groups, government and other organizations. All information collected throughout the exercise will only be used for academic purposes.

Thank you very much.

Sincerely,

Lily Chebet Murei

L83/93701/2013

University of Nairobi, Kenya,

Appendix II: Questionnaire for Farmers and Group Leaders

This questionnaire is meant to collect information on the relationship between monitoring and evaluation drivers (Monitoring & E culture, Human Resource Capacity for M & E, M & E Budget, and utilization of M & E information and Type of project leadership on performance of horticulture projects supported by KENAFF. The information collected will be used for academic purposes only and is expected that the findings from this study will make a significant contribution towards enhancing performance of projects. The information collected will be handled with confidentiality and with academic professionalism.

KEY

- M & E – Monitoring and Evaluation
- Project Leader- Leader at group level as well as at KENAFF Secretariat level
- Others – Refers to group members or staff

SECTION A: BACKGROUND INFORMATION

Personal Information for KENAFF staff

Please tick the most appropriate information about yourself

1. Designation:

   Project Manager [ ]
   Project Coordinator [ ]
   Project officer [ ]
   M & E officer [ ]
   County Coordinator [ ]
   Other……..

2. Your highest level of education

   College Certificate [ ]
   Diploma [ ]
   Bachelor's degree [ ]
   Master's degree [ ]
   Others (specify)……

3. How long have you been involved in projects supported by KENAFF?

   Below 5 years [ ]
   5- 10 year [ ]
   Over 10years [ ]

4. To what extent are you involved in Monitoring and Evaluation tasks? Tick appropriately

Not at all [ ]
To a small extent [ ]
To a Moderate extend [ ]
To great extent [ ]
To a very Great extent [ ]

Personal Information for Farmer Groups Leaders

5. Position in the group

Chairperson [ ]
Deputy Chairperson [ ]
Treasurer [ ]
Secretary [ ]
Deputy Secretary [ ]
Farmer representative [ ]
Other …….

6. Your highest level of education

Primary Certificate [ ]
High Certificate [ ]
College Certificate [ ]
Diploma [ ]
Bachelor's degree [ ]
Master's degree [ ]
Others (specify)……

7. How long has your group been a member of KENAFF?

Below 5years [ ]
5- 10 years [ ]
Over 10 years [ ]

SECTION B: PERFORMANCE OF HORTICULTURE PROJECTS

This section contains items on Performance of Horticulture projects. Kindly rate the following statements using the five point likert scale of;1-Not at all;2-To a small extent; 3-To a Moderate extend; 4-To great extent and 5- To a very great extent

No.	Statements	Not at all (1)	To a small extent (2)	To a Moderate extend (3)	To great extent (4)	To a very great extent (5)
	(a)Economic status of farmers					
8	Project is main source of income for farmers					
9	Project has improved opportunities for income generation for farmers					
10	Project has connected farmers to markets					
11	Project has not made any difference in the lives of farmers					
12	Returns/Profits from project is satisfactory					
13	Project has created job opportunities for majority of the farmers					
	(b)Technical Performance of projects					
114	Engagement of professional project leader, contributes to successful project performance					
15	Skilled project leader/managers contributes to high project performance					
16	M & E Trainings have helped improved the quality of produce					
17	Provision of Technical advisory services to farmers have improved overall project performance					
18	Use of M& E information has contributed to innovation & learning by farmers					
	(c)Farmers' satisfaction of products and services					
19	Project products and services are relevant to farmers					
20	Project products and services impact positively on beneficiaries					

No.	Statements	Not at all (1)	To a small extent (2)	To a Moderate extend (3)	To great extent (4)	To a very great extent (5)
21	Majority of farmers are satisfied with services and products provided by the project					
22	Majority of the farmers are dissatisfied with services and products provided by the project					

SECTION C: M & E CULTURE

This section contains items on M & E Culture and performance of Horticulture projects supported by KENAFF. Kindly rate the following statements using the five point likert scale of;1- **Strongly Agree; 2-Agree; 3- Neutral;4- Disagree;5- Strongly Disagree**

No	Orientation and Statements	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
	a) Task Orientation					
23	M & E roles are specified					
24	I understand my M& E role in the project					
25	M & E project indicators are available and clear					
26	There are Project staff specifically assigned for M& E					
27	Farmer Group leaders are involved in M & E of project work					
28	It is only the M & E staff that carry out M &E tasks					
29	M & E is too technical and is not clear					
30	Tracking of project M & E indicators is easy					
31	Farmer Group leaders understand how to track M &E indicators					
32	Reporting on M &E indicators is adhered to					
	b) Team Orientation(Cooperation)					
33	Project staff and farmers are cooperative in carrying out M & E project work					
34	M &E guidelines and plan promote team work					
35	Project staff and farmers involved in M& E tasks are good team players					

36	There is a strong sense of being in a team to achieve M &E targets					
37	Peer support for performance culture exist in our project					
38	Project staff and farmers who carry out M & E work well in teams are rewarded					
39	'Lend a helping hand' is a good description of how our M & E project works.					
40	Strong team work in M &E has contributed to high project performance					
	(c) Results Orientation					
40	Project Targets are specified					
41	Project targets are measurable					
42	Project targets are realistic					
43	Project teams focus on timely achievement of project targets					
44	Project teams work towards achieving project targets					
45	Achievement of project targets is rewarded					
46	M & E Culture has improved performance in our project					
47	Delivering on project targets is too demanding					
48	Change in project targets needs to be communicated in good time					

SECTION D: HUMAN RESOURCE CAPACITY FOR MONITORING AND EVALUATION

This section contains items on the influence of M & E Human Resource Capacity on Performance of Horticulture projects supported by KENAFF.

Kindly rate the extent to which you agree with the following statement using scale of 1-Strongly agree; 2=Agree; 3-Neutral; 4-Disagree; 5-Strongly

Statement		**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
		1	**2**	**3**	**4**	**5**
	M & E Expertise (Skills & Knowledge)					
49	Farmers understand how to carry out M &E related project activities					

Statement		Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4	5
50	M & E staff have the knowledge and ability to handle project related M&E issues					
51	M & E staff are able to transfer M & E knowledge to farmers					
52	Farmer group leaders have the knowledge and ability to handle M &E related issues					
53	M & E is too technical and should be left to specialists					
	M &E Competency					
54	M &E staff are competent					
55	M & E staff instill trust and confidence in farmers					
56	M & E staff are consistently keen and thorough during M & E visits					
57	M & E staff competency has contributed to high project performance					
58	Farmer group leaders are competent and participate in M &E activities					
59	Those tasked with M &E are not competent					
	M & E training					
60	Farmer group leaders have been trained on project M & E					
61	Farmer group leaders trained in M & E have cascaded training to farmers					
62	M & E training offered to farmers have contributed to high project performance					
63	No M &E training have been offered to farmers					

SECTION E: MONITORING AND EVALUATION BUDGET

This section contains items on the influence of Monitoring and Evaluation Budget on Performance of horticulture projects supported by KENAFF. Indicate the extent to which you agree with the following statements using a scale of 1-strongly agree, 2-Agree, 3-Neutral, 4-Disagree, 5-Strongly Disagree

Statement		Strongly Disagree	Agree	Neutral	Disagree	Strongly
		1	2	3	4	5
	(a)**Budget allocation**					
64	M &E budget is a priority like any other budget					
65	Adequate budget has been set aside for M & E activities					
66	Farmer Group leaders are consulted regarding M& E budget					

Statement		Strongly Disagree	Agree	Neutral	Disagree	Strongly
		1	2	3	4	5
67	M & E budget is an afterthought, only included after all activities have been budgeted for					
68	Allocation of specific budget for M &E contributes to high project performance					
	(b)**Budget Review**					
69	Farmer Group leaders are consulted during budget review for specific M& E activity costs					
70	There are no budget reviews for M &E related costs					
71	M & E budget review is only known to those who are tasked with M &E activities					
72	M & E budget is well outlined in the project document					

SECTION F: UTILIZATION OF MONITORING AND EVALUATION INFORMATION

This section contains items on the influence of Utilization of Monitoring and Evaluation information on performance of horticulture projects supported by KENAFF. Indicate the extent to which you agree with the following a statements using a scale of 1-strongly agree, 2-Agree, 3-Neutral, 4-Disagree, 5-Strongly Disagree

Statement		Strongly Disagree	Agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4	5
	(a)Information collection					
73	Farmers participate in information collection					
74	M &E information is consistently collected in a timely manner					
75	Type of M & E information collected is relevant to our project					
76	Collection of M &E information is complicated hence rarely collected					
	(**a)Availability of M & E information**					
77	M&E information is packaged in the right format to meet our needs					
78	M & E information is available for us in a timely manner					
79	It is easy to access M & E information related to our project					
80	M &E information is only accessible to those tasked with M & E					
	(c)Information Use					
81	M &E information is useful to our project					
82	M & E information is used to make decisions on how to improve project performance					
83	M &E information is not in our project					

Statement		Strongly Disagree	Agree	Neutral	Disagree	Strongly Disagree
		1	2	3	4	5
84	M & E information is only relevant to those tasked with M & E					

SECTION G: TYPE OF PROJECT LEADERSHIP

This section contains items on the influence of type of project leadership on performance of horticulture projects supported by KENAFF.

KEY

- Type of project leadership will refer to leader at group level or immediate manager/supervisor at KENAFF secretariat level.
- Others refer to group members and or staff.

Kindly rate the leader(s) of the various initiatives in this project by KENAFF using the following statements on a five point likert scale ranging from 1- Not at all; 2 - Once in a while;3 - Sometimes;4 - fairly often and 5 -frequently, if not always.

Transformation Leadership Style		Not at all (1)	Once in a while (2)	Sometimes (3)	Fairly Often s (4)	Frequently if not always (5)
(a) **Inspirational Motivation**						
85	Able to express himself/herself in few words on what others do and should do					
86	Provides appealing examples on what others can do					
87	Helps others find meaning in their work					
88	Encourages others to work towards achieving goals					
(b)Intellectual Stimulation						
89	Enables others to think of how to solve challenges					
90	Gets others to rethink ideas in creative ways					
91	Seeks differing perspectives when solving problems					
92	Suggests new ways at how others look at their tasks					
(c) Idealized Influence(attributed)						

93	Instills pride in being associated with him/her					
94	Goes beyond own self for the good of the others					
95	His/ Her actions build respect for him/her by others					
94	Displays a sense of power and confidence					
(d) Idealized Influence(Behavioral)						
96	Makes others feel good to be around him/her					
97	Others have complete faith in him/her					
98	Others are proud to be associated with him/her					
99	Talks to others about the most important values and beliefs					
(e)	**Individual consideration**					
100	Helps others develop themselves					
101	Spare time for mentoring others					
102	Appreciates each team members different needs, abilities and aspirations					
103	Treats others with respect					

	Transactional Leadership Style	**Not all (1)**	**Once in a while (2)**	**Sometimes (3)**	**Fairly Often (4)**	**Frequently if not Always (5)**
(a)Contingent Reward						
104	Tells others what to do if they want to be rewarded for their work					
105	Provides recognition/rewards when others reach their goals.					
106	Gives personal attention to what others can get for what they accomplish					
107	Expresses his/her satisfaction when others do a good job					
(b)	**Management – by Exception (Active)**					
108	Satisfied when others meet agreed up on targets					
109	As long as things are working, he/she do not try to change anything.					
110	Tells others the standards they have to know to carry out their work.					
111	Directs his/her attention toward failure to meet standards					

(c)	**Management – by Exception (Passive)**					
112	As long as work meets minimal standards, he/she avoids trying to make improvements					
113	Avoids getting involved when important issues arise					
114	Avoids making decisions					
115	Shows he/she is a firm believer in "if it isn't breaking, don't fix it"					

Appendix III: Focus Group Discussion Guide

Introduction

The purpose of this interview guide is to collect information on the influence of Monitoring and evaluation drivers, type of project leadership on performance of horticulture projects supported by KENAFF**.** The information collected will be used for academic purposes only and it is expected that the findings from this study will make a significant contribution towards enhancing performance of projects implemented by KENAFF and other organizations. You were selected to be part of the focus group discussion because you have been involved in the implementation of Horticulture projects and also reside in Nakuru County. There are no wrong answers but rather differing points of view. Please feel free to share your point of view. The comments from the focus group will remain confidential and no name will be attached to any comments made during the discussion.

The focus will be on main thematic areas as per the study objectives:

1. Theme 1: Monitoring and Evaluation Culture and performance of horticulture projects in the context of ;
    i. Role orientation
    ii. Team orientation/cooperation
    iii. Results orientation
2. Theme 2:Human resource capacity for Monitoring and Evaluation and Performance of Horticulture project in reference to ;
    (i) M &E Expertise
    (ii) M &E competency
    (iii) M &E training

4. Theme 3: M& E budget and performance of horticulture projects in reference to;

    (i) Budget allocation for M & E
    (ii) Review of Budget for M &E

5. Theme 4: Utilization of M & E information r and performance of horticulture in reference to;
    i. Collection of M &E information
    ii. Availability of M &E information

iii. Use of M &E information

6. Theme 5: (i) Transactional leadership and Performance of Horticulture projects
(ii) Transformational leadership and Performance of Horticulture projects

Thank you for taking your time to respond

Appendix IV: Interview Guide for KENAFF Board

Introduction

The purpose of this interview guide is to collect information on the influence of Monitoring and evaluation drivers, type of project leadership on performance of horticulture projects supported by KENAFF**.** The information collected will be used for academic purposes only and it is expected that the findings from this study will make a significant contribution towards enhancing performance of projects implemented by KENAFF and other organizations.

SECTION A: Demographic information

1. Highest level of Education
2. What is your designation?
3. How long have you been involved in Project/s?

SECTION B: Specific Information on study variables

1. How would you rate the performance of horticulture projects supported by KENAFF in Nakuru County since 2013?
2. How would you rate economic status of famers implementing horticulture projects supported by KENAFF in Nakuru County?
3. How would rate the satisfaction of project beneficiaries in relation to performance of horticulture projects supported by KENAFF in Nakuru County?
4. How would you rate the satisfaction of project staff in relation to performance of horticulture projects supported by KENAFF in Nakuru County?
5. How would you rate the influence of M& E culture on performance of horticulture projects supported by KENAFF in Nakuru County?
6. To what extent does human resource capacity for M &E influence performance of horticulture projects supported by KENAFF in Nakuru County?
7. To what extent does M& E budget influence performance of horticulture projects supported by KENAFF in Nakuru County ?
8. To what extent does utilization of M & E information influence performance of horticulture projects supported by KENAFF in Nakuru County?

9. Does the type of project leadership influence performance of horticulture projects supported by KENAFF in Nakuru County? If yes elaborate
10. What are your comments and recommendations regarding performance of Horticulture projects supported by KENAFF in Nakuru County?
11. Any other comment

Thank you for taking your time to respond

Appendix V: Groups Implementing Projects in Nakuru County

	Group Name	Sub County	Ward	No. of Members	Main Activity/ies
1	Kbb Haraka Self Help(SHG)	Kuresoi North	Keringet	25	Horticulture
2	Mororgong Educ Self Help	Kuresoi North	Keringet	28	Horticulture
3	Chesa Self Help	Molo	Chebonde	16	Horticulture
4	Ndimu Maize Growers SHG	Molo	Tegat	25	Cereals
5	07 Tusameheane Self Help	Kuresoi North	Keringet	32	Horticulture
6	Gatume Self Help	Gilgil	Eburru	25	Rabbits
7	Arise And Shine	Kuresoi South	Sinendet/ Olenguruone	28	Horticulture
8	Universal Self Help	Kuresoi South	Sinendet/ Olenguruone	32	Horticulture
9	Kahuho Mwireri Self Help	Molo	Tegat	25	Horticulture
10	Mbaruk Small Scale Farmers SHG	Gilgil	Mbaruk	28	Rabbits
11	Maji Tamu Chemaluk Shg	Rongai	Majitamu /Solai	24	Cereals
12	Shangilia Positive Selection	Molo	Tegat	32	Horticulture
13	Green Estate Self Help	Molo	Elburgon/Turi farmers	25	Horticulture
14	Michatha Organic Self Help	Molo	Chebonde	32	Horticulture
15	Kiamunyeki Poultry Farmers Shg	Nakuru Town East	Lanet	28	Poultry
16	Cokawa Self Help	Nakuru Town West	Freearea	25	Cereals
17	Lanet Dairy Coop	Nakuru Town West	Lanet	44	Dairy
18	Jitegemee/Jiinue Self Help	Bahati	Bahati	24	Dairy
19	Mastima Potato Growers Shg	Nakuru Town East	Ngata	36	Horticulture
20	Etmol Self Help	Molo	Chebonde	25	Horticulture
21	Holien Bee Gichobo Project	Molo	Elburgon/Turi farmers	36	Aquaculture;Dairy ; Horticulture(Main)
22	Rumwe Self Help Group	Njoro	Subuku	28	Horticulture(Main) ;Beekeeping

23	Piave Small Dairy Farmer-(Ngapia Dairy Coop	Njoro	Piave	42	Dairy
24	Piave Dairy Self Help	Njoro	Piave	28	Dairy
25	Gatagati Women Group	Nakuru Town East	Ngata	21	Horticulture(Main) ;Cereals
26	Maleshani Farmer	Nakuru Town East	Ngata	44	Large Scale Farming-Cereals
27	Crater Women Group	Bahati	Bahati	24	Poultry;Cereals
28	Menengai Environment Youth Group	Bahati	Bahati	36	Youth Projects
29	Kamwaro Self Help	Bahati	Bahati	25	Horticulture
30	Kenyu Na Kenyu Dairy Goat Group	Bahati	Bahati	36	Commodity Association-Goats
31	Nyathuna Farm	Bahati	Lanet Umoja	44	Large Scale Farming-Cereals
32	Philmark Investments	Bahati	Lanet Umoja	25	Aquaculture;Cereals; Horticulture(Main)
33	Baruk Dairy Farm	Bahati	Bahati	28	Dairy
34	Mutati Farmers Field School	Njoro	Subuku	32	Horticulture
35	Subuku Farmer Field School	Njoro	Subuku	28	Horticulture
36	Mau Narok Small Scale Farmers	Njoro	Mau Narok	36	Horticulture
37	Mau Community Disabled Project	Njoro	Mau Narok	21	Horticulture
38	Rumwe Self Help	Njoro	Mau Narok	25	Horticulture
39	Kwangoro & Renovation Self Help	Njoro	Mau Narok	24	Horticulture
40	Mutukanio Youth Group	Njoro	Mau Narok	32	Horticulture
41	Umonguvu Self Help	Molo		25	Horticulture
42	Gilgil Rabbits Self Help Group	Gilgil	Eburru	28	Rabbits
43	Mwimaki Self Help	Njoro	Mau Narok	25	Horticulture
44	Karima Self Help	Naivasha	Maimahiu	23	Horticulture
45	Naivasha Fadc Self Help	Naivasha	Maimahiu	21	Poultry;Cereals; Aquaculture

Appendix VI: Reliability Tests

Reliability test for Performance of horticulture projects

Overall alpha		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Reliability Statistics					
Cronbach's Alpha	N of Items				
0.844	3				
Economic Status of Farmers		82.14	192.223	0.809	0.779
Technical performance		83.39	192.988	0.814	0.779
Farmers satisfaction of products and services		88.52	228.333	0.72	0.844

Reliability test for M&E Culture

Overall alpha		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Reliability Statistics					
Cronbach's Alpha	N of Items				
0.822	3				
Task Orientation		94.01	194.477	0.668	0.785
Team Orientation		103.31	195.937	0.742	0.772
Results Orientation		99.11	203.94	0.657	0.798

Reliability test for human Resource Capacity for M&E

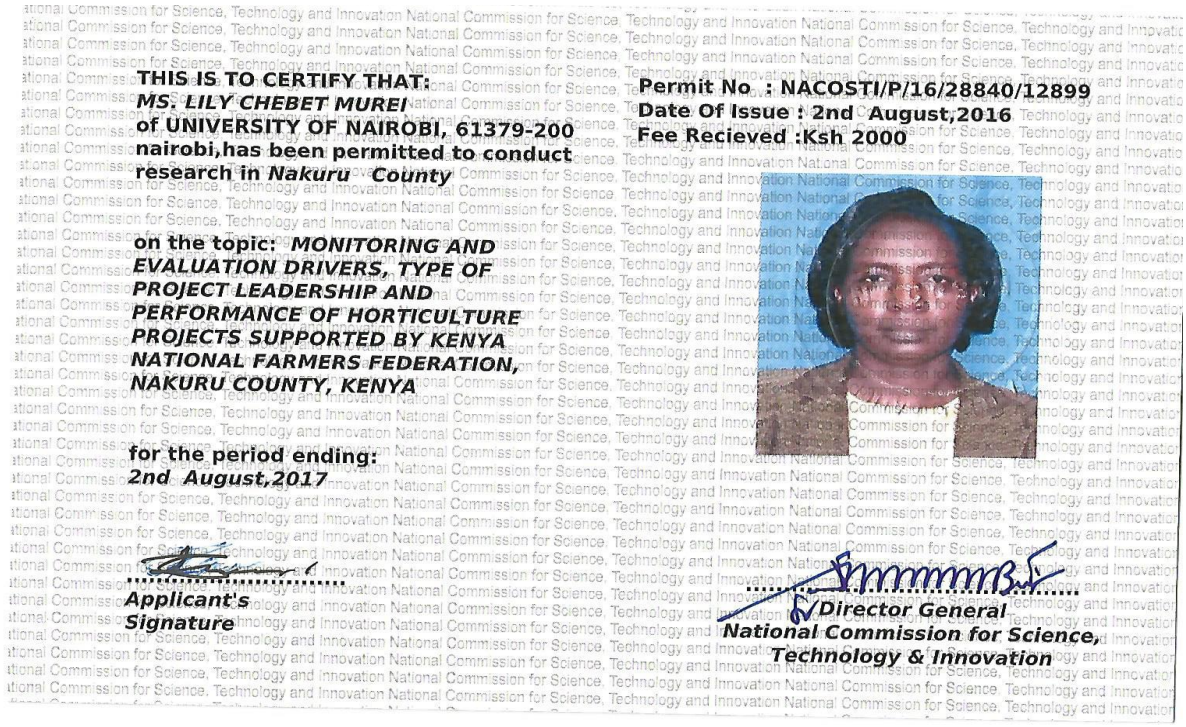
Overall alpha		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Reliability Statistics					
Cronbach's Alpha	N of Items				
0.837	3				
M&E Expertise		59.94	83.545	0.767	0.814
M&E Competency		57.49	67.597	0.826	0.743
M&E Training		60.9	83.327	0.683	0.824

Reliability test for M&E Budget

Overall alpha	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted

Reliability Statistics					
Cronbach's Alpha	N of Items				
0.849	3				
Budget Allocation		36.54	28.533	0.774	0.742
Budget Review		38.56	40.532	0.618	0.917
Reliability test for Utilization of M&E information					
Overall alpha		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Reliability Statistics					
Cronbach's Alpha	N of Items				
0.817	3				
Information Collection		51.14	46.688	0.709	0.752
Availability of M&E information		51.17	48.843	0.705	0.765
Information Use		49.47	53.345	0.564	0.813
Reliability tests for project leadership					
Overall alpha		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Reliability Statistics					
Cronbach's Alpha	N of Items				
0.772	8				
Inspirational motivation		105.63	179.447	0.767	0.705
Intellectual Stimulation		106.37	171.966	0.7	0.706
Idealized Influence(attributed)		105.23	169.293	0.722	0.701
Idealized Influence(Behavioral)		105.1	164.414	0.781	0.689
Individual Consideration		105.44	184.114	0.741	0.712
Contingent Reward		107.48	176.656	0.545	0.735
Management- by Exception (Active)		108.09	186.425	0.55	0.735
Management- by Exception (Passive)		114.81	290.079	-0.524	0.9

Appendix VII: Research Permit



THIS IS TO CERTIFY THAT:
MS. LILY CHEBET MUREI
of UNIVERSITY OF NAIROBI, 61379-200
nairobi,has been permitted to conduct
research in *Nakuru County*

on the topic: *MONITORING AND EVALUATION DRIVERS, TYPE OF PROJECT LEADERSHIP AND PERFORMANCE OF HORTICULTURE PROJECTS SUPPORTED BY KENYA NATIONAL FARMERS FEDERATION, NAKURU COUNTY, KENYA*

for the period ending:
2nd August,2017

Permit No : NACOSTI/P/16/28840/12899
Date Of Issue : 2nd August,2016
Fee Recieved :Ksh 2000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

Appendix VIII: Linearity Scatter Plots (Composite Means)