

**INFLUENCE OF MONITORING AND EVALUATION PRACTICES ON THE
PERFORMANCE OF NON-GOVERNMENTAL ORGANIZATIONS IN THE
AGRICULTURAL SECTOR: A CASE OF THE KENYA**

NATIONAL FARMER'S FEDERATION

ALI ABDI ALIO DUBE



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DECLARATION AND APPROVAL

Declaration by the candidate

This research project is entirely original with no submissions for awards or degrees to any other university.

Sign: 

Date: 25TH OCTOBER 2024

Ali Abdi Alio Dube

MAME/2022/50868

Declaration by the supervisor

I attest that the candidate completed the tasks outlined in this research project while working under my supervision.

Sign: 

Date: 26TH OCTOBER 2024

Prof. Kennedy Mutundu

Department of Social and Development Studies

Mount Kenya University

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ABSTRACT

Monitoring and Evaluation (M&E) play a vital role in enhancing the performance and effectiveness of Non-Governmental Organizations (NGOs), especially within the agricultural sector, which significantly contributes to economic growth, food security, employment, and GDP (Ciucescu and Feraru, 2014). This study focused on analyzing how M&E practices influence the performance of NGOs in agriculture, specifically examining the Kenya National Farmers' Federation (KENAFF). The study's objectives were to assess the impact of the frequency of M&E data collection, stakeholder engagement in M&E, and the integration of local knowledge in M&E on KENAFF's performance. A descriptive research approach was employed to investigate the influence of M&E practices on KENAFF. The target population included 140 M&E staff and 60 stakeholders, resulting in a sample size of 134 respondents. The study utilized a mix of probability and non-probability sampling methods, with simple random sampling applied for M&E staff. Data collection tools included surveys with closed- and open-ended questions and Key Informant Interviews (KIIs) targeting M&E managerial and operational staff, stakeholder representatives, and grassroots stakeholders. To ensure validity and reliability, content validity assessments were conducted, and Cronbach's Alpha tested the questionnaire's internal consistency. Data was analyzed using SPSS, where descriptive statistics like means, standard deviations, and frequencies were used to summarize findings. The research provides insights into how M&E practices at KENAFF can enhance organizational performance, ultimately benefiting farmers supported by the organization. The findings revealed mixed views among respondents. Many were neutral or slightly dissatisfied with the frequency of M&E data collection per agricultural season, indicating some uncertainty about data adequacy. Similarly, respondents were generally neutral regarding the sufficiency of stakeholder engagement and local practices integrated into KENAFF programs, suggesting a need for potential improvements. Conversely, respondents expressed strong satisfaction with KENAFF's financial performance, indicating that the organization's overall outcomes were well-regarded. In conclusion, the study highlights diverse perspectives on M&E practices at KENAFF, particularly concerning data collection frequency, stakeholder engagement, and the incorporation of local knowledge. The findings suggest that stakeholder engagement and local knowledge integration could be areas for further enhancement. The study recommends that KENAFF continue with its current practices but also pursue qualitative feedback to explore subtle areas for improvement. Additionally, efforts should be made to diversify stakeholder representation to improve inclusivity, and the organization should continually evaluate and enhance the integration of local practices into its M&E framework. These recommendations aim to foster stronger stakeholder connections, improve M&E practices, and contribute to KENAFF's goal of supporting agricultural development and improving farmer livelihoods. Further research could examine the types of data collected influence decision-making processes in agricultural NGOs. Explore best practices and innovative methods for integrating local agricultural practices in a way that strengthens both program relevance and outcomes in KENAFF.

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LIST OF ABBREVIATION AND ACRONYMS

CCAA	Climate Change Adaptation in Africa
GDP	Gross Domestic Product
ICTs	Information and Communication Technology
IK	Indigenous knowledge
IKS	Indigenous Knowledge Systems
IOM	International Organization for Migration
KALRO	Kenya Agricultural & Livestock Research Organization
KENAFF	Kenya National Farmer's Federation
KM	Knowledge Management
M&E	Monitoring and Evaluation
MPCU	Municipal Planning and Co-ordinating Unit
NACOSTI	National Commission for Science, Technology and Innovation
NGO	Non-Governmental Organizations
OJT	On-the-job training
PM&E	Participatory Monitoring and Evaluation
SPSS	Statistical Package for the Social Sciences

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The agricultural sector in the United States is a cornerstone of the nation's economy, contributing to food security, rural development, and economic growth. Non-governmental organizations (NGOs) are integral to the sector, particularly in addressing issues such as sustainable farming, environmental conservation, and rural livelihoods. NGOs play a pivotal role in advancing agricultural development by providing technical assistance, training, advocacy, and resources to farmers and agricultural communities. However, their success depends on the efficient implementation of programs and the achievement of set goals (Bamberger, Rao and Woolcock, 2016).

Japan's agricultural sector is known for its distinctive mix of modern technology and traditional farming practices. However, the sector faces several challenges, including an aging farming population, limited arable land, and the impacts of climate change (Sawa, 2020). Non-governmental organizations (NGOs) have increasingly played a vital role in supporting rural communities, promoting sustainable agriculture, and advancing environmental conservation efforts. These NGOs contribute by advocating for organic farming, resource-efficient practices, and helping local farmers adapt to changing market and environmental conditions. The success and impact of these NGOs in Japan's agricultural sector are, to a significant extent, shaped by the effectiveness of their monitoring and evaluation (M&E) practices.

According to Hubert and Mulyungi (2018), M&E planning significantly affects project success in a few chosen NGOs in Rwanda's Gasabo District. The research findings indicate that M&E planning enhances the general efficacy of project planning, management, and execution by offering remedial measures for divergence from the intended level. An NGO's project

performance can be enhanced more effectively if it develops and implements a comprehensive M&E plan. To maintain project performance monitoring, Hubert & Mulyungi (2018) advise NGOs to have a comprehensive M&E plan that outlines the actions to take and the methodology to follow.

Akoon (2023) found that routine monitoring, evaluations, and the learning have a significant and favorable impact on the systems of accountability in South Sudan's NGO sector. According to the study, employees regularly carry out routine monitoring at project sites, gather beneficiary feedback, and share information timely and frequently on program activities. Akoon (2023) also found that staff adequately participate in evaluation processes, and that on-the-job training and technical backstopping can enhance accountability mechanisms. Akoon (2023) recommends strengthening evaluation processes through adequate allocation of resources and periodic provision of on-the-job training. As the study covered only one organization, its generalizability is limited.

Njiiri (2015) targets field officers, M&E officers, and program officers in NGOs that carry out agribusiness projects in Murang'a County. A survey research design is used in this study. Njiiri (2015) found varying correlations between different aspects of M&E and project performance. It was discovered that indicators in projects and performance show a negative correlation, while human resources in M&E show a positive correlation. According to the study's findings, effective monitoring and evaluation is crucial for tracking outcomes and shedding light on the effects of development interventions. Njiiri (2015) promoted information sharing, learning, accountability, and response on results and lessons learned in NGOs and Governments as a basis for decisions about program management, policies, strategies, , and projects in order to improve performance.

According to Ondeko (2020), partnerships for planning, monitoring, and evaluating agricultural initiatives sponsored by NGOs in Bungoma County, Kenya have a favorable impact on their sustainability. Ondeko (2020) discovered that partnerships for planning M&E have a good association with the sustainability of agricultural projects in order to achieve project sustainability. The significance of stakeholder engagement in M&E is also highlighted by Ondeko (2020), who notes that it fosters grassroots communication and changes the community from passive recipients to active participant with the ability to shape project activities according to their requirements and analysis.

According to Koima, Mukulu, and colleagues (2020), project success was directly correlated with planning in M&E, implementation of monitoring and control, and evaluation findings, but not with feedback systems. Based on these findings, in order to improve project performance, the study suggested that KALRO enhance its planning for M&E by including all pertinent stakeholders, adopt better procedures for putting control and monitoring measures in place, and collect, process, and use feedback in an efficient manner to inform future project execution policies. Therefore, M&E can contribute to the success of projects in KALRO by improving planning, implementation, and feedback systems. The findings of Tandi Lwoga (2011) imply that knowledge management approaches with a western foundation should be used with caution in developing nations because both indigenous and external knowledge are gained and disseminated in various situations. Tandi Lwoga (2011) discovered that access to knowledge in rural communities is significantly influenced by policies, legal frameworks, ICTs, and culture. The collection, sharing, preservation, and application of indigenous knowledge are constrained by a lack of an indigenous knowledge policy and by the inadequate recognition and protection of indigenous knowledge through intellectual property rights (IPRs) (Tandi Lwoga, 2011).

1.2 Statement of Problem

More than 40% of Kenya's workforce is employed in the agricultural sector, which contributes roughly 33% of the GDP and is essential to the nation's economy (Kenya National Bureau of Statistics [KNBS], 2020). NGOs like the Kenya National Farmer's Federation (KENAFF) are key players in promoting sustainable agricultural practices, supporting farmers, and improving rural livelihoods. KENAFF is involved in capacity building, policy advocacy, and resource mobilization aimed at enhancing food security and increasing farmers' incomes. However, despite these efforts, the performance of NGOs in achieving their objectives is often hindered by inefficiencies in program delivery, resource management, and a lack of long-term sustainability.

M&E practices are critical tools that can help NGOs like KENAFF improve their effectiveness by enabling them to assess their progress, measure the impact of interventions, and identify areas that need improvement (Kusek and Rist, 2004). However, little is known about the ways in which M&E activities affect Kenyan agricultural NGOs' performance. The significance of M&E in NGO operations has been emphasized in a number of studies, but few have specifically looked at how it affects NGOs working in the agriculture sector (Mwaura and Ngugi, 2020). Poor accountability, resource misallocation, and restricted scalability of successful interventions are frequently the outcomes of many companies' lack of adequate M&E frameworks (World Bank, 2011).

Research by Mungai, Kiptoo and Mutiso (2018) shows that while NGOs in Kenya's agricultural sector is making strides in promoting sustainable farming techniques, many face challenges related to inadequate M&E practices. These challenges hinder their ability to evaluate program outcomes effectively and make data-driven decisions to enhance project success. Furthermore, KENAFF and other agricultural NGOs often struggle with limited funding and donor dependency, which can affect the sustainability of their projects. Despite these challenges, there

is little empirical research that examines the relationship between M&E practices and the performance of NGOs like KENAFF in promoting agricultural development.

Thus, by examining the impact of M&E procedures on KENAFF's performance, this study aims to close this gap. Understanding how effective M&E systems can enhance program delivery, optimize resource utilization, and improve long-term sustainability is crucial for the future success of NGOs in Kenya's agricultural sector.

1.3 Purpose of the Study

The purpose of this study was to analyze the influence of M&E practices on the performance of NGOs in the agricultural sector using Kenya National Farmer's Federation (KENAFF) as a case study.

1.4 Objectives of the Study

The objectives of this study were;

- i. To assess how the frequency of M&E data collection impacts the performance of NGOs in the agricultural sector, with a focus on the Kenya National Farmers Federation.
- ii. To investigate the effect of stakeholder engagement in M&E on the performance of NGOs in the agricultural sector, focusing on the Kenya National Farmers Federation.
- iii. To analyze the role of integrating local knowledge into M&E practices on the performance of NGOs in the agricultural sector, with a focus on the Kenya National Farmers Federation.

1.5 Research Questions

The following are the study's research questions:

- i. What is the influence of frequency of data collection in M&E on the performance of NGOs in the agricultural sector focusing on the Kenya National Farmers Federation?
- ii. How does stakeholder engagement in M&E influence the performance of NGOs in the agricultural sector focusing on the Kenya National Farmers Federation?
- iii. In what ways integrating local knowledge in M&E influence the performance of NGOs in the agricultural sector focusing on the Kenya National Farmers Federation.

1.6 Significance of the study

Numerous stakeholders involved in agricultural development and NGO operations can benefit from this study's significance regarding the impact of Monitoring and Evaluation (M&E) practices on the performance of NGOs in the agricultural sector, with a particular focus on the KENAFF. The key stakeholders include:

This study has numerous implications that are intricately linked to the goals and success of NGOs, especially those engaged in the agriculture industry. This study sheds light on how M&E methods can improve organizational performance and, eventually, the lives of the farmers that these NGOs assist, with a particular focus on the Kenya National Farmer's Federation (KENAFF). The purpose of a study looking at how data collection frequency affects NGO performance is to shed light on the best times to collect data so that an NGO can stay abreast of quickly changing local conditions. Timely and relevant data can improve efficient resource utilization and speedy change response. By extension, these methods may lead to more productive farming methods, raising farmers' incomes and output.

It seeks to comprehend how M&E is impacted by stakeholder participation. Stakeholders such as donors, NGOs, government agencies, and farmers are crucial to the agricultural sector. The applicability, effectiveness, and sustainability of the interventions can all be significantly

enhanced by their comments and recommendations. As a result of this research, the social impact of agricultural NGOs may be improved by a more comprehensive and inclusive M&E approach. The conclusions of the study will offer helpful recommendations to other non-governmental organizations (NGOs) involved in the agriculture industry, in addition to KENAFF. NGOs need to improve their efficacy and efficiency as food crisis and climate change worsen. By increasing knowledge of and using better M&E practices, research such as this could eventually lead to more successful interventions and a more sustainable agriculture industry.

1.7 Scope of the study

The performance of non-governmental organizations (NGOs) in the agricultural sector, particularly the Kenya National Farmers Federation (KENAFF), is the main subject of this study. The research will encompass the following aspects:

The research specifically focused on examining how the M&E practices impact the performance of NGOs, in the agricultural sector with a case study conducted on KENAFF. The research took place in Nairobi, Kenya. In order to comprehend the problems under investigation, a mixed methods approach was used, combining both quantitative and qualitative data. This approach allowed for exploring relationships between variables and providing insights relevant to the context. The research design was descriptive in nature aiming to describe and interpret the state of monitoring and evaluation practices, within KENAFF.

Stakeholder engagement, local knowledge integration, and frequency of data collection make up three key components of M&E practices studied in the study. Stakeholder engagement explored how the KENAFF involves various stakeholders (farmers, government bodies, other NGOs, donors, etc.) in their M&E processes. The integration of local knowledge examined how the KENAFF incorporates the wisdom and experiences of local farmers and communities into

their M&E practices. Lastly, the study investigated how often the KENAFF collects data for their M&E processes and how this frequency impacts their performance. In conclusion, the investigation was carried out between July 2023 and May 2024. A detailed snapshot of the current state of M&E procedures within the KENAFF was captured during this time due to the extensive data gathering and analysis process that was made possible.

1.8 Study Limitations

This study on the influence of M&E practices on the performance of NGOs in the agricultural sector, with a focus on the Kenya National Farmers Federation (KENAFF), is subject to several limitations.

While this study aimed to provide valuable insights into the M&E practices within the Kenya National Farmer's Federation (KENAFF), there are certain limitations that should be acknowledged. The study focused specifically on the KENAFF, limiting the ability to generalize findings to all NGOs in the agricultural sector. The KENAFF's distinct context, objectives, and operational strategies rendered the research findings inapplicable to other NGOs with dissimilar features. When addressing the study's findings, it, nevertheless, explicitly described the particular setting and KENAFF's operational framework. Further, where feasible, parallels with extant literature on other non-governmental organizations (NGOs) was established to indicate possible relevance and directions for future investigation. Access to information was a potential limitation for this study. While NGOs such as the KENAFF are usually committed to transparency, certain internal data and information pertaining to M&E practices were considered sensitive or confidential. Such restricted the depth of understanding possible. However, the research requested official authorization from KENAFF in order to obtain access to the required data, guaranteeing confidentiality and upholding ethical norms. The study relied on publicly accessible data when access to sensitive information is restricted.

To further enhance our understanding of M&E practices, we also incorporated insights from key informant interviews. Besides farmers, community leaders, and representatives of local NGOs, this study relied on engaging stakeholders. Cultural and language differences posed a challenge in communication and comprehension during the data collection process. Misinterpretation or misunderstanding of responses potentially impacted the accuracy of the research findings. In order to get over this problem, the study used bilingual researchers or interpreters as needed to guarantee effective communication. Furthermore, culturally aware methods of engagement were used, such as speaking in regional accents and adhering to customs when interacting. Potential comprehension problems were found and fixed with the assistance of pre-testing data collection tools in the local environment. To reduce misunderstandings, this project provided data collectors with extensive training on the local languages and cultural customs.

1.9 Delimitations of the Study

This study is delimited to investigating the influence of M&E practices on the performance of NGOs in the agricultural sector, with a specific focus on the Kenya National Farmers Federation (KENAFF).

Delimitations in research study are the characteristics, conditions, or parameters that the researchers set to define the scope of the study. They are the features that arise from limitations in the scope or design of the study, but they're set by the researcher. The following were the delimitations of this study. The study is delimited geographically, as it focuses solely on the Kenya National Farmers Federation, specifically within the context of Kiambu, Kenya. The findings, therefore, may not be generalizable to other regions, countries, or different organizational contexts outside the KENAFF. This research is delimited to non-governmental organizations in the agricultural sector, particularly the KENAFF. This analysis excludes

organizations that are for-profit or governmental. The study is temporally bounded, with data being collected and analyzed between 2000 to 2020. Changes in monitoring and evaluation (M&E) practices or NGO performance that occur outside this timeframe will not be captured in this study. The research focuses specifically on the influence of M&E practices, particularly the frequency of data collection, stakeholder engagement, and integration of local knowledge on NGO performance. Other potential factors influencing NGO performance are outside the scope of this study.

1.10 Assumptions of the study

The research was conducted based on the following assumptions;

- i. The research assumes that all participants, whether they be staff of the Kenya National Farmer's Federation (KENAFF) or other stakeholders, provided honest and accurate responses during interviews, focus group discussions, and surveys.
- ii. Researcher accessed all the necessary and relevant data holds by KENAFF was assumed, including both qualitative and quantitative M&E practices data.
- iii. The study assumed that the sample chosen for this study, whether in terms of individuals, groups, or data points, accurately represents the larger population and operations of the KENAFF.
- iv. The study assumed that the M&E practices adopted by the KENAFF have been fairly consistent over the study period. Changes in practices or strategies midway through the study affected the validity of the findings.

1.11 Operational Definition of Key Terms

Agricultural Sector: refers to the part of a country's economy that is related to the production of crops, livestock, forestry, fisheries, and other farming practices. In the context of Kenya, it might also include smallholder farming, subsistence farming, commercial farming, and agro-industry.

Evaluation The systematic assessments of a project or program's design, implementations, and outcomes to ascertain its efficacy and effectiveness. Evaluations are frequently carried out at project completion or at predetermined milestones with the goal of offering insights that can direct learning and decision-making.

Frequency of Data Collection as the number of times the data concerning various metrics (e.g., crop yield, farmers reached, income change, etc.) is collected within a specific period (e.g., daily, weekly, monthly, annually).

Integration of Local Knowledge the process of incorporating information, practices, and experiences derived from local farmers and indigenous people into the strategies, policies, and operations of an NGO. It can involve understanding traditional farming methods, crop varieties, local weather patterns, or socio-economic dynamics that are unique to a particular area.

M&E Practices M&E stands for Monitoring and Evaluation. These practices involve processes, tools, and methodologies

used by an organization to monitor its progress and evaluate its outcomes. This can include data collection methods, data analysis techniques, reporting, stakeholder engagement, and the use of findings for decision-making and learning.

Monitoring

refers to the ongoing, systematic gathering of data on specific indicators to providing indicators of the progress and achievements of the NGO's projects and programs.

Non-Governmental Organizations

NGOs are private, not-for-profit organizations that operate to serve a public purpose. They work independently of governments and are diverse in their goals, ranging from humanitarian and social objectives to environmental and developmental aims.

Stakeholder Engagement

The processes through which the organizations involve people, groups, or the organizations that might be impacted by or interested in their decisions and actions.

In the context of your study, stakeholders can include farmers, government bodies, other NGOs, donors, etc.

The level of engagement can range from information sharing and consultation to partnership and shared decision making.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

A thorough literature review that covers a wide range of pertinent scholarly research on the topic of this study is included in this chapter. Additionally, this revealed current research gaps that support the project. It outlines the theoretical foundations that serve as the research's foundation in order to situate this investigation within current scholarly discourses and discussions. The conceptual framework and the relationships between the variables are also explained in this chapter.

2.2 Empirical Literature Review

2.2.1 Overview of M&E and Performance of NGOs

M&E serve as a means of measuring project progress, effectiveness, and impact, according to IFRC (2002). It involves systematically collecting and analyzing data to determine whether the intended outcomes and objectives are being achieved. A monitoring and evaluation program aids in identifying strengths and weaknesses, aids in decision making, increases performance, is accountable and promotes transparency. It also provides valuable information that facilitates learning and continuous improvement. According to Karimi, Mulwa and Kyalo (2020) Stakeholder engagement in M&E also promotes accountability and transparency. Involving stakeholders in setting goals, developing M&E plans, and implementing changes increases program success. Involvement fosters ownership and responsibility, increasing commitment and dedication to achieving program goals.

Micah and Luketero (2017) found a moderately remarkable correlation between M&E tactics, the effectiveness of maternal health projects, stakeholder involvement, human resource capability and kind of information systems used. They advise that staff jobs description be in

line with M&E plans, that the amount of M&E training be increased, that routine data quality assessments be carried out to identify areas of staff difficulty, that investments be made in information and communication technology, and that individual M&E officers be managed with the assistance of other staff or management.

Rumenya and Kisimbi (2020) investigate a number of aspects of M&E systems and their effect on project performance. They contend that project performance is significantly influenced favorably by organizational frameworks for monitoring and assessment. Performance is better when project staff members work together and have clear expectations for their roles and responsibilities. The management may, however, lack motivation and dedication, and there may be few procedures for stakeholder discussions and project performance monitoring.

The research by Njuguna (2016) was motivated by the growing expectation that NGOs show concrete results from their work, particularly when it comes to educational initiatives. Understanding the effects of financial allocation, training, stakeholder involvement and the size of the M&E team on M&E performance was one of the study's goals. According to him, the strength of the monitoring team, stakeholder involvement, and training all have a big impact on M&E systems. He observed that 34% of firms set aside 5–10% of their budgets for M&E, which is a sufficient amount for the majority of organizations. The majority of respondents—50%—concurred that the project budget was adequate for M&E tasks. Additionally, he emphasized the strong beneficial relationships between stakeholder involvement and the wise use of finances, as well as between the expertise of the M&E employees and the frequency of training.

2.2.2 Frequency of M&E Data Collection and the Performance of NGOs

According to Koima and Mukulu, E. (2020) the purpose of data collection in monitoring is to gather information that measures progress towards pre-set indicators during the implementation of an intervention. In addition to tracking intervention progress, this data is used for implementing information needs. In contrast, data collection in evaluation is used to assess the outcome of the intervention and broader effects it may have had. The data collected for evaluation serves the objective of answering evaluation questions and providing evidence for decision-making and learning.

Kumar and Choudhury (2020) argue that frequency for data collection in monitoring and evaluation depends on various factors, such as the nature of the program or intervention being monitored, the resources' accessibility and the specific information needs. Data collection should, however, be done regularly to guarantee timely monitoring and evaluation. During and after an intervention, data could be collected to track changes and progress. The planning stage is when the frequency of data collection should be decided.

Thambura, Mwangi, Mbugua, and Kikwatha (2023) aimed to determine the effects of M&E data collection methods on livelihood program performance at Caritas Meru, Kenya. The study focused on 465 individuals, including smallholder farmer group leaders and senior managers from Caritas Meru. Thambura et al. (2023) claim that M&E data collection methods were effectively applied at Caritas Meru and that there was a definite positive correlation between M&E data collection and livelihood program efficacy. The performance of Caritas Meru's livelihood programs was significantly impacted by M&E data collection methods, according to Thambura et al. (2023).

This study by Smith and Adams (2017) investigates the influence of the frequency of M&E data collection on the performance of agricultural NGOs in Sub-Saharan Africa. Recognizing the critical role of M&E in managing and improving agricultural projects, the research explores how different frequencies of data collection affect the effectiveness of these projects. Using a mixed-methods approach, the study analyzes quantitative data from various NGOs and conducts qualitative interviews with project managers and stakeholders to assess the impact of M&E practices. The findings reveal a significant positive correlation between the frequency of data collection and improved project outcomes. Specifically, NGOs that implemented more frequent data collection reported better resource management, enhanced project efficiency, and higher success rates in achieving their agricultural objectives. The study also highlights that increased data collection frequency is associated with higher rates of adoption of agricultural innovations by local farmers. This suggests that regular monitoring and timely feedback help NGOs to adjust their strategies more effectively, respond to emerging challenges, and ensure that their interventions are more aligned with the needs of the communities they serve.

This research by Lee and Patel (2019) investigates the relationship between the frequency of M&E data collection and the success of agricultural projects managed by NGOs operating in rural areas. The study addresses a critical gap in understanding how the timing and frequency of data collection influence project performance, particularly in the context of rural agricultural development. The findings reveal that NGOs with more frequent data collection are better positioned to adapt to evolving conditions and challenges in rural agriculture. Increased frequency of data collection allows these organizations to make timely adjustments to their strategies and interventions, leading to improved project outcomes. Specifically, the research shows that frequent data collection enhances the ability of NGOs to respond to environmental changes, address emerging issues promptly, and optimize resource allocation. As a result,

projects managed by NGOs with high data collection frequencies exhibit higher success rates and greater overall effectiveness.

This study by Kumar and Choudhury (2020) examines the influence of monitoring practices, with a particular focus on the frequency of data collection, on the performance of agricultural NGOs in India. As the agricultural sector in India faces numerous challenges, including resource constraints and the need for effective project management, understanding the role of monitoring practices is crucial for enhancing NGO performance and project outcomes. The findings indicate that higher frequencies of data collection are significantly associated with improved performance of agricultural NGOs. NGOs that collect data more frequently demonstrate better resource utilization, increased project efficiency, and enhanced overall effectiveness. The study reveals that regular monitoring allows NGOs to make timely adjustments to their strategies, respond to emerging issues more effectively, and optimize the use of resources. As a result, these organizations achieve higher levels of project success and better outcomes in terms of agricultural productivity and community impact.

This study by Wilson and Johnson (2018) explores the impact of M&E data collection frequency on the performance of NGOs engaged in agricultural development. The research aims to determine how varying frequencies of M&E data collection influence the effectiveness of agricultural projects and the degree to which these projects meet community needs. The findings indicate that increased frequency of M&E data collection is strongly associated with enhanced NGO performance in agricultural development. NGOs that implement frequent monitoring practices experience significant improvements in project outcomes, including better resource allocation and more efficient project execution. Additionally, frequent monitoring enables NGOs to more effectively align their activities with the needs of the community, resulting in higher levels of project relevance and impact.

This research by Nguyen and Zhang (2021) explores the impact of the frequency of M&E data collection on the performance of agricultural NGOs in Southeast Asia. The study investigates how varying frequencies of data collection influence key performance metrics, including agricultural productivity, project impact, and overall effectiveness of NGO operations. The findings reveal a significant positive relationship between the frequency of M&E data collection and various performance metrics. NGOs that engage in more frequent data collection demonstrate notable improvements in agricultural productivity, which is attributed to the timely adjustments and enhanced decision-making facilitated by regular monitoring. Additionally, frequent data collection is associated with a greater overall impact of agricultural projects, leading to more effective interventions and better alignment with local needs.

Frequent data collection allows for more up-to-date information, improving responsiveness to challenges and helping to adapt strategies in real-time (Alonso, 2020). Consistent data collection practices enhance data quality, reducing the risk of inaccuracies that could misinform decisions (Mouton, 2019). Frequent data collection may require substantial resources, which can affect the overall efficiency and performance of NGOs (Nguyen and Mook, 2021). Regular M&E provides timely feedback, allowing NGOs to adjust their programs and improve performance (Duggan and Tang, 2022).

2.2.3 Stakeholders Engagements in the Monitoring and evaluation and the NGOs Performance

Wilson and Johnson (2018) provide insights into the essential elements of meaningful stakeholder relations and the internal environment in an organization to enhance its ability to obtain value from these relationships. They emphasize that organizations no longer have a choice about whether to engage with stakeholders; the decision is about when and how to do so

effectively. Stakeholder engagement is predicated on the notion that groups impacted by or having an impact on an organization's mission ought to be given the chance to weigh in on decisions that affect them.

According to Wolde (2019) meaningful engagements is characterized through the willingness to change openly and is an iterative process that involves understanding stakeholders, Planning, consultation, building trust, internal preparation, response and implementation, and monitoring and evaluation. The guide provides practical advice, tools, and techniques for managers to engage stakeholders effectively, emphasizing the importance of mutual respect and ongoing dialogue rather than one-off consultations.

According to Karanja and Yusuf (2018) stakeholders' interests are well assessed in organization projects, and their influence contributes a lot to project performance. During the budget planning and resource allocation processes, stakeholders participate in understanding the project's vision and mission. Karanja & Yusuf (2018) however found that stakeholders are not clearly involved in the strategy planning process, which can have a negative impact on performance.

Micah and Luketero (2017) argue that stakeholder participation in M&E projects can have both positive and the negative influences on project performance. One way that meaningful stakeholder engagement in M&E activities can improve project delivery is by producing adequate and pertinent information. It is possible for stakeholders to shares the authority over the procedures, information, and outcomes of M&E activities. Data collection, analysis, and decision-making can be refined to improve project results. However, excessive stakeholder participation in M&E may have a negative impact on the project performance. In order to achieve major milestones and deliverables, excessive stakeholder participation may slow down the project's progress. It is important to carefully manage stakeholder involvement to ensure

that it enriches the quality of the M&E data without negatively impacting project delivery (Micah & Luketero, 2017).

Abalang (2016) research revealed that Caritas Torit employed various tools for M&E, including logical framework approach Theory-based evaluation, cost-benefit and Cost Effectiveness analyses, public expenditure tracking, and impact evaluation. He also highlighted the significant role of the management in influencing the performance of M&E systems, emphasizing the importance of designing objectives, planning, and resource allocation. On-the-job trainees generally performed well in their positions following training. Abalang (2016) also emphasized the importance of stakeholder participation in M&E activities, noting that tools used in conducting M&E were simplistic, leading to high stakeholder participation, especially in lower-level activities.

In Karimi's (2020) view, effective monitoring and evaluation are enhanced when teachers, parents, administrators, and community members participate actively. Engaging stakeholders in the M&E of educational programs ensures that their perspectives and insights are considered. Identifying areas that need improvement and understanding the program's strengths and weaknesses is possible with this involvement. Furthermore, Karimi (2020) contends that stakeholder engagement in M&E helps to identify and address challenges and barriers that may hinder program effectiveness. By actively involving stakeholders, their knowledge and expertise can be utilized to overcome obstacles and find innovative solutions.

Sulemana (2018) explores the value of participatory monitoring and evaluation (PM&E) in promoting sustainability, accountability, and openness in development governance. According to the study, while district assembly and municipal planning and coordination unit (MPCU) members participated in M&E of projects and programs at a noticeably high rate, stakeholder participation at the community and zonal council levels was noticeably lower. The gap in

participation levels has had a detrimental effect on the openness, responsibility, and sustainability of projects and programs. Sulemana (2018) draws the conclusion that the MPCU failed to make a determined effort to include grassroots stakeholders, and community-level stakeholders' lack of interest in M&E of projects and programs, are to blame for the limited involvement of stakeholders in M&E. According to Sulemana (2018), the District Assembly should develop strategies through the MPCU to improve the participation of substructures throughout the project lifespan, from planning to assessment, as well as to raise community knowledge of participatory monitoring and evaluation.

Koech (2022) focuses on the role of stakeholder engagement in the implementation of agricultural mechanization projects, specifically tea harvesting machines among small-scale tea farmers in Kaptumo Tea Factory. It was based on the understanding that tea plucking machines can significantly boost productivity and reduce labor-intensive aspects of traditional farming. Koech (2022) revealed that stakeholder engagement at different phases, especially during initiation and planning, significantly influences the successful implementation of agricultural mechanization projects. Koech (2022) concludes that for the successful implementation of such projects, it is crucial to enhance involvement of stakeholders at every stage of the project.

This study by Adams and Robinson (2018) investigates the effect of stakeholder engagement in the M&E process on the performance of agricultural NGOs in Sub-Saharan Africa. Using a mixed-methods approach, the research examines the correlation between various levels of stakeholder involvement and key performance indicators of agricultural NGOs. The study includes quantitative analysis of performance metrics such as project implementation success and community alignment, complemented by qualitative insights from stakeholder interviews and focus groups. The findings reveal that increased stakeholder engagement significantly enhances project implementation effectiveness. NGOs that actively involves the stakeholders in the M&E processes are better able to align their projects with community needs, resulting in

more relevant and impactful interventions. Enhanced engagement also contributes to improved overall performance, including more efficient resource utilization and greater project sustainability.

This research by Chen and Wang (2019) investigates the influence of stakeholder participation in the M&E processes on the success of agricultural projects managed by NGOs operating in rural areas. The study employs a quantitative research design, analyzing data from a range of agricultural projects to assess how varying levels of stakeholder involvement impact project outcomes. The research includes a detailed examination of project efficiency, effectiveness, and sustainability in relation to stakeholder engagement practices.

The findings indicate that higher level of the stakeholder participation is positively correlated with improved project outcomes. Specifically, projects with greater stakeholder involvement exhibit enhanced efficiency in resource use, more effective implementation strategies, and increased sustainability. The study highlights that when stakeholders are actively engaged in M&E, NGOs are better positioned to adapt to local needs, incorporate diverse perspectives, and achieve more substantial and lasting impacts (Chen and Wang, 2019).

The results suggest that stakeholder participation in M&E is a key determinant of project success. By fostering greater inclusion and engagement of stakeholders, NGOs can enhance their project management practices, leading to more efficient operations and better alignment with community needs. The study underscores the importance of involving the stakeholders throughout the M&E process to achieve superior agricultural development outcomes and ensure the long-term success of rural projects (Chen and Wang, 2019).

This study by Morris and Scott, (2021) examines the impact of stakeholder engagement in M&E processes on the performance of the non-governmental organizations (NGOs) working in

agricultural development. Utilization of the mixed-methods approaches, the study integrates the quantitative data from project performance metrics and qualitative insight from stakeholder interviews to assess the effectiveness of various engagement strategies. The findings reveal that robust stakeholders' engagements in M&E processes significantly enhances the performance of agricultural NGOs. Specifically, the study demonstrates that effective engagement leads to more informed decision-making, which in turn improves project effectiveness. NGOs that actively involve stakeholders in M&E are able to adapt more swiftly to emerging challenges, align their projects more closely with community needs, and achieve higher levels of impact. Additionally, increased stakeholder involvement results in enhanced satisfaction among stakeholders, fostering stronger relationships and greater support for NGO initiatives.

This by Nguyen and Lam (2022) research explores the influence of stakeholder engagement in M&E processes on the performance of agricultural NGOs in Southeast Asia. The study employs a comprehensive methodology, combining quantitative analysis of performance metrics with qualitative case studies from various agricultural projects across the region. The findings indicate that active and meaningful stakeholder engagement significantly improves multiple aspects of NGO performance. Specifically, the research highlights that engagement enhances project planning by incorporating diverse perspectives, which leads to more effective execution and ultimately better agricultural outcomes. NGOs that engage stakeholders throughout the M&E process demonstrate improved strategic alignment with community needs, increased project efficiency, and greater impact on agricultural development.

Engaging stakeholders in M&E promotes ownership of outcomes and fosters better decision-making processes (Pellegrini, 2021). Active stakeholder engagement encourages collaboration, leading to more efficient use of resources and improved performance (Smith and Bell, 2023). Involving stakeholders ensures greater transparency and accountability, which can

enhance the credibility and legitimacy of the NGO (White and Zanotti, 2022). Engaging stakeholders in M&E ensures effective communication of findings, which leads to better implementation and follow-up actions (Scott and Kieran, 2021).

2.2.4 Integrating Local Knowledge in M&E and the Performance of NGOs

Wolde (2019) defines local knowledge as the knowledge and understanding that is developed and held by people within a specific community or area. Over generations, it derives from direct experiences, observations, and interactions with their environment. He expounds that it encompasses the wide range of information, including traditional practices, cultural beliefs, ecological knowledge, and practical skills that are specific to a particular place. Local decision-making, resource management, and adaptation strategies are often influenced by orally passed down knowledge from generation to generation, according to Mercer (2012). Local knowledge is considered valuable for its contextual relevance and its potential to contribute to sustainable development and resilience in local communities.

This research by Nguyen and Hoang (2018) examines the influence of incorporating local knowledge into M&E processes on agricultural development projects. The study focuses on how integrating local insights affects the accuracy of project assessments, decision-making, and overall project outcomes. Using a combination of quantitative data and qualitative case studies from various agricultural development projects, the research reveals that the inclusion of local knowledge significantly enhances the M&E process. The findings demonstrate that local knowledge integration improves the precision of project assessments by ensuring that evaluation criteria are relevant and tailored to the specific context of the agricultural projects. The study highlights that local knowledge contributes to more informed decision-making by providing a deeper understanding of community needs, challenges, and opportunities. This, in turn, leads to more effective project planning and execution. Projects that effectively incorporate local

perspectives are found to achieve better outcomes, including increased efficiency, greater alignment with community priorities, and enhanced project sustainability.

This study by Smith and Patel (2021) investigates the role of integrating local knowledge into M&E systems and its impact on the performance of agricultural NGOs. The research focuses on how the inclusion of local insights in M&E frameworks influences the success, community alignment, and sustainability of agricultural projects. Using a mixed-methods approach, the study analyzes data from various agricultural NGOs operating in diverse rural settings. The results indicate that projects incorporating local knowledge into their M&E systems consistently experience higher levels of success. Specifically, these projects demonstrate better alignment with the needs and priorities of the communities they serve, leading to more effective and relevant interventions. Furthermore, the integration of local knowledge contributes to more sustainable project outcomes. By grounding M&E practices in local context and expertise, agricultural NGOs are better equipped to design and implement projects that are resilient and adaptable to changing conditions. This not only improves immediate project performance but also enhances the long-term impact and sustainability of NGO initiatives.

This research by Lee and Zhang (2019) evaluates the impact of integrating local knowledge into M&E practices on the performance of NGOs in the agricultural sector. The study focuses on how the incorporation of local insights into M&E frameworks influences project relevance, stakeholder engagement, and agricultural outcomes. Moreover, the study finds that local knowledge integration plays a crucial role in improving stakeholder engagement. Projects that actively involve local stakeholders in the M&E process experience higher levels of participation and collaboration, which in turn leads to more successful project implementation and greater community ownership of outcomes. The research also demonstrates that integrating local knowledge into M&E practices leads to better agricultural outcomes. This approach not only

improves the immediate impact of projects but also contributes to their long-term sustainability by ensuring that interventions are tailored to the unique challenges and opportunities of the local context.

This study by Chen and Wang (2022) explores the impact of integrating local knowledge into Monitoring and Evaluation (M&E) processes on the effectiveness of agricultural non-governmental organizations (NGOs). The research aims to understand how the inclusion of local insights within M&E framework can ensure the success and impact of agricultural projects managed by NGOs. The study also highlights that the integration of local knowledge enables NGOs to design interventions that are more aligned with the specific needs and contexts of the communities they serve. This alignment not only increases the immediate effectiveness of agricultural interventions but also contributes to their long-term sustainability, as projects are more likely to be embraced and maintained by the local population. Moreover, the research demonstrates that incorporating local knowledge into M&E practices fosters greater community engagement and ownership of projects. Through involving the local stakeholders in the M&E process, NGOs are able to build stronger relationships with the communities they work with, leading to more successful and impactful agricultural interventions.

Incorporating local knowledge into M&E ensures that performance metrics are contextually relevant, increasing the effectiveness of NGO interventions (Takada, 2020). Integrating local knowledge enhances cultural sensitivity in the implementation of projects, improving stakeholder trust and cooperation (Aoki and Fujimoto, 2021). Programs designed with local knowledge are more sustainable because they are tailored towards community specific requirements of the community (Kamau and Njoroge, 2022). The use of local knowledge in M&E practices empowers local communities, increasing participation and ownership of outcomes (Liang and Huang, 2023).

2.3 Theoretical Framework

In this research, the Theory of Change by Carol Weiss, Helene Clark and Andrea A. Anderson and the Stakeholder Theory by Edward Freeman will be used as the theoretical underpinning.

2.3.1 Theory of Change

The concept of the Theory of Change is often credited to Carol Weiss, who laid the initial groundwork in the 1990s. Subsequent contributors like Heléne Clark and Andrea A. Anderson further refined the theory in the early 2000s, making it a robust framework used across diverse disciplines today.

The Theory of Change operates under several key assumptions that make it particularly relevant for our study. Firstly, it assumes that there is a causal relationship between the interventions and its outcome, creating a logical pathway that allows us to trace the impact of activities on desired objectives. Secondly, it places a strong emphasis on the role of context, acknowledging that any intervention, including Monitoring and Evaluation (M&E) practices, does not exist in a vacuum but is influenced by cultural, social, and economic factors. Thirdly, the theory assumes active stakeholder engagement at all stages of a project, from planning to evaluation. Lastly, it offers the flexibility to adapt and revise the model as new information becomes available.

When investigating the influence of M&E practices on the performance of NGOs like the KENAFF, the Theory of Change offers a structured approach to map out how these practices lead to better performance outcomes. This can help determine the best types and frequency of data collection to optimize performance. Our research objective is to examine stakeholder engagement in M&E practices, so the theory is invaluable. It provides a theoretical underpinning that supports the importance of inclusivity and collaboration with stakeholders such as local farmers, governmental bodies, and donors in the M&E process. Likewise, the theory's strong focus on contextual elements resonates with our objective of examining the

integration of local knowledge into M&E practices. Local conditions, wisdom, and practices are variables that can influence the success of an NGO's initiatives, and the Theory of Change allows us to examine this in a structured manner. Finally, because the Theory of Change emphasizes data collection for monitoring progress, it aligns with our objective to examine how the frequency of such data collection affects NGO performance. This gives us a theoretical basis for investigating the optimal timing and type of data collection for effective M&E in NGOs operating in the agricultural sector.

2.3.2 Stakeholder Theory

Stakeholder theory states that companies should consider the interests and effects of all stakeholders when making choices. It was initially put forth by R. Edward Freeman in his seminal book *Strategic Management: A Stakeholder Approach* in 1984

. The theory is based on a number of fundamental tenets, including the following: organizations are intricately entwined in a web of relationships with different stakeholder groups (such as workers, clients, suppliers, communities, and governments), all of which have legitimate interests; an organization's ability to successfully manage and balance these disparate interests is critical to its long-term success; and ethical considerations are crucial when responding to stakeholder concerns. Engaging a diverse range of stakeholders is crucial for improving organizational performance and effect, as highlighted by the application of Stakeholder Theory to NGOs, especially in the agriculture sector.

Stakeholder Theory provides a strong framework for examining how NGOs' interactions with their stakeholders can shape their M&E practices and, consequently, their overall effectiveness in the context of this study on the impact of M&E practices on NGO performance in the agricultural sector. Through the application of Stakeholder Theory, the study will be able to

investigate the following topics: how NGOs prioritize and identify stakeholder needs and expectations in their monitoring and evaluation (M&E) processes; how program design and implementation incorporates stakeholder feedback; and how these engagements affect the achievement of sustainable agricultural development objectives. With the use of this theoretical framework, it is possible to conduct a thorough analysis of the mutually beneficial relationships that exist between NGOs and their stakeholders. Stakeholder involvement in M&E not only helps NGOs become more transparent and accountable, but it also fosters trust, helps goals align, and results in mutual benefits. By means of this application, the research aims to enhance comprehension of the strategic function of stakeholders in molding the performance results of NGOs in the agriculture domain.

2.4 Conceptual Framework

The study presents a representation of how M&E practices (independent variable) influences the performance of NGOs, Kenya National Farmer's Federation, (dependent variable). The figure represents how frequency of data collection for M&E, stakeholders' engagement and integration of local knowledge influence the financial performance, project completion rate, stakeholder satisfaction level and how KNFF agricultural methods are adopted by farmers. The influence of M&E practices is regulated by the organizational capacity to utilize collected data in decision making.

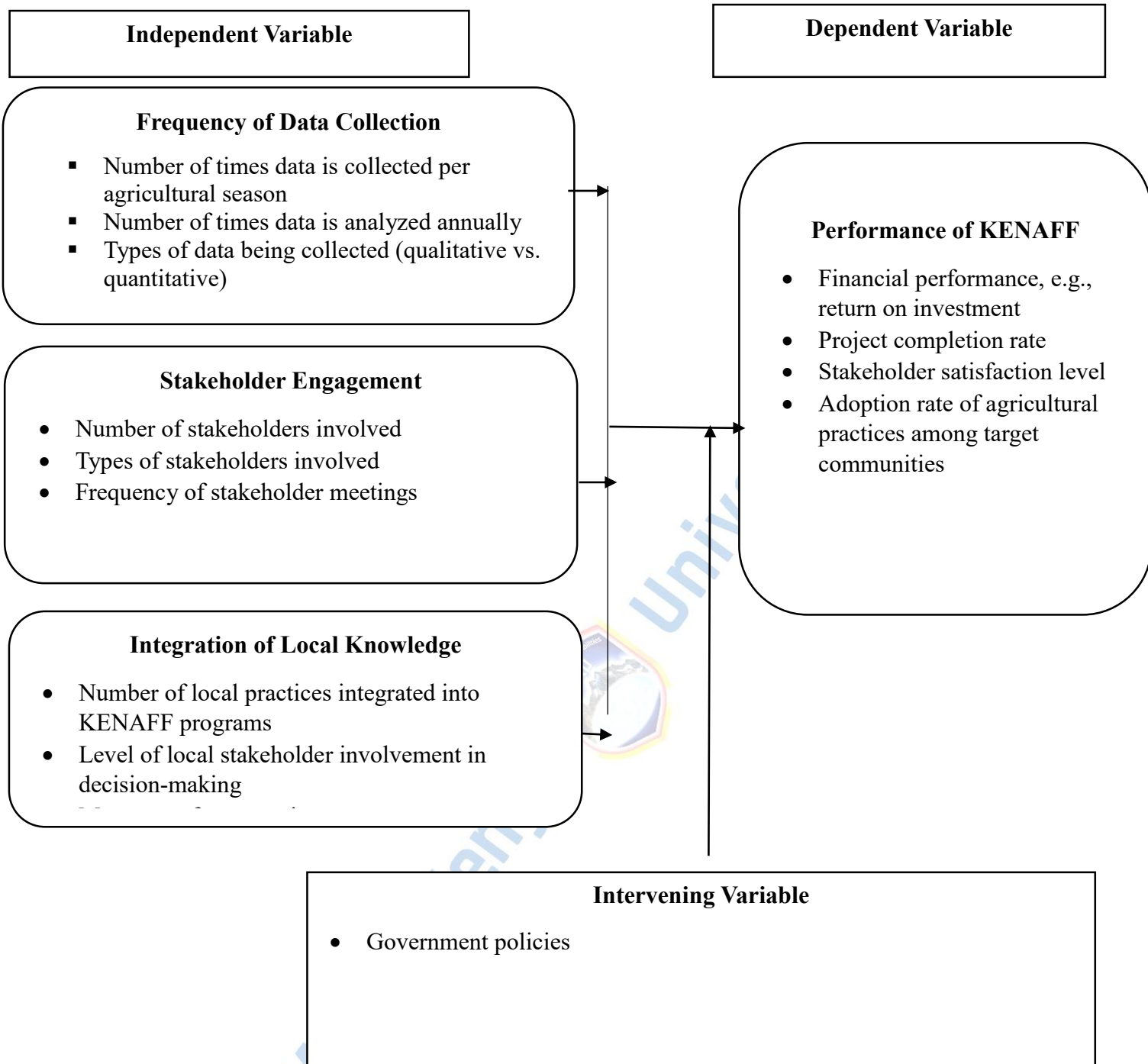


Figure 1: Conceptual Framework

Researcher (2023)

2.4.1 Explanation of the conceptual framework

Frequency of Data Collection for M&E: This variable refers to how often data is collected during M&E activities. Regular data collection ensures that up-to-date information is available, which can help KENAFF to make timely adjustments to its projects, thereby potentially improving its performance.

Stakeholder Engagement: These variable measures the involvement of stakeholders (such as farmers, community members, and other partners) in the M&E process. High levels of engagement can lead to better alignment of KENAFF's initiatives with the needs of the community, enhancing project effectiveness and stakeholder satisfaction.

Integration of Local Knowledge: This variable captures the extent to which KENAFF incorporates local practices and knowledge into its M&E process. By integrating local knowledge, KENAFF can ensure that its projects are more culturally relevant and likely to be embraced by the community, improving project outcomes and adoption rates of agricultural methods.

Financial Performance: This represents how well KENAFF is managing its financial resources, which can be influenced by effective M&E practices that allow for better planning and resource allocation.

Project Completion Rate: This measures the timeliness and success rate of KENAFF's projects. M&E practices like regular data collection and stakeholder engagement can help identify potential issues early, leading to more projects being completed on time.

Stakeholder Satisfaction Level: This reflects how satisfied stakeholders are with KENAFF's operations and outcomes. Effective M&E practices that involve stakeholders and consider local knowledge can increase satisfaction by ensuring that projects meet community needs.

Adoption of KENAFF Agricultural Methods by Farmers: This variable indicates the extent to which farmers are implementing the agricultural techniques promoted by KENAFF. M&E practices that integrate local knowledge are likely to make these methods more applicable and acceptable to farmers, leading to higher adoption rates.

Organizational Capacity to Utilize Collected Data: The association between KENAFF's performance and M&E practices is moderated by this variable. It stands for KENAFF's capacity to evaluate and use the information gathered during M&E operations in order to make wise choices. While a weak capacity may limit the effectiveness of even well-executed M&E procedures, a robust capacity in this area increases the influence of M&E practices on performance.

2.5 Research Gaps

The research on the influences of M&E data collection frequency on the performance of agricultural NGOs reveals several key findings, yet gaps remain that warrant further investigation. While multiple studies highlight the positive impact of frequent M&E data collection on project outcomes, resource management, and adaptation to challenges, there is a need to explore how these effects vary across different geographical regions, scales of operation, and types of agricultural interventions. Additionally, most existing research focuses on the correlation between data collection frequency and project success, but fewer studies examine the long-term sustainability of these practices or the potential trade-offs between data collection costs and project outcomes. Further research could also investigate the role of

technological advancements in optimizing data collection processes and how they influence the overall effectiveness and efficiency of M&E practices in the agricultural sector.

The existing literature on stakeholders' engagements in the M&E processes highlights its significance in enhancing project outcomes, yet several research gaps persist. While studies like those by Jeffery (2009) emphasize the importance of meaningful stakeholder engagement and its iterative nature, there is limited exploration of how different types of stakeholders (e.g., grassroots versus organizational) influence the M&E outcomes. Karanja & Yusuf (2018) identify a gap in stakeholder involvement in strategic planning, but the impact of this gap on long-term project sustainability remains underexplored. Micah & Luketero (2017) suggest that excessive stakeholder involvement might hinder project progress, yet the optimal level of engagement for different project types has not been clearly defined. Additionally, while studies like those by Sulemana (2018) and Adams & Robinson (2018) recognize the value of participatory M&E, there is a lack of research on how technological advancements could streamline stakeholder engagement without compromising the quality of data and decision-making. Furthermore, the context-specific impacts of stakeholder engagement, particularly in diverse regions or varying project scales, need more in-depth investigation to generalize best practices across different agricultural NGOs and settings.

While existing studies emphasize the importance of integrating local knowledge into Monitoring and Evaluation (M&E) frameworks to enhance agricultural project outcomes, several research gaps remain. Most research focuses on the positive impacts of local knowledge integration, such as improved project relevance, community engagement, and sustainability. However, there is limited exploration of the challenges and limitations of this integration, such as potential conflicts between local knowledge and scientific practices or the capacity of local communities to effectively participate in M&E processes. Additionally, while the benefits of

local knowledge in agricultural projects are well-documented, there is a need for more research on the mechanisms through which local knowledge is effectively captured, preserved, and applied within different cultural and environmental contexts. The roles of the technology in facilitating the integration of local knowledge into M&E frameworks also remains underexplored. Finally, the long-term impacts of integrating local knowledge on project sustainability and the resilience of the agricultural communities in the faces of the climate change require further investigation.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The study's methodology, research design, study location, sample size, targeted population, and determination were all included in this chapter. The chapter also covered the development of research tools, validity and reliability testing, data gathering techniques, suggested data processing, and study ethics.

3.2 Research Methodology

The study took a mixed methodology, utilizing qualitative and quantitative research techniques to comprehend the effect of M&E procedures on the effectiveness of NGOs in the agricultural sector, with a focus on the Kenya National Farmers Federation. To gather qualitative and quantitative information on independent variables including the frequency of data collection, stakeholder engagement, and integration of local knowledge, questionnaires and statistical analysis was used. These techniques made it easier to get factual data that can be applied broadly. They were specifically aid in quantifying the connection between the factors and the success measures of NGOs in the agricultural sector, such as monetary performance, project completion rate, stakeholder satisfaction, and the adoption rate of agricultural methods. In order to collect non-numerical data, key informant interviews and document analysis was used, with an emphasis on involving stakeholders and incorporating local knowledge. These qualitative techniques provided in-depth observations into the attitudes, perceptions, and experiences of diverse Kenya National Farmers Federation stakeholders. They also helped with comprehending the subtleties of the context that affected how well the NGO performs in the agricultural sector.

3.3 Research Design

A descriptive survey methodology is the most suitable research approach for the study on how M&E practices affect the performance of NGOs in the agricultural sector, with a particular focus on the KENAFF. The researcher will be able to evaluate the efficacy of the current M&E methods, gather comprehensive data about them methodically, and examine how they affect KENAFF's performance thanks to this design.

Information about the current status of M&E processes, including the frequency of data collection, stakeholder engagement, and the incorporation of local knowledge within KENAFF, can be obtained effectively through descriptive surveys. This design enables for the collecting of both the quantitative and qualitative data, which will be beneficial in assessing the numerical impact of M&E techniques on performance and obtaining comprehensive perspectives from stakeholders. A descriptive survey makes it possible to gather information from a wide population at a particular moment in time, which facilitates the analysis of the effects of M&E practices across KENAFF's numerous projects and initiatives.

3.4 Study Location

The study took place in Kiambu, Kenya, where the Kenya National Farmers Federation's (KENAFF) offices are. Due to its importance in the agriculture industry and its role as the KENAFF operating hub, Kiambu serves as a crucial location for this study for a number of reasons. The principal organization under research is easily accessible thanks to the study's location in Kiambu. The collecting of data in real time, interviews, and any necessary follow-ups was made easier by this close proximity. An appropriate place to research the effect of M&E methods on NGOs in the agricultural sector is Kiambu, a region noted for its thriving agricultural operations. Reaching different stakeholders' local farmers, NGO employees, and policymakers participating in or influenced by KENAFF activities were done easily from this location. Kiambu, which is at the center of KENAFF's operations, offered the crucial contextual

backdrop that assisted in comprehending the problems influencing M&E practices and performance outcomes.

3.5 Target Population

For this study the target population was divided into two main groups; M&E Staff and Stakeholders. To narrow the emphasis of the data collecting and analysis procedures, these two groups are further separated into sub-categories. At KENAFF, the managerial and operational staff make up the first group. The Directors of M&E and Senior M&E Managers were in charge of developing and putting KENAFF's M&E practices into action. The strategic and decision-making facets of M&E became more understandable from their points of view. M&E officers and data analysts who are participating in ongoing M&E activities were included in the operational level. These people provided first-hand knowledge of how M&E processes actually work in practice and how that affects project outcomes.

The second group consists of KENAFF stakeholders at both the representative and grassroots levels. Government representatives for agriculture and donor organizations that work with KENAFF included the representative level. These people offered a view from outside the organization on how M&E procedures affect the performance and reputation of the federation in the larger agricultural industry. Farmers and residents of the neighborhood who benefited from KENAFF projects make up the grassroots level. Understanding their perspectives and experiences helped clarify how M&E methods transfer to real-world effects. The practical information that employees and farmers have is crucial for comprehending the situation on the ground, while managerial and representative stakeholders provide a macro-level perspective that helps interpret these findings. This stratification provided the study more depth, enabling the triangulation of data and enhancing the reliability of the study's conclusions.

Table 1: Target Population

Stratification	Number	Percentage
Operational staff	140	70
Grassroot stakeholder	60	30
Total	200	100

Source, HRM KENAFF (2023)

3.6 Sampling Procedure

In order to provide adequate representation of diverse perspectives from the intended audience, the research employed a multi-phase sampling methodology. Because KENAFF is a hierarchical and diversified dataset, sampling strategies that combine probability and non-probability was employed. This is how the sampling procedure worked: The first stage identified the subgroups that make up the target audience. The two primary categories of the study are M&E workers and stakeholders, who are divided into managerial/representative and operational/staff levels. A simple random sampling technique was used to sample M&E staff at both the administrative and operational levels. To create the sample, a random selection was made from a list of all eligible individuals. Because of the specialized knowledge required, government agriculture officials and donor agencies were selected using a purposive sampling technique. Using a stratified random sample approach, farmers and community members were selected at random from a range of stratifications, including geography, age, and farm size.

3.6.1 Sample Size Determination

Yamane's sample size calculation formula was adopted in determining the sample size for this research study. The formula for Yamane is as follows:

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

The variables in this equation are the sample size (n), the population size (N), and the precision level (e), which is set at 0.05 for a 95% confidence level.

The sample size was distributed proportionately.

Table 2: Sample Size

Stratification	Proportion	Number
Operational staff	140/200	94
Grassroot stakeholder	60/200	40
Total	1	134

Source, Researcher (2023)

3.7 Construction of Research Instruments

The primary research tools used for this project was the questionnaires and key informant interviews. Both tools gathered information that is consistent with the study's objectives and variables.

3.7.1 Questionnaire

The survey's design included both closed-ended and open-ended questions. There were open-text questions for more in-depth responses, Likert scale questions, and multiple-choice questions. The important study variables, such as the frequency of data collection for M&E, stakeholder involvement, and incorporation of local knowledge, was the subject of the questionnaire. To effectively address these variables, the questions was divided into various sections. The first portion gathered demographic information, while the second concentrated on objectives. Depending on the respondents' preferences and accessibility, the questionnaires were distributed both electronically and on paper. The main respondents were M&E workers and stakeholders at various levels within KENAFF.

3.7.2 Key Informant Interview

From the four strata of M&E Managerial Staff, M&E Operational Staff, Stakeholder Representatives, and Grassroots Level Stakeholders, key informants were chosen. Individuals having in-depth knowledge of M&E procedures at KENAFF received special attention. Semi-structured interview questions included in the interview guide. This acted as a structure for the interview, ensuring that all pertinent questions are asked while also giving the informants room to provide new insights. Depending on the convenience of the informants, the interviewed either be performed in-person, over the phone, or by video conferencing. With the interviewees' permission, all interviews were recorded, and transcriptions was created for examination.

3.8 Testing for Validity and Reliability

To ensure the validity and generalizability of the study's findings, extensive validity and reliability tests were conducted on the research tools, which comprise the questionnaires and the key informant interview guides.

3.8.1 Validity

Content validity was used. The instruments were reviewed by professionals in the fields of monitoring and evaluation, agriculture sector NGOs, and research technique before being distributed. To enhance the caliber and applicability of the questions, the researcher took into account their input. With a sample from the target population that is 10% of the recommended size but is excluded from the main study, a pilot test was conducted. To better enhance the questions, their suggestions was evaluated.

3.8.2 Reliability

Cronbach's Alpha is a statistical test used to assess the internal consistency of the questionnaire. A Cronbach's alpha value of 0.7 or above is typically regarded as adequate for research purposes. The questionnaire was given to a subset of the pilot test participants to complete

twice, each time in identical circumstances. The instrument's dependability was evaluated by looking at the correlations between the two sets of the responses. A portion of the responses from interviews were coded by two separate researchers. To assess the consistency of the interview questions and their dependability, their coding was compared.

3.9 Data Collection Procedure

According to institutional guidelines and ethical standards, the data collection process for this project was organized. The specific procedures to be followed are listed below: The postgraduate research department and the offices of ethical consideration evaluation at Mount Kenya University was both receive the research proposal for examination and approval. The research plan was updated to reflect any comments or suggestions made. The ethical clearing certificates and a letter of introduction was requested after the research has received institutional approval to attest to the research's compliance with all ethical standards and to introduce the researcher. We obtained a research license from NACOSTI. This strengthens the research because it is a legal mandate. The KENAFF, the subject organization, was asked for a research permit prior to the start of data collection. The study tools (questionnaires and interview guides) were created after all approvals and permits have been obtained, taking any advice from the institutional and ethical review into consideration.

To evaluate the validity and reliability of the study instruments, a pilot study was conducted. The results of the pilot research were used to determine what changes need to be made. Depending on their desire, the M&E staff and stakeholders at KENAFF got the questionnaires either electronically or on paper. There were frequent follow-ups to guarantee a high response rate. Key stakeholders and M&E staff members who have agreed to participate in interviews had appointments set up in advance. To maintain confidentiality, all interviews took place in a calm, private setting, and with the participants' permission, they were recorded. Interviews that

were recorded was verbatim transcribed for analysis. Reviewing pertinent documents like M&E reports, strategic plans, and other KENAFF-issued official publications may also yield more data. All data was coded and no personally identifiable information will be utilized to protect privacy. Password-protected folders were used to securely store the data, which only the research team can access.

3.10 Proposed Data Analysis Technique

For both descriptive and inferential statistical analyses, the researcher utilized SPSS version 27, which is the Statistical Package for the Social Sciences. To guarantee the accuracy and validity of the results, the data analysis for this research was conducted in a methodical manner. We'll study both quantitative and qualitative data. Data was entered into SPSS version 27 after collection to be cleaned up and given a preliminary analysis. This entails finding any missing or conflicting data and handling it. The dataset was summarized using simple descriptive statistics like means, standard deviations, and frequencies. Inferential statistics on the research questions looked at the relationships between variables and the impact of independent variables (frequency of data collection, stakeholder engagement, and integration of local knowledge) on the dependent variable (performance of NGOs in the agricultural sector).

Verbatim transcriptions of each key informant interview were made. The transcripts were subsequently be manually thematically coded. Emerging themes were identified in relation to the study objectives and research questions. Verbatim quotes from respondents were utilized to illustrate significant themes in the narrative summary of findings. To give a thorough understanding of the research phenomenon, the conclusions from the quantitative and qualitative analyses merged. This triangulation was not only confirming the results but also deepen our grasp of the intricate relationships between the many variables. Particularly when

the quantitative data show unexpected results, qualitative discoveries was used to explain, validate, or supplement the quantitative findings.

3.11 Ethical Considerations

Any research project must guarantee ethical integrity. Strict ethical standards for the researcher, the participants, and the entire research process was followed in this study.

3.11.1 Ethical Consideration Concerning the Researcher

Throughout the study process, the researcher upheld the strictest moral and ethical standards, abstaining from any plagiarism or deliberate manipulation of data. For the protection of the participants' and the involved organization's privacy, all acquired data was kept secret and maintained in a safe environment. All individuals involved received a comprehensive explanation of the research's objectives, methodologies, and intended use of the data. All parts of the research, including data collection, processing, and interpretation, was completely within the control of the researcher.

3.11.2 Ethical Consideration Concerning the Participants

All participants provided their informed consent before to taking part. They received an explanation of the study's objectives, the duties assigned to them, and their unrestricted ability to leave at any time. All participants' identities remain concealed in the research's findings. To protect your privacy, we shall delete or mask any identifying identifiers. There were no coercion or undue influence used to get participants to participate in the study. It is believed that their consent is the foundation of ethical research. Participants were told how the study helped them and their organization, and it attempts to improve the organizational methods used by NGOs in the agricultural sector.

3.11.3 Ethical Consideration Concerning the Research Process

Prior to starting the study, all institutional and governmental approvals were obtained, including those from the Mount Kenya University Offices of Ethical Consideration Review and the Postgraduate Research Department. Additional approvals were obtained from NACOSTI, the KENAFF, and the necessary research licenses. The acquired data was securely stored in password-protected folders, and only the study team had access to it. The study's findings were presented objectively, without any data manipulation to match preset conclusions. The cultural customs and practices of the community was honored because the study concentrates on the Kenya National Farmers Federation.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

Data processing is covered in this chapter, along with how to assess the study's findings. Using the Kenya National Farmer's Federation as a case study, the study sought to determine how monitoring and evaluation procedures affected the effectiveness of NGOs working in the agricultural sector.

4.2 Response Rate

To analyze, interpret, and conclude based on the provided data in Table 3: Response Rate

Table 2: Response Rate

Response	Frequency	Percentage
Returned questionnaires	129	96
Unreturned questionnaires	5	4
Total	134	100

Source: Researcher (2024)

Out of 129 of the 134 surveys that were sent were returned, yielding a remarkable 96% response rate. This suggests that the respondents' degree of participation was high.. The findings collaborate with Dillman, Smyth, and Christian (2014) also highlight that response rates above 80% are desirable as they help ensure that the data is reflective of the target population. The unreturned questionnaires accounted for only 4%, showing that a small portion of the target population did not participate. The 96% response rate is regarded as excellent and suggests that the information gathered is probably trustworthy and reflective of the intended audience. High response rates like this typically reduce the risk of non-response bias, suggesting that the

findings from the survey can be generalized to the broader population with a high degree of confidence. The small proportion of unreturned questionnaires (4%) is unlikely to have a significant impact on the overall results. The small proportion of unreturned questionnaires (4%) may suggest minimal non-response bias. The findings collaborate with Groves (2006) who emphasizes that the risk of such bias is only significant when response rates are very low. Given the 96% response rate in this study, the likelihood of significant bias is reduced.

4.2.1 Tests of Reliability

Reliability tests evaluate the stability and consistency of a measurement tool, such a survey, test, or questionnaire. Reliability testing ensures that the results obtained from the instrument are repeatable and consistent over time, across different items, or among different raters.

Table 4: Reliability Tests

Category	Cronbach Alpha	No. of Items	Remarks
Frequency of M&E data collection	0.897	3	Accepted
M&E stakeholder engagement	0.881	3	Accepted
Integrating Local Knowledge	0.778	3	Accepted

Source: Researcher (2024)

Cronbach alpha frequency of M&E data collection is 0.897. This high value indicates excellent internal consistency among the 3 items in this category, suggesting that the items reliably measure the same underlying concept. The reliability is well above the generally accepted threshold of 0.7. Cronbach Alpha for M&E stakeholder engagement is 0.881. This value also shows strong internal consistency for the 3 items related to stakeholder engagement in monitoring and evaluation (M&E). The high alpha value supports the reliability of the instrument in this category. Cronbach alpha frequency of integrating local knowledge is 0.778. Although slightly lower than the other categories, this alpha value is still within the acceptable

range, indicating good internal consistency among the 3 items. It suggests that the items are consistently measuring the concept of integrating local knowledge.

The reliability analysis using Cronbach's Alpha demonstrates that all categories—Frequency of M&E Data Collection, M&E Stakeholder Engagement, and Integrating Local Knowledge—have high internal consistency, with alpha values above 0.7 which collaborates with Nunnally and Bernstein (1994), a Cronbach's Alpha value of 0.7 or above is considered acceptable for most research purposes, indicating that the items within a scale or subscale have adequate internal consistency. These results confirm that the measurement instrument is reliable and that the items within each category are consistent in assessing their respective constructs. Therefore, the tool can be confidently used in further data analysis and interpretation. This collaborates with Tavakol and Dennick (2011) emphasize that a higher Cronbach's Alpha value generally indicates better reliability.

4.3 Demographic Data

The area provides demographic statistics, including details on gender and the age bracket of the respondents

Table 5: Gender

Category	Frequency	Percentage
Male	81	63
Female	48	37
Total	129	100

Source: Researcher (2024)

Male respondents had frequency of 81 males participated in the survey. They represent 63% of the total respondents. This suggests that males form the majority of the sample, making up nearly two-thirds of the participants. Female respondents had a frequency of 48 females participated in the survey. They represent 37% of the total respondents. This indicates that females are a significant minority, comprising just over one-third of the sample. The gender distribution of respondents in the study reveals a higher representation of males (63%) compared to females (37%). This indicates that the sample is somewhat gender-skewed, with a larger proportion of male participants.

Depending on the study's context, this gender imbalance could be a point to consider when interpreting the results, as it may influence the generalizability of the findings to a more balanced or different population. Yegidis and Rank (2007) assert that gender imbalances can influence the relevance of the findings to different demographic groups. They recommend that researchers consider the gender distribution of their sample in the context of their research objectives and the broader population to which they aim to generalize their results. However, the data still provides valuable insights into the perspectives of both genders within the sampled population. Sarantakos (2005) suggests that understanding the gender distribution in a sample is crucial for identifying and addressing potential biases. He argues that while gender imbalance does not necessarily invalidate the research, it requires careful consideration when drawing conclusions and making recommendations.

Table 6: Age of the Respondents

Table 6 presents data on the working experience of respondents, providing both the frequency and percentage of respondents falling into each category.

Table 6: Age Bracket

Category	Frequency	Percentage
18 - 25 years	19	15
26- 33 years	55	43
34- 41 years	46	36
41 years and above	9	6
Total	129	100

Source: Researcher (2024)

The age of 18 - 25 years had a frequency of 19 respondents fall into this age bracket. They represent 15% of the total sample. This suggests a relatively small proportion of younger adults in the study. The age of 26 - 33 years had a frequency of 55 respondents are within this age group. They constitute 43% of the total respondents. This age bracket has the highest representation, making up nearly half of the sample. This indicates that a significant portion of the respondents are young adults, likely in early to mid-career stages. The age of 34 - 41 years had a frequency of 46 respondents belong to this category. They account for 36% of the sample. This is the second most represented age group, indicating that a substantial portion of the respondents are in their late career or middle age. The age of 41 years and above had a frequency of 9 respondents are aged 41 years or older. They make up 6% of the sample. This group is the least represented, suggesting a smaller proportion of older respondents. Pew Research Center (2019) emphasizes that age demographics should be carefully considered when interpreting survey results, as different age groups may have distinct perspectives and experiences.

The age distribution of the respondents shows a concentration in the younger age brackets, with 43% of the respondents aged 26-33 years and 36% aged 34-41 years. Together, these two groups account for 79% of the total sample, indicating that the majority of participants are within the early to mid-adult stages of life. The smaller proportions of respondents in the 18-25 years (15%) and 41 years and above (6%) categories suggest that the study may be more

reflective of the perspectives of younger to middle-aged adults. This age distribution should be considered when interpreting the results, as the findings may be particularly relevant to these age groups. The findings agree with Robinson (2013) who suggest that age demographics should be analyzed in conjunction with other variables to understand their impact on research outcomes.

Table 7: The length of association with KENAFF

Category	Frequency	Percentage
A year or less	27	21
1–5 years	51	40
6–10 years	39	30
Ten or more years	12	9
Total	129	100

Source: Researcher (2024)

Respondents’ category 1–5 Years the frequency of 51 respondents have been associated with KENAFF for 1–5 years. This group forms the largest segment, accounting for 40% of the total sample. This suggests that the majority of respondents have a moderate level of experience with KENAFF, likely offering insights from those who are somewhat established within the organization. The findings collaborate with Meyer and Allen (1991) who argued that employees with longer tenure often have deeper insights into organizational culture and practices, while those with shorter tenure may offer fresh perspectives and highlight different aspects of the organizational experience.

Respondents’ category of 6–10 Years. Frequency of 39 respondents have been associated with KENAFF for 6–10 years. They constitute 30% of the total respondents. This indicates a significant portion of the sample has considerable experience with KENAFF, contributing

seasoned insights. The findings collaborate with Bamberger (2008) who argued that highlights that employees' length of association with an organization affects their familiarity with organizational processes and their ability to provide informed feedback. Respondents with 6–10 years of experience, constituting 30% of the sample, likely bring substantial knowledge and experience to the survey, contributing valuable insights based on their more extensive involvement with KENAFF.

Respondents' category of a year or less had a frequency of 27 respondents have been associated with KENAFF for a year or less. They represent 21% of the total respondents. This suggests that a significant portion of participants are relatively new to KENAFF, indicating fresh perspectives from newer members. The findings collaborate with Harrison and Klein (2007) who points out that diverse lengths of service within a sample can offer varied perspectives, enhancing the richness of the data. In this study, the representation of respondents with a year or less of experience (21%) and those with ten or more years (9%) introduces a range of viewpoints, from newer employees who may be more attuned to recent changes, to long-term employees who have experienced organizational evolution over time. Respondents' category of ten or more years. The frequency of 12 respondents have been associated with KENAFF for ten or more years. This group represents 9% of the total respondents. The smaller size of this group suggests that fewer respondents have long-term experience with KENAFF, yet their perspectives may be deeply informed by their extended involvement.

4.4 Descriptive Statistics

The fundamental characteristics of a dataset are summed up and described by descriptive statistics. They offer concise summaries of the metrics and the sample.

Table 8: Frequency of M&E data collection

	N	Mean	Std. Deviation
The number of times data is collected per agricultural season is adequate.	129	2.9225	.26846
The number of times data is analyzed annually is sufficient for effective decision-making.	129	3.0000	.00000
The types of data being collected (qualitative vs. quantitative) are appropriate for the assessment of agricultural practices.	129	3.5659	.49757

Source: Researcher (2024)

Respondents were neutral that the number of times data is collected per agricultural season is adequate as shown by (Mean: 2.9225, Standard Deviation: 0.26846). The mean score of 2.92 suggests that respondents are generally neutral or slightly disagree with the adequacy of data collection frequency per agricultural season. The low standard deviation (0.26846) indicates that there is little variation in responses, meaning most respondents have similar views on this issue. Smith and Adams (2017) and Lee and Patel (2019) emphasize that higher frequencies of data collection correlate with improved outcomes in agricultural NGOs. These studies suggest that more frequent data collection enhances decision-making and project effectiveness, which aligns with IOM's (n.d.) assertion that regular data collection is crucial for timely monitoring and adjustments.

Respondents were neutral that the number of times data is analyzed annually is sufficient for effective decision-making as indicated by (Mean: 3.0000, Standard Deviation: 0.00000). The mean score of 3.00 suggests a neutral stance, with respondents neither agreeing nor disagreeing about the sufficiency of annual data analysis for decision-making. The standard deviation of 0.00000 indicates that all respondents gave the same rating, implying complete consensus on

this issue. This aligns with the findings of Nguyen and Zhang (2021), which suggest that regular and timely data analysis is critical for adapting to changing conditions and enhancing performance. The complete agreement among respondents (standard deviation: 0.00000) might suggest a standardized approach or lack of awareness of the potential benefits of more frequent analysis.

Respondents agreed that the types of data being collected (qualitative vs. quantitative) are appropriate for the assessment of agricultural practices as shown by (Mean: 3.5659, Standard Deviation: 0.49757). The higher mean score of 3.57 suggests that respondents generally agree that the types of data being collected are appropriate for assessing agricultural practices. However, the standard deviation of 0.49757 shows that there is moderate variation in responses, indicating some differences in opinion among respondents. The literature supports the effectiveness of using a combination of data types to enhance project assessments and decision-making (Smith & Adams, 2017; Lee & Patel, 2019). This congruence with empirical findings suggests that the data collection approach in the study is considered appropriate by the respondents and aligns with best practices in M&E.

With a mean score of 2.92 on the adequacy of data collection frequency per agricultural season and a standard deviation of 0.268, there appears to be variation in respondents' perceptions. This variability could imply inconsistency in data collection practices, which may have affected the accuracy of the study's findings. With a mean score of 3.57 and a standard deviation of 0.498, the study suggests variability in perceptions regarding the appropriateness of qualitative vs. quantitative data. Further research could examine how the types of data collected influence decision-making processes in agricultural NGOs.

Table 9: M&E Stakeholder Engagement

	N	Mean	Std. Deviation
The number of stakeholders involved in the program is sufficient.	129	2.8837	.34523
The types of stakeholders involved are diverse and representative of the community.	129	3.1705	.43524
The frequency of stakeholder meetings is adequate for effective collaboration.	129	3.5736	.51197

Source: Researcher (2024)

Respondents were neutral that the number of stakeholders involved in the program is sufficient as shown by (Mean: 2.8837, Standard Deviation: 0.34523). The mean score of 2.88 suggests that respondents generally feel neutral to slightly disagree about the sufficiency of stakeholder involvement. The standard deviation of 0.34523 indicates there is a moderate level of consensus among respondents, with some variation in opinions. The finding of neutrality regarding stakeholder sufficiency aligns with literature that stresses the importance of effective stakeholder involvement. The perception of insufficiency among respondents suggests that there may be room for improvement in involving stakeholders, consistent with Karanja & Yusuf's (2018) observations.

According to the data (Mean: 3.1705, Standard Deviation: 0.43524), respondents were indifferent to the fact that the stakeholders participating are varied and reflective of the community. Respondents generally believe that the types of stakeholders are representative and diversified, as indicated by the mean score of 3.17. The moderate variation in replies, indicated by the standard deviation of 0.43524, indicates that opinions on the diversity and representativeness of stakeholders vary, notwithstanding the overall positive mood. The discovery that stakeholders are thought to be fairly varied is consistent with research that indicates diversity is essential for successful project engagement. The neutral position,

however, raises the possibility that stakeholders do not yet accurately reflect the community, pointing to the need for more inclusive engagement tactics.

Respondents were neutral that the frequency of stakeholder meetings is adequate for effective collaboration as shown by (Mean: 3.5736, Standard Deviation: 0.51197). The higher mean score of 3.57 suggests that respondents generally agree that the frequency of stakeholder meetings is adequate. The standard deviation of 0.51197 indicates moderate variation in responses, reflecting some differences in opinion regarding the adequacy of meeting frequency. The positive assessment of meeting frequency aligns with the literature emphasizing the importance of regular stakeholder engagement. The agreement on this aspect suggests that the existing frequency of meetings is considered appropriate for fostering collaboration and effective project management.

The mean score of 2.88 and a standard deviation of 0.345 suggest that respondents feel the number of stakeholders involved is somewhat limited, which may impact the generalizability of the findings and the inclusiveness of the M&E practices in representing broader community needs. Given the variability in responses, research could focus on how the diversity and representativeness of stakeholders directly influence NGO performance. A comparative study across different stakeholder groups (e.g., community members, government, NGOs) could offer insights.

Table 10: Integrating local knowledge

	N	Mean	Std. Deviation
The number of local practices integrated into KENAFF programs is sufficient.	129	2.6589	.47592
The level of local stakeholder involvement in decision-making is satisfactory.	129	3.0543	.22742
Community acceptance or satisfaction with the integrated practices is high.	129	3.8295	.37758

Source: Researcher (2024)

Respondents were neutral that the number of local practices integrated into KENAFF programs is sufficient as evidenced by (Mean: 2.6589, Standard Deviation: 0.47592). The mean score of 2.66 indicates that respondents generally feel neutral to slightly disagree about the sufficiency of local practices integrated into KENAFF programs. The standard deviation of 0.47592 shows moderate variation in responses, suggesting that opinions on the sufficiency of local practices vary among respondents. This partially aligns with Mercer (2012), who emphasizes the importance of integrating local knowledge but does not specify sufficiency as a measure. The moderate variation in responses could indicate differing opinions on the effectiveness and application of local practices, aligning with the notion that successful integration often requires continuous adaptation and improvement.

Respondents were neutral that the level of local stakeholder involvement in decision-making is satisfactory as shown by (Mean: 3.0543, Standard Deviation: 0.22742). The mean score of 3.05 suggests a neutral to slightly positive view on the level of local stakeholder involvement in decision-making. The low standard deviation (0.22742) indicates a high level of agreement among respondents regarding the satisfaction with stakeholder involvement. This partially aligns with Adedipe et al. (2004) and Ziervogel & Opere (2010), who emphasize active and meaningful stakeholder participation. The low standard deviation suggests a consensus among

respondents on the current level of involvement, aligning with the view that stakeholder engagement should be enhanced for better decision-making and program outcomes.

Respondents agreed that community acceptance or satisfaction with the integrated practices is high as evidenced by (Mean: 3.8295, Standard Deviation: 0.37758). The mean score of 3.83 indicates a positive view on community acceptance or satisfaction with the integrated practices, suggesting that respondents generally feel that the community is satisfied with how local knowledge is incorporated. The standard deviation of 0.37758 shows moderate variation in responses, with some differences in opinions on community satisfaction. This finding aligns well with the literature that suggests incorporating local knowledge leads to better community alignment and satisfaction (Davis & Thomas, 2020; Nguyen & Hoang, 2018). The moderate standard deviation reflects some variation in opinions but overall supports the notion that local knowledge integration positively impacts community satisfaction.

The theory of change emphasizes the importance of considering contextual factors, including the integration of local knowledge, to achieve desired outcomes. Your findings show that respondents were neutral or slightly disagreed on the sufficiency of local practices integrated into KENAFF programs (Mean: 2.66, Standard Deviation: 0.47592). This suggests that while the integration of local knowledge is recognized, it may not be fully effective or sufficient to meet the program's needs, indicating a potential gap between the theory's assumptions and the actual practices. The moderate variation in responses also points to differing views on the adequacy of local knowledge integration, which partially disagrees with the Theory of Change's emphasis on contextual adaptation (Weiss, 1995; Clark and Anderson, 2004).

With a mean score of 2.66 and a standard deviation of 0.476, the study indicates that respondents feel the integration of local practices is somewhat lacking. This perceived insufficiency might limit the findings on how effectively local knowledge is being leveraged to

enhance program outcomes. Further research could explore best practices and innovative methods for integrating local agricultural practices in a way that strengthens both program relevance and outcomes in KENAFF and other NGOs.

Table 11: Performance of NGOs

	N	Mean	Std. Deviation
The financial performance of KENAFF, such as return on investment, is satisfactory.	129	4.4341	.49757
The project completion rate at KENAFF meets the expected timelines.	129	4.6434	.48086
Stakeholder satisfaction with KENAFF's performance is high.	129	4.7519	.43357
The adoption rate of agricultural practices among target communities is significant.	129	4.9147	.28037

Source: Researcher (2024)

Majority of respondents agreed that the financial performance of kenaff, such as return on investment, is satisfactory as indicated by (Mean: 4.4341, Standard Deviation: 0.49757). The mean score of 4.43 suggests a high level of satisfaction with KENAFF's financial performance. The standard deviation of 0.49757 indicates moderate variation in responses, meaning there is some diversity in opinions about financial performance. This aligns with the IFRC's view that effective M&E contributes to better financial performance through improved resource management and accountability. The moderate variation (Std. Deviation: 0.49757) reflects some differing opinions but overall supports the idea that M&E frameworks positively impact financial performance.

Majority of respondents strongly agreed that the project completion rate at kenaff meets the expected timelines as shown by (Mean: 4.6434, Standard Deviation: 0.48086). The mean score of 4.64 reflects a high level of agreement that KENAFF meets expected project timelines. The standard deviation of 0.48086 shows some variation but overall agreement on timely project completion. This finding is consistent with Rumenya & Kisimbi (2020), who emphasize that effective M&E frameworks lead to better project management and timely completion. The moderate standard deviation indicates general agreement among respondents about the timely completion of projects.

Majority of respondents strongly agreed that stakeholder satisfaction with KENAFF's performance is high as shown by (Mean: 4.7519, Standard Deviation: 0.43357). The mean score of 4.75 indicates very high stakeholder satisfaction with KENAFF's performance. The standard deviation of 0.43357 shows some variation, but the overall sentiment is strongly positive.

The majority of respondents firmly believed that target communities' adoption rate of agricultural methods is considerable, as shown by the data (Mean: 4.9147, Standard Deviation: 0.28037). With a mean score of 4.91, there is strong agreement that the rate at which agricultural techniques are adopted is noteworthy. A high degree of agreement among respondents regarding this favorable result is indicated by the low standard deviation of 0.28037. Njuguna (2016) emphasizes the importance of efficient M&E in improving project outcomes and adoption rates, and this study bolsters her argument. There is broad agreement among respondents regarding the substantial influence of KENAFF's programs on agricultural practices, as seen by the low standard deviation.

4.5 Correlation Analysis

A statistical technique called correlation analysis is used to assess the direction and degree of a relationship between two or more variables. It assists in determining the presence and strength of a relationship between two variables.

Table 12: Correlation

		Frequency of M&E Data Collection	M&E stakeholder engagement	Integrating local knowledge
Frequency of M&E data collection	Pearson Correlation	1	.126	-.125
	Sig. (2-tailed)		.155	.159
	N	129	129	129
M&E stakeholder engagement	Pearson Correlation	.126	1	.088
	Sig. (2-tailed)	.155		.324
	N	129	129	129
Integrating local knowledge	Pearson Correlation	-.125	.088	1
	Sig. (2-tailed)	.159	.324	
	N	129	129	129
Performance of KENAFF	Pearson Correlation	.139	.377**	.061
	Sig. (2-tailed)	.115	.000	.490
	N	129	129	129

Source: Researcher (2024)

The table shows the Pearson correlation coefficients between the independent factors (M&E Stakeholder Engagement, Integrating Local Knowledge, and Frequency of M&E Data Collection) and the dependent variable (KENAFF Performance), as well as the related p-values (Sig. (2-tailed)).

The performance of KENAFF and the frequency of M&E data collection appear to be positively correlated, as indicated by the correlation coefficient of 0.139. This association is not statistically significant, though, as the p-value of 0.115 is higher than 0.05. This finding contrasts with the literature by Karimi et al. (2020), which emphasizes the importance of regular

data collection for improving performance. It suggests that while data collection is important, other factors may play a more significant role in influencing performance, or the frequency of data collection alone might not be sufficient to drive performance improvements.

A moderately good association between M&E stakeholder participation and KENAFF's success is indicated by the correlation coefficient of 0.377. At the 1% significance level, the p-value of 0.000 is less than 0.05, indicating that this link is statistically significant. This backs up the empirical research by Micah & Luketero (2017) and Karimi et al. (2020), which emphasizes the importance of stakeholder involvement in improving M&E effectiveness and overall performance. The noteworthy correlation found is consistent with the literature's focus on stakeholder engagement as a major factor in performance enhancement.

A very slight positive association between incorporating local knowledge and KENAFF performance is indicated by the correlation coefficient of 0.061. This association is not statistically significant, as indicated by the p-value of 0.490, which is significantly higher than 0.05.

This finding contrasts with the literature by Micah and Luketero (2017), Njuguna (2016), which emphasizes the value of local knowledge in enhancing program effectiveness and relevance. The lack of significant correlation could imply that while integrating local knowledge is important, its impact on performance might be influenced by other factors or may not be captured fully in this study.

There is a statistically significant moderate positive relationship between M&E stakeholder engagement and the performance of KENAFF. This suggests that higher levels of stakeholder engagement in M&E processes are associated with better performance outcomes for KENAFF. The frequency of M&E data collection and the integration of local knowledge show weak positive correlations with the performance of KENAFF, but these relationships are not

statistically significant. This implies that these factors, as measured in this study, may not have a strong or direct impact on the performance of KENAFF. These findings highlight the importance of stakeholder engagement in M&E practices as a key driver of organizational performance, while the frequency of data collection and integration of local knowledge may require further investigation or improvement to better influence performance.

4.6 Regression Analysis

A statistical method called regression analysis is used to describe and examine the relationship between one or more independent variables (predictors or explanatory variables) and a dependent variable (commonly referred to as the outcome or response variable). Quantifying the strength and form of these interactions as well as understanding how the dependent variable varies when the independent factors change are the objectives.

Table 13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.391 ^a	.153	.132	.32191

a. Predictors: (Constant), Integrating local knowledge, M&E stakeholder engagement, Frequency of M&E Data Collection

Source: Researcher (2024)

Key statistics are provided in the model summary to help comprehend the relationship between the dependent variable (KENAFF performance) and the independent factors (integrating local knowledge, M&E stakeholder engagement, and frequency of M&E data collection).

The performance of KENAFF and the total independent variables have a somewhat positive association, as indicated by the R value of 0.391. This implies that the dependent variable is somewhat influenced by the predictors taken together. The independent variables in the model may account for about 15.3% of the variance in KENAFF performance, according to the R Square value of 0.153. This indicates that other factors not included by this model account for the remaining 84.7% of the variance.

The R Square, which accounts for the number of predictors in the model, is somewhat higher than the Adjusted R Square of 0.132. After taking into consideration the complexity of the model, it indicates that the independent variables account for roughly 13.2% of the variability in KENAFF performance. The average separation between the observed values and the regression line is estimated by the standard error of 0.32191. The data points are more widely distributed when the standard error is bigger, and closer to the fitted line when it is smaller.

According to the model, the performance of KENAFF can be moderately explained by the independent variables (Integrating Local Knowledge, M&E Stakeholder Engagement, Frequency of M&E Data Collection), which account for roughly 15.3% of the variance. Even if the predictors and KENAFF's performance are positively correlated, the model's relatively low R Square value suggests that other factors might have a greater impact on the organization's performance. Although monitoring and evaluation procedures have a moderate effect on KENAFF's performance, according to this analysis, other significant aspects probably need to be investigated in order to comprehend and enhance the organization's results.

Table 14: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.332	3	.777	7.501	.000 ^b
	Residual	12.953	125	.104		
	Total	15.285	128			

a. Dependent Variable: Performance of KENAFF

b. Predictors: (Constant), Integrating local knowledge, M&E Stakeholder engagement, Frequency of M&E Data Collection

Source: Researcher (2024)

The ANOVA table sheds light on the regression model's overall significance in explaining the variance in the dependent variable, in this case, KENAFF's (Kenya National Farmers' Federation) performance. 2.332 is the regression model's sum of squares. This is the variation that the model explains (i.e., the combined effect of the predictors: engaging M&E stakeholders, integrating local knowledge, and frequency of M&E data collection). The residual's sum of squares, which represents the variation that the model is unable to account for, is 12.953. The sum of squares for the dependent variable's (KENAFF performance) total variance is 15.285. The statistical significance of the regression model ($p < 0.05$) suggests that the performance of KENAFF is significantly impacted by the predictors (integrating local knowledge, M&E stakeholder participation, and frequency of M&E data collecting). Given that the model accounts for a sizable amount of the variance in the dependent variable, as indicated by the F-statistic of 7.501, the predictors are helpful in forecasting KENAFF's performance.

The total regression model provides a good fit for the data, according to the ANOVA findings. The significant F-statistic and p-value imply that the independent variables—integrating local knowledge, M&E stakeholder engagement, and frequency of M&E data collection—are

collectively significant in influencing the performance of KENAFF. Therefore, these factors should be considered important in improving the performance of KENAFF.

Table 15: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficient	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.665	.693		3.846	.000
	Frequency of M&E data collection	.193	.163	.099	1.183	.239
	M&E Stakeholder Engagement	.380	.088	.361	4.326	.000
	Integrating Local Knowledge	.060	.119	.042	.504	.615

a. Dependent Variable: Performance of KENAFF

Source: Researcher (2024)

The table provides the coefficients for the regression model, which includes the independent variables (Frequency of M&E Data Collection, M&E Stakeholder Engagement, Integrating Local Knowledge) and their relationship with the dependent variable (Performance of KENAFF).

The expected performance of KENAFF when all independent variables are held at zero is represented by the constant value of 2.665. This constant is statistically significant, as indicated by the significance level (p-value) of 0.000. With all other factors held equal, the unstandardized coefficient (B) of 0.193 indicates that the performance of KENAFF rises by 0.193 units for every unit increase in the frequency of M&E data collection. This association is not statistically significant, though, as the p-value of 0.239 is higher than 0.05.

With all other factors held constant, the unstandardized coefficient (B) of 0.380 shows that KENAFF's performance increases by 0.380 units for every unit increase in M&E stakeholder participation. Among the factors, M&E stakeholder engagement appears to be the most

significant predictor, as indicated by the standardized coefficient (Beta) of 0.361. The statistical significance of this link is indicated by the p-value of 0.000. There is a very slight positive correlation between KENAFF's performance and incorporating local knowledge, according to the unstandardized coefficient (B) of 0.060. This association is not statistically significant, though, as the p-value of 0.615 is significantly higher than 0.05.

The analysis reveals that among the independent variables, M&E stakeholder engagement is the only significant predictor of KENAFF's performance, with a strong positive and statistically significant relationship ($p = 0.000$). This suggests that enhancing stakeholder engagement in monitoring and evaluation practices is likely to have a meaningful impact on the organization's performance. On the other hand, the frequency of M&E data collection and the integration of local knowledge do not show statistically significant effects on KENAFF's performance, as indicated by their higher p-values (0.239 and 0.615, respectively). These findings suggest that while these factors may play a role, they are not as critical as stakeholder engagement in driving the performance of KENAFF.

4.7 Qualitative Analysis

a) How do you perceive the influence of the frequency of data collection on the overall performance of NGOs in the agricultural sector, specifically the KENAFF?

The frequency of data collection is a critical aspect of Monitoring and Evaluation (M&E) practices, and it can have a significant influence on the overall performance of NGOs in the agricultural sector, such as KENAFF. It is perceived in terms of timely decision-making, continuous improvement, stakeholder engagement and trust, resource utilization and performance measurement. The qualitative findings by Karimi et al. (2020) align with the empirical literature, which underscores the importance of frequent data collection for effective

M&E practices. Both sources agree that it supports timely decision-making, continuous improvement, and performance measurement.

b) How, in your opinion, does stakeholder engagement improve the general effectiveness of non-governmental organizations (NGOs) in the agriculture sector, particularly the KENAFF?

Stakeholder engagement plays a pivotal role in enhancing the general effectiveness of non-governmental organizations (NGOs) in the agricultural sector, including KENAFF. Here's how it contributes: Enhanced relevance and impact, improved decision-making, greater buy-in and ownership, building trust and collaboration, accountability and transparency, sustainable outcomes and innovation and adaptation. The qualitative findings are consistent with the empirical literature by Micah and Luketero (2017), which highlights the importance of stakeholder engagement in improving organizational effectiveness and performance. Both sources agree that engagement contributes to better decision-making, trust, and sustainable outcomes.

c) In your opinion, how does integrating local knowledge contribute to the overall performance of NGOs in the agricultural sector, specifically the KENAFF?

Integrating local knowledge into the operations and strategies of NGOs in the agricultural sector, such as KENAFF, is crucial for enhancing their overall performance contributes to:

increased relevance and effectiveness, enhanced community buy-in and participation, sustainable practices and outcomes, improved problem-solving and adaptation, cultural sensitivity and acceptance, innovation through hybrid solutions, strengthened resilience, empowerment and capacity building. The qualitative findings are consistent with the empirical literature by Micah & Luketero (2017), which highlights the importance of stakeholder engagement in improving organizational effectiveness and performance. Both sources agree

that engagement contributes to better decision-making, trust, and sustainable outcomes. While the qualitative findings underscore the benefits of integrating local knowledge for various aspects of performance, the empirical literature by Njuguna (2016) also supports this view on the importance of local knowledge for tailoring interventions and improving outcomes, supporting the qualitative view of its benefits for problem-solving and community engagement.

d)Regarding the impact of monitoring and assessment procedures on the operations of non-governmental organizations (NGOs) in the agricultural sector, specifically with reference to the KENAFF, do you have any further remarks or recommendations?

Effective M&A procedures are essential for ensuring that KENAFF's activities align with its strategic goals. By regularly monitoring progress and assessing outcomes, KENAFF can ensure that its programs are on track to achieve the desired impact. M&A procedures provide critical data that informs decision-making at all levels of the organization. Robust M&A procedures enhance transparency and accountability within KENAFF. M&A procedures facilitate a culture of learning and adaptation within KENAFF. The qualitative findings align well with the empirical literature by Rumenya and Kisimbi (2020), which supports the critical role of M&A procedures in ensuring strategic alignment, improving transparency, and fostering a learning culture. Both sources agree on the importance of effective M&A procedures for organizational performance and accountability.

4.8 Discussions

4.8.1 Frequency of M&E data collection

The findings show partial alignment with the qualitative data, particularly regarding the appropriateness of the types of data collected. However, there is a noticeable conflict between the perceived importance of frequent M&E practices in qualitative responses and the neutral

stance found in the quantitative data regarding the adequacy of these practices. This suggests a gap between the theoretical understanding of M&E practices' importance and their practical implementation, as perceived by respondents. Addressing this gap would likely enhance the effectiveness of M&E practices in NGOs like KENAFF, better aligning with the Theory of Change and Stakeholder Theory.

The Theory of Change emphasizes that data collection should align with the monitoring of interventions, yet respondents' neutral stance on the adequacy of data collection frequency (Mean: 2.9225, SD: 0.26846) suggests that they do not view the current frequency as sufficient for effective monitoring. This neutrality points to a potential challenge in aligning data collection processes with performance tracking, as envisioned by the Theory of Change (Weiss, 1995). The low variation in responses highlights shared concerns among stakeholders, further suggesting a misalignment between the intervention needs and data collection processes. In line with Stakeholder Theory, which underscores the importance of stakeholder involvement in decision-making, the neutral response reflects a partial disagreement with the theory's call for continuous engagement in decisions like data collection frequency (Freeman, 1984).

In terms of the sufficiency of annual data analysis (Mean: 3.0000, SD: 0.00000), the Theory of Change emphasizes the need for regular and sufficient data analysis to track progress and adapt interventions. The neutral consensus among respondents indicates uncertainty about the adequacy of annual analysis for decision-making, which may not fully support the iterative feedback process crucial for performance improvement (Clark & Anderson, 2000). Stakeholder Theory also stresses the importance of involving stakeholders in decision-making processes that directly impact them. The uniformity in responses (SD: 0.00000) suggests a consensus that annual data analysis may not meet stakeholders' expectations for timely decision-making,

signalling insufficient stakeholder engagement in the process, thus partially misaligning with Stakeholder Theory (Freeman, 1984).

4.8.2 M&E Stakeholder Engagement

Overall, the findings show partial alignment between the quantitative and qualitative data, particularly concerning the frequency of stakeholder meetings and the diversity of stakeholders involved. However, there is a noticeable conflict regarding the sufficiency of stakeholder involvement, with qualitative data advocating for more robust engagement than what is reflected in the quantitative responses. This suggests a gap between the recognized importance of stakeholder engagement and its current implementation, indicating an area for improvement in M&E practices within NGOs like KENAFF. By addressing this gap, KENAFF could better align its practices with the expectations of stakeholders, thereby enhancing its effectiveness and achieving more sustainable outcomes in the agricultural sector.

The findings regarding the sufficiency of stakeholder involvement (Mean: 2.8837, SD: 0.34523) reveal a neutral stance among respondents, with some leaning toward slight disagreement. The Theory of Change, which emphasizes active stakeholder engagement at all stages of a project (Weiss, 1995; Clark & Anderson, 2000), partially disagrees with this finding. The neutral perception suggests that the current level of involvement may not fully align with the theory's emphasis on inclusive collaboration to achieve desired outcomes. Similarly, Stakeholder Theory, which stresses the importance of engaging a broad range of stakeholders in decision-making (Freeman, 1984), partially disagrees, as the neutral response suggests that respondents may feel stakeholder participation is insufficient.

Regarding the diversity of stakeholders (Mean: 3.1705, SD: 0.43524), respondents were generally positive but with moderate variation in opinions. The Theory of Change, which

emphasizes the importance of including diverse perspectives to account for contextual factors (Weiss, 1995), agrees with this finding, as the involvement of a representative range of stakeholders supports the theory's goal of capturing diverse viewpoints. Stakeholder Theory also agrees, as it advocates for considering the interests of all relevant groups (Freeman, 1984). The positive sentiment on diversity aligns with the theory's focus on inclusive decision-making processes, although the moderate variation in responses suggests that further improvement might be needed to fully satisfy all stakeholders.

4.8.3 Integrating Local Knowledge

The quantitative and qualitative findings on integrating local knowledge generally align in terms of community satisfaction and stakeholder involvement. However, there is a potential conflict regarding the sufficiency of local practices being integrated into KENAFF programs. This suggests that while the importance of local knowledge is acknowledged, there may be room for improvement in how effectively it is being utilized. Addressing this gap could enhance the relevance, effectiveness, and sustainability of KENAFF's agricultural programs.

The Theory of Change emphasizes the importance of contextual factors and the integration of local knowledge to achieve desired outcomes (Weiss, 1995; Clark & Anderson, 2004). The finding that respondents were neutral regarding the sufficiency of local practices integrated into KENAFF programs (Mean: 2.66, SD: 0.47592) suggests a partial disagreement with the theory. This neutrality implies that while local knowledge is recognized, its integration may not be fully effective or sufficient to meet program needs. The moderate variation in responses reflects differing views on the adequacy of local practice integration, indicating a potential gap between the theory's assumption of robust local knowledge incorporation and the actual practices within KENAFF.

Stakeholder Theory, which emphasizes active participation and meaningful stakeholder involvement (Freeman, 1984), also shows partial agreement and disagreement with the findings. The neutral response to the sufficiency of local stakeholder involvement in decision-making (Mean: 3.05, SD: 0.22742) aligns partially with the theory, as there is a consensus on the level of involvement. However, the slight neutrality suggests room for improvement in engagement levels. On the other hand, the positive response regarding community satisfaction with integrated practices (Mean: 3.83, SD: 0.37758) aligns with Stakeholder Theory, as it supports the theory's notion that successful integration of local knowledge fosters trust and satisfaction among community stakeholders (Adedipe et al., 2004; Nguyen & Hoang, 2018).

4.8.4 Performance of NGOs

The quantitative and qualitative data on the performance of KENAFF largely align, with both sets of data reflecting a positive assessment of the organization's financial performance, project completion, stakeholder satisfaction, and adoption of agricultural practices. The qualitative insights provide a deeper understanding of the factors driving these positive outcomes, particularly the importance of M&E practices, stakeholder engagement, and local knowledge integration. The alignment between these two types of data suggests that KENAFF is effectively managing its operations and meeting its strategic goals, with a few nuances in financial performance that could be explored further.

The Theory of Change aligns with KENAFF's financial performance and project timelines. High satisfaction with KENAFF's financial performance (Mean: 4.43, SD: 0.49757) supports the theory's assumption that successful interventions lead to measurable outcomes (Weiss, 1995; Clark & Anderson, 2004). The moderate variation in responses reflects the theory's emphasis on contextual factors like financial strategies. Similarly, the high agreement on KENAFF meeting project timelines (Mean: 4.64) validates the Theory of Change's notion that

planned interventions lead to expected outcomes (Weiss, 1995). The strong consensus on stakeholder satisfaction (Mean: 4.75) and the adoption rate of agricultural practices (Mean: 4.91) further underscore the theory's focus on engaging stakeholders and integrating local knowledge to achieve desired impacts (Clark & Anderson, 2004).

Stakeholder Theory emphasizes ethical decision-making that balances stakeholder interests (Freeman, 1984). The high satisfaction with KENAFF's financial performance and project completion rate supports the theory's focus on engaging stakeholders to achieve long-term success. The strong agreement on stakeholder satisfaction (Mean: 4.75) aligns with Stakeholder Theory's assertion that involving diverse stakeholder's fosters trust and accountability (Freeman, 1984). Additionally, the high adoption rate of agricultural practices (Mean: 4.91) reflects the theory's emphasis on stakeholder involvement in decision-making processes, indicating that KENAFF's programs have effectively addressed community needs, leading to mutual benefits and program success.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter includes an overview, a conclusion, and suggestions for more study on how monitoring and assessment procedures affect the effectiveness of NGOs in the agriculture industry: The Kenya National Farmer's Federation is the subject of this case study.

5.2 Summary of Findings

5.2.1 What is the influence of frequency of data collection in M&E on the performance of NGOs in the agricultural sector focusing on the Kenya National Farmers Federation?

The findings indicate that respondents were generally neutral or slightly disagreed with the adequacy of data collection frequency per agricultural season, as reflected by a mean of 2.92 and a low standard deviation of 0.26846, suggesting similar views. Regarding the sufficiency of annual data analysis for decision-making, respondents maintained a completely neutral stance, with a mean of 3.00 and no variation in responses (standard deviation of 0.00000). Conversely, respondents agreed that the types of data being collected (qualitative vs. quantitative) are appropriate for assessing agricultural practices, evidenced by a higher mean of 3.57, though with moderate variation in opinions (standard deviation of 0.49757).

5.2.2 How does stakeholder engagement in M&E influence the performance of NGOs in the agricultural sector focusing on the Kenya National Farmers Federation?

Respondents were generally neutral about the sufficiency of stakeholder involvement in the program, with a mean score of 2.88 and moderate consensus (standard deviation: 0.34523). They slightly agreed that the types of stakeholders involved were diverse and representative, as

indicated by a mean of 3.17 and a moderate variation in responses (standard deviation: 0.43524). Additionally, respondents tended to agree that the frequency of stakeholder meetings was adequate for effective collaboration, with a mean score of 3.57 and moderate variation in opinions (standard deviation: 0.51197).

5.2.3 In what ways integrating local knowledge in M&E influence the performance of NGOs in the agricultural sector focusing on the Kenya National Farmers Federation.

Respondents were generally neutral about the sufficiency of local practices integrated into KENAFF programs, with a mean score of 2.66 and moderate variation in opinions (standard deviation: 0.47592). They also held a neutral to slightly positive view on the level of local stakeholder involvement in decision-making, as indicated by a mean of 3.05 and a low standard deviation (0.22742), reflecting a high level of agreement. Additionally, respondents agreed that community acceptance or satisfaction with the integrated practices was high, with a mean score of 3.83 and moderate variation in responses (standard deviation: 0.37758).

The majority of respondents expressed strong satisfaction with KENAFF's financial performance, as reflected by a high mean score of 4.43, though with some diversity in opinions (standard deviation: 0.49757). They also strongly agreed that KENAFF consistently meets its project timelines, with a mean of 4.64 and moderate variation in responses (standard deviation: 0.48086). Stakeholder satisfaction with KENAFF's overall performance was similarly high, as indicated by a mean score of 4.75 and some variation (standard deviation: 0.43357). Additionally, respondents overwhelmingly agreed that the adoption rate of agricultural practices among target communities is significant, with a very high mean score of 4.91 and a low standard deviation of 0.28037, indicating strong consensus on this positive outcome.

5.3 Conclusion

5.3.1 M&E data collection

The data reveals mixed perspectives on the frequency of M&E data collection. Respondents are generally neutral or slightly skeptical about the adequacy of data collection per agricultural season. There is complete neutrality and agreement regarding the sufficiency of annual data analysis for decision-making. Respondents generally agree that the types of data being collected are appropriate, though there is some variation in opinion.

5.3.2 M&E Stakeholder Engagement

The analysis of stakeholder engagement perceptions shows respondents are generally neutral or slightly dissatisfied with the number of stakeholders involved, indicating a potential need for increased stakeholder participation. There is general agreement that the stakeholders are diverse and representative, though with some variation in opinions. Respondents are generally satisfied with the frequency of stakeholder meetings, suggesting that current practices are adequate for effective collaboration.

5.3.3 Integrating Local Knowledge In M&E

The analysis of integrating local knowledge shows respondents are generally neutral to slightly dissatisfied with the sufficiency of local practices integrated into KENAFF programs. This suggests that there may be room for improvement in incorporating more local practices. Respondents are neutral to slightly positive about the level of local stakeholder involvement in decision-making, with a high level of consensus on this issue. Respondents are generally

positive about community acceptance or satisfaction with integrated practices, indicating that the community is largely satisfied with how local knowledge is used.

The performance metrics for KENAFF are overwhelmingly positive. Respondents are generally satisfied with the financial performance of KENAFF, though there is some variation in opinions. There is strong agreement that KENAFF meets expected project timelines. Stakeholder satisfaction with KENAFF's performance is very high. The adoption of agricultural practices is seen as very significant, with strong consensus on this positive outcome.

5.4 Recommendations

The low standard deviation (0.26846) indicates that there is little variation in responses, meaning most respondents have similar views on this issue. Smith and Adams (2017) and Lee and Patel (2019) emphasize that higher frequencies of data collection correlate with improved outcomes in agricultural NGOs. These studies suggest that more frequent data collection enhances decision-making and project effectiveness, which aligns with IOM's (n.d.) assertion that regular data collection is crucial for timely monitoring and adjustments. Given the neutral or slightly negative view on the adequacy of data collection per agricultural season, it is recommended that KENAFF review and potentially increase the frequency of data collection to ensure that it meets the needs of all stakeholders. Since there is complete agreement on the sufficiency of annual data analysis, KENAFF should maintain the current practices but also consider seeking qualitative feedback to understand if there are any nuanced areas for improvement.

The finding of neutrality regarding stakeholder sufficiency aligns with literature that stresses the importance of effective stakeholder involvement. The perception of insufficiency among respondents suggests that there may be room for improvement in involving stakeholders,

consistent with Karanja & Yusuf's (2018) observations. Given the concern about the sufficiency of stakeholder numbers, it is recommended to review and possibly expand stakeholder involvement to ensure broader representation and engagement in the program. Although there is general agreement on the diversity and representativeness of stakeholders, efforts should be made to continuously assess and improve the diversity of stakeholder groups to address any concerns and enhance community representation

The standard deviation of 0.47592 shows moderate variation in responses, suggesting that opinions on the sufficiency of local practices vary among respondents. This partially aligns with Mercer (2012), who emphasizes the importance of integrating local knowledge but does not specify sufficiency as a measure. The moderate variation in responses could indicate differing opinions on the effectiveness and application of local practices, aligning with the notion that successful integration often requires continuous adaptation and improvement. While the current level of local stakeholder involvement is considered satisfactory, efforts should be made to continuously engage stakeholders more effectively and ensure that their input is well-represented in decision-making processes. The positive feedback on community acceptance suggests that KENAFF is successfully integrating local knowledge. To maintain or improve this satisfaction, continue to involve the community in feedback mechanisms and ensure that integrated practices remain relevant and beneficial.

5.5 Recommendations for Further Studies

With a mean score of 3.57 and a standard deviation of 0.498, the study suggests variability in perceptions regarding the appropriateness of qualitative vs. quantitative data. Further research could examine how the types of data collected influence decision-making processes in agricultural NGOs. Given the variability in responses, research could focus on how the diversity and representativeness of stakeholders directly influence NGO performance. A comparative

study across different stakeholder groups (e.g., community members, government, NGOs) could offer insights. This perceived insufficiency might limit the findings on how effectively local knowledge is being leveraged to enhance program outcomes. Further research could explore best practices and innovative methods for integrating local agricultural practices in a way that strengthens both program relevance and outcomes in KENAFF and other NGOs.



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APPENDICES

APPENDIX I: INFORMED CONSENT FORM

Influence of M&E Practices on The Performance of Non-Governmental Organizations in the Agricultural Sector: A Case Study of the Kenya National Farmer's Federation.

- I.....voluntarily consent to participate in this research study.
- I understand that even if I agree to participate, I can withdraw at any time and refrain from answering questions.
- I understand I have two weeks to revoke consent for the use of interview information. In this case, the content will be erased.
- I was given written descriptions of the study's aims and methods, as well as an opportunity to ask questions.
- I understand that participating involves providing various data for the study project's analysis.
- I understand that my participation in this study will not immediately benefit me.
- I consent to having the interview recorded on audio.
- I agree that my identify will be kept confidential when the research findings are released. This is achieved by using a different name and concealing any information from the interview that would reveal my identify or the identities of the persons I'm discussing.
- Excerpts of my interview may be used in unpublished papers, conference presentations, or other media channels.

- I understand I may need to tell authorities if I advise a researcher that I or someone else is in danger. They will discuss this with me beforehand, but reporting may be required with or without my agreement.
- Signed consent forms and audio recordings will be held in a restricted place until the audit committee validates the results.
- I understand that my interview tape will be kept for two years after all personally identifiable information is deleted.
- I have the legal right to access the data as long as it is kept in the above-mentioned manner, within the parameters of the freedom's legalization.
- I can contact any participant in the study for further information or clarification.
- *The study participant's signature*
-
- **A participant's signature.....Date.....**
-
- *The researchers' signature*
-
- My perspective, the individual is giving informed permission to participate in the research.
-
- **The investigator's signature.....Date.....**

APPENDIX II
QUESTIONNAIRE

The purpose of this study is to assess how M&E procedures affect NGOs' performance in the agricultural sector. Kindly provide the most honest response you can to the following questions. Please be advised that there are no right or incorrect responses to this; it is NOT a test. Once again, thank you so much for your involvement in this project.

SECTION 1: Personal Information

1. Name.....

2. Gender:

- Male
- Female



3. Age:

- 18 - 25 years
- 26- 33 years
- 34- 41 years
- 41 years and above

4. What is the length of your association with KENAFF, the Kenya National Farmers Federation?

- a) A year or less
- b) 1–5 years
- c) 6–10 years

d) Ten or more years

SECTION 2: Objective 1 - Influence of Frequency of M&E Data Collection on NGOs

Performance

Please select how much you agree or disagree with the following statements on data gathering methods. 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree, 5 = Strongly Agree, and 4 = Agree

Statement	5	4	3	2	1
5. The number of times data is collected per agricultural season is adequate.					
6. The number of times data is analyzed annually is sufficient for effective decision-making.					
7. The types of data being collected (qualitative vs. quantitative) are appropriate for the assessment of agricultural practices.					

8. What impact, in your opinion, does the frequency of data gathering have on the general effectiveness of NGOs working in the agriculture sector, particularly the KENAFF?

SECTION 3: Objective 2 - Influence of M&E Stakeholder Engagement on NGOs

Performance

Regarding stakeholder participation, please indicate how much you agree with each of the following statements. 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree, 5 = Strongly Agree, and 4 = Agree

Statement	5	4	3	2	1
9. The number of stakeholders involved in the program is sufficient.					
10. The types of stakeholders involved are diverse and representative of the community.					
11. The frequency of stakeholder meetings is adequate for effective collaboration.					

12. In what ways can stakeholder participation enhance the overall efficacy of NGOs in the agricultural sector, specifically the KENAFF, in your perspective?

SECTION 4: Objective 3 - Influence of Integrating Local Knowledge in M&E on NGOs

Performance

Please indicate how much you agree or disagree with the following comments about KENAFF broadcasts incorporating local knowledge. 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree, 5 = Strongly Agree, and 4 = Agree

Statement	5	4	3	2	1
13. The number of local practices integrated into KENAFF programs is sufficient.					

14. The level of local stakeholder involvement in decision-making is satisfactory.					
15. Community acceptance or satisfaction with the integrated practices is high.					

16. In your opinion, how does integrating local knowledge contribute to the overall performance of NGOs in the agricultural sector, specifically the KENAFF?

SECTION E: PERFORMANCE OF KENAFF

Please select how much you agree or disagree with the following assertions about KENAFF's performance. 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree, 5 = Strongly Agree, and 4 = Agree

Statement	5	4	3	2	1
17. The financial performance of KENAFF, such as return on investment, is satisfactory.					
18. The project completion rate at KENAFF meets the expected timelines.					
19. Stakeholder satisfaction with KENAFF's performance is high.					
20. The adoption rate of agricultural practices among target communities is significant.					

SECTION 5: Additional Comments and Suggestions

21. Do you have any other comments or suggestions regarding how monitoring and assessment processes affect the activities of NGOs in the agricultural sector, particularly in relation to the KENAFF?

APPENDIX III:

ERC CLEARANCE



Mount Kenya University

REF: MKU/ISERC/3718
TO: ALI ABDI ALIO DUBE
REG: MAME/2022/50868
Date: 21 May 2024

Dear Sir/Madam,

RE: INFLUENCE OF MONITORING AND EVALUATION PRACTICES ON THE PERFORMANCE OF NON-GOVERNMENTAL ORGANIZATIONS IN THE AGRICULTURAL SECTOR: A CASE STUDY OF THE KENYA NATIONAL FARMER'S FEDERATION.

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **2762**. The approval period is **21/05/2024 - 20/05/2025**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
Call: +254 709 153 000 | +254 709 153 200
Email: info@mku.ac.ke, Web: www.mku.ac.ke
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APPENDIX IV:
LETTER OF INTRODUCTION



**APPENDIX V:
RESEARCH LICENSE**



REPUBLIC OF KENYA

Ref No: **147897**



**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Date of Issue: **04/June/2024**

RESEARCH LICENSE



This is to Certify that **Mr. Ad Abdi Ali Dube Ali** of **Mount Kenya University**, has been licensed to conduct research as per the provision of the **Science, Technology and Innovation Act, 2013 (Rev.2014)** in **Kisumu** on the topic: **Influence of Monitoring and Evaluation Practices on the Performance of Non-Governmental Organizations in the Agricultural sector; A case study of the Kenya National Farmer's Federation**, for the period ending : **04/June/2025**.

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Applicant Identification Number: **147897**

Walter M...

Director General

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APPENDIX VI:
MAP FOR THE STUDY AREA

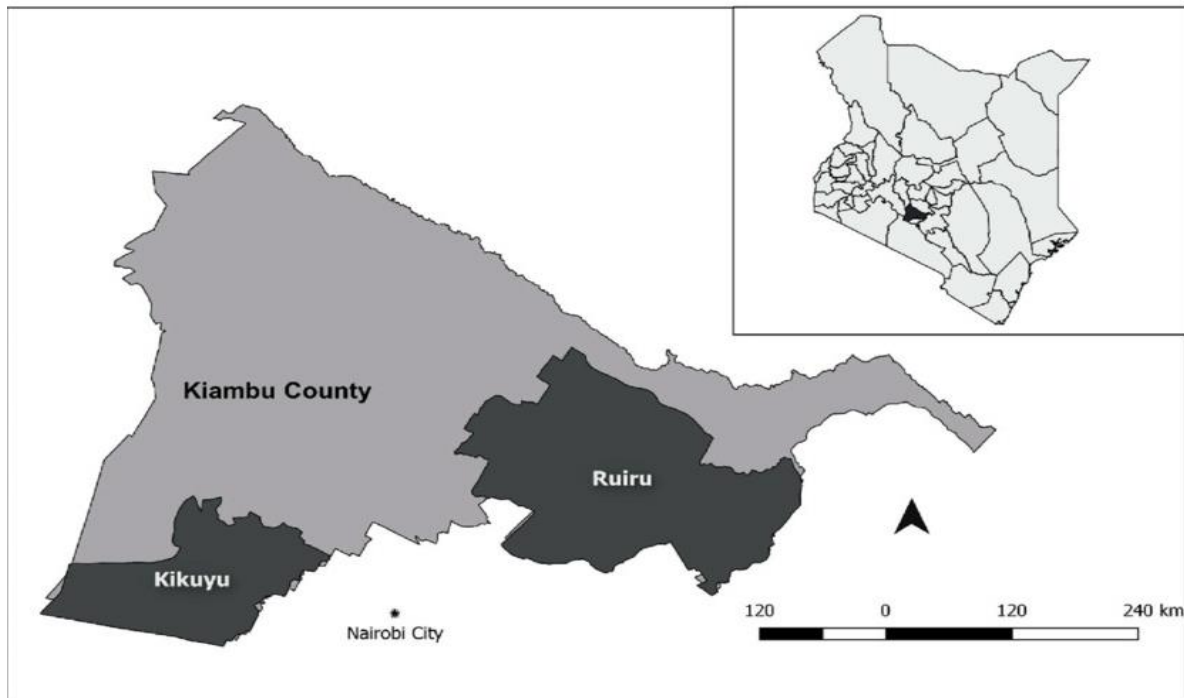


Figure 4: Study Area

Researcher (2023)

APPENDIX VII:

TURNITIN REPORT



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Submission ID trn:oid::1:3060534081

ALI ABDI ALIO DUBE

INFLUENCE OF MONITORING AND EVALUATION PRACTICES ON THE PERFORMANCE OF NON-GOVERNMENTAL ORGANIZ...

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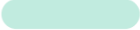
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