MONITORING AND EVALUATION SYSTEMS' INFLUENCE ON KENYA CLIMATE SMART AGRICULTURE PROJECT PERFORMANCE, A WORLD BANK-FUNDED INITIATIVE IN UASIN GISHU COUNTY, KENYA.

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DECLARATION AND APPROVAL

Declaration

This research project is my original work and has never been presented for any academic award in any institution.

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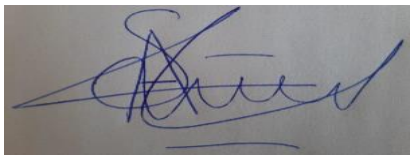
Signature:  Date: 1st July 2025

Approval

This research project is being submitted for examination with my approval as University supervisor.

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DEDICATION

This research is dedicated to my family, Mr. and Mrs. Twaem, for their continued support of my studies.

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First of all, I thank God for good health, strength, guidance, and the opportunity to achieve my life's ambitions. I also convey my heartfelt appreciation to my outstanding supervisor, Dr. Stella Karimi, whose steadfast support, instructive counsel, and valuable feedback guided this research. I also extend enormous gratitude to Mount Kenya University for supporting and assisting me through my educational path; this journey would not have been feasible without them. A special thank you to my mentors, Mr. Collin Marangu and Dr. Nathan Psiwa, for their ongoing words of encouragement, helpful instructional assistance, and constructive criticism throughout this research. In addition, I want to express deep thanks to my loved ones, colleagues, and fellow students for their continued encouragement throughout this course. May God abundantly bless each of you for your involvement in my academic journey.

ABSTRACT

In response to international donors' and other non-profit organizations' demands for transparency in project development, Kenya's agriculture sector has adopted an array of monitoring and evaluation systems that accurately monitor results. Nevertheless, some donor-funded agricultural initiatives stay stagnant or halt, underscoring the urgency to look into all possible variables impacting project outcomes. Recognizing M&E system contribution in agricultural initiatives funded by external donors is vital for maximizing the allocation of resources, developing project design, and positively impacting small-scale farmers' livelihoods. The study thus sought to understand how M&E systems influence agricultural productivity in KCSAP, a World Bank-funded initiative in Uasin Gishu County Kenya. Specifically, the study determined how human capacity, work plan, routine program monitoring, and data use contributes to project performance, coordinating project goals, outcome optimization, decision-making, and resource allocation. The study was informed by three theories: the Theory of Change, Empowerment Evaluation Theory, and Utilization-Focused Evaluation Theory. The study process included data collection via structured questionnaires and interview guides to 250 respondents, consisting of monitoring and evaluation officers, farmers, and other project stakeholders. SPSS version 25 was used to process quantitative data, alongside regression analysis outputs such as Pearson correlation and ANOVA. The qualitative evidence acquired was examined thematically. The findings exhibited a 2.28 composite mean score, indicating a modest influence of M&E human capacity to Kenya- Climate-Smart Agriculture Project. This was confirmed by a statistically significant positive correlation with a <0.001 P-value emphasizing the M&E human capacity contribution project succeeding, with a 43.5% performance variance. The composite 3.35 average score also established that the M&E work plan contributed relatively to Kenya- Climate-Smart Agriculture Project success. The

<0.001 p-value confirmed its statistical significance in improving the project's outcome, corresponding to a variance of 39.9%. The key work plan attributes behind this positive outcome were explicit goals, regular revisions, and engagement with stakeholders. Routine program monitoring proved effective in enhancing farming practices, minimizing waste, and boosting yields, as a combined average score of 3.26. A p-value of 0.031 laid out the statistical importance of the variables' connection, pointing to its impact on Kenya- Climate-Smart Agriculture Project performance, making up a 39.9% variance. The analysis of data use and its role in Kenya- Climate-Smart Agriculture Project yielded an encouraging outcome with a moderate 3.45 average rating, implying efficient exchange of knowledge, which facilitated access and decision-making. The findings confirmed that data use contributed to project performance. The above results show that M&E's human resources and work plan have the most significant effects on Kenya- Climate-Smart Agriculture Project performance. Data use, on the other hand, has a small effect, even though it is important. In this respect, the study recommends the use of advanced data management tools, personalized M&E training for stakeholders, and improvement of M&E frameworks tailored to agricultural projects. Further research could explore other factors influencing World Bank-funded project Performance, such as funding models, policy implementation, and the integration of technology.

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ABBREVIATIONS AND ACRONYMS

FAO:	Food and Agriculture Organization
GAFSP:	Global Agriculture & Food Security Program
IFPRI:	International Food Policy Research Institute
KCSAP:	Kenya Climate Smart Agricultural Project
M&E:	Monitoring and Evaluation
MOALD:	Ministry of Agriculture and Livestock Development
NGOs:	Non-profit Organizations
WB:	World Bank
CBOs:	Community-Based Organizations
ANOVA:	Analysis of Variance

CHAPTER ONE: INTRODUCTION

1.0 Introduction

This section or chapter establishes the subject matter by presenting comprehensive background knowledge and pointing out the issue that triggered the investigation. The chapter's other sections address the research objectives and hypothesis, significance, scope, limitation, delimitation, and study assumption and conclude by defining key operational terms.

1.1 Study Background

M&E frameworks use, or adoption has surged in popularity, particularly due to unusual climate change and concerns about food security that have since grown worse in many nations around the world (Muvhuti, 2023). In fact, despite over fifteen years of practical experience in climate change adaptation initiatives, M&E has just recently earned a greater spotlight, awareness, and order as a strategically important toolkit for primarily assessing what seems to be performing properly and what is not, including measures to impact projects and improve results (Kim & Lee, 2021). Such success is mostly due to the positive impact of M&E vital components, which include human capacity, work plan, routine program monitoring, and data use. These aspects guarantee credibility, efficiency, informed choices, and continuous project development, which ultimately improve agricultural output and adaptation to climate change.

Notably for agricultural and extension investments, M&E frameworks have demonstrated their critical roles in tracking and assessing project performance and effectiveness (Otundo 2024). For example, within the global arena. M&E systems used have improved significantly in agriculture-related initiatives. Such widespread use has been inspired by an increasing desire for accountability and productive resource utilization. This is given the recent empirical evidence, which has shown

how much a well-designed oversight system can greatly enhance the outcome or results of projects (Mbugua, 2024). Levinson and Herforth (2022), for instance, noted that in agricultural projects, M&E framework ensures desired outcomes are fulfilled and resources are effectively managed.

The NAP-Ag (National Adaptation Plan) represents a few of the M&E system examples designed for oversight and evaluation of developments within agricultural sectors (Chingarande et al., 2020). This oversight system, as reported by FAO & UNDP (2023), has enabled many countries, including Latin America, Africa, and Asia, to make major strides in agriculture (Adetuyi et al., 2022). There are multiple successful stories regarding the vital impact of M&E systems use in directing projects (Bordon, 2020). Brazil, for instance, has adopted M&E systems in its farming sector, which happens to be a key economic driver. As a known agricultural powerhouse, Brazil produces farm products such as sugarcane, coffee, and soybeans, while coming in second behind the US in livestock, poultry, and cotton production.

The widespread use of M&E mechanisms in brazil has been accompanied by beneficial outcomes, such as increased yields. M&E systems assist in tracking progress, detecting problems, and carrying out measures to improve output and agricultural operations effectiveness, and subsequently, foster sustainable growth by tracking the ecological and communal impact associated with agricultural programs (Zaman et al., 2023). Moreover, comparable positive accounts of effective adoption of such oversight systems have been heard in India, where the adopted M&E system based on technology has proven efficient for tracking agricultural projects (Suresh Kumar & Palanisami, 2021). This has prompted many donor organizations to include M&E as a prerequisite for every project they fund.

The FAO, as a key organization involved in various agriculture-related projects globally acknowledges the relevance of M&E in guaranteeing initiatives' sustainability while generating

the desired outcomes. Other than FAO, the World Bank and a couple of other international agencies have voiced support for M&E frameworks integration into different development initiatives for greater success (Wolfensoh, 2020). As a result, a growing percentage of states from the highlighted continents have begun deploying different M&E systems to oversee agricultural programs (Amin et al., 2023). Such widespread acceptance has helped ensure surveillance, training, and continual advancement.

Despite global progress noted in the implementation of M&E systems in agricultural initiatives, issues pertaining to technical expertise and alignment and collaboration have been noted to impede successful adoption of such systems (Mbugua, 2024). Studies by Levinson and Herforth (2022) illustrate that, notwithstanding the contribution of M&E systems in guaranteeing optimal resource use and outcomes, their effectiveness still hinges on ensuring the availability of competent staff, structuring clear work plans, and continuously monitoring the projects. While various oversight frameworks adopted, such as the NAP-Ag M&E system, have assisted in enhancing accountability and efficiency in agricultural projects (Chingarande et al., 2020), observations by FAO and UNDP organizations reveal that some countries struggle to retain the workforce needed for efficient execution. Such human capacity issues stem primarily from gaps in M&E competencies, teamwork, the absence of a globally recognized training, and limited funding.

Moreover, while the World Bank and other donor organizations push for M&E system incorporation into agricultural development (Wolfensoh, 2020), discrepancies in work plan implementation constrain their true potential (Amin et al., 2023). Adetuyi et al. (2022), for instance, outlines challenges associated with the M&E Work Plan, confirming that many such projects grapple with spending and planning challenges, including resource accessibility obstacles that impair M&E operations. Additionally, routine monitoring of such initiatives has been

determined as an obstacle, with countries in charge of developments lacking expansive locale-specific standards, data quality oversight measures, and needed supplies for regular oversight. This is evident in countries such as Brazil and India, where, despite the success stories associated with M&E system adoption, routine monitoring of development projects remains a great challenge (Bordon, 2020; Suresh & Palanisami, 2021). Such challenges have slowed down implementation and response to issues emerging in projects.

In Africa, agriculture's essential contribution to promoting economic development, poverty reduction, and ensuring improved nutrition and food security is presently acknowledged by nearly all regional countries (Kombian, 2021). This follows the so-called structural transition period, in which the social and economic implications of disinvesting in the agricultural sector have become all too clear. Since then, many African countries according to Ba, (2021) have chosen to prioritize agriculture by investing in various projects and employing various M&E frameworks to assess how well the agricultural plans, programs, and ventures have alleviated poverty, tackled food security, and enhanced their sustainable development goals.

The highlighted challenges demand that M&E systems guarantee that agricultural initiatives attain the expected results (Maitho & Kyalo, 2025). As established, many African countries have adopted different oversight frameworks, like the FAO M&E framework, which have all been critical in tracking and assessing various agricultural and rural growth initiatives and policies (FAO & UNDP, 2023). Another M&E Framework, CSAIPs ("Climate Smart Agriculture Investment Plans") established particularly for African countries by the World Bank, and the AAA ("Adaptation of African Agriculture Initiative") with the backing of funding collaborators like the United Kingdom, AFD ("Agence française de développement") and FDCO ("Foreign Commonwealth & Development Office"), the CGIAR ("Consultative Group on International Agricultural Research"),

and other technical partners has been instrumental in enhancing agricultural adaptation, mitigation outcomes, and productivity in general (Plan, 2021).

The subsequent national-level M&E measures entail an evaluation of M&E needs, pursuit, and capability, and particularly an outline of key metrics and subsequent actions for developing an integrated M&E system (Jalango et al., 2024). Testing and improving the highlighted M&E framework has enabled African countries to gather insights to direct both private and public shareholders and funding sources, both regionally and globally, particularly those interested in promoting the expansion of climate-smart agriculture (CSA) in the African continent (Juma, 2024). Each of the M&E frameworks utilized across Africa have significantly contributed to increased climate change adaptability, accessibility to markets, especially for small-scale farmers, and encouraging inclusive rural community growth (Koima, & Mukulu, 2020). Such frameworks involve various tasks, such as data collection, evaluation, and scrutiny, which aim to enhance comprehension of agricultural programs' success and influence.

In Kenya, the agriculture sector remains the backbone, given its undisputable role in long-term economic growth. Though the sector has made noteworthy contributions to the national food supply, economic output, and, among other things, job creation, food security, particularly low productivity, is still an ongoing challenge, given variations in agricultural output attributed to dangers such as pest invasions, climate change, and volatile markets affecting both the prices of input and products (Koima, & Mukulu, 2020). In response to such challenges, there have been many initiatives taken by not only the government but also other international organizations like the World Bank, which has been actively involved in multiple agricultural initiatives in Kenya, most of which are intended to increase productivity as well as reduce poverty (N. Kingiri, 2021). Such initiatives tend to be handled on an accountability basis, with monitoring and evaluation

metric systems being applied to ensure effective funds utilization and assess the influence of various programs.

Given the growing demand by various international donors and other non-profit organizations for transparency in project development and effect, the agriculture sector in Kenya has embraced various M&E systems to track outcomes or results accurately (Koima, & Mukulu, 2020). While there currently exist multiple M&E systems for climate change resiliency or adaptation for agricultural initiatives, both at the global and national stages, the field is nonetheless relatively new; thus, there is yet not enough information about its expansive role and significance (Otundo, 2024). As noted, most Kenyan agricultural initiatives, especially those funded by donors like the World Bank, remain deficient in knowledge or awareness about the contribution of M&E systems and tools towards productivity. This dearth of information points out the demand for an exhaustive study into how M&E systems help boost agricultural output.

This study sought insight into how M&E frameworks contribute towards greater agricultural output in World Bank-funded KCSAP initiatives. KCSAP represents a few initiatives the World Bank financed to solve food insecurity problems through environmentally conscious farming methods. The study5 was conducted in Uasin Gishu County, which is a major hub for numerous KCSAP projects aimed at boosting agricultural output via climate-smart procedures. The initiative prioritizes small-scale farmers, supporting them in developing sustainable agriculture strategies that boost adaptability to changing climates.

1.2 Statement of the Problem

Donor organizations have always been involved in development projects, relief efforts, emergency situation or a combination of both mixture of all three. In Kenya, a large part of the economy is driven by agriculture; however, continual poor performance, inadequate yields, environmental

impacts, and market instability frequently occur, threatening food availability and prosperity (Faling,2020). Addressing such challenges has prompted several initiatives, such as the KCSAP, a program co-funded by World Bank and the Kenyan government to encourage sustainable farming practices to better agricultural productivity (Yatich, 2023; Uasin Gishu County, 2024). However, numerous studies have noted that most donor-aided projects tend to have an insignificant impact in reducing poverty. This is affirmed by African Development Bank study released in 2018, which reported that in Kenya, donor-aided projects contribution is insignificant. (Mlawasi, 2023). Stats shows that neatly 58% of such project funded by donor organization in Kenya often perform poorly particularly in terms of budgeting, completion time and not meeting client needs (Jerotich & Nyang'au, 2024).

The World Bank's 2019 report on donor-funded project performance within Sub-Saharan Africa also revealed that nearly 40% usually fail to meet their targets (Kibe et al., 2024). Some of the causal reasons outlined in the report were weak project management, poor project design, limited institutional capacity, and low stakeholder engagement. Additional investigation by KNBS (Kenyan National Bureau of Statistics) focusing on understanding the status of various development initiatives in Kenya reported consistent failure of such projects to fulfill (KNBS, 2019). Stats reported by the study showed that 53% of the project experienced cost overrun, while only 34% met the completion deadlines. Some of the reasons behind poor performance include lack of stakeholder participation, poor project management, and issues of corruption. Other attributes of poor donor-funded project performance are incompetency by project managers and project teams in effectively managing the projects.

Despite ongoing challenges with the proper execution of donor-funded projects, there is very little knowledge on particulars regarding human capacity limitations, inadequate regular monitoring,

poor work plans, and inefficient data management influence project results (Jahid, 2019; Rumenya & Kisimbi, 2020). Moreover, whereas donor demands M&E incorporation, proper execution remains incoherent, resulting in undesirable results. This important gap within prior research discloses insufficient examination into how the specified parameters affect World Bank-funded KCSAP programs in Uasin Gishu County. Recognizing M&E system contribution in agricultural initiatives is vital for maximizing the allocation of resources, developing project design, and positively impacting small-scale farmers' livelihoods (Becker-Reshef et al., 2020). Thus, Strengthening M&E systems will not just enhance project efficiency, but offer legislators, project managers, and other stakeholder partners valuable information, enabling them to arrive at sound choices about how to reinforce M&E systems and optimize their benefits.

1.3 Objectives of the Study

1.3.1. General Objective

The study's general objective was to explore M&E systems' influence on KCSAP performance, a World Bank-funded initiative in Uasin Gishu County, Kenya.

1.3.2 Specific Objectives

The study was guided by the following specific objectives

1. To examine the influence of M&E Human Capacity and Performance of World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.
2. To establish the influence of M&E work plans on the performance of the World Bank-funded Climate-Smart Agricultural Project within Uasin Gishu County, Kenya.
3. To examine the influence of routine program monitoring on the performance of a World Bank-funded climate-smart agricultural project within Uasin Gishu County, Kenya.

4. To assess the influence of data use and performance of World Bank-funded Climate-Smart Agricultural Project performance in Uasin Gishu County, Kenya.

1.4 Null Hypotheses of the study

The study tested the following null hypotheses.

1. **H_{01}:** Human capacity for M&E does not influence the performance of the World Bank-funded Kenya Climate-Smart Agricultural Project within Uasin Gishu County, Kenya.
2. **H_{02}:** M&E Work Plan does not influence and Performance of World Bank-funded Kenya Climate-Smart Agricultural Project within Uasin Gishu County, Kenya.
3. **H_{03}:** Routine Programme Monitoring does not influence the performance of World Bank-funded Climate-Smart Agricultural Project within Uasin Gishu County, Kenya.
4. **H_{04}:** M&E Data Use does not influence the performance of World Bank-funded Climate-Smart Agricultural Project within Uasin Gishu County, Kenya.

1.5 Significance of the Study

To KCSAP project Management

Recognizing M&E system contribution in agricultural initiatives funded by external donors like the World Bank is vital for maximizing the allocation of resources, developing project design, and positively impacting small-scale farmers' livelihoods. The findings from this study are meant to offer legislators, project managers, and other stakeholder partners valuable information, enabling them to arrive at sound choices about how to reinforce M&E systems and optimize their benefits. This is by bolstering M&E policies and showcasing how such systems can be utilized as an effective oversight tool to help project managers, and more partner non-government organizations gain confidence in projects' credibility and openness and improve outcomes.

Determining the M&E framework's contribution toward the KCSAP project presented helpful insights not simply concerning how it can be adopted to promote accountability, openness, and timely intervention, but additionally how it could be utilized to boost crop productivity in many other similar agricultural initiatives funded by different development funding bodies like the World Bank.

To researchers and scholars

The research's discoveries are fundamental towards comprehending the significance of various M&E systems on similar programs. This inquiry is crucial since it guarantees that investments in agriculture meet both immediate goals and contribute to the agricultural sector's long-term sustainability and survival. The study addresses the effective use of resources by analyzing the link between M&E budgets and project outcomes, providing vital facts that guarantee adequate funds are given out to optimize the project's influence. The insights learned thus act as an outline for future research in this field by promoting scholarly discussion and the creation of new concepts and frameworks. Researchers can then draw upon their findings when conducting identical research in other projects located in various parts. These insights promise a boost to the universality and practicality of the outcomes, particularly agricultural productivity and economic growth within Uasin Gishu County.

To the government

Finally, the awareness of M&E systems significance on agricultural productivity shall in the future allow government to engage with stakeholders such as project directors, implementers, non-governmental organizations, funding organizations, and those who play a part in the planning and

executing projects to formulate well-informed policies and guidelines based on such mechanisms in comparable initiatives

1.6 Scope of the Study

This subsection explores area of inquiry**,** focusing on the KCSAP agricultural initiative funded by the WB in Uasin Gishu. It outlines the study's content, timeline, and geographic scope.

1.6.1 Content scope

Focusing on KCSAP, an agricultural initiative supported by the Kenyan government alongside WB, this study sought to establish and understand the influence of M&E systems in enhancing agricultural productivity and overall sustainability through accountability. The study utilized a descriptive design to explore significant topics like work plans, data usage, routine program monitoring, and M&E human capacity. These aspects as noted in the findings section proved critical in comprehending the effect of M&E frameworks on agricultural productivity. Data-gathering approaches which comprised questionnaires ensured actionable insights were gathered from KCSAP stakeholders. The outcomes are intended to help create helpful M&E practices and to encourage the widespread adoption of significant approaches to boost productivity in farming within the region.

1.6.2 Timeline scope

The investigation took place from March to the end of July 2024, covering the main research stages. This time frame enabled the methodical and thorough analysis of M&E aspects that influence KCSAP project outcomes.

1.6.3 Geographic scope

This investigation was restricted to Uasin Gishu, one of Kenya's North Rift counties, covering a total 3,345.2 km² land area and bordering Elgeyo Market County, Trans Nzoia County, Baringo County, Nandi County, Kericho County and Kakamega County. The decision to undertake research in this particular area was informed by its distinguishing ecological characteristics and economic endeavors. Particularly, this county serves as an agricultural hub given its agricultural capabilities and its favorable agroecological conditions, all of which inspire profitable land use and farming. Regarding climate conditions, Uasin Gishu County, based on weather reports and patterns, receives heavy and frequent rainfall, with a standard annual rainfall that varies from 624.9 mm to around 1560.4 mm. The rainfall always takes place from March to the month of September, while peaking twice during May and later in August. The mean temperatures also tend to oscillate between 70 and around 290 degrees Celsius.

Some of the farming activities that those conditions support or include are poultry farming, dairy or livestock rearing, horticulture, wheat, forestry, and grain production, establishing the region as a perfect setting for evaluating climate-smart agricultural efforts. Additionally, the actualization of multiple climate-smart agriculture programs to boost agricultural output and build climate preparedness is prompted by the region's susceptibility to changing climates, which is marked by extended droughts, excessive temperatures, and unplanned precipitation patterns.

1.7 Limitations of the study

The inquiry was centered on the Kenya Climate Smart Agriculture Project, limiting the results' relevance and applicability to other World Bank-funded projects. Despite conducting and

analyzing the study well, several obstacles emerged. First, the research's geographic target limited the outcomes' applicability to other areas exhibiting distinct agricultural products or economic patterns. That is, the contextual considerations particular to this investigation region would not be relevant elsewhere. This limitation was addressed by reviewing comparable initiatives in other areas, broadening the study's significance and dimensions. Secondly, relying on data supplied by those involved brought up the likelihood of incorrect responses and arbitrary interpretations. Despite confirmation regarding the research's intent, it was anticipated that some participants could present undesirable responses thereby jeopardizing the relevance and genuineness of their answers. This limitation was also addressed by giving respondents assurance of their anonymity and confidentiality to ensure they provide honest answers.

1.8 Delimitations of the Study

The key concern of this inquiry was the perspectives and observations of project management groups, M&E personnel, and financial supporters participating in KCSAP within Uasin Gishu. Other aspects, like policy implementation and market access, were not researched. Additionally, this investigation was focused on Uasin Gishu County, making the practicality of the results and its relevance to other regions uncertain. The investigation employed questionnaires and interviews, including statistical tools, to acquire and exhaustively analyze data. Such limitations supported an organized, thorough examination without compromising the study's significance for agricultural M&E systems. Regardless of the above limitations, the findings offer insightful information to boost KCSAP performance.

1.9. Assumptions of the Study

In this study, the findings from Kenya Climate Smart Agriculture Project were assumed to reflect all World Bank-funded agricultural initiatives, even though such projects may differ. Secondly, it was assumed that the specific M&E frameworks employed in KCSAP would be identical and applicable to other projects. Moreover, the study assumed that the available data that has been examined is complete, accurate, and representative of the initiative's effectiveness. Further, the assumption that targeted donor groups would agree to cooperate and offer information about their experiences with the M&E system used in agricultural projects was made. Finally, the opinion shared by the few donors interviewed was assumed to represent the general experience of all NGOs within Uasin Gishu.

1.10 Operational Definition of Key Terms

M&E Human Capacity	Includes the technical competencies, abilities, and background of those responsible for project oversight operations.
M&E Training Level	The stage of proficiency attained by oversight officials
M&E Experience	Knowledge background gained by taking on various roles
M&E Staff Population	Size of oversight staff members
M&E Resource Availability	Equipment, software and funding available to support oversight activities

M&E Work Plan	A laid-out plan describing tasks, schedules, and assets for carrying out project monitoring.
Detailed M&E Work Plan	Comprehensive work plan containing oversight goals.
Regular Plan Updates	Continuous adjustments to oversight workplan
Project Objective Alignment	Oversight plan conformity with project goals
Stakeholder Involvement	Collaboration between oversight officials and project stakeholders
Routine program monitoring	This is a streamlined data-gathering, assessment, and dissemination of program operations and outcomes to guarantee the project stays on the right path.
Data Collection Frequency	Rate at which data is collected
Data Quality	Reliability and wholeness of data gathered
Data usage	The effective utilization of data acquired during oversight processes to guide choices, optimize resource use, and enhance project results.

Data Analysis Frequency	Rate at which data is analyzed conducted per period.
Agricultural Productivity	The profitability from the farming process, often measured as the proportion of farm outputs to inputs.
Crop Yield	Amount of food crops harvested or obtained from a unit of land
Livestock Production	Rearing animals and harvesting their products
Resource Use Efficiency	Optimal resources are used to increase agricultural output while reducing waste.
Climate Change Resiliency	Adaptability to the negative climate change effects.
Agricultural Revenue	Income generated from agricultural-related activities
Government Policies	Set out standards and regulations influencing agricultural projects.
Donor M&E System	Measures oversight mechanisms and reporting requirements established by financing institutions or external donors like the World Bank.
Resource Availability	The abundance of ample resources, like human and financial, for effective project execution and success.
CSAP	Climate-Smart Agriculture initiative supported by the Kenyan government in partnership with the World Bank

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter looks into the crucial roles that M&E systems play and how they influence agricultural production, putting greater emphasis on Kenyan projects that are reportedly receiving World Bank support or funding. The three key themes discussed include Agricultural Productivity in World Bank-funded projects, the M&E human capacity, M&E data use, Routine Program Monitoring, and finally M&E work plan in agricultural productivity. The theoretical and conceptual underpinnings that inform this research are further explored in the review.

2.1 Empirical Literature

This section covers evidence from empirical studies focusing on KCSAP, and World Bank-funded projects performance. It examines M&E human capacity, M&E data use, Routine Program Monitoring, and finally M&E work plan in agricultural productivity.

2.1.1. World Bank-funded KCSAP Performance in Uasin Gishu County Kenya.

Agricultural productivity has plummeted over the years recently, resulting in a severe food shortage and many other issues, including increased poverty. Studies into this current situation such as Steensland (2021), Vandercasteelen (2022) and many more have mostly linked such challenges to a shortage of readily available inputs, inadequate investment in agricultural infrastructure and technological advances, natural resource constraints, and weather interruptions, among many other factors. As a result, boosting agriculture has evolved into an essential goal for numerous nations and groups, with cultivating crops at the epicenter of the advancement agenda

(Onyiriuba et al., 2020). The World Bank's aid to numerous emerging economies around the globe to discover and adopt remedies that address their food security concerns remains visible.

The World Bank, for instance, has been working with the farming industry, whereby they have collaborated with local authorities on multiple projects to enhance climate adaptability, output, and long-term viability. Research by (Swinnen & Kuijpers, 2020) estimates that the World Bank's yearly spending on multiple global initiatives usually varies between US dollars 15 to 20 billion. Raga, (2020) acknowledge that these funds have supported several nations to meet their respective national objectives. In the agricultural sector, the World Bank's assistance with livestock farming and cultivation of crops has proven invaluable in leveraging institutional innovation through encouraging small-scale producers to take part in the agricultural products supply chain (Kim & Lee, 2021). The bank has continuously called for climate-smart approaches to agricultural initiatives to boost food security.

Varga (2020) noted the significant investments the World Bank has made in agribusiness, with nearly all of the institution's interventions centered around inclusiveness, efficiency, and sustainable development. The World bank's strategy toward accomplishing results and maximizing impact is often grounded in actions or interventions, including organizational attributes (Wanyama et al., 2020). Based on Aremu et al. (2021) inquiry, the World Bank's anticipated diversity, efficiency, and long-term sustainability goals have contributed to agricultural product development mechanisms. The bank's endeavors have been fundamental toward promoting sustainable farming methods, expanding input use, closing produce deficits, and bettering farmer produce and access to markets (Swinnen & Kuijpers, 2020). The World Bank's strategy to address food scarcity and inequality, both of which are typically linked with agricultural output, is clarified within the lens

of their more extensive rural growth plans, encompassing staple crops and animal farming, including backing other growth initiatives.

The World Bank is greatly credited for supporting many projects to develop rural economies by means of financing, policy debates, guidance, and analyses (Raga, 2020). In particular, the monetary support of different farm initiatives globally, particularly within Africa, has been essential for addressing the present food shortages while guaranteeing their future viability (Wangu, 2021). As productivity achievement rates have revealed, most World Bank-funded agricultural projects have greatly enhanced results in regions targeted by the initiatives. Study evidence by Kim (2021). shows that many World Bank-funded initiatives have proved successful in boosting livestock and crop production and promoting the entry of smaller-scale farmers, including medium-sized enterprises, into agri-food supply chains through new institutions like cooperatives and productive partnerships (van Niekerk, 2020). Additionally, the World Bank's initiative has been beneficial, more so in pushing for the enactment of sustainability and food-safety laws, as well as intelligent climate practices.

Since 1960, Kenya has received support from the World Bank, with total commitments between then and 2011 estimated to be around $4.2 billion towards various projects (Kibet, et al., 2024). Among the World Bank-funded initiatives in Kenya is KAPAP (Kenya Agricultural Productivity and Agribusiness Project), which appears to be effective (Wanyama, et al., 2020). As previously stated, this project has contributed significantly to revitalizing the nation's extension network by partnering with private service companies to increase assistance and resource access (Vandercasteelen, 2022). The Bank's assistance in pilot regions has paid off with greater yields of multiple agricultural products like maize, milk, beans, honey, and sorghum.

Deductively, these studies acknowledges the World Bank support for various agricultural initiatives has dramatically boosted output, long-term viability, and integration of farms and agribusiness corporations. However, substantial challenges still exist in achieving multiple objectives, including stimulating agricultural productivity and development, especially in vulnerable and conflict-affected nations. For instance, development initiatives offering emerging economies socioeconomic aid usually have intangible outcomes, making oversight and appraisal of project goals and outcomes challenging (Searchinger et al., 2020). Thus, to identify, track, and measure development project success, adaptation to novel techniques and ideas is needed to ensure World Bank funding for development projects is effectively used to safeguard ecosystems, alleviate poverty, and raise living standards, among many other objectives.

2.1.2 M&E Human Capacity and World Bank-funded KCSAP Performance.

Strong (M&E) human capacity is frequently needed for better project performance. Nabibya et al. (2023) note human capacity vital role in M&E, particularly in ensuring project success. They point out two key aspects, namely the experience and expertise levels, which they believe professionals undertaking M&E activities should possess. The observations align with other studies that also ascertain that adequate human and institutional capacity are critical in ensuring the M&E frameworks employed work effectively (Mushori et al., 2020). This is considering that project complexities tend to vary, necessitating various expertise levels. For example, contractual projects or those involving different stakeholders always require higher skills from M&E officials.

Similarly, Musili (2020) explored the influence experienced personnel have on project results. In that regard, he recommended that M&E staff be invigorated with the proper expertise or skills in gathering information, record keeping, analysis, and submitting reports. Dipela and Mohapi (2021) consider such measures critical for recognizing and swiftly tackling any potential obstacles. In

another study, Nabibya et al. (2023) stated that considering the period of time required to evaluate enormous data and the great deal of attention required, M&E personnel ought to exhibit high commitment and devotion. Kadel et al., (2021) noted that it enables them to operate in tough circumstances beyond typical working hours.

Moreover, practical communication abilities were another essential requirement for M & E personnel, given they are usually expected to communicate or submit reports to their stakeholders and project leaders about growth and possible challenges (Davis, et al., 2021). According to Musili (2020), strong communication skills strengthen cooperation and build investor trust in the project, particularly when obstacles are handled promptly. Accordingly, having proficient M&E staff that have practical interpersonal abilities and are devoted to doing their work is essential for the project leaders to accomplish high success rates or efficiency (Adugna, 2021). This clarifies why project leaders who seek to meet goals often invest extensively in human capital. According to Akinyi & Kisimbii (2020), potent human capacity has previously been correlated to the fulfillment and sustainable existence of projects. Similarly, most projects' personnel often determine profitability and are responsible for their execution.

Even then, human capital's influence on the success of projects and their capacity to guide other staff members in project implementation cannot be ignored. The economic performance of most projects is driven by M&E personnel overseeing their implementation and future viability (Abeysiriwardana & Jayasinghe-Mudalige, 2022). Having proficient M&E human resources is, thus, essential for projects to do even better and remain sustainable over time. Ensuring M&E personnel receive adequate training and are skilled in their positions often helps improve the project's effectiveness (Kegoli, 2023). A study by Musili (2020) posits that M & E program staff

deserve resources and incentives that equip them with essential skills, tools, and time to effectively perform their oversight roles during project implementation.

These studies all acknowledged the M&E personnel critical role in achieving the desired project outcomes. The concern with human capacity for M&E is that other metrics, such as Budget, timeliness, stakeholder satisfaction, and specifications, usually take precedence over human capacity. As a result, there is always a dearth of awareness about the benefits of having a skilled project management team. However, not much evidence is available to demonstrate how human capacity inefficiencies in terms of inept M&E training, lack of technical experience, low staff population and resource availability have led to poor performance in World Bank funded projects and the value of having competent M&E human capacity for increased project performance. Investigation into human resource capacity concerning project performance determined that M & E personnel ought to be provided with incentives and resources like tools, time, and skills to allow them to accomplish their goals of increasing project performance. The empirical evidence above clearly shows why project managers should consider human capacity when hiring M &E personnel. Recognizing this fact necessitates prioritizing M&E expertise and experience when recruiting personnel for such roles.

2.1.3 M&E Work Plan for and World Bank-funded KCSAP Performance

Efficient work plans are usually important in projects since they set forth the strategy, leadership, oversight, assessment, and record-keeping processes. According to Ba, (2021), M&E work plans are usually intended to motivate or assist the project or program employees when executing projects to meet intended goals. It is also meant to help ensure that the plans are correctly documented (Kadel et al., 2021). van den Burg et al. (2023) while investigating target indicators associated M&E workplan with project performance and impact. With respect to project execution

and performance, the intent of monitoring is always to ensure project implementation is not only efficient but also thriving. This process, as noted by Lawson et al., (2020) is continuous as vast information about project activities is usually collected periodically during the actual implementation. Information from quarterly implementation reviews, semi-annual reports, regular technical supervision, and technical reports are typically crucial to managers and stakeholders during decision-making (Sambaya, 2023). By reading through such reports, they identify project constraints and challenges, such as financial, human resource, and technical, and promptly act on them using corrective solutions. This process ensures that the project remains on course and increases performance.

The M&E Work Plan also entails continuous project impact monitoring, precisely its success based on outcomes (Musyimi & Ondara, 2022). Based on logical frameworks, this process ensures that all success indicators are noted and applied in subsequent projects. In agriculture, M&E project performance usually entails tracking physical, financial, and human resources and documenting and transforming them into outputs, results, and, subsequently, impacts (Mwaguni, 2020). This process demands that project planning details be disclosed consistently and on a timely basis. This is critical to project stakeholders in ensuring that the information provided provides evidence and lessons to optimize existing project performance and future designs (Allen et al., 2022). GAFSP initiatives, for instance, are usually guided by a specific M&E Plan that fulfills two essential functions, which are to point out the critical GAFSP M&E Framework features such as indicators, reporting prerequisites, and tools, as well as describe their application at different project cycle stages during operation (Swinnen, & Kuijpers, 2020).M&E work plans are usually created to enhance crop yields, increase pliability to unprecedented climate variations, and, most significantly, tackle food shortages issues.

Steven Ssebale (2024) concluded that M&E plan is essential for agricultural and rural growth initiatives because it identifies their goals, indicators, and data sources and details its oversight and assessment operations. It also assists in determining the resources involved for M&E operations and guaranteeing that all information is systematically gathered and assessed in a standardized way. M&E work plans predominantly address the project's results and effects (Hamel, 2019). The resolved for project surveillance is frequently to determine how successful they are by evaluating their effectiveness, especially in fulfilling time-bound objectives and timelines. This process tends to involve reviewing data gathered by means of study examinations, inquiry, and end-of-project assessments. Wickert et al. (2021) observed that the impact of examination and performance in general tend to boost managerial decisions. In particular, impact analyses regularly guarantee that initiatives stay apprised while ensuring the targets and intended results are met.

According to Diaz et al. (2021), experiences acquired through such processes are subsequently integrated into project planning. Thus, M&E plans guarantee that projects are executed and run properly. In agricultural projects, such plans consistently guarantee that results are assessed based on their usefulness, progress, and impact. This normally assists in improving small-scale farmers' adaptation capacities while minimizing their proneness to risk. The M&E plan operates as an outline that project managers refer to when executing M&E responsibilities (Carboni et al., 2024). This plan assists in ascertaining the amount of assets and resources, personnel available, and the expertise required to conduct M&E tasks. The M&E plan clarifies the processes for collecting and analyzing data and identifies the key performance indicators that require scrutiny (Okafor, 2021). This allows Stakeholders to monitor project outcomes, pinpoint areas for growth, and arrive at knowledgeable decisions concerning project management and efficient resources utilization.

As confirmed by various studies, more so, Jahid (2019), a workplan remains crucial M&E tool that outlines procedures for carrying out and monitoring project operations, sets forth the project's strategy, leadership, oversight, assessment, and record-keeping processes. However, this process is often poorly done resulting in a lack of detailed M&E work plans, which are not updated regularly, and lack both project objective alignment and Stakeholder involvement. Proper planning is thus essential for the M&E systems to perform and be more effective (Pearce et al., 2023). Such instances always highlight the importance of writing the M&E plan's operational guidelines in advance (Koima & Mukulu, 2020). Establishing an M&E plan on time, not only helps stakeholders gain insight into the task before them but also informs strategists about the duration and finances necessary for an M&E work plan to be carried out successfully (Thomas, et al., 2021). Ethical conduct encourages broad participation with different stakeholder groups, and those charged with executing the plan must be notified and engaged during its development.

2.1.4 Routine Program Monitoring for M&E and World Bank-funded KCSAP Performance

Routine program monitoring is arguably crucial to ensuring the successful implementation of donor-funded projects. This process offers valuable data or information that allows project managers to detect issues and introduce changes that ultimately ensure the targets or objectives intended are met. Muli et al. (2020) generally defined routine program monitoring as understanding the system's status by observing or employing a monitoring device to detect changes. Simply put, routine program monitoring is an organized procedure of gathering, evaluating data, and regularly applying insights gained to monitor the approaches and techniques used to attain a specific goal (Cabili, et al., 2021). The methods and techniques monitored usually get backing from some management activities, like staffing, funding, and time management. More notable is the relationship between approaches, techniques, and project outcome objectives.

Evidence reveals that most project targets tend to hinge on methods and techniques they could yield. This means that monitoring as a continual function in public projects typically requires planned data gathering based on particular parameters (Kerzner, 2022). M&E, as a conventional tool for project management, serves project managers in various ways, more so in improving the project's overall performance and results.

This role is reinforced by Agostino et al. (2023), where the authors contend that M&E's core intent is to enhance output management, outcomes, and their sustainable impact. Monitoring, as noted by, informs not only the project directors but also other involved participants about the project's progress, challenges, and outcomes. Monitoring offers essential information for review, forming the general assessment process (Cabili, et al., 2021). Evaluation involves assessing a project's design, implementation, and outcomes, whether it is ongoing or completed (Khan et al., 2020). It prioritizes timely assessments of an initiative's significance, performance, success, impact, and enduring sustainability. The noted description outlines the M&E process's significance in assisting program administrators in making intelligent choices concerning program activities, provision of services, and efficacy.

In agriculture, routine program monitoring entails constant program assessment to guarantee its successful execution by noticing potential issues or hurdles and making necessary corrections to enhance outcomes. Oshiro et al. (2020) broadly described routine program oversight as a continual procedure of collecting, assessing, and comprehending information to improve public project effectiveness. In agriculture, this process entails organized or periodic gathering of information about farm activities and funding, farmer education, partnerships, and adjustments to crop production (Ocharo et al., 2020). The insight gained from such an oversight process is then utilized

to ensure that project activities align with its intended aims (Mahmoud Saleh & Karia, 2024). This repetitive process frequently calls for meticulous data collection to ensure all metrics are captured.

Adrian et al. (2023) regards monitoring as a valuable instrument for organizations, given that it backs basic structures by offering valuable information concerning a firm's regular operations and related program issues for scrutiny. Kombian (2021) emphasized this relevance while additionally recommending consciousness when evaluating programs for any possible shifts that could happen gradually. Numerous investigations have proven the significant impact or influence that routine program monitoring has on agricultural productivity. Hazell and Timu's (2021) study, for example, observed that regular oversight of programs increases accountability and rapid deployment of farming interventions, leading to increased yields. Cabili et al (2021) confirmed this by referencing an IFPRI inquiry, which observed that areas practicing routine program oversight realized yield increases of roughly 20 percent compared to other regions.

Investigations by the World Bank have revealed that economies with working oversight programs often experience greater agricultural yields. Levinson and Herforth (2022) similarly noted such an impact as they observed that regular oversight of programs guarantees the sustainability of agricultural projects. The findings disclosed a beneficial relationship, indicating that regular program oversight helps maintain agricultural initiatives. This additionally implies that agricultural programs were effective when firms carried out regular program surveillance (Raman, 2024). Current empirical studies have consistently demonstrated that regular program surveillance boosts productivity and the initiative's sustainability through fostering transparency and efficiency. In a separate investigation focusing on educational project results, Ocharo et al. (2020) observed the necessity for routine program monitoring throughout the program's actualization cycle, as he found that it resulted in greater stakeholder engagement. Resources for management, such as funding,

recruitment, and task scheduling, help facilitate these procedures and tactics. In agricultural production, this reveals that a regular program monitoring process is critical to achieving agricultural project sustainability because it boosts stakeholder engagement.

While routine program monitoring is critical to the effectiveness of M&E systems (Muli et al., 2020), inconsistencies in periodic data collection frequency and time, low data quality, and underutilization of data for decision making lead to underachievement due to delays in discovering challenges and missed intervention prospects (Ocharo et al., 2020). Moreover, empirical evidence indicates a lack of expansive locale-specific guidelines, measures for controlling data quality, and monitoring supplies. According to Pearce et al. (2023), data collection frequency remains extremely restricted. There are not enough resources, machinery, transportation, and reimbursements for periodic surveillance. Standard methods for gathering and reporting data are not commonly utilized, and variations in reports are somewhat not carefully integrated. This means that monitoring as a continual function in public projects typically requires planned data gathering based on particular parameters (Kerzner, 2022). This considers M&E as a conventional tool for project management, that often serves project managers in various ways, more so in improving the project's overall performance and results.

2.1.5 Data Use for M&E and World Bank-funded KCSAP Performance.

According to Meeker et al., (2022), M&E officials regularly employ data to guide agricultural project plans and results. The vast details on the project's status typically aid choices, maximize resource allocation, and strengthen farming procedures. Rumenya & Kisimbi, (2020) contribution of M&E data in providing a framework for efficient project management and strengthening policy assessment and formulation, all of which promote accountability, tracking, and project viability, remains significant. As such, data availability and utilization call for project leaders to prioritize

information documentation, data reliability, and relevance. Suradhaniwar et al., (2021) states that M&E systems must be fueled by demand instead of supply to promote sustainability. M & E data usage and needs should target specific groups. FAO 2004 reports further suggest that informal participatory methods should be embraced when gathering data instead of relying solely on formal studies (Mushori et al., 2020). This does a lot in ensuring vital stakeholders are not just barely involved, enhances the M&E system, and increases project ownership significantly. For many nations, the dearth of M&E data demand remains a reality and thus, proposals have been made to ensure trustworthy ministry information systems are established to offer crucial information upon which M & E systems might rely.

Reports show that few M&E officials have undergone training in contemporary information-gathering and assessment methods (Ndou, 2023). Even fewer have received guidance on how they can interpret multiple data types. As a result, several solutions, including information systems auditing, assessing information capacities, and ensuring expert participation, have been taken more so when carrying out questionnaire, censuses, and managing data (Nditiye, 2020). Moreover, given that data is vital to M&E, robust mechanisms have been suggested to allow performance improvement as numerous emerging economies begin recognizing its significance. In this context, the M&E data usage goal is to assist organization leadership in making swift and efficient project scheduling, surveillance, and management choices (Ikendi & Retallick, 2023). The initial assessment is essential for measuring performance indicators to direct future operations or project outcomes. This implies that baseline information must be collected for all listed outcome indicators since project achievement is often determined by contrasting target values with realized or actual figures.

Data about policies, programs, and programs affecting farming and rural growth are usually in high demand in agriculture (Maulu et al., 2021). Governments and the private sector require knowledge of dietary and agricultural conditions, patterns, and the influence of interventions and policies. M&E plan indicators and research inquiries determine the data necessary for the framework to function (Okafor, 2021). For instance, during the project's execution phase, data obtained is usually utilized to guide future operations or strengthen or modify implemented strategies (Cabili et al., 2021). Besides, the findings obtained by assessing and monitoring output should be shared with the stakeholders to ensure accountability. Organizations must include a data dissemination plan in their M&E work plan.

The various M&E system indicators, such as inputs, outcomes, output, and impact indicators, necessitate three data sources: periodic, one-time, and routine (Danforth et al., 2023). These data sources form a part of gathering information, the middle ring, recording, and establishing the 12 functional M&E system components. The application of these data sources often varies; for instance, routine data sources are usually utilized when doing routine monitoring, periodic data sources when undertaking periodic investigations, and one-time data sources for assessment and research. The highlighted data sources serve varied purposes. For example, routine data sources offer real-time data regarding daily activities, including crop production, climate, and input utilization (Temesgen, 2021). According to Rehman et al., (2022), information obtained frequently allows for regular monitoring of agricultural activities, thereby helping in the prompt identification of anomalies or developments that require swift intervention. Early indications and recognition of potential problems encourage swift adjustments to project operations, which then maximizes overall efficiency.

Periodic data sources leverage participants' responses when evaluating long-term changes and sequences in agricultural production (Brick et al., 2020). Such investigations usually capture more broad and precise information, providing perspectives on an array of aspects like demographic data, financial standing, farming methods, and nutritional well-being. Periodic information sources also support routine recognition and prolonged review of program efficacy. Subsequently, one-time data sources tend to be utilized when performing comprehensive assessments of investigations conducted at certain moments (Jenkins et al., 2021). This data source provides comprehensive information on particular agricultural productivity facets, like novel technology influences or developmental initiatives' effectiveness (Suradhaniwar et al., 2021). Such insightful information regarding the project results and agricultural intervention impacts assists stakeholders in recognizing the broader context of their investments and directing future decision-making procedures.

Despite increasing awareness of the significance of M&E data to guide world bank project plans, aid decisions, optimize resource distribution, and bolster farming procedures (Meeker et al., 2022), most African countries, according to Jahid (2019) still struggle with the issue of infrequent data analysis frequencies, inconsistent use of data for decision making, inadequate data sharing with stakeholders, and failure to use data for improving program execution result in inefficiencies in project execution. In Kenya, data evaluation approaches remain below acceptable adoption levels because they solely address result chain elements such as inputs and outcomes, leaving out the impact (George et al., 2024). Additionally, data offered are dictated by donors and activists and analyzed by appraisers who lack the necessary expertise.

The inadequate availability of timely and precise information makes project management challenging, if not unattainable (Ba, 2021). Other hallmarks include the uncertainty and

lengthiness of the approach employed to translate intriguing research and understanding and apply them in the sector. However, M&E data usage remains fundamental to closing this gap. Data use for agricultural purposes requires capacity development for project viability. To be beneficial, an M&E system should not be influenced by supply but by demand. Capitalizing on M&E outcomes is also vital in influencing project sustainability (Mbithi, 2020). This is because the project result necessitates diligent preparation for project execution while considering available resources and sound decisions centered on relevant data.

2.2 Theoretical Framework

This is the "blueprint" for the research project, demonstrating various indicators and statistical correlations. The monitoring and evaluation theoretical framework are centered on an array of perspectives that aid in comprehending its implementation in project management. This inquiry was informed by ToC (Theory of Change) and UFE (Utilization-Focused Evaluation).

2.2.1 Utilization-Focused Evaluation (UFE) Theory

This evaluation theory points out the relevance of devising evaluations that are beneficial and applicable to the intended recipient (Miller, 2023). It typically zeroes in on figuring out and satisfying stakeholders' information needs and afterwards applying findings from assessments to guide decisions and better the program (Ramírez et al., 2022). Michael Quinn Patton came up with this theory to stress the value of establishing useful and personalized evaluations. As indicated, one underlying foundation of this theory is the vitality of evaluation to those using it. It particularly suggests that evaluation frameworks or procedures ought to be customized to satisfy key stakeholders' desires and needs (Okul et al., 2021). Additionally, the evaluation process should be proactive, with everyone involved taking part in all phases. from concern identification to comprehension and applying the evaluation findings.

Another focus of this theory is building capacity among stakeholders to ensure they possess basic understanding to successfully apply to engage in evaluation (Miller, 2023). Capacity building typically involves training and guidance in evaluation procedures and data analysis, including designing systems and procedures that allows use of evaluation discoveries to inform choices. This theory is mostly employed in many different evaluation contexts, such as program assessment, policy reviews, and organizational appraisals (Patton et al., 2024). The endpoint is usually to guarantee that the evaluation process is trustworthy, relevant, and beneficial to the target audience and that the outcomes or insights gained are effectively put to use to bring about positive change or boost the organization's performance or the initiative under scrutiny (Okul et al., 2021).

Application of the Theory to the Study

In this investigation, Utilization-Focused Evaluation assisted in clarifying complex initiatives such as KCSAP by systematically capturing the project's objectives and the practical actions needed to realise them. Examining the progress and identifying any flaws or challenges additionally helped determine whether the project's targets were successfully met. It also helped assess whether the verification techniques and measurable indicators are dependable and robust (Uwizeyimana, 2020). It also offered invaluable knowledge into how the evaluation methods used have promoted transparency and accountability, leading to greater results for stakeholders and local farmers. In general, applying a logical framework method helped shed light on the influence of the M&E system on improving agricultural productivity.

2.2.2 Theory of Change (ToC).

This oversight tool is commonly applied to initiatives to establish the measures required to accomplish a specific objective. In the planning phase, the ToC usually assists in detecting risks,

assumptions, and challenges (Hertz et al., 2021). For purposes of monitoring, ToC guarantees that the metrics applied to detect major points of change and success are determined. Additionally, it assists in discovering project areas or stages that require adjustments. ToC, like LFA, is frequently used by global funding organizations as well as local charities to convey project goals and impact over time (Reinholz, & Andrews, 2020).

Application of the Theory to the Study

In this context, ToC was utilized to underscore the importance of establishing justifications for initiatives as well as recognizing the connections between resources, obligations, outcomes, and impacts to assist in productive choices and oversight (Douthwaite et al., 2020). For instance, in this research, the framework contributed invaluable knowledge about the need for oversight and assessment, including their implications across multiple agricultural stages. Most importantly, the framework shaped the formulation of project advancement and goal assessments to point out their efficacy.

2.2.3 Empowerment Evaluation Theory

This comprehensive and proactive evaluation framework mostly focuses on broadening individuals, groups, and society's aptitude to take ownership of personal development while fulfilling their targets (Fetterman, 2023). This David Fetterman ideology, initially presented in the 1990s, hinges on the premise that people most directly impacted by a venture or program ought to be most suited to evaluate its effectiveness and determine how to maximize it. This approach seeks to get everyone involved in a program to take part in the screening procedure and avoid being observers or recipients of third-party assessment. Empowerment Evaluation accordingly is

designed to promote growth and learning by requiring those involved to participate in the oversight process (Wanimbo et al., 2025). Empowerment Evaluation operates on democratic participation, community ownership, building capacity, social justice, cultural sensitivity, development and learning, and openness and accountability principles. The aforementioned principles direct the participatory approach, involving every stakeholder participating in this assessment process, like program beneficiaries, workers, and residents. It is frequently employed in assessments of community-based initiatives, where interested parties are keen on the program's performance and willing to engage in the monitoring process (Sheperis & Bayles, 2022). The theory likewise serves to evaluate initiatives that target disadvantaged or minority groups, with the intention of strengthening capacity, fostering fairness and equality, and subsequently improving responsibility through open insights communication and stakeholder involvement in making decisions.

Application of the Theory to the Study

In this research, this approach was employed to assess the performance of KCSAP initiatives as well as to formulate and execute novel projects by working with stakeholders. The aforementioned principles of this paradigm are often applied to all kinds of assessment operations, like program organization, execution, and appraisal. Its unlimited possibilities and versatility promote its application in a broad spectrum of settings, from local programs to global projects aimed at advocating social transformation and encouraging groups or institutions. Empowerment Evaluation, for instance, is frequently employed in local initiatives focused on reducing social and health gaps (Fetterman, 2023). The assessment team often utilizes guiding principles to engage stakeholders in the M&E process, thereby increasing their capacities to gather and evaluate data, which enables them to make sound choices about the initiative's future. In a global setting, this

framework is also being utilized to appraise the outcomes of an initiative. It guides the evaluation team to team up with local players to get information, evaluate accomplishments, and formulate action plans to manage identified issues.

The theory is additionally used in school environments to increase educational outcomes and encourage fairness (Wanimbo et al., 2025). The assessment team in charge typically partners with parents, educators, and learners to gather knowledge, analyze outcomes, and then develop action plans. Lastly, by examining the institution's inclusion and equality programs success, the framework can be utilized to develop projects to foster organizational growth and change. Based on the illustrations provided above, empowerment evaluation often involves input from stakeholders in the monitoring process, promotes progress and betterment, and cultivates capacity for long-term growth (Francés et al., 2023). It also fosters beneficial social shifts and fairness by motivating interested parties to assert control over their personal growth as they accomplish goals they set.

2.3 Conceptual Framework

The conceptual structure below showcases the foundation that was used to figure out the M&E framework's contribution to KCSAP agricultural yields. The structure as displayed consisted of multiple variables, which assisted in clarifying the subject matter and how each aspect matched. The dependent factors were clarified through independent factors or variables like M&E human capacity, routine program monitoring, M&E work plan, and data use. These listed independent variables were determined by employing a variety of techniques.

For instance, the first two independent variables, human capacity and work plan, were assessed using quantitative indicators such as resource availability, staff population, experience and training levels, frequency of updates, project objective alignment, and stakeholder involvement. The final two variables, routine program monitoring and data use, were assessed qualitatively to ascertain the benefits of monitoring procedures and data-driven choices. The dependent variables, such as agricultural productivity, crop production, crop yield, resource use efficiency, climate change resilience, and agricultural revenue, were determined by performance indicators like technology adaptation, strategy adoption rates and total yield.

In the case of intervening variables, policy analysis or reviews were employed to evaluate the influence of government legislation, the donor's M&E measures, and resource availability on project results. The expectation was that by examining the three guiding parameters that form the study literature, and that findings were meant to reveal whether M&E systems contribute to agricultural productivity across such World Bank-funded projects. Deductively, this framework was critical in establishing a comprehensive groundwork for assessing how the monitoring and evaluation system influences agricultural productivity in Kenya.

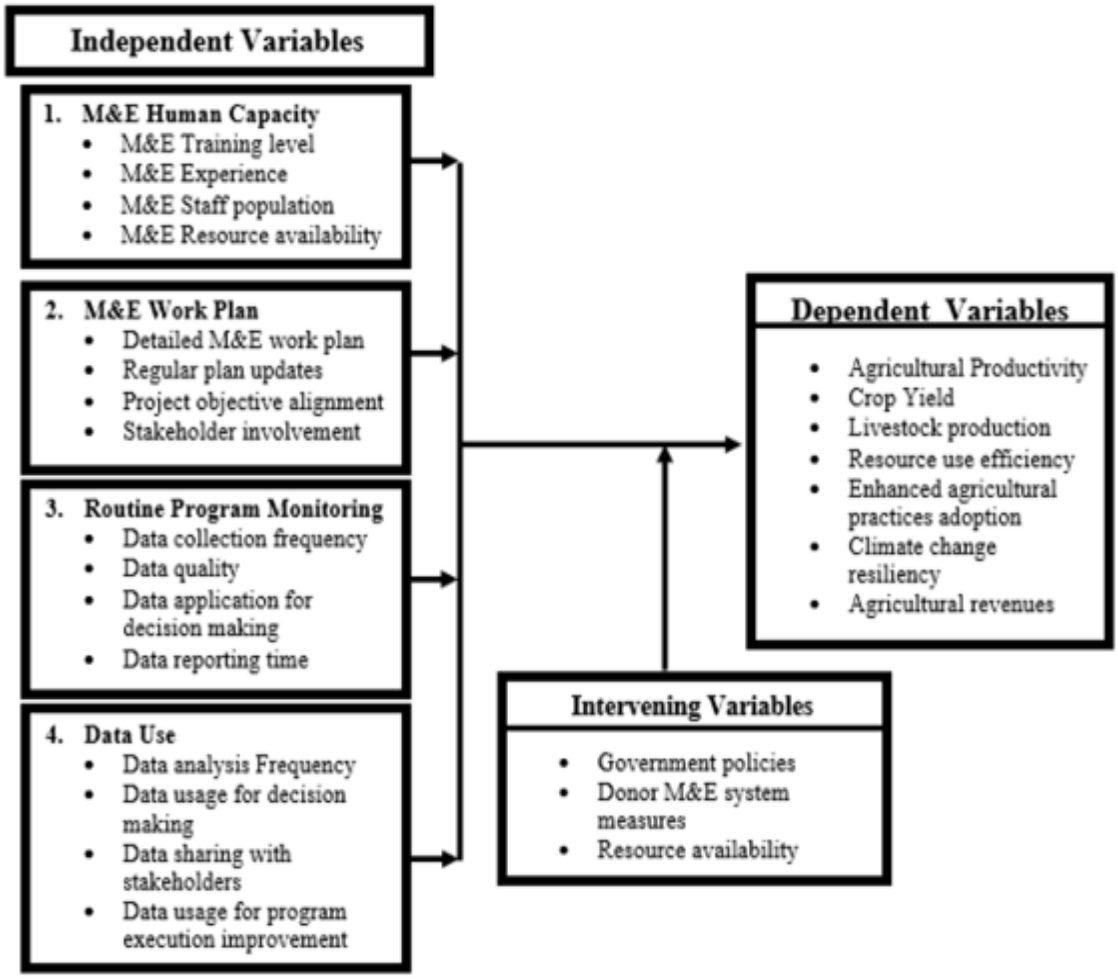

Figure 1: Conceptual Framework

Source: Author 2024

Figure 1: Conceptual Framework

2.5 Recap of the Literature / Research Gaps

This study provides valuable insights into how monitoring and evaluation (M&E) systems influence the performance of donor-funded agricultural projects, particularly the Kenya Climate-Smart Agriculture Project (KCSAP) in Uasin Gishu County. However, more comprehensive exploration brings to light several gaps that warrant further investigation, offering opportunities to refine our understanding of optimizing M&E practices within donor-funded programs. One of the gaps noted in this study is that most studies into the agricultural productivity situation have mostly linked such challenges to a shortage of readily available inputs, inadequate investment in agricultural infrastructure and technological advances, natural resource constraints, and weather interruptions, among many other factors (Vandercasteelen, 2022). As a result, boosting agriculture has evolved into an essential goal for numerous nations and groups, with cultivating crops at the epicenter of the advancement agenda (Onyiriuba et al., 2020). The World Bank's aid to numerous emerging economies around the globe to discover and adopt remedies that address their food security concerns remains visible.

Besides, while most existing studies focus on health, education, or infrastructure, it presents some gaps in understanding the role of M&E in other donor-funded sectors like agriculture. where reports of donor-funded agricultural projects intended to boost yields in agriculture are noted to be stalling or not achieving their intended purpose highlight the urgency to explore factors like climate change, resource impediments, and effectiveness of oversight measures to ensure project performance and sustainability. This warrants an exploration into the vitality of M&E frameworks used in such projects, their effectiveness in boosting agricultural productivity, particularly in donor-funded undertakings in Kenya, by analyzing critical inefficiencies stemming from human capacity, routine program monitoring, work plans, and data use. There is also the issue of the

study being confined to specific geographic restrictions whereby exploration into the influence of M&E is localized to Uasin Gishu County, thereby limiting the generalizability of the findings making contextual considerations particular to this investigation region is not relevant elsewhere. This equally warrants comparative studies across multiple counties or regions with diverse agro-ecological conditions to see if results differ across various contexts and donors. Additionally, future studies could explore other factors influencing project performance, such as funding models, policy implementation, and the integration of technology.

Moreover, the literature points to the need for strong (M&E) human capacity for better project performance (Musili, 2020). However, the concern noted is that other metrics, such as budget, timeliness, stakeholder satisfaction, and specifications, usually take precedence over human capacity. As a result, there is always a dearth of awareness about the benefits of having a skilled project management team. However, not much evidence is available to demonstrate the value of having competent M&E human capacity for increased project performance. Nabibya et al. (2023) note human capacity's vital role in M&E, particularly in ensuring project success. Scholars point to the experience and expertise levels, which they believe professionals undertaking M&E activities should possess. These observations, although they align with other studies that also ascertain that adequate human and institutional capacity is critical in ensuring the M&E frameworks employed work effectively (Mushori et al., 2020), show that project complexities tend to vary, necessitating various expertise levels. This points to the need for the project managers to enhance M&E human capacity to guarantee that project interventions coincide with the needs of the community by supporting the performance of any project.

Additionally, an efficient work plan is expressed to set forth the project's strategy, leadership, oversight, assessment, and record-keeping processes (Ba, 2021). In projects, M&E work plans are

usually intended to motivate or assist the project or program employees when executing projects to meet intended goals. It is also meant to help ensure that the plans are correctly documented (Kadel et al., 2021). M&E systems always perform best when properly planned. On the other hand, other systems often become less effective because of inadequate attention to detail during the planning stage. Such instances always highlight the importance of writing the M&E plan's operational guidelines in advance (Koima & Mukulu, 2020). Establishing an M&E plan on time not only helps stakeholders gain insight into the task before them but also informs strategists about the duration and finances necessary for an M&E work plan to be carried out successfully. Further look into routine program monitoring as another crucial factor behind M&E system effectiveness reveals that most project targets tend to hinge on methods and techniques they could yield (Atandi, 2023). This means that monitoring as a continual function in public projects typically requires planned data gathering based on particular parameters (Kerzner, 2022). This considers M&E as a conventional tool for project management, that often serves project managers in various ways, more so in improving the project's overall performance and results.

Finally, while data is noted to be essential in guiding agricultural project plans and results (Meeker et al., 2022), most African countries, according to still, struggle with the issue of low-quality data despite many of their sector ministries accumulating an array of unusable performance data. In Kenya, data evaluation approaches remain below acceptable adoption levels because they solely address result chain elements such as inputs and outcomes, leaving out the impact (George et al., 2024). Additionally, data offered are dictated by donors and activists and analyzed by appraisers who lack the necessary expertise. The inadequate availability of timely and precise information makes project management challenging, if not unattainable (Ba, 2021). Some hallmarks include the uncertainty and lengthiness of the approach employed to translate intriguing research and

understanding and apply them in the sector. However, M&E data usage remains fundamental to closing this gap. The highlighted literature gaps provide a chance for additional studies to further the comprehension of M&E's role in project success and long-term viability in a range of development contexts.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This study section describes the procedures employed to gather accurate responses. Some of the topics covered include the study's approach, design, site location, sampling technique, targeted population, "sample size", enquiry tools, study reliability and validity testing, information collection strategies, analysis procedures, and ethical concerns.

3.2 Research Methodology

The method of inquiry chosen for this study was a "mixed methods" approach (MMR), in which multiple data types, descriptive (qualitative) and numerical (quantitative), were gathered and evaluated independently or together to arrive at an interpretation (Taherdoost, 2022). The incorporation of various data sets contributed to a greater comprehension of the M&E significance within the KCSAP initiative, especially in regard to agricultural productivity. This methodology added depth and significance to empirical results while also establishing subjective findings using statistics.

Quantitative response, for instance, presented measurable data about crop output and M&E effectiveness, allowing for statistical examination and impartial ratings of results (Shiyanbola et al., 2021). Conversely, Qualitative responses noted from interview guides conveyed an in-depth grasp of stakeholder perspectives and encounters, exposing context-related factors and obstacles that statistical data lacks (Spake et al., 2022). Together, this comprehensive approach led to productive, appropriate, and executable results, offering more clarity to the initiative's influence.

3.3 Research Design

Given the methodology adopted above, a descriptive research design which proved ideal for quantitative insights, purposed to empirically assess the causal association between M&E systems and success of projects. On the other hand, **case study research design** directed qualitative aspects allowing an extensive review of stakeholder observations during the KCSAP project (Shiyanbola et al., 2021). This building process was beneficial because it guaranteed the information coming from the preliminary phase was utilized to guide the subsequent stage of obtaining information. As noted by Fife-Schaw (2020), this form of information integration during the presentation level usually entails applying the 'merging' technique to construct a 'joint display' whereby both data types are combined together visually to bring out a fresh perspective beyond the knowledge acquired separately.

In this investigation, the "building" strategy was methodically employed to generate measurable items using qualitative evidence, while the merger was later done to gauge the coherence of both phases' outcomes. That is, the investigation began with focus group conversations with first stakeholders who are farmers to find out about their general impressions of KCSAP and, specifically, the influence of oversight (M&E) systems in place. In light of what was discovered, an organized questionnaire was created and shared with more respondents to quantitatively evaluate their views. The joint display revealed how both phases merged.

Mixed methods, according to Taherdoost (2022), are an all-encompassing tool useful for constructing quantitative tools. In this case, multiple stages of instrument creation and construct testing occurred (Spake et al., 2022). The initial four steps involved utilizing mixed methods selected to formulate the idea of interest, followed by discovering and outlining the traits that

underline the idea, constructing a research tool, and then carrying out pilot tests. Using combined approaches at different phases of the instrument construction process enhanced instrument accuracy by determining its appropriateness (Shiyanbola et al., 2021). Thus, the selected exploratory study design proved necessary to improve the accuracy and dependability of the customized instrument.

3.4 Study Location

Uasin Gishu County was picked as the study's location. This region is centered along Kenya's Rift Valley. This area had been explored before and deemed to be perfect. Among the aspects considered were extensive agricultural practices, including large-scale wheat and maize farming, in addition to livestock dairy farming. In addition, this particular area was observed to receive substantial funding not just from nonprofit organizations and donors, but also from regional and national authorities. This backing has elevated the region to the position of an agricultural hub, which explains why efforts have been made to boost production while simultaneously raising climate change resistance (Makokha, 2021; Ghosh et al., 2022).Among the initiatives that have done exceptionally well in the region is the KCSAP, a World Bank-funded initiative intended to introduce climate-smart practices to improve agricultural production. The project's success has resulted in the widespread adoption of smart climate-sensitive practices, which have performed well nationally thanks to the successful M&E systems deployment. In general, this study helped explain M&E systems' contribution to agricultural productivity.

3.5 Target Population

This population counts the study plans to analyze and develop conclusions about. In this case, a total of 660 persons were targeted. The inquiry concentrated on diverse stakeholders, notably

farmers, government institutions, non-profit organizations, and donor partners associated with the Kenya Climate Smart Agriculture Project initiative. As shown in Table 3.1, the study participants or key informants included farmers, project coordinating unit personnel, M&E officers, socials from MOALD, donors' agencies, project pool experts, and project directors. This set of targeted participants were sourced from national, and Uasin Gishu County record databases, service records kept by agricultural extension officers, cooperatives, and community-based organization members' hip records, past project records, Ministry of Agriculture reports and internal records

Table 3.1: Target Population

Categories (Stakeholders)	**Target Population (No. of Respondents)**
Farmers	150
M&E Officers	60
Project Coordinating Unit	50
Steering Committee	75
Donors	100
Ministry of Agriculture and Livestock Development	75
Project Pool of Experts	100
Directors	50
Total	660

Source: Primary Data, 2024

3.6 Sampling Procedure and Sample Size

The accuracy and reliability of any study are decided by the efficacy of approaches employed in collecting data. The following subsection outlines the process of sampling along with a formula for estimating study sample size. It clarifies the steps taken to select respondents using a blend of simple random and purposive sampling approaches to guarantee representation of various stakeholder groups.

3.6.1 Sample procedure

This entails selecting individual components from a cohort using various procedures and techniques. To guarantee fair representation during the selection of responders or participants from the targeted population, an approach known as stratified random sampling was initially employed, followed by a simple random and purposive sampling approach. (Shiyanbola et al., 2021; Iliyasu & Etikan, 22021) These included program directors, monitoring and evaluation officials, and other functional technical employees. The sampling procedure is among the most straightforward data gathering and prevalently used procedures in various study domains, permitting subgroups within the wider population.

These sampling strategies involved separating the targeted population into categories that reflect key aspects (Shiyanbola et al., 2021). Participants from each category assisted in capturing variation and guaranteed that all important groups are represented. Using these sampling methods enhanced the result's precision and generality (Spake et al., 2022). Specifically, they gave a chance for accurate assessments and conclusions about the M&E system's contribution to agricultural productivity across various community segments within Uasin Gishu County. Its use facilitated unbiased data gathering, resulting in unbiased findings.

3.6.2 Sample size

This is a count of participants involved in the study. Most research projects rely on questionnaires given to a representative group of the overall population (Umar & Wachiko, 2021). In this examination, the sample size included a specific portion of people equally. Yamane's (1967) formula was then used to generate the sample project. The calculation was as detailed below.

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

Given this equation, "N" represented, "Target Population" while "n" represented Chosen sample size where population was < 10, 000.

"e" (Precision error) confidence level of 95% ~ 0.05

e^2 $(0.05)^2$

nn =250 (sample size) with 95% confidence level.

Hence donors denoted by.

n_1 =**250**x $\frac{20}{660}$ = 8 respondents.

M&E Officersrepresented by;

n_2 = 250 X $\frac{20}{660}$ = 8 respondent.

Project Coordinating Unit represented by.

n_3 = 250 x $\frac{20}{660}$ = =8 respondents.

Steering Committee represented by.

n_4 = 250 x $\frac{20}{660}$ = 8 respondents

Directors represented by.

$n_5 = 250\ x\ \frac{30}{660}$ = 11 respondents

Ministry of Agriculture and Livestock Development staff represented by.

$n_6 = 250\ x\ \frac{50}{660}$ = 19 respondents

Project Pool of Experts represented by.

$n_7 = 250x\ \frac{100}{660}$ = 38 respondents.

Farmers represented by.

$n_8 = 250\ x\ \frac{400}{660}$ = 151 respondents

Therefore, the sample size is 250

Table 3.2: Sample Size

Categories	Targeted Population	Size of the Sample	Sampling procedure
Donors	20	8	Stratified Random, before Purposive
M&E Officers	20	8	Stratified Random, before Purposive
Project Coordinating Unit	20	8	Simple Random Sampling
Steering Committee	20	8	Stratified Random, before Purposive
Directors	30	11	Stratified Random, before Purposive

Ministry of Agriculture and Livestock Development	50	19	Stratified Random, before Simple Random
Project Pool of Experts	100	38	Simple Random Sampling
Farmers	400	151	Stratified Random, before Simple Random
Total	**660**	**250**	

Source: Primary Data, 2024

3.7 Research Tool/ Instruments

This part covers the research tools employed during data gathering. The investigation collected qualitative data and quantitative data using interview guides and questionnaires, respectively. Questionnaires were developed for agricultural officers and farmers, whereas interview guides promoted in-depth discussions and interviews with various parties involved in KCSAP within Uasin Gishu County.

3.7.1 Questionnaires

According to Adosi (2020), questionnaires are usually the most common ways of gathering data. These data-gathering tools are frequently employed to obtain mixed evidence from the selected respondents (Fife-Schaw, 2020). Here, a well-structured inquiry form consisting of questionnaire (closed and open-ended) relating to farming practices, stakeholders' perceptions, agricultural yields, and climate change impacts was deployed to obtain information (quantitative and qualitative) from selected respondents directly involved in the KCSAP project.

Closed-ended questions, for example, facilitated the collection of uniform responses from various groups (Cannold, 2020). Open-ended questions, on the other hand, helped convey farmers' thoughts, experiences, and the project's challenges (Adosi, 2020). As expected, the questionnaires administered triggered their viewpoints, degree of fulfillment, and feelings about M&E's support for agricultural output and the initiative's success. Inquiry methods such as in-person interviews, face-to-face discussions, social media, and telephone conversations were performed to encourage greater participation (Hansen & Świderska, 2024). These questionnaires were essential, specifically for acquiring an accurate picture of what was achieved with regard to agricultural productivity.

3.7.2 Interview guide

This form of obtaining information is often utilized to gain a complete grasp of the initiative's stakeholders' observations, perceptions, and thoughts. For several years, this method has proved valuable when looking into complex issues involving interpersonal interactions and customs that questionnaires are very unlikely to record. In this study, the discussion was primarily a result of subjective data acquired from 14 respondents. As planned, the group interviews involved farmers, M&E Officers, the Project Coordinating Unit, the Steering Committee, Donors, the MOALD, and the Project pool of Experts and Directors. This data collection approach allowed those participating to express their thoughts on sustainable agricultural practices, difficulties, and the initiative's influence on farming activities. It encouraged respondents to expand their ideas, resulting in more detailed and varied data. The data acquired supplemented questionnaire responses, providing a deeper awareness of the program's influence.

The approaches outlined above guaranteed collection of exhaustive, reliable data is collected. This was vital to understanding the key role M&E systems have in guaranteeing the KCSAP Project's success in improving agricultural productivity as well as sustainable practices.

3.8 Reliability and Validity of the Research Instruments

This section explores the accuracy of the research instruments used in the study. It examines reliability and validity, analyzing various measures used verifying their consistencies.

3.8.1 Reliability of the Research Instrument

In evaluating research instruments dependability and reliablity, a group consisting of 10 percent of the overall study participants selected (Quintão et al., 2020). The test study's location was a small sub-county within Uasin Gishu County called Kapseret. This place was picked due to its unique features, including weather patterns, economic variables, and agricultural practices that, in a way, conveyed those of Uasin Gishu County. As per reports, methods of agriculture in Kapseret tend to vary between massive and small-scale producers.

In consideration of socioeconomic variables, Kapseret farmers were noted to have distinct education levels, resource access, and income (Yatich, 2023). Kapseret's easy access to Uasin Gishu encourages movement and interaction during the early study stages. The setting additionally features multiple farming programs, allowing visitors to connect with various groups and farmers nearby. Discussions with the chosen pilot team, among them Kapseret Sub-County farmers alongside various local officials or managers, played a role in validating the questionnaires (Sürücü & Maslakci, 2020). A test-retest method was applied multiple times using various arrangements,

yielding comparable results. The 0.82 correlation value indicated good reliability, suggesting the measure used was not only stable but also consistent over time.

Table 3.3: Reliability Statistics

Assessment	Test-Retest Correlation (r)	Sample Size	No. of Items
Community Survey	0.82	25	10

Source: Primary Data, 2024

3.8.2 Validity of the Research

Validation of study tools is a crucial phase toward guaranteeing success and positive study outcomes (Sürücü & Maslakci, 2020). In this investigation, the testing of the research tools guaranteed that the goals and concerns shared with those questionnaires corresponded. The instrument's reliability was assessed by looking at the research's content, usefulness, design, and standards, among other things. For confirmation of the subject matter, study tools were piloted and shared with a specialist group for examination (Quintão et al., 2020). Additionally, Criterion validity was employed to confirm that the assessment outcomes appropriately encapsulated the capacities of individuals or attributes.

Other methods like factor examination and convergent strategies were implemented to interpret the questionnaires responses and confirm the study's tools' aptitude to gauge the listed conceptual ideas (Shrestha, 2021). Results were subsequently assessed using predictive and combined

evaluation strategies to figure out the association between the study tools and outside parameters (Meeker et al., 2022). The outlined approaches, along with several others not mentioned, made certain that the tools used precisely and efficiently identified multiple research contrasts.

3.9 Data Collection Procedures

A comprehensive array of data gathering strategies was essential for precise data and ethical conduct during the inquiry. The processes entailed setting up requisite authorizations and conforming with national study guidelines. Obtaining approval for research from the right officials was a must in this context. Every bit of the insights provided were based on different data sources. The information-gathering processes encompassed non-structured and structured questionnaires, focused group discussion, interviewing key informants, analysis of documents, and KCSAP assessments. Questionnaires administered helped a lot in gathering reliable information on farming methods, productivity levels, climate-smart farming implementation, and opinions, particularly from the project coordinating units, M&E employees, farmers, and key stakeholders. In addition, comprehensive interviews with key informants consisting of M&E staff, project managers, oversight board members, and professionals helped obtain insights into execution, tracking processes, and the project's overall effectiveness and provided qualitative perspectives to the study.

3.10 Data Analysis Techniques

Statistical and analytical approaches were used to detect data trends and interactions (Van de Vijver & Leung, 2021). The analysis focused on understanding how the M&E system is used within KCSAP, including its roles in agricultural productivity. The data which was gathered quantitatively were scrutinized systematically to determine potential patterns and correlations (Shiyanbola et al., 2021). The process entailed cleaning data and coding for further analysis using

statistical tools such as SPPS software version 26, or any other suitable software.

That is, Excel sheet was used to be clean and code the data obtained. Thereafter SPSS software version 26 helped analyze the information obtained. Data was studied in two distinct forms. First, descriptive statistics, including inferential statistics (regression analysis) and central tendency measures, were determined. This encouraged investigation of the statistical distribution of study variables.

Secondly, relationships between study variables were established through inferential statistics. Specifically, correlation and linear regression analyses were made. These connections between the highlighted variable were determined using the regression model below.

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

Here,

Y expressed road construction developments performance.

βo stands for constant term.

X1 stands for negotiation skills.

X2 stands for communication skills.

X3 stands for political skill.

X4 stands for delegation skills.

ε represents the model error term.

"β1, β2, β3, and β4" happen to be independent variable coefficients.

The data was displayed graphically using tables, graphical representations, and charts, followed by inferential statistical tests, which include ANOVA or the t-test to find the relationship between the established variables.

For qualitative data, the key informants' interviews, one-to-one replies, including online virtual interview responses were analyzed, and key insights and themes extracted. This process involved transcribing recorded audio-to-text format coding data by selecting key insights and themes, and visualization through thematic maps (Van de Vijver & Leung, 2021). This process additionally included evaluation of content, which utilized software like ATLAS.ti to measure certain ideas, issues, or terms. Triangulation of data was undertaken to verify the validity and accuracy of the results using various information approaches and sources (Santos et al., 2020). Using the data assessment methods stated, this research offered invaluable insights into KCSAP's oversight and evaluation influence on agricultural output and later projects.

3.11 Ethical Considerations

These constitute guidelines that regulate the procedures and approaches used. These consist of informed permission, open or voluntary participation, confidentiality for participants or secrecy, result communication, and knowledge concerning any potential risks. Moral guidelines were strictly observed all through the inquiry process, including when gathering information and publishing the findings. This investigation weighed several ethical concerns, like informed permission, which ensured those involved had full knowledge of the study's benefits, objectives, and processes. This allowed them to consent either through words (verbal) or in writing. The other

ethical concern brought up regarded the participant's privacy and safety. This ensured that the privacy of those taking part in the study was respected. This was achieved by giving them private identities while avoiding sharing sensitive data while reporting. Participants were additionally informed of their liberty to engage or cancel or opt out at will. Furthermore, those who participated had the assurance that they wouldn't experience emotional, interpersonal, or bodily harm. This involved identifying potential risks and taking measures to prevent them. Also, given the diversity of the population, cultural awareness was upheld to ensure local norms, values, and cultures were respected. This was done by having prior engagement with the local communities under their cultural contexts. Other ethical issues considered during the course of the investigation included honesty and transparency, fairness and equity, non-maleficence and beneficence, data protection from disclosure or unauthorized access, and finally, ensuring participants are offered feedback about the impacts of their contribution to the study by sharing and making the findings accessible to them. Adherence to the above ethical considerations undoubtedly helped maintain the respondent's dignity and rights.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION.

4. 0 Introduction

This part offers insights into the results gathered from the participants' responses obtained from questionnaires forms distributed and the structured interviews conducted.

4.1 Response Rate

The study targeted and distributed 250 questionnaires. Remarkably 230 questionnaires were returned, achieving a 92% response rate. The positive return rate resulted from the enthusiasm and cooperation between the target group and the study process. From the questionnaires distributed 8% were not returned. Nevertheless, the commendable response rate imparts confidence in the views of the respondents. The detailed results are illustrated in Table 3 below.

Table 4.1: Return Rate for the Questionnaire

Questionnaire Categories	Frequency	Percentage (%)
Received/Returned questionnaires	230	92
Unreturned questionnaires	20	8
Total	**250**	**100.0**

Primary Data, 2024

4.1.1 Questionnaire Response Rate

The responses rate to the questionnaire reflected the views, observations and experiences of majority of the chosen sample adequately took part in the investigation by filling the questionnaire, and the interview. This high response rate alongside the stakeholders' involvement enhanced not only the study findings' reliability but also accuracy, reflecting the perspectives of a wider range of participants (Sataloff and Vontela, 2021). This improved the acceptability of the findings attained and makes the outcomes more useful in comparable situations or projects.

4.1.2. Interview Response Rate

The interviews on the other hand received a 100% response rate. All the 35 key-informants selected participated in the interview.

4.2 Respondents Demographic Features.

The respondent's demographic characteristics were segregated to designation, gender, education, age, and experience in the M&E sector and agricultural production in Uasin Gishu County, Kenya. The results have been summarized and presented in table 4.2 below.

Table 4.2: Demographic Features of the Respondents

Categories	**Frequency**	**Percentage**
Gender		
Female	95	41.3
Male	135	58.7
Total	**230**	**100**
Age Levels	**Frequency**	**Percentage**
20-30	40	17.3
31-40	95	41.6
41-50	65	28.1
Over 50	30	13
Total	**230**	**100**
Education	**Frequency**	**Percentage**
College- Certificate	38	16.5
College- Diploma	90	38.9

Undergraduate- Degree	86	37.7
Master's- Degree	14	6.1
PhD	2	0.9
Total	**230**	**100**

Duration	**Frequency**	**Percentage**
5 years and below	45	19.5
6-10	105	45.9
11-15	70	30
16-20	10	4.3
Total	**230**	**100**

Source: Primary Data, 2024

4.2.1 Gender

From the study, there was a difference in participants' distribution by gender. The male respondents accounted for 135 (58.7%) while female respondents 95(41.3%).

4.2.2 Age category respondents

The respondents age ranges were also determined and based on the findings, most participants 95(41.6%) were between age 31 to 40 years, 40(17.3%) were between 20 to 30 years, 65(28.1%) were between 41 to 50 years and 30(13%) respondents were between 51-60 years.

4.2.3 Respondents' Education Levels.

The study sought to establish the education levels of the respondents. From the study, 90(38.9%) were diploma holders, 86(37.7%) undergraduates, 38(16.5%) had college certificate, 14(6.1%) had master's degree and 2(0.9%) were PHD holders.

4.2.4 Duration at the workplace

Additionally, the study sought to establish the respondent's work duration. From the study 45(19.5%) had less than 5 years of experience. 105(45.9%) respondents had 6 to 10 years of experience. 70(30%) of the respondents had 11-15 years of experience. 10(4.3%) respondents had 16-20 years of experience.

4.3 M&E Human Capacity and KCSAP performance

Human Capacity in terms of training level, expertise, staff count, and resource availability, were assessed to determine how it influences performance of World Bank- funded KCSAP project in Uasin Gishu County Kenya.

4.3.1 M&E Human Capacity and KCSAP performance.

Six statements on human capacity influence on KCSAP performance were assessed, as presented in Table 4.3 below.

Table 4.3: M&E Human Capacity and KCSAP performance

Statements (M&E Human Capacity)	**Std** **%** **F**	**D** **%** **F**	**N** **%** **F**	**A** **%** **F**	**SA** **%** **F**	**Mean**	**Std Deviation**
There are several trainings on staff members who are always busy implementing the project	9 (3.9%)	24 (10.4%)	0 (0%)	100 (43.5%)	97 (42.2%)	**4.10**	**1.09**

Many staff members are experienced in their work, thus resulting in good productivity	10 (4.3%)	27 (11.7%)	0 (0%)	100 (43.5%)	93 (40.4%)	**4.04**	**1.12**
Low staff numbers make the project not to be able to render good services	90 (39.1%)	87 (37.8%)	6 (2.6%)	27 (11.7%)	20 (8.7%)	**2.13**	**1.28**
There are enough resources to implement the projects being undertaken in the Climate-Smart Agricultural Project	30 (13%)	88 (38.3%)	0 (0%)	56 (24.3%)	56 (24.3%)	**3.09**	**1.45**
There are no resources to implement the projects being undertaken in the Climate-Smart Agricultural Project	63 (27.4%)	85 (36.9%)	0 (0%)	22 (9.6%)	60 (26.1%)	**2.70**	**1.58**
Many staff members are not trained in any skill, causing the organization to lose many clients.	62 (27%)	96 (41.7%)	3 (1.3%)	36 (15.7%)	33 (14.3%)	**2.49**	**1.40**

Overall composite Mean and Std deviation	**2.82**	**1.62**

Source: Primary Data, 2024

In the variable that there are several training courses on staff members who are always busy implementing the project was assessed. Positive response as data collected from 230 respondents established that 97 respondents (42.2%) strongly agreed, 100 respondents (43.5%) agreed that project staff members had received several training courses, 0 respondents (0%) were neutral, 24 respondents (10.4%) disagreed with the statement while 9 respondents (3.9%) strongly disagreed. The statement had a mean of 4.10, which is higher than the overall mean, 2.82 demonstrating that staff are well trained, especially the ones doing implementations of the projects, thus producing good results. The 1.09 standard deviation which is lower than the 1.62 composite average indicates agreement within the views of the respondents.

In the statement, many staff members are experienced in their work, thus resulting in good productivity. Data collected from 230 respondents revealed that 93 respondents (40.4%) strongly agreed with the statement, 100 respondents (43.5%) agreed, 0 respondents (0%) were neutral, to the statement while 10 respondents (4.3%) strongly disagreed, and 27 respondents (11.7%) disagreed with the statement. The response variable had a 4.04 mean score which is higher than 2.82 overall means implying that higher performance is achieved by having a well experienced staff. The 1.62 composite standard deviation is higher than the 1.12 standard deviation that was recorded indicating agreement within the views of the respondents.

In the statement there are low staff numbers that make the organization not to be able to render good services was assessed and data collected from 230 respondents revealed that 90 respondents

(39.1%) strongly disagreed, 87 respondents (37.8%) disagreed with the statement, 6 responses (2.6%) were neutral, 27 respondents (11.7%) agreed and 20 respondents (8.7%) strongly agreed with the statement. This response had a 2.13 mean which is higher than the overall mean2.82 implying that that good services are not rendered due to the low number of staff in the organization since they are not able to meet the demand of the activities to be performed thus low production. Additionally, 1.28 standard deviation is lower than the 1.62 composite standard deviation indicating agreement within the views of the respondents.

The variable of there being enough resources to implement the projects being undertaken in the Climate-Smart Agricultural Project was assessed and data from 230 responses revealed a critical result. 56 respondents (24.3%) strongly agreed, 56 respondents (24.3%) agreed, 0 respondents (0%) were neutral to the statement while 88 respondents (38.3%) disagreed with the statement and 30 respondents (13%) strongly disagreed. The response recorded a 3.09 mean score which is higher than the overall mean 2.82 implying that more resources should be added to make it easy for the implementation of projects. The composite standard deviation of 1.62 is higher than the 1.45 standard deviation indicating agreement within the views of the respondents.

The statement to assess whether there were no resources to implement the project obtained 230 responses. The data revealed that 63 respondents (27.4%) strongly disagreed, 85 respondents (36.9%) disagreed with the statement, 0 respondents (0%) were neutral, 60 respondents (26.1%) strongly agreed, and 22 respondents (9.6%) agreed with the statement. This statement recorded 2.70 mean score and 1.58 standard deviation. The mean is lower than the overall mean 2.82, implying that the right resources should be available for project implementation. The statement standard deviation 1.58 is lower than the composite 1.62 indicates agreement within the views of the respondents.

In the statement many staff members are not trained in any skill, causing the project to lose many clients being assessed. The respondents were steadfast in their responses as 62 respondents (26.9%) strongly disagreed, 96 respondents (41.7%) disagreed with the statement, 3 respondents (1.3%) remained neutral while 36 respondents (15.7%) agreed, and 33 respondents (14.3%) strongly agreed. The statement had a mean score of 2.49, which is lower than the overall mean 2.82, implying that staff need to be well trained to increase productivity and not lose clients. The 1.40 standard deviation is lower than the composite standard deviation 1.62 which indicates agreement within the views of the respondents.

4.3.2 Inferential Statistics on M&E Human Capacity and KCSAP Performance

"Pearson's correlation" was the statistical output used to analyze examine the M&E Human Capacity-project performance relationship as presented in Table 4.4. Cumulative scores were determined using participant response ratings at a confidence level of 95%.

Table 4.4: Pearson Correlation Between M&E Human Capacity and KCSAP Performance

Variable	Statistics	Performance of World Bank-funded Climate-Smart Agricultural Project
M&E Human Capacity	Pearson *r*	0.435**
	P-value	0.000
	N	230

Source: Primary Data, 2024

As determined, the findings revealed a positive statistically significant correlation, pointing out the necessity of M&E human capacity in ensuring project success. This is attributed to P-value <0.01. This finding is further backed by the r = 0.435 Pearson's correlation coefficient, which points to a slight positive relationship between the studied variables. Considering the p-value, the study's null hypothesis is thus rejected, proving that M&E human capacity and KCSAP performance have a highly significant relationship. This evidence implies that improving the skills and expertise of human personnel in charge of M&E results in enhanced performance and greater KCSAP productivity.

4.3.3 Model summary of M&E Human Capacity and KCSAP performance

The model employs regression analysis to study the correlation between M&E human capacity and KCSAP performance. Table 4.5 summarizes the findings.

Table 4.5: Regression Analysis on the Influence of M&E Human Capacity on KCSAP performance

Model outline				
Framework	R	R Square	Amended R Square	Std. Error of the Estimate
1	0.660[a]	0.435	0.425	0.52337

a. Predicator: (Constant), M&E Human Capacity

ANOVA					
Model	**Sum of Squares**	**Df**	**Mean Squares**	**F**	**Sig.**

1	Regression	4.302	1	4.302	15.707	<0.000 [b]
	Residual	62.452	228	0.275		
	Total	66.754	229			

a. Setting up for M&E Human Capacity and Performance of the World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.

b. Predictors: (Constant), M&E Human Capacity

Coefficients

Analysis		Unstandardized Coefficients		Standardized Coefficients	T	Sig (p-value)
		B	Std. Error	Beta		
1	(Constant)	2.125	0.246		8.648	0.000
	M&E Human Capacity	0.282	0.071	0.435	3.953	0.000

a. Independent Variable: M&E Human Capacity.

In this regression model, a positive R^2=0.435 correlation between the studied variables was observed. The 43.5% project performance variation was due to M&E Human Capacity major contribution to KCSAP performance. The certainty of this effect is further refined by the R^2 = 0.425. The model's statistical significance is additionally established by KCSAP performance, considering the notable F-value of 15.707 derived from the ANOVA analysis as well as a p-value of <0.001, which is significantly below the required (0.05) threshold. Looking at the regression coefficients while retaining other variables constant, a constant 2.125 value and a 0.246 M&E Human Capacity are noted. This suggests that any advancement in M&E human capacity,

especially in skills, culminates in a 0.246 boost in KCSAP performance. The 0.52337 estimated standard error implies a moderate predictive accuracy level.

The model equation for regression is stated as follows:

$Y = 2.125 + 0.282X_1 + \varepsilon$

Whereby:

Y = KCSAP Performance

X1 = M&E Human Capacity

ε =term for Error.

The results presented highlight the necessity of improving human M&E capacity to guarantee KCSAP's success.

4.3.4 Qualitative Data on M&E Human Capacity and KCSAP performance

It was revealed that M&E human capacity and KCSAP performance in Uasin Gishu corresponded to the responses submitted for the statements specified for all the variables presented in the interview guide concerns. Qualitative findings are summed below.

> *"Capacity building is key to all organizations since they contribute to better skills enhanced by the training. Field coordinators were fully engaged in the projects and trying so much to involve the community at the same time organizing Barasa so that they could be made aware of the projects being implemented" KII-Respondent 1-6*

4.3.5 Discussions on M&E Human Capacity and KCSAP performance

This finding proved that improving the skills and expertise of human personnel in charge of M&E results in enhanced performance and greater KCSAP productivity. This is backed by descriptive statistics, and the positive correlation confirms the relationship between M&E Human Capacity and KCSAP Performance in Uasin Gishu county. The results are coherent with those of other comparable empirical studies. To accomplish sustainable income-generating endeavors, effective leadership is necessary. Nabibya et al. (2023) notes the critical role that human capacity plays in M&E, particularly in ensuring project success. M&E personnel are usually expected to show high dedication and commitment levels. The high levels of attention that are required while evaluating the specifics of a project are the reason that M&E activities typically take a significant amount of time. As a consequence of this, it is frequently asked of M&E workers to go above and beyond to operate under difficult conditions outside of their formal working hours. Clements (2020) proposed in their study that M&E officials and staff members must be provided with resources and incentives that allow them to acquire the expertise, equipment, and opportunity to successfully carry out their oversight tasks throughout the project's implementation. When employing workers for monitoring and evaluation, project managers should consider human capacity, as demonstrated by the empirical findings presented.

4.4 M&E Work Plan and KCSAP performance

M&E Work Plan is an independent variable being measured by detailed M&E workplan, regular updates, project objectives alignment, and stakeholder involvement. To assess the influence of work plan to the performance of KCSAP project, regular workplan updates, alignment to project objectives and stakeholder involvement were studied.

4.4.1 M&E Work Plan and KCSAP performance

Six statements about the M&E work plan and their contribution to KCSAP performance were addressed, as revealed in Table 4.6.

Table 4.6: M&E Work Plan and KCSAP performance

Statements (Monitoring and Evaluation Work Plan)	Std % F	D % F	N % F	A % F	SA % F	Mean	Std Deviation
Project managers make very detailed work plans for the staff members to use when undertaking the projects	10 (4.3%)	26 (11.3%)	2 (0.9%)	96 (41.7%)	96 (41.7%)	4.05	1.12
There is no work plan documentation to be used by the project team while undertaking the project activities	85 (36.9%)	109 (47.4%)	3 (1.3%)	22 (9.6%)	11 (4.8%)	1.98	1.09
There are regular plan updates made by the team leaders to be shared	11 (4.8%)	25 (10.9%)	0 (0%)	97 (42.2%)	97 (42.2%)	4.06	1.13

with all the team members							
There are proper project objectives which are set in line with the variables under study	8 (3.4%)	17 (7.3%)	6 (2.6%)	101 (43.9%)	98 (42.6%)	4.15	1.02
All stakeholders are involved in developing a work plan for the project	10 (4.3%)	42 (18.2%)	3 (1.3%)	84 (36.5%)	91 (39.5%)	3.89	1.23
Not all stakeholders are involved in developing a work plan for the project.	73 (31.7%)	79 (34.3%)	3 (1.3%)	67 (29.1%)	8 (3.4%)	2.38	1.29
Overall composite Mean and Std deviation						**3.35**	**1.43**

Source: Primary Data, 2024

The findings focused on multiple work plan facets, which include the existence of an action plan, documentation, plan updates, project objectives alignment, and participation by stakeholders.

The first statement focused on whether project managers develop detailed work plans for M&E staff members to use when executing the project. The statement had a positive response with data from 230 respondents revealing that 96 respondents (41.7%) strongly agree, and 96 respondents (41.7%) agree with the statement while 26 respondents (11.3%) disagreed, and 10 respondents (4.3%) strongly disagreed, 2 respondents (0.9%) remained neutral. The mean of 4.05 was greater

than the overall mean 3.35 implying good performance of a project is due to a well detailed workplan made by the project managers. The composite standard deviation of 1.43 was higher than the standard deviation of 1.12, indicating agreement within the views of the respondents.

The study's second statement sought to establish whether there is no work plan documentation to be by M&E and project staff while executing the project. Data from 230 respondents revealed that 85 respondents (36.9%) strongly disagreed with the statement, 109 respondents (47.4%) disagreed, 3 respondents (1.3%) remained neutral, 22 respondents (9.6%) agreed, and 11 respondents (4.8%) strongly agreed with the statement. The statement means of 1.98 was lower than the overall mean 3.35 implying that there are workplans in place for project staff to use. The composite standard deviation 1.43 is greater than 1.09 standard deviation indicating agreement within the views of the respondents.

The findings of the variable that there are regular plan updates made by the team leaders to be shared with all the team members were assessed. From the 230 responses received, 97 respondents (42.2%) strongly agreed, 97 respondents (42.2%) agreed with the statement, 0 respondents (0%) neutral while 11 respondents (4.8%) strongly disagreed, and 25 respondents (10.9%) disagreed. The statement had a mean of 4.06 which is greater than the overall mean of 3.35 implying that regular plan updates have been made by the leaders and then shared to the team. The composite standard deviation 1.43 is greater than the standard deviation of 1.13 indicating agreement within the views of the respondents.

The statement on there are proper project objectives which are set in line with the variables under study was assessed. The study had a relatively positive response with data from 230 respondents revealing that 98 respondents (42.6%) strongly agreed, and 101 respondents (43.9%) agreed to the statement, 6 respondents (2.6%) remained neutral to the statement while 8 respondents (3.4%)

strongly disagreed, and 17 respondents (7.3%) disagreed with the statement. The 4.15 mean value was greater than the overall mean 3.35 implying that proper project objectives are set in line with the objectives. The standard deviation of 1.02 is lower than 1.43 the composite standard deviation implying agreement within the views of the respondents.

Further, on the statement on whether all stakeholders are involved in developing a work plan for the project, data from 230 respondents indicate that 91 respondents (39.5%) strongly agree, 84 respondents (36.5%) agree with the statement, 3 respondents (1.3%) remained neutral to the statement whereas, 10 respondents (4.3%) strongly disagreed, and 42 respondents (18.2%) disagreed with the statement. The statement had a mean of 3.89 which is greater than the overall mean indicating that all stakeholders are involved in developing workplans for the project meaning that everyone is part and parcel of the project. The composite standard deviation 1.43 is greater than the standard deviation of 1.23 indicating agreement within the views of the respondents.

The statement that not all stakeholders are involved in developing a work plan for the project was assessed. The statement had a positive response of 230 responses with 73 respondents (31.7%) strongly disagreed with the statement, 79 respondents (34.3%) disagreed, 8 respondents (3.4%) strongly disagreed, and 67 respondents (29.1%) agreed with the statement while 3 respondents (1.3%) remained neutral. The average score of 2.38, which is lower than the overall mean value of 3.35 implying that all stakeholders are involved in workplan development since majority of the respondents disagree that not all stakeholders are involved. The composite standard deviation 1.43 is greater than the standard deviation of 1.29 implying agreement within the views of the respondents.

4.4.2 Inferential Statistics on M&E Work Plan and KCSAP performance

A correlation between the variable M&E Work Plan and KCSAP project performance was studied using "Pearson's correlational" test at confidence level (95%), and the participants' ratings on every aspect were then utilized to determine the cumulative rating scale's scores. The results were then presented in table 4.7 below.

Table 4.7: Pearson Correlation Between M&E Work Plan and KCSAP performance

Variable	Statistics	Performance of World Bank-funded Climate-Smart Agricultural Project
Monitoring and Evaluation Work Plan	Pearson r	0.358**
	P-value	0.000
	N	230

The 0.357 Pearson correlation value confirmed moderately positive M&E Work Plan-KCSAP performance relationships. In addition, the strong significance level p-value of 0.000 reveals the connection between the variables. The observed association doesn't occur by chance but rather reveals the significant influence on M&E Work Plan contribution towards KCSAP performance. In summary, although the correlation is deemed moderate, it points out the relevance of well-organized work plans for project efficacy, productivity, and oversight. This proves that a good M&E work plan will enhance project performance.

4.4.3 Model summary of M&E Work Plan and KCSAP performance

Simple linear regression assessment to assess the extent to which the M&E Work Plan influences KCSAP project performance was carried out. Table 4.8 summarizes the regression model's brief findings.

Table 4.8: Regression Analysis on the Influence of M&E Work Plan on KCSAP performance

Model outline				
Framework	R	R Square	Amended R Square	Std. Error of the Estimate
1	0.599[a]	0.358	0.345	0.52337

a. Predicator: (Constant), Monitoring and Evaluation Work Plan

ANOVA

Model		**Sum of Squares**	**Df**	**Mean Squares**	**F**	**Sig.**
1	Regression	2.414	1	2.414	11.351	0.000 [b]
	Residual	66.754	228	0.293		
	Total	66.754	229			

a. Setting up for Monitoring and Evaluation Work Plan and Performance of the World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.

b. Predictors: (Constant), Monitoring and Evaluation Work Plan

c. Independent Variable: Monitoring and Evaluation Work Plan

Coefficients[a]

Analysis		Unstandardized Coefficients		Standardized Coefficients	T	Sig (p-value)
		B	Std. Error	Beta		
1	(Constant)	3.091	0.246		16.385	0.000
	Monitoring and Evaluation Work Plan	0.391	0.056	0.358	3.113	0.000

The model's positive correlation value (R = 0.599) points to a moderately positive relationship between M&E Work Plan and KCSAP Performance. This correlation value reflects a 35.8% shift in project performance, a finding that is equally affirmed by the modified $R^2 = 0.345$. The model's statistical significance was further established and affirmed using ANOVA, resulting in an 11.351 F-value and a p-value of 0.000. The results demonstrated the impact that the M&E Work Plan has on KCSAP performance, and it was clear the connection was not simply by chance. The formula framework for regression was written as follows:

$$\mathbf{Y = 3.091 + 0.391X + \varepsilon}$$

Whereby:

- **Y** = KCSAP Performance
- **X** = M&E Work Plan
- **ε** = "Error term".

4.4.4 Qualitative Data on M&E Work Plan and KCSAP performance

The findings from the questionnaire were validated by the qualitative findings that demonstrated that the M&E Work Plan and World Bank-funded KCSAP Performance were correlated. Qualitative findings are summed up as follows:

> *"Project managers are the ones who develop work plans for monitoring and evaluating projects. Team leaders are involved in making sure that the team members dully follow the instructions carefully" KII-Respondent 16-29*

> *"Most people are not involved in the decision of the projects being implemented and thus not aware of what is happening in the" KII-Respondent 7-14*

4.4.5 Discussions on M&E Work Plan and KCSAP performance

This finding proved that having structured M&E work plan results in enhanced performance and greater KCSAP productivity. This is backed by descriptive statistics and the positive correlation value (R = 0.599) points to a moderately positive relationship between M&E Work Plan and KCSAP Performance. The M&E work plan outlines the procedures for the project's leadership, management, oversight, evaluation, and record-keeping. It is typically meant to motivate or help employees working on the project or program to review their M&E plans before the execution of the project. In addition to this, it is intended to assist in ensuring that the plans are properly documented (Kadel et al., 2021). When they are properly planned, M&E systems always perform at their highest level. Different systems, on the other hand, frequently become less effective because of lack of attention to detail throughout the planning and execution phase. The intent of monitoring such initiatives is usually to examine their efficacy by measuring their success, particularly in meeting time-bound goals and targets (Clements, 2020). The effects of projects are

assessed using data obtained through the project's research and examination, as well as through baseline and mid-term assessments, including end-of-project evaluations. Kadel et al. (2021) states that the general performance and impact assessment of a project typically contributes to improvements in management and decision-making. By keeping the project on track, they contribute to ensuring that the projects continue to progress as planned, that the aim and anticipated outcomes are achieved, and that the lessons learned are incorporated into the planning process.

4.5 Routine Program Monitoring and KCSAP performance

Routine Program Monitoring as the independent variable was measured by data collection frequency, data quality, data application for decision making and data reporting.

4.5.1 Routine Program Monitoring and KCSAP performance

Six major statements on collecting data participation by stakeholders and data sharing or dissemination were assessed.

Table 4.9: Routine Program Monitoring and KCSAP performance

Statements (Routine Program Monitoring and Performance)	Std % F	D % F	N % F	A % F	SA % F	Mean	Std Deviation
There are many people assigned to collect data for the organization	10 (4.3%)	42 (18.3%)	5 (2.2%)	84 (36.5%)	89 (38.7%)	3.87	1.23
Very few people are involved in data	50	76	6	79	19	2.74	1.34

collection thus making the project lag behind	(21.7%)	(33%)	(2.6%)	(34.3%)	(8.3%)		
Gathering proper information from the farmers helps in producing quality data.	11 (4.8%)	44 (19.1%)	3 (1.3%)	85 (37%)	87 (37.8%)	3.84	1.25
Most farmers are never involved in gathering information hence they do not own the projects at their hearts	50 (21.7%)	76 (33%)	6 (2.6%)	79 (34.3%)	19 (8.3%)	2.74	1.34
All stakeholders are not involved in decision-making after data has been collected and analyzed.	30 (13%)	100 (43.5%)	5 (2.2%)	71 (30.9%)	24 (10.4%)	2.82	1.28
Data is shared promptly and displayed in the database for usage.	14 (6.1%)	51 (22.2%)	3 (1.3%)	80 (34.8%)	82 (35.7%)	3.72	1.31
Overall composite Mean and Std deviation						**3.25**	**1.52**

Source: Primary Data, 2024

The study sought to establish whether there are many people assigned to collect data for the project. The findings drawn from 230 respondents revealed that 89 respondents (38.7%) strongly agreed, 84 respondents (36.5%) agreed that adequate individuals were tasked with data collection. Five respondents (2.2%) were neutral while 10 respondents (4.3%) strongly disagreed, and 42 respondents (18.3%) disagreed with the statement. The statement had a mean of 3.87 which is higher than the overall mean 3.25 implying that the workforce for collecting data is high due to the many people appointed by the organization to collect the data. The composite standard deviation 1.52 is greater than the 1.23 standard indicating agreement within the views of the respondents.

The statement on whether a few people got involved in that process, impeding the project's implementation, was assessed. Data from 230 respondents revealed that 50 respondents (21.7%) strongly disagreed, 76 respondents (33%) disagreed, 6 respondents (2.6%) remained neutral, 79 respondents (34.3%) strongly agreed, and 19 respondents (8.3%) agreed to the statement. The mean statement had a 2.74 average which was lower than the overall mean 3.25 implying collection of data is insufficient due to the low number of people collecting the data for the organization meaning more people are needed to assist in data collection so that projects do not lag behind schedule. The composite standard deviation 1.52 is greater than 1.34 standard deviation indicating agreement within the views of the respondents.

The responses on gathering proper information from the farmers helped in producing quality data were assessed. There was a positive response with 230 responses to the statement. From the responses, 87 respondents (37.8%) strongly agreed, and 85 respondents (37%) agreed to the statement while 3 respondents (1.3%) were neutral, 11 respondents (4.8%) strongly disagreed, and 44 respondents (19.1%) disagreed with the statement. The statement had an average of 3.84 higher

than the overall mean implying that quality data is achieved due to the proper information gathered from the farmers. The composite deviation 1.52 is greater than 1.25 standard deviation indicating agreement within the views of the respondents.

The responses of most farmers are never involved in gathering information hence they do not own the projects at their hearts were assessed. Data from 230 respondents revealed that 50 respondents (21.7%) strongly disagreed, 76 respondents (33%) disagreed while 6 respondents (2.6%) remained neutral, 79 respondents (34.3%) of the respondents agreed and 19 respondents (8.3%) strongly agreed to the statement. The 2.74 average is lower than the overall mean 3.25 implying that farmers own the projects since they are not involved in every step of collecting the information meaning some gaps need to be addressed. The composite standard deviation1.52 is greater than the standard deviation 1.34 indicating agreement within the views of the respondents.

The responses of all stakeholders who are not involved in decision-making after data has been collected and analyzed was assessed. Data from 230 respondents revealed that 30 respondents (13%) strongly disagreed, 100 respondents (43.5%) disagreed with the statement, 5 respondents (2.2%) were neutral, 24 respondents (10.4%) strongly agreed, and 71 respondents (30.9%) agreed with the statement. The 2.82 average score is lower than the overall mean 3.25 implying findings is not all stakeholders are involved in decision making, thus need for them to be involved is key so that can feel encouraged and work as a team. The composite standard deviation 1.52 is greater than 1.28 standard deviation indicating agreement within the views of the respondents.

In the statement, data is shared promptly and displayed in the database for usage was assessed. Data from the 230 respondents indicated that 82 respondents (35.7%) strongly agreed with the statement, 80 respondents (34.8%), 3 respondents (1.3%) remained neutral to the statement while

51 respondents (22.2%) disagreed, and 14 respondents (6.1%) strongly disagreed with the statement. The variable average is 3.72, which is greater than 3.25 the overall mean implying that the way data is presented within the database is closely linked to the efficiency of how this information is shared. Specifically, the prompt sharing of data facilitates timely updates and ensures that the information displayed remains relevant and accurate. This demonstrates the importance of effective data management practices and procedures in improving the usability and reliability of the database for users. The composite standard deviation 1.52 is greater than the 1.31 standard deviation indicating agreement within the views of the respondents.

4.5.2 Inferential Statistics on "Routine Program Monitoring" and KCSAP performance

Pearson's correlation was adopted to analyze the connection between routine program monitoring and World Bank-funded KCSAP performance, whereby input from participants on all aspects was integrated at a 95% confidence level to arrive at the overall rating scale scores. Table 4.10 below shows the correlational analysis findings

Table 4.10: Routine Program Monitoring and KCSAP performance Pearson Correlation

Variable	**Statistics**	**Performance of World Bank-funded Climate-Smart Agricultural Project**
Routine Program Monitoring	Pearson *r*	0.389**
	P-value	0.032
	N	230

Source: Primary Data, 2024

The 0.391 positive correlation value confirmed a moderate relationship between variables. This signifies that as routine program monitoring gets effective, project performance is inclined to improve. The variables' relationship statistical significance was further demonstrated by a p-value of 0.031 p-value. This revealed the influence of routine program monitoring on KCSAP performance, signaling that their connection seems unlikely to be purely accidental. These results point out the crucial role of regular oversight and participation by stakeholders for enhancing the performance of such climate-smart agricultural initiatives.

4.5.3 Model summary of Routine Program Monitoring and KCSAP performance

Similarly, a "simple linear regression" method of analysis was selected to analyze the influence of routine program monitoring and World Bank-funded KCSAP performance. Table 4.11 sums up the regression model's findings.

Table 4.11: Regression Analysis on the Influence of Routine Program Monitoring on KCSAP performance

Model outline				
Framework	R	R Square	Amended R Square	Std. Error of the Estimate
1	0.664[a]	0.389	0.385	0.54081

a. Predicator: (Constant), Routine Program Monitoring

ANOVA					
Model	**Sum of Squares**	**Df**	**Mean Squares**	**F**	**Sig.**

1	Regression	2.172	1	2.172	5.240	0.032 [b]
	Residual	62.684	228	0.292		
	Total	66.754	229			

a. Setting up for Routine Program Monitoring and Performance of the World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.

b. Predictors: (Constant), Routine Program Monitoring

c. Independent Variable: Routine Program Monitoring

Coefficients[a]

Analysis		Unstandardized Coefficients		Standardized Coefficients	T	Sig (p-value)
		B	Std. Error	Beta		
1	(Constant)	2.971	0.244		12.162	0.000
	Routine Program Monitoring	0.235	0.071	0.389	0.490	0.032

A positive R value of 0.664 was realized, confirming a significant relationship between routine program monitoring and KCSAP project performance. This implied that regular monitoring impacted the project performance considerably. The statistical importance of this connection was additionally established by a 5.240 F-value and a p-value of 0.032. Equally noted was the correlation coefficient data, which displayed a 39.9% variance in KCSAP performance, reflecting a positive ($R^2 = 0.389$) value.

The regression model's modified $R^2 = 0.385$ showed an accurate match for the data, accounting for potential predictors. In this instance, it emerged that routine monitoring asserted effectiveness occurs when all other variables remain constant. Basically, this infers that in case other variables are held constant, an additional unit of routine program monitoring would culminate in a 0.235 boost in project performance. The statistical significance of such an effect is supported by the (0.032) p-value.

Below is an expression for this regression equation:

$$Y = 2.971 + 0.235X1 + \varepsilon$$

Where:

Y = KCSAP Performance

X1 = Routine Program Monitoring

ε =term for Error.

4.5.4 Qualitative Data on Routine Program Monitoring and KCSAP performance

Routine Program Monitoring and World Bank-funded KCSAP Performance were corresponding with the responses given by participants to all the variables in the study. Qualitative findings are summed up as follows:

> *"Projects are monitored by project managers and all the stakeholders involved in the implementation process. Monitoring of projects helps in checking the weak areas and strengthens where necessary" KII-Respondent 15-19*

> *"No one is accountable for the failure of project completion since every team member is not responsible for the project's activities" KII-Respondent 20- 23*

4.5.5. Discussions on Routine Program Monitoring and KCSAP performance

The findings confirm the influence of conducting periodic or routine program monitoring on project performance and outcomes. The positive R value of 0.664 realized confirms not only the impact of routine program monitoring but also its relationship and contribution to KCSAP performance. As noted, such practice increases decision-making, enhances transparency, and ensures efficient utilization of resources. KCSAP results show that coherent oversight can greatly boost performance, leading to desired results. This highlights the need for organizing and conducting periodic data monitoring in the future for initiatives. This implied that regular monitoring impacted the project performance considerably. Clements (2020) notes this contribution of regular monitoring of programs in enhancing accountability and prompt deployment of agricultural measures, leading to greater yields. As stated by Oshiro et al. (2020), routine program monitoring encompasses obtaining and reviewing data continuously to boost the project's effectiveness. This routine surveillance of activities helps guarantee the whole plan is timely appraised so that it meets its objectives and projections. This is frequently achieved through evaluating the procedures and strategies employed to achieve a specific result. Notably, such monitored processes and strategies often get backing from specific managerial operations, like financing, time management practices, and staffing. These findings are reinforced by a recent IFPRI investigation, which observed areas practicing routine program oversight realized a 20% increase in agricultural output compared to parts that don't.

4.6 M&E Data Use and KCSAP performance

Data Use and performance of World Bank-funded KCSAP was the independent variable, which was measured by data analysis frequency, data usage for decision making, data sharing with stakeholders, and data usage for program execution improvement.

4.6.1 M&E Data Use and KCSAP performance

Six statements about data collection methods, stakeholder engagement in gathering information, and contribution to decision-making, alongside information sharing or dissemination, were examined. Table 4.12 shows what was discovered based on Likert scale responses, including average scores and deviations from the mean.

Table 4.12: M&E Data Use and KCSAP performance

Statements (M&E Data Use and Performance)	**Std % F**	**D % F**	**N % F**	**A % F**	**SA % F**	**Mean**	**Std Deviation**
There are several methods used for data collection information	14 (6.1%)	38 (16.5%)	6 (2.6%)	80 (34.8%)	92 (40%)	3.86	1.27
There are no proper methods of collecting quality data from the respondents	68 (29.6%)	116 (50.4%)	6 (2.6%)	19 (8.3%)	21 (9.1%)	2.17	1.20

Data collected is used for future decision-making and also helps in formulating policies	9 (3.9%)	15 (6.5%)	5 (2.2%)	93 (40.4%)	108 (47%)	4.20	1.03
Most farmers are never involved in gathering information hence they do not **own** the projects at their hearts	35 (15.2%)	108 (47%)	8 (3.5%)	57 (24.8%)	22 (9.6%)	2.67	1.26
All stakeholders are not involved in decision-making after data has been collected and analyzed for better use	12 (5.2%)	46 (20%)	4 (1.7%)	82 (35.7%)	86 (37.4%)	3.80	1.27
It is timely for data sharing in the database management center	14 (6.1%)	58 (25.2%)	5 (2.2%)	71 (30.9%)	82 (35.7%)	3.65	1.34
Overall composite Mean and Std deviation						**3.44**	**1.46**

Source: Primary Data, 2024

The first statement sought to establish whether several data collection methods were employed to collect important information concerning the project. The response to this statement was resounded from 230 respondents with 92 respondents (40%) strongly agreed with the statement, 80 respondents (34.8%) agreed, while 6 respondents (2.6%) remained neutral, 14 respondents (6.1%) strongly disagreed, 38 respondents (16.5%) disagreed with the statement. This response had a 3.86 mean which was greater than the overall mean 3.44 implying several methods of collecting data are used which led to comprehensive information for the project. The composite standard deviation 1.46 is greater than 1.27 standard deviation indicating harmony among the views of the respondents.

In the statement there are no proper methods of collecting quality data from the respondents, 230 data responses were collected. From the data collected, 68 respondents (29.6%) strongly disagreed with the statement, 116 respondents (50.4%) disagreed, 21 respondents (9.1%) strongly agreed, 19 respondents (8.3%) agreed while 6 respondents (2.6%) were neutral. The response had a 2.17 mean which is lower than the overall mean 3.44 implying there are proper methods of collecting quality data which enhances the information required by the project. The composite standard deviation 1.46 is greater than the 1.2 standard deviation indicating harmony among the views of the respondents.

Respondents also expressed their views on the statement whether collected data is used for future decision-making and also helps in formulating policies. Data from 230 respondents revealed that 93 respondents (40.4%) agreed, 108 respondents (47%) strongly agreed to the statement, 15 respondents (6.5%) disagreed, 9 respondents (3.9%) strongly disagreed while 5 respondents (2.2%) remained neutral to the statement. The response had a 4.20 mean which is greater than the overall mean 3.44 implying that data should be collected ahead of time to help in decision making

and formulation of policies. The composite standard deviation 1.46 is greater than the 1.03 standard deviation indicating harmony among the views of the respondents.

The responses to the statement most farmers are never involved in gathering information hence they do not own the projects at their hearts was assessed. Data from 230 respondents revealed that 35 respondents (15.2%) strongly disagreed, 108 respondents (47) disagreed with the statement, whereas 8 respondents (3.5%) remained neutral, 57 respondents (24.8%) agreed, and 22 respondents (9.6%) strongly agreed to the statement. The response had 2.67 average which is lower than the overall mean 3.44 implying farmers are involved in gathering information and owning the projects at their hearts since they are involved in collection of data. The composite standard deviation 1.46 is greater than the 1.26 standard deviation indicating harmony among the views of the respondents.

The statement assessed whether non-involvement of all stakeholders in decision-making after data collection and analysis is for better use. From 230 responses, the data revealed 86 respondents (37.4%) strongly agreed, 82 respondents (35.7%) agreed, 4 respondents (1.7%) being neutral, whereas 46 respondents (20%) respondents disagreed, and 12 respondents (5.2%) strongly disagreed. The response average 3.80 is greater than the overall mean 3.44 implying involvement of stakeholders is limited, and stakeholders should be involved in decision making after the data is collected and analyzed. The composite standard deviation 1.46 is greater than the 1.27 standard deviation indicating harmony among the views of the respondents.

The statement assessed whether the information had been shared in the information management center on time. Data from 230 respondents revealed that 82 respondents (35.7%) strongly agreed with the statement, 71 respondents (30.9%) agreed with the statement, 14 respondents (6.1%) strongly disagreed, 58 respondents (25.2%) disagreed while 5 respondents (2.2%) remained

neutral. The findings had an average of 3.65, which is greater than the overall mean 3.44 implying that sharing of data is done promptly and in good time. The composite standard deviation 1.46 is greater than the 1.34 standard deviation indicating harmony among the views of the respondents.

4.6.2 Inferential Statistics on Data Use and KCSAP performance

The correlation between data use and the World Bank-funded KCSAP project was studied using statistical outputs. At a 95% confidence level, the respondents' assessments on all items were incorporated to determine the cumulative ratings.

Table 4.13: Pearson Correlation Between Data Use and KCSAP performance

Variable	Statistics	Performance of World Bank-funded Climate-Smart Agricultural Project
Data Use	Pearson r	0.230**
	P-value	0.047
	N	230

(n=230); ** The correlation is statistically significant at the 0.01 level (two-tailed).

The analysis yielded a 0.230 correlation coefficient, implying that the relationship between data usage and KCSAP performance was low. This essentially means any improvement in data utilization leads to a minor boost in project performance. Despite the low correlation, the p-value of 0.047 signifies statistical significance. This further confirmed that, while data usage was limited,

it had considerable effects on KCSAP performance, and that this connection was unlikely to be accidental. These results draw attention to the necessity of enhancing data management procedures for improved choice-making and general project success.

4.6.3 Model Summary of Data Use and KCSAP performance

The findings of a simple linear regression assessment that explored the correlation between data use and KCSAP performance as demonstrated by table 4.6.3. This analysis intended to determine the level to which data use predicted program outcomes, including whether such a relationship is considered statistically significant.

Table 4.14: Regression Analysis on the Influence of Data Use on KCSAP performance

Model outline				
Framework	R	R Square	Amended R Square	Std. Error of the Estimate
1	0.480[a]	0.230	0.221	0.54050

a. Predicator: (Constant), **Data Use**

ANOVA

Model		**Sum of Squares**	**Df**	**Mean Squares**	**F**	**Sig.**
1	Regression	2.146	1	2.146	3.500	0.047 [b]
	Residual	62.608	228	0.292		
	Total	66.754	229			

a. Setting up for Data Use and Performance of the World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.

b. Predictors: (Constant), Data Use

c. Independent Variable: Data Use.

Coefficients[a]

Analysis		Unstandardized Coefficients		Standardized Coefficients	T	Sig (p-value)
		B	Std. Error	Beta		
1	(Constant)	2.881	0.297		8.697	0.000
	Data Use	0.254	0.076	0.230	0.707	0.047

The statistical regression test yielded R=0.480, pointing to a substantial correlation between data use and KCSAP performance and productivity. The significance of this relationship was validated using an ANOVA test, which resulted in a 3.500 F-value and a p-value of 0.0047, implying that the model was indeed significant. This result broadly proves that even though other variables are more important, using data has considerable effects on project productivity. This is evidenced by 0.230 R-square coefficient, which reveals that 23% of the project's performance variation is due to data use, with the remaining 77% determined by other variables. The minor variation, despite being modified, was 0.0221, which remains lower, signaling the model's stability.

An additional examination of the tested coefficient data reveals a constant state (R = 2.881 and p-value = 0.000), where data use is considered zero. However, with coefficient values of R=0.254 and p-value=0.047, any improvement in data use, assuming every other variable stays constant,

resulting in a 0.254-unit boost in performance. The statistical importance of this influence on project performance is evidenced by the 0.047 p-value, which is significant against a 0.05 threshold. These results draw attention to the necessity of improved data management methods for increasing the potential advantages of information-driven choices in KCSAPs.

The generated regression equation is based on the findings:

$Y = 2.881 + 0.254X1 + \varepsilon$

Whereby:

Y = KCSAP Performance

X1 = Data Use

ε =term for Error.

4.6.4 Qualitative Data on Data Use and KCSAP performance

This was evident given by the varied statements presented that the Data Use and World Bank-funded KCSAP Performance were corresponding with the responses given by participants to all the variables in the study. Qualitative findings are summed up as follows:

> *"The information is retrieved from the database promptly since it is adequately stored for future use. All the collected information is carefully used and data analyzed to help the organization to use it" KII-Respondent 24-29*

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4.6.5 Discussions on Data Use and KCSAP performance

This study's findings show that quality M&E data is key to increasing project performance and productivity. Incorporating such project data to inform KCSAP decisions has resulted in increased

performance and outcomes. The contribution of M&E data to enhance KCSAP performance is supported by a positive (R=0.480) correlation pointing to its significance in strengthening the M&E system and improving project outcomes. Jahid (2019) study affirms the critical role of having access to quality, accurate M&E data to inform project implementation and increase success rates. The indicators of the M&E strategy and the research inquiries are what determine the data that is required for the framework to function properly (Abena et al., 2024). For instance, during the project execution phase, collected information is often kept and later utilized to direct future operations, as well as to improve or modify methods that have already been implemented. There are typically a variety of functions that each of the highlighted data sources fulfills. According to Temesgen, (2021) the examples of routine data sources include those that provide real-time information about everyday activities such as crop production, climate, and input utilization.

4.7 Performance of KCSAP, World Bank-funded Project.

The performance of KCSAP in Uasin Gishu is the dependent variable, which is measured by agricultural productivity, crop yield, livestock production, resource use efficiency, enhanced agricultural practices adaptation, climate change resilience and agriculture revenues

4.7.1 Performance of KCSAP, World Bank-funded Project

The KCSAP performance in the context of M&E results distribution was assessed with the survey focusing on agricultural output, livestock rearing, resource usage, climate change issues, and outside forces like governmental initiatives and cartels within the sector, as demonstrated in Table 4.15.

Table 4.15: ***Performance of KCSAP, World Bank-funded Project.***

Statements (Performance on Agriculture productivity)	**StD % F**	**D % F**	**N % F**	**A % F**	**SA % F**	**Mean**	**Std Deviation**
There are good yields from the farms due to good teamwork work experienced	5 (2.2%)	29 (12.6%)	0 (0%)	105 (45.7%)	91 (39.6%)	4.08	1.04
There are no good yields from the farms due to poor teamwork experienced	17 (7.4%)	85 (37%)	0 (0%)	84 (36.5%)	44 (19.1%)	3.23	1.32
Many farmers have enough livestock in their farms due to properly managed AI's	9 (3.9%)	15 (6.5%)	0 (0%)	107 (46.5%)	99 (43%)	4.18	1.00
Resources are properly used and efficiently according to the planned	11 (4.8%)	37 (16.1%)	0 (0%)	98 (42.6%)	84 (36.5%)	3.90	1.19

objectives and plan of the projects							
There are several enhanced agricultural practices adopted by farmers on their farms on livestock keeping	6 (2.6%)	15 (6.5%)	0 (0%)	126 (54.8%)	83 (36.1%)	4.15	0.91
There are challenges to climate change which keep on changing now and then thus affecting the production of yield in the firms	16 (7%)	47 (20.4%)	0 (0%)	117 (50.9%)	50 (21.7%)	3.60	1.22
The government collects good revenue from agricultural produce	22 (9.6%)	44 (19.1%)	5 (2.2%)	86 (37.4%)	73 (31.7%)	3.63	1.35
Many cartels have hindered farmers from getting good services	9 (3.9%)	33 (14.3%)	7 (3%)	85 (37%)	96 (41.7%)	3.98	1.17

from the government and funding agencies		
Overall composite Mean and Std deviation	**3.84**	**1.32**

Source: Primary Data, 2024

The responses offered regarding the KCSAP performance in Uasin Gishu offered some vital insights into the performance of the World Bank-funded KCSAP project.

The findings on the variable that there are good yields from the farms due to good teamwork work experience. Data collected from 230 respondents revealed that 91 respondents (39.6%) strongly agreed, 105 respondents (45.7%) agreed with the statement, 0 respondents (0%) were neutral, 5 respondents (2.2%) strongly disagreed, and 29 respondents (12.6%) disagreed. The response recorded a mean of 4.08 which is greater than the overall mean 3.84 implying that teamwork has promoted good yielding from the farms. Composite standard deviation 1.32 is greater than the response standard deviation 1.04 indicating harmony among the views of the respondents.

The statement that there are no good yields from the farms due to poor teamwork experience was assessed. Data collected from 230 respondents revealed that 17 respondents (7.4%) strongly disagreed, 85 respondents (37%) disagreed, 0 respondents (0%) were neutral, 84 respondents (36.5%) agreed, and 44 respondents (19.1%) strongly agreed. These findings indicate that the mean of 3.23 is lower than the overall mean of 3.84 implying that teamwork should be promoted to increase the yields of the farms. The Standard Deviation of 1.32 is equal with the composite standard deviation of 1.32, indicating harmony among the views of the respondents.

The responses on Many farmers have enough livestock in their farms due to properly managed AIs was assessed and data collected from 230 respondents revealed that 9 respondents (3.9%) strongly disagreed, 15 respondents (6.5%) disagreed, 0 respondents (0%) were neutral, 107 respondents (46.5%) agreed, and 99 respondents (43%) strongly agreed. The variable mean 4.18 is higher than the overall mean of 3.84 which implies that AI has improved the number of livestock to a positive number due to it being used well by farmers. The Composite standard deviation 1.32 greater than the Standard Deviation of 1.00, indicating the harmony of opinions of the respondents.

The statement on resources is properly used and efficiently according to the planned objectives and the plan of the projects was assessed. Data collected from 230 respondents revealed that 11 respondents (4.8%) strongly disagreed, 37 respondents (16.1%) disagreed, 0 respondents (0%) were neutral, 98 respondents (42.6%) agreed, and 84 respondents (36.5%) strongly agreed. This response had a mean of 3.90 which is higher than the overall mean of 3.84 implying that efficiency is witnessed due to how properly the resources are used. The Composite standard deviation 1.32 is higher than the Standard Deviation of 1.19, indicating harmony among the views of the respondents.

The statement om there are several enhanced agricultural practices adopted by farmers on their farms on livestock keeping was assessed. Data collected from 230 respondents revealed that 6 respondents (2.6%) strongly disagreed, 15 respondents (6.5%) disagreed, 0 respondents (0%) were neutral, 126 respondents (54.8%) agreed, and 83 respondents (36.1%) strongly agreed. These findings recorded a mean of 4.15 which is higher than the overall mean of 3.84 implying that the adoption of enhanced techniques by farmers is witnessed. The Composite standard deviation 1.32 is higher than the Standard Deviation of 0.91, indicating harmony among the views of the respondents.

The statement there are challenges to climate change which keep on changing now and then thus affecting the production of yield in the firms was assessed. Data collected from 230 respondents revealed that 16 respondents (7%) strongly disagreed, 47 respondents (20.4%) disagreed, 0 respondents (0%) were neutral, 117 respondents (50.9%) agreed, and 50 respondents (21.7%) strongly agreed. The response had a mean of 3.60 which is lower than the overall mean of 3.84 implying that production in the farms keeps on changing due to the challenges of climate change which keeps on changing. The Composite standard deviation 1.32 is higher than the Standard Deviation of 1.22 indicating the harmony of opinions of the respondents.

The statement government collects good revenue from agricultural produce was assessed. Data collected from 230 respondents revealed that 22 respondents (9.6%) strongly disagreed, 44 respondents (19.1%) disagreed, 5 respondents (2.2%) were neutral, 86 respondents (37.4%) agreed, and 73 respondents (31.7%) strongly agreed. The response had a mean of 3.63 which is lower than the overall mean of 3.84 implying that the government still collects good revenue from agricultural produce. The Composite standard deviation 1.32 is lower than the Standard Deviation of 1.35, indicating disagreeing opinions of the respondents.

The statement many cartels have hindered farmers from getting good services from the government and funding agencies was assessed and data collected from 230 respondents revealed that 9 respondents (3.9%) strongly disagreed, 33 respondents (14.3%) disagreed, 7 respondents (3%) were neutral, 85 respondents (37%) agreed, and 96 respondents (41.7%) strongly agreed. The response finding had a mean of 3.98 which is greater than the overall mean of 3.84 implying that farmers lack good services from government funding agencies due to the many cartels. The Composite standard deviation 1.32 is greater than the Standard Deviation of 1.17, indicating harmony in the opinions of the respondents.

4.7.2 Qualitative Data on KCSAP, World Bank-funded Project Performance

The study established the performance of the World Bank-funded KCSAP project, which corresponded with the responses given by participants to all the study variables. The qualitative findings are summed up as follows:

> *"Performance of projects wholly depends on the project manager and his team which is not the case in the* Agricultural Project. *Field coordinators were fully engaged in the projects and trying so much to involve the community" KII-Respondent 30-35*

4.7.3 Discussions on Performance of *KCSAP*,World Bank-funded Project

Based on the findings, successful collaboration or great teamwork increased performance, while effective use of artificial insemination (AI) increased livestock population. This showed that livestock farmers were exposed to different improved agricultural practices. With such improved production, it was affirmed that revenues collected by the government were substantial. However, concerns such as unpredictable climate change and the presence of cartels were noted to not only affect yields but also exclude farmers from accessing donor and government support and services. Evidence from Aremu et al. (2021) study indicates that the World Bank's projected inclusion, productivity, and sustainability targeting has generally supported agri-food development systems. It is acknowledged that the World Bank has supported several initiatives to expand agricultural economies through funding, policy discussions, and advisory and analytical work (Vandercasteelen, 2022). Specifically, the financial backing of several farm projects throughout the globe, especially in Africa, has proved essential to resolving the ongoing food crisis and guaranteeing their sustainability. As productivity achievement rates have revealed, most World

Bank-funded agricultural projects have greatly enhanced results in regions targeted by the initiatives.

Study evidence by Barron et al. (2022) shows that several World Bank-funded initiatives have proved successful in boosting livestock and crop production and promoting the entry of smaller-scale farmers, including medium-sized enterprises, into agri-food supply chains through new institutions like cooperatives and productive partnerships. According to my knowledge, project monitoring can be ongoing, but project assessment is often conducted on a quarterly basis. As a result of the World Bank's assistance with different agricultural programs, yield, long-term viability, and integration of farms and agribusiness firms have all seen significant increases. Despite this, there are still significant obstacles to overcome in order to accomplish numerous goals, one of which is to boost agricultural productivity and development, particularly in nations that are now experiencing conflict and are susceptible. One example is that development projects that provide socioeconomic assistance to developing economies typically have intangible results, which makes it difficult to track and assess the project's objectives including the results.

Deductively, the positive regression analysis correlation ($R^2 = 0.230$) between project performance and data use implies that within the project structure, data may account for 23% of the overall performance variability. This significant correlation is also revealed by the ANOVA test, with a p-value (0.047) and a 3.500 F-value. This affirms that the model is adequate for forecasting the dependent variable. The undefined coefficient demonstrates that additional data use culminates in increased project performance, assuming all other variables remain constant. The findings highlight the vitality of effective data usage in influencing agricultural proposal performance. Prompt and precise information usage facilitates policy formulation, choices, and optimized project execution, all of which are essential for fulfilling the project's goals.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.0 Introduction

This Chapter five details the summary of key results discussed in previous chapter, theoretical and empirical conclusions and finally offers suggestions or recommendation, which includes the study gaps that need further research work.

5.1 Summary of the Findings

This part reviews the key study outcomes grounded on each research objective.

5.1.1 M&E Human Capacity and performance of World Bank-funded Kenya Climate-Smart Agriculture Project in Uasin Gishu County, Kenya.

The M&E human capacity contribution towards KCSAP performance was considered by assessing the availability of staff M&E training, M&E competency, low staff impacting good service delivery, whether there was adequate or no resource availability, and finally, the organization losing clients due to lack of training for many staff members. Concerning the availability of staff M&E training, the sum of those who agreed and/or strongly agreed was 85.7%, while those who disagreed and/or strongly disagreed was 14.3%. On M&E competency, the proportion of those who agreed and/or strongly agreed that there are experienced staff was 83.9%, while 16% disagreed and/or strongly disagreed. Besides, regarding whether low staff impacted good service delivery, 20.4% agreed and/or strongly agreed, 6% remained neutral, while 76.9% disagreed and/or strongly disagreed. Moreover, the question of whether there was adequate or no resource availability for KCSAP implementation received mixed reactions, with the proportion of those

who agreed and/or strongly agreed to have sufficient resources being 48.6% and those who disagreed and/or strongly disagreed being 51.3%. The disparity in response was noted when the question was reversed, with 35.7%, agreeing and/or strongly agreeing to not have resources, while 64.3% disagreed and/or strongly disagreed. Finally, regarding whether the organization was losing clients due to lack of training for many staff members, 68.7% disagreed and/or strongly disagreed, 1.3% were neutral, and 30% agreed and/or strongly agreed. This response was supported by a positive R^2=0.435 correlation between the studied variables, with 43.5% project performance variation confirming M&E human capacity's major contribution to KCSAP performance. The. assessment of human capacity and KCSAP performance demonstrated that personnel with skills and expertise contributed to project execution. Pearson's correlation was applied to investigate the human capacity and KCASP performance relationship. The results were statistically significant, pointing out the need for competent human capacity in ensuring project success. Further, a positive correlation was noted through models' regression examination, which affirmed the correlation between human capacity and KCSAP's success.

5.1.2 M&E Work Plan and performance of World Bank-funded Kenya Climate-Smart Agriculture Project in Uasin Gishu County, Kenya.

The M&E Work Plan contribution towards World Bank-funded KCSAP Performance within Uasin Gishu. Descriptive statistics showed that M&E work plans optimized the project performance due to the existence of an action plan, documentation, plan updates, project objectives alignment, and participation by stakeholders. As noted, an overwhelming 83.4% agreed and agreed strongly that project managers had detailed work plans in place for M&E staff members to use when executing the project, 15.6% disagreed and/or strongly disagreed, and 0.9% remained neutral. Regarding whether no work plan documentation was available to M&E project staff to use while executing

the project, 84.3% disagreed and/or strongly disagreed, 1.3% remained neutral, while 14.4% agreed and/or strongly agreed. Besides, the question of whether team leaders prepared regular plan updates and shared them with team members received a positive response, with 84.4% agreeing and/or strongly agreeing, while 15.7% disagreed and/or strongly disagreed. Additionally, reaction to whether proper project objectives were set in line with the variables under study was noted, with 86.5% agreeing and/or strongly agreeing, 2.6% remaining neutral, and 10.7% disagreeing and/or strongly disagreeing. Moreover, the involvement of stakeholders in work development was assessed, and 76% agreed and/or strongly agreed, 1.3% remained neutral, while 22.5% disagreed and/or strongly disagreed. Finally, the statement that not all stakeholders were involved in developing a work plan for the project revealed 66% disagreeing and/or strongly disagreeing, 32.5% agreeing and/or strongly agreeing, and 1.3% remaining neutral. The positive correlation value (R = 0.599) noted confirmed a moderately positive relationship between the M&E Work Plan and KCSAP Performance as reflected by a 35.8% variation. This indicates that as the M&E Work Plan's success improves, so does the KCSAP project's performance, although it is less significant. Finally, a "simple linear regression" assessment was conducted to assess how work plan contributes to KCSAP project performance. The model's correlation value points to a moderately positive work plan and KCSAP performance relationship. The results obtained demonstrated the influence of work plan on KCSAP performance.

5.1.3 Routine Program Monitoring and performance of World Bank-funded Kenya Climate-Smart Agriculture Project in Uasin Gishu County, Kenya.

The correlation between Routine program monitoring and the World Bank-funded KCSAP project was studied using the statistical outputs. Descriptive analysis affirmed that considerable participation in gathering data and high farmer contribution, along with efficient exchange of data,

improved project oversight. As noted, 75.2% agreed and/or strongly agreed that adequate individuals were tasked with data collection. 2.2% were neutral, while 22.6% disagreed and/or strongly disagreed. Regarding the statement that fewer people were involved in data collection thereby making the project lag, 54.7% disagreed and/or strongly disagreed, 2.6% remained neutral, while 42.6% agreed and/or strongly agreed. Besides the assessment of whether gathering proper information from the farmers helped in producing quality data, the survey produced a positive response, with 74.8% agreeing and/or strongly agreeing, 1.3% staying neutral, and 23.9% disagreeing and/or strongly disagreeing. The statement of most farmers not participating in data-gathering information prompted a reaction, with 54.7% disagreeing and/or strongly disagreeing, 2.6% remaining neutral, and 42.6% agreeing and/or strongly agreeing. Moreover, 56.5% disagreed and/or strongly disagreed that responses of all stakeholders who are not involved in decision-making after data has been collected and analyzed were assessed, 2.2% were neutral, while 41.3% agreed and/or strongly agreed. Lastly, 70.5% agreed and/or strongly agreed that data collected is promptly shared and displayed in the database for usage, 1.3% remained neutral, while 28.3% disagreed and/or strongly disagreed. A positive R-value of 0.664 confirms a significant relationship between routine program monitoring and KCSAP project performance. This implied that regular monitoring impacted the project performance considerably.

5.1.4 Data Use and performance of World Bank-funded Kenya Climate-Smart Agriculture Project in Uasin Gishu County, Kenya.

The correlation between data use and the World Bank-funded KCSAP project was studied using statistical outputs. Descriptive analysis affirmed that data use has an immense effect on project performance. For instance, a sum of 74.8% agreed and/or strongly agreed that several data collection methods were employed to collect important information concerning the project, 2.6%

remained neutral, while 22.6% disagreed and/or strongly disagreed. Regarding the lack of proper methods of collecting quality data, 80% disagreed and/or strongly disagreed, 17.4% agreed and/or strongly agreed, while 2.6% were neutral. Besides, 87.4% agreed and/or strongly agreed that collected data was being used for future decision-making, 10.4% disagreed and/or strongly disagreed, while 2.2% remained neutral. On the issue of whether most farmers feel excluded and unconcerned about non-involvement in gathering information, 62.2% disagreed and/or strongly disagreed, 3.5% remained neutral, and 34.4% agreed and/or strongly agreed. Moreover, 73.1% agreed and/or strongly agreed that all stakeholders were not involved in decision-making after data had been collected and analyzed for better use, 1.7% were neutral, whereas 25.2% disagreed and/or strongly disagreed. Finally, 66.5% agreed and/or strongly agreed that data collected was timely shared in the database management center, 31.3% disagreed, while 2.2% remained neutral. The statistical regression test yielded R=0.480, confirming the substantial correlation between data use and KCSAP performance and productivity. This result broadly proves that even though other variables are more important, using data has considerable effects on project performance.

5.2 Conclusions

This section distills the study's insights, concentrating on key findings. It presents theoretical and empirical conclusions and examines how they influence KCSAP.

5.2.1 Theoretical conclusions

The research results offered a greater awareness of the M&E practices used by KCSAP, particularly their effect on productivity in agriculture. Insights into such procedures were in line with found theoretical frameworks. For instance, a logical framework, or log frame provides an outline to examine assessment objectives, verification techniques, indicators, and activities,

including the stakeholder's roles. This approach is frequently employed in M&E to support initiatives and groups in developing a structured and organized approach for program strategy, execution, and appraisal. This framework provided insight into diverse projects like KCSAP by carefully documenting its goals and the actual actions sought for fulfilling them, as well as assessing if the targets were successfully achieved. This logical framework theory offered insight regarding the M&E framework's role in enhancing agricultural output.

The Theory of Change, for its part, helped clarify the significance of evaluation and oversight, including their implications across multiple agricultural divisions. It presented an exhaustive overview of the procedure for which a planned change ought to happen in a specific scenario. It also underscored the necessity of proving the logic behind initiatives and connections between inputs, tasks, results, and influences on aid in efficient choices and accountability. The theory additionally informed the procedure of measuring the project's development and goals to highlight their effectiveness. In a nutshell, both theoretical approaches proved to be useful guiding tools in this study, especially in exploring KCSAP's M&E practices. Using them enhanced the set study objectives and contributed to greater awareness of challenges with M&E practices.

5.2.2 Empirical conclusions

Empirical evidence recognizes the essential M&E practices elements affecting donor-funded agricultural project operations, including productivity within the study County. First, M&E-human capacity positively and significantly influences KCSAP performance. Therefore, conducting comprehensive M&E Human Capacity remains vital for project performance. Secondly, the M&E Work Plan was also noted to positively influence KCSAP performance. Thus, there is a need for managers in charge of projects to prioritize developing SMART work plans to

enhance project performance. Thirdly, Routine Program Monitoring positively and significantly influences the Performance of the World Bank-funded KCSAP in Uasin Gishu County, Kenya. This implies that involving Routine Program Monitoring in project activities is essential for achieving sustainable outcomes. Lastly, results demonstrate that data use significantly influenced the World Bank-funded KCSAP Performance in Usain Gishu. This highlights the importance of data usage and storage through databases for future use and timely reporting. In general, whereas M&E practices for KCSAP positively impacted the project's success, improving human capacity skills, planning, encouraging data utilization, and promoting stakeholder engagement remain vital to improving agricultural profitability and their long-term viability.

5.3 Recommendations

The suggestions according to the key observations are that:

1. Project managers need to enhance M&E Human capacity to guarantee that project interventions align with the needs of the community by supporting the performance of any project.
2. Project teams should focus on establishing and developing a structured M&E Work Plan to guarantee that project activities are well-structured and aligned with project goals and that resources are efficiently allocated.
3. Policymakers should adopt Routine Program Monitoring to promote active participation and Performance of World-Bank, and other donor funded Projects.
4. There should be continued storage of data to ensure proper data usage in the future. However, this can be done through involving every stakeholder in the projects being implemented.

5.4 Suggestion for Additional Research

This study was restricted to Uasin Gishu County and World Bank funded projects in Kenya, and future research could extend to other regions or conduct a comparative analysis to see if results differ across various contexts and donors. Additionally, future studies could explore other factors influencing project Performance, such as funding models, policy implementation, and the integration of technology.

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APPENDICES

Appendices I: Research tools

A) Questionnaire

“This questionnaire tool aims to collect information regarding monitoring and evaluation (M&E) systems on agricultural productivity in World Bank-funded Kenya Climate Smart Agriculture Project, Uasin Gishu County, Kenya**. “**The information collected will kept in secrecy and handled with confidentiality. **“**

Please take a moment to complete this form as requested.

“PART I: DEMOGRAPHIC INFORMATION

a) Kindly indicate your gender

Female [ ]

Male [ ]

b) Kindly specify your age:

20 yrs and 30 yrs [_]

31yrs and 40 yrs [_]

41 yrs and 50 yrs [_]

Beyond 50 yrs [_]

c) What is the highest education level?

PhD [_] Master’s- Degree [_]

Undergraduate- degree [_] College- Diploma [_]

College- Certificate [_]

4. For how many years have you been working in your current position? **“**

(a) 5 yrs and below [_] (b) 6 – 10 yrs [_]

(c) 11 – 15 yrs [_] (d) 16 – 20 yrs [_]

PART II: M&E Human Capacity and Performance of World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.

"This section seeks information on M&E Human Capacity for agricultural productivity. A case study of World Bank-funded Kenya climate-smart agriculture project (KCSAP) in the county of Uasin Gishu, Kenya**.** The variable is measured by training levels, experience of the staff members, staff population, and resource availability. Please rate your response to whether you agree or strongly agree or disagree or strongly disagree in the statements below. **"**

"

Key:	**1-Strongly Disagree (SdT)**	**2-Disagree (D)**	**3-Neutral (N)**	**4-Agree (A)**	**5-Strongly Agree (SA)**

	Statements (M&E Human Capacity)	**1**	**2**	**3**	**4**	**5**
1.	There are several trainings on staff members who are always busy implementing the project					
2.	Many staff members are experienced in their work, thus resulting in good productivity					
3.	Low staff numbers make the organization not to be able to render good services					
4.	There are enough resources to implement the projects being undertaken in the Kenya- Climate-Smart Agricultural Project					

5.	There are no resources to implement the projects being undertaken in the Kenya- Climate-Smart Agricultural Project					
6.	Many staff members are not trained in any skill causing the organization to lose many clients.					

In your assessment, how else does M&E Human Capacity affect the productivity and Performance of the World Bank-funded Kenya- Climate Smart Agricultural Project in Uasin Gishu County……

……

"PART III: Monitoring and Evaluation Work Plan and Performance of World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.

In this section you are sought to provide information on monitoring and evaluation (M&E) of work plans and performance World Bank-funded Kenya- Climate Smart Agricultural Project in the county of Uasin Gishu, Kenya**.** The variable is measured by a detailed M&E work plan, regular plan updates, and project objective alignment**.**

Please rate your response to whether you agree or strongly agree or disagree or strongly disagree in the statements below.

Key:	**1-Strongly Disagree (SdT)**	**2-Disagree (D)**	**3-Neutral (N)**	**4-Agree (A)**	**5-Strongly Agree (SA)**

	Statements (Monitoring and Evaluation Work Plan)	**1**	**2**	**3**	**4**	**5**
1.	Project managers make very detailed work plans for the staff members to use when undertaking the projects					

2.	There is no work plan documentation to be used by the project team while undertaking the project activities					
3.	There are regular plan updates made by the team leaders to be shared with all the team members					
4.	There are proper project objectives which are set in line with the variables under study					
5.	All stakeholders are involved in developing a work plan for the project					
6.	Not all stakeholders are involved in developing a work plan for the project.					

In your assessment, how else does Monitoring and Evaluation (M&E) Work Plan affect the productivity and Performance of the World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County……

……

"PART IV: Routine Program Monitoring and Performance of World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.

This section seeks information on Routine Program Monitoring and performance World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya**.** The variable is measured by data collection frequency, data quality, data application for decision-making, and data reporting time.

Please rate your response to whether you agree or strongly agree or disagree or strongly disagree in the statements below.

Key:	1-Strongly Disagree (SdT)	2-Disagree (D)	3-Neutral (N)	4-Agree (A)	5-Strongly Agree (SA)

	Statements (Routine Program Monitoring)	1	2	3	4	5
1.	There are many people assigned to collect data for the organization					
2.	Very few people are involved in data collection thus making the project implementation lag behind					
3.	Gathering proper information from the farmers helps in producing quality data.					
4.	Most farmers are never involved in gathering information hence they do not own the projects at their hearts					
5.	All stakeholders are not involved in decision-making after data has been collected and analysed.					
6.	Data is shared promptly and displayed in the database for usage.					

In your view, how else does Routine Program Monitoring influence the Performance of the World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County……

……

"PART V: Data Use and Performance of World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.

In this section please provide information on data usage and performance of World Bank-funded Climate-Smart Agricultural Project in the county of Uasin Gishu, Kenya**.** The variable is measured by data analysis frequency, data usage for decision-making, data sharing with the stakeholders and data usage for program execution improvement.

Please rate your response to whether you agree or strongly agree or disagree or strongly disagree in the statements below.

Key:	**1-Strongly Disagree (SdT)**	**2-Disagree (D)**	**3-Neutral (N)**	**4-Agree (A)**	**5-Strongly Agree (SA)**

	Statements (Data Usage)	**1**	**2**	**3**	**4**	**5**
1.	There are several methods used for data collection information					
2.	There are no proper methods of collecting quality data from the respondents					
3.	Data collected is used for future decision-making and also helps in formulating policies					
4.	Most farmers are never involved in gathering information hence they do not own the projects at their hearts					
5.	All stakeholders are not involved in decision-making after data has been collected and analysed for better use					
6.	It is timely for data sharing in the database management centre					

In your view, how else does Data Usage influence the Performance of the World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County? ……

……

PART VI: Performance of World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya.

This section seeks information on the performance World Bank-funded Climate-Smart Agricultural Project in Uasin Gishu County, Kenya**.** The variable is measured by agricultural productivity, crop yield, livestock production, resource use efficiency, enhanced agricultural practices adaption, climate change resiliency, and agricultural revenues.

Please rate your response to whether you agree or strongly agree or disagree or strongly disagree in the statements below.

Key:	**1-Strongly Disagree (SdT)**	**2-Disagree (D)**	**3-Neutral (N)**	**4-Agree (A)**	**5-Strongly Agree (SA)**

	Statements (Performance World Bank-funded Climate-Smart Agricultural Project)	**1**	**2**	**3**	**4**	**5**
1.	There are good yields from the farms due to good teamwork work experienced					
2.	There are no good yields from the farms due to poor teamwork experienced					

3.	Many farmers have enough livestock in their farms due to properly managed AI's					
4.	Resources are properly used and efficiently according to the planned objectives and plan of the projects					
5.	There are several enhanced agricultural practices adopted by farmers on their farms on livestock keeping					
6.	There are challenges to climate change which keep on changing now and then thus affecting the production of yield in the firms					
7	The government collects good revenue from agricultural produce					
8	Many cartels have hindered farmers from getting good services from the government and funding agencies					

THANK YOU FOR PARTICIPATING"

B) **: Interview Guide Questions**

This research qualitative data was guided by this interview guide to collect data on how the M&E system components have influenced the performance of World Bank funded KCSAP project in Uasin Gishu County Nairobi.

The initial questions was based on:

i). Staff and stakeholder understanding of the project objectives and anticipated outcomes.

ii). Understanding the stakeholders roles and responsibilities and their involvement in the project.

M&E Human Capacity and Performance of World Bank Funded KCSAP project interview questions were based on:

i). The training and skills that the M&E and project staff are competent on to ensure that the project activities and results are achieved.

ii). The kind of challenges experienced during the M&E assignments, its impact and how it was/will be addressed.

Questions to assess the existing sustainable agricultural practices due to the KCSAP project that have been adopted by farmers in Uasin Gishu county focused on:

i). Which sustainable agricultural practices due to KCSAP have farmers have embraced.

ii). What are some of the barriers that farmers encounter when adopting these sustainable agricultural practices and steps taken to address them.

Questions on the role M&E System and processes used towards the KCSAP performance focused on:

i). How did the M&E system and processes performed in ensuring that project goals are achieved and which systems have been utilized and proved to be effective and those that are not.

ii). How did the M&E system and processes support decision-making by the steering committee and project coordinators.

Interview guide questions on the impact of farming activities due to the KCSAP project focused on;

i). Understanding whether there are some farming practices that were piloted, upscaled and embraced by farmers as a result of KCSAP project and how this has impacted agricultural productivity and livelihoods of farmers.

ii). Understanding the stakeholder perspective on whether the KCSAP project has achieved its goal of ensuring that it increases agricultural productivity and sustainability.

iii). Gathering opinions and recommendation from the stakeholders on how to improve the projects outcome and impact.

Questions on partnership and linkages between the project and the World Bank funding focused on:

i). Understanding the role of the World Bank as the donor in ensuring that project activities, outputs and outcomes are assessed.

ii). How has the partnership impacted the project outcomes.

Other question/guides include:

i). Any anticipated outcomes witnessed

ii). Any recommendations for future improvement of the project M&E system to improve agricultural productivity.

These interviews' guiding questions provide a comprehensive and inclusive understanding of the M&E processes and systems effectiveness in KCSAP project.

Appendices II: ERC

Mount Kenya University

REF: **MKU/ISERC/4672** Date: 14 January 2025

TO: **MANGUSHO ANTONY TWAEM**

REG: **MAME/2023/42296**

Dear Sir/Madam,

RE: MONITORING AND EVALUATION SYSTEM ON AGRICULTURAL PRODUCTIVITY. A CASE STUDY OF WORLD BANK-FUNDED KENYA CLIMATE SMART AGRICULTURE PROJECT (KCSAP), UASIN GISHU COUNTY, KENYA.

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **3394.** The approval period is **14/01/2025 - 13/01/2026.**

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,

MOUNT KENYA UNIVERSITY
ETHICS REVIEW COMMITTEE
P. O. Box 342 - 01000,
THIKA

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

Appendices III: Letter of Introduction

A) MKU

Mount Kenya University

DIRECTORATE OF GRADUATE STUDIES

MAME/2023/42296

15th January, 2025

National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA

Dear Sir/Madam,

RE: MANGUSHO ANTONY TWAEM – REGISTRATION NO. MAME/2023/42296

The purpose of this letter is to introduce the above named student who is pursuing **Master of Arts in Monitoring and Evaluation** in the Department of **Social and Development Studies** in the School **of Social Sciences.**

The title of the research is **"Monitoring and Evaluation System on Agricultural Productivity. A Case Study of World Bank -Funded Kenya Climate Smart Agriculture Project (KCSAP), Uasin Gishu County, Kenya."** It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **January, 2025 and March, 2025.**

Any assistance accorded to the student will be highly appreciated.

Thank you.

Mount Kenya University
P. O. Box 342 - 01000, THIKA
Office of the Director,
Graduate Studies

Dr. Samuel M. Kareng'a, Ph.D
Director, Graduate Studies
Enc.

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
Cell: +254 709 153 000 / +254 709 153 200

B) Letter of Introduction II-

Twaem Antony

P.o Box 14733- 00800

Ministry of Agriculture and Livestock Development

Nairobi, Kenya.

Dear sir/Madam

Re: Letter of Introduction to Carry out Data Collection in Uasin Gishu County.

"Antony Twaem is a Masters Student (MAME/2023/42296 from Mount Kenya University, Nairobi Campus and also have supported the Kenya- Ministry of Agriculture and Livestock Development World Bank Projects for the past years. Currently, I am undertaking my masters research which aims to bring to light the M&E systems' influence on agricultural productivity in KCSAP in the county of Uasin Gishu- Kenya. The KCSAP project was one of the World Bank (WB) funded projects at Uasin Gishu county which makes it a target for my study location.

This research study is important since it is a requirement for the qualification of the MAME program. The findings, results, discussions and insights from this research study will improve and enhance the processes and procedures of other donor funded international supported projects in the country. The data and information drawn and gathered from this study and process will be confidential and will not be used for any other purposes. **"s**

Yours sincerely

Twaem Antony, amtwaem@gmail.com, 0701294260

Data and Information Officer

Appendices IV: NACOSTI Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 124728

Date of Issue: 23/January/2025

RESEARCH LICENSE

This is to Certify that Mr.. TWAEM MANGUSHO ANTONY 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 Uasin-Gishu on the topic: MONITORING AND EVALUATION SYSTEM ON AGRICULTURAL PRODUCTIVITY. A CASE STUDY OF WORLD BANK-FUNDED KENYA CLIMATE SMART AGRICULTURE PROJECT (KCSAP), UASIN GISHU COUNTY, KENYA. for the period ending : 23/January/2026.

License No: NACOSTI/P/25/415422

124728

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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See overleaf for conditions

Appendices V: Turnitin Report

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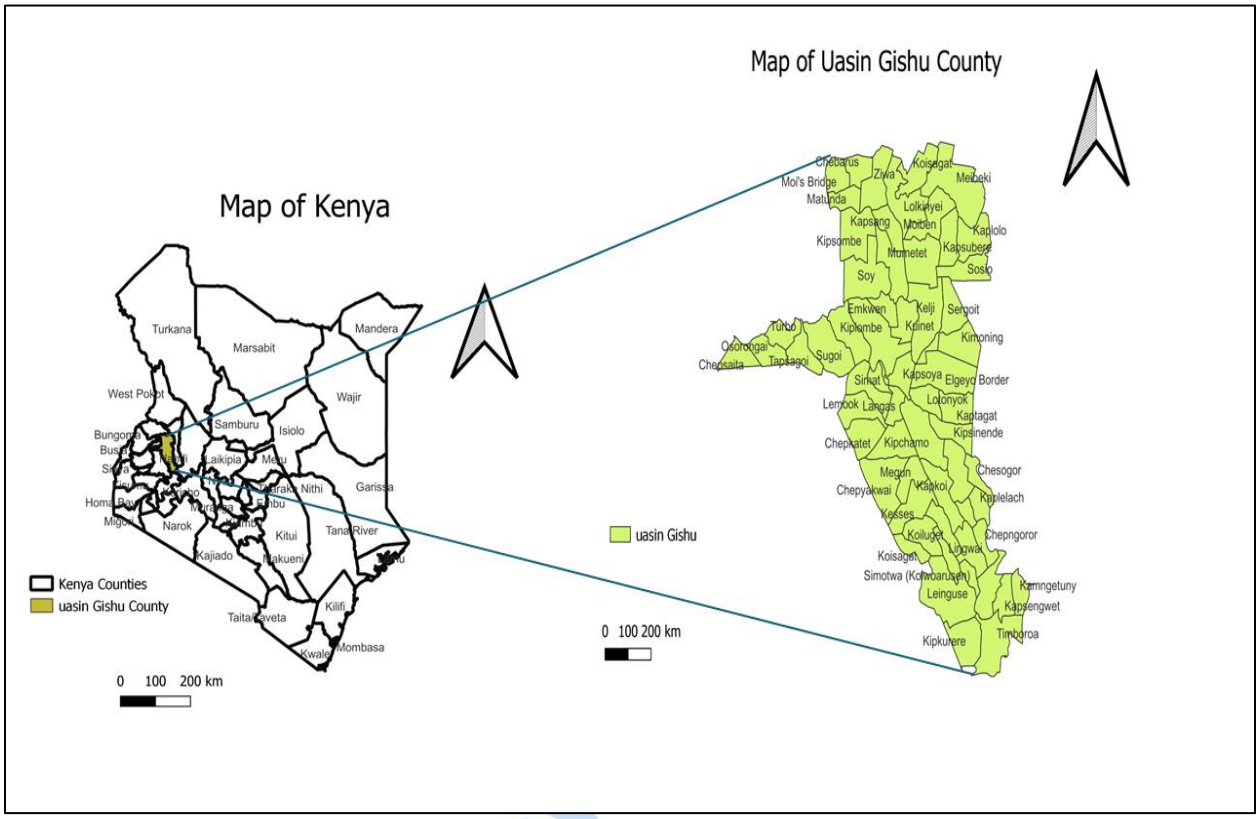
Appendices VI: Research Site Map

Figure of the study location- Uasin Gishu County



Appendices VII: Long tables

A) Work Plan

Research Stages	Research Task	Start Date	End Date
Project Conception	Develop Research topic	7th /03/ 2024	11th /03/ 2024
	Establish research objectives and questions.	12th /03/ 2024	13th /03/ 2024
	Create a conceptual framework.	14th /03/ 2024	16th /03/ 2024
	Review relevant literature	17th /03/ 2024	20th /03/ 2024
Proposal Building			
	Establish methodology & sampling.	21st /03/ 2024	23rd /03/ 2024
	Prepare data collection tools.	24th /03/ 2024	28th /03/ 2024
	Seek Ethical Clearance	1st /04/ 2024	6th /04/ 2024
Data Collection			
	Prepare study assistants	8th April 2024	10th /04/ 2024
	Conduct pilot testing and field studies.	10th /04/ 2024	14th /04/ 2024
Data Analysis	Data preparation and cleaning	15th/ /05/ 2024	17th /05/ 2024
	Analysis using statistics tools	18th /05/ 2024	20th /05/ 2024
	Results interpretation	18th /06/ 2024	20th /06/ 2024
Report Writing			
	Compose the initial report.	22nd /06/ 2024	24th /06/ 2024
	Seek feedback and edit.	25th /06/ 2024	27th /06/ 2024

	Wrap up the report	25th /06/ 2024	27th /06/ 2024
Presentation and Submission			
	Develop a presentation	6th /07/ 2024	8th /07/ 2024
	Present results	9th /07/ 2024	11th /07/ 2024
	Submit the finalized report.	13th /07/ 2024	20th /07/ 2024

B) Project Budget Breakdown

Category	Description	Cost (ksh)
Research supplies	Stationeries	20,000
	Questionnaire	30,500
	Travel and communication Expenses	100,000
	Technology	150,000
Personnel	Field assistance	20,000
	Research Coordinator	30,000
	Data analysts	10,500
Training	Training materials	40,500
	Seminars and Workshops	30,000
Data Preparation	External consultants	
	Data processing	10,500
	Statistical data analysis software	20,000
	Data visualization and presentation	30,000
Contingency	Contingency budget	50,000
Project Total Budget		**542,000**

“

C) Consent Form

CONSENT FORM

Title of Study: Monitoring and Evaluation System on Agricultural Productivity. A Case Study of World Bank-Funded, Kenya Climate Smart Agriculture Project (KCSAP), Uasin Gishu County, Kenya.

Researcher Name : [_____]

Dear [_____]

I am requesting you to take part in the referenced study. Your involvement entails filling out a survey/questionnaire and, upon request, attend a focused group discussion to express your observations and views. Taking part is completely optional which means you may terminate it at any moment .

Confidentiality
All personal details gathered will be absolutely private and only utilized for study purposes.
Contact:

N/B: For any inquiries or concerns regarding the investigation, kindly reach out at [_____].

Permission:
By taking part, you confirm your awareness of the study intentions, secrecy of your views and voluntary participation. Your cooperation is highly valued.

Participant Signature: _____

(Date) _____