

**PROJECT MANAGEMENT PRACTICES AND PERFORMANCE OF FOOD  
SECURITY PROJECTS IN KENYA: A CASE OF AGRICULTURAL SECTOR  
DEVELOPMENT SUPPORT PROGRAMME (ASDSP) IN MAKUENI COUNTY,  
KENYA**

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**A Research Project Submitted in Partial Fulfillment of the Requirements for the Award of  
Degree of Master of Arts in Project Planning and Management of the University of Nairobi**

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## DECLARATION

This research project is my original work and has not been presented to any other university or institution of higher learning for a degree or any other award.

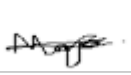
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This research project has been presented to the University of Nairobi for examination with my approval as the university supervisor.

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## **DEDICATION**

I dedicate my research to my loving husband and son. Special thanks to my husband for motivating me and checking in on my progress regularly. I would also like to appreciate my mum, siblings and friends for encouraging me to see the end of this journey.

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I would like to acknowledge the Almighty God for allowing me to add a Master's degree to my list of achievements. I would also like to specially thank Dr. Mary Mwenda for her invaluable guidance and support.

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## **ABBREVIATIONS AND ACRONYMS**

ANOVA:	Analysis of Variance
ASAL:	Arid and Semi Arid Lands
ASDS:	Agricultural Sector Development Strategy
ASDSP:	Agricultural Sector Development Support Programme
CBOs:	Community-Based Organizations
IFAD:	International Fund for Agricultural Development
ILO:	International Labour Organization
JICA:	Japan International Cooperation Agency,
LPG:	Liquefied Petroleum Gas
M&E:	Monitoring and Evaluation
NAAIAP:	National Accelerated Agricultural Input Access Programme
NGO:	Non-Governmental Organization
PMI:	Project Management Institute
SPSS:	Statistical Package for Social Science
SRA:	Strategy for Revitalization of Agriculture
SSA:	Sub-Saharan Africa
U.S.A:	United States of America

## ABSTRACT

Food security is a critical concern in Kenya hence the need to develop projects that will enhance food security in the country. There is an underlying assumption that specific universally recognized project management methodologies exist, which enhance the proficiency of project management. The main objective of the study was to assess project management practices and performance of food security projects in Kenya: a case of Agricultural Sector Development Support Programme in Makueni County, Kenya. The study sought to determine the influence of project scope management, project leadership, stakeholder participation and monitoring and evaluation on the performance of food security projects in Makueni County. A descriptive survey research design was chosen for the study. The study focused on the ASDSP food security initiative projects in Makueni County. The unit of analysis as the four projects under ASDSP: Irrigation Projects, Water Harvesting Projects, Soil Conservation Projects, and Livestock Production Projects. The study targeted the project managers in the four units of analysis. The determination of the sample size was through the Slovin Formula, resulting in a sample size of 125 project managers. Proportional random sampling was used to ensure proportionate representation of strata in the sample based on the project categories. Questionnaires was the primary data collection tool. SPSS software was used for data analysis. Both descriptive and inferential statistics were adopted in the analysis. Simple and multiple linear regression models were employed to examine the relationship between dependent and independent variables. The study found moderately positive and significant correlation between Project Performance and Scope Management ( $r = 0.445$ ), a weak positive and significant correlation between Project Performance and Leadership ( $r = 0.199$ ), a positive and significant moderate correlation between stakeholder participation and project performance ( $r=0.381$ ) and a strong positive correlation between monitoring and evaluation (M&E) and project performance ( $r=0.549$ ). The study recommends that there is need to strengthen the change control procedures to ensure that any changes to the project scope are well-documented, evaluated, and approved by the appropriate authorities. There is need for team-building workshops or activities to foster a collaborative atmosphere among project team members. The project teams should maintain and enhance the active engagement of all stakeholders in the M&E processes. In addition there is need to encourage community members to actively participate in project planning and execution.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

The most ambitious goal set under the sustainable development goals agenda is the eradication of poverty in all its forms across the globe. The looming population growth, urbanization and dietary changes will lead to global demand increase for food by over 60% by 2050 requiring intensification of agricultural productivity (ILO & IFAD, 2020). Zhao and Zhao (2021) reported that food security projects have helped shape the socio-economic progress of countries particularly in Europe, Sweden, Germany and the United Kingdom. In Sub-Saharan Africa, in South Africa, Mutenje et al. (2019) unveiled that enhancing the effectiveness of agricultural projects is contingent upon effective knowledge management and robust stakeholder engagement. Eshete, Sinshaw and Legese, (2020) in Ethiopia identified the lack of governance capacity and accountability as key challenges to sustainability of the irrigation projects. In Malawi, a large scale input subsidy program has transformed the country from being food insecure to food exporter (Ragasa, Aberman & Mingote, 2019). In the Kenyan economy, the agricultural sector is the backbone as it provides livelihoods for most of our rural population. Approximately 80% of Kenya's population resides in rural regions and is either directly or indirectly involved in agricultural activities (Wanyama et al., 2021). Consistent and robust agricultural expansion is of paramount importance in enhancing the quality of life for these individuals and fostering rapid economic progress. However, the sector remains to be predominantly small scale with heavy dependence on rain-fed farming and low use of agricultural technologies (Van Dijk et al., 2022).

Project scope, leadership, stakeholder participation and monitoring and evaluation practices are essential elements that interconnect and significantly impact the performance of projects (Levinson & Herforth, 2022). Project scope management ensures that food security projects stay focused, leadership provides direction and motivation, stakeholder participation ensures local relevance and collaboration, and monitoring and evaluation offer a means to measure progress, learn, and adapt. According to Nassar and Vasa (2022) effective leadership is central to the

integration of project scope management, stakeholder participation, and monitoring and evaluation. Engaging stakeholders in scope definition is essential to ensure that their needs and expectations are considered. Effective monitoring and evaluation require leadership to make decisions based on performance data and take corrective actions when necessary. Clear scope definition, stakeholder engagement, and ongoing assessment of project performance are vital components of successful project management, and leadership plays a critical role in orchestrating and aligning these elements to achieve project goals (Pheng & Pheng, 2018).

In the study, both Project Management Competency Theory developed by McClelland & McBer in the 1980s and Stakeholder Theory by Edward Freeman in 1984, provide valuable frameworks for guiding a study on the influence of project scope, leadership, stakeholder participation, and monitoring and evaluation on the performance of food security projects. Project Management Competency Theory focuses on the skills, knowledge, and abilities of project managers. This can include competencies related to scope management, leadership and performance monitoring. Stakeholder Theory emphasizes the importance of considering the diverse interests of stakeholders in food security projects (Dmytriyev, Freeman & Hörisch, 2021).

### **1.1.1 Project Management Practices**

Project management practices encompass the essential elements that are intrinsic to a project and must be upheld to facilitate efficient and effective teamwork. Continuous attention is necessary for their operation, as they are active throughout the project. Project management processes and strategies are employed to effectively coordinate and allocate resources in order to attain predictable outcomes. The present condition of project management techniques in developing African nations is a matter of great concern, mostly driven by technological advancements, the growing intricacy of projects, and the limited availability of skilled personnel (Osabutey & Jackson, 2019). Assessing the accomplishment of a project usually hinges on the extent to which the outlined goals are met and if the project effectively serves its intended function and addresses a recognized issue within the specified parameters of time, cost, and quality. To achieve the intended objectives, it is important to implement project management systems to effectively control project planning (Kerzner, 2019).

The importance of projects to the performance of businesses has been acknowledged, leading to a heightened focus on improving project management practices. An increasing number of firms have adopted project management practices as a crucial approach for maintaining competitiveness within the contemporary business landscape characterized by intense competition (Ford & Lyneis, 2020). In strategic initiatives aimed at improving overall organizational efficiency, there is a growing presence of centers of excellence for project management. These include project management offices, training initiatives, and programs focused on organizational change. As outlined by the Project Management Institute (PMI, 2021), project management involves attaining project goals and meeting stakeholders' anticipations by efficiently producing intended deliverables within established timelines and budgetary constraints.

### **1.1.2 Performance of Food Security Projects**

The consideration of project performance has been a subject of great importance for the majority of stakeholders involved in food security programs. This phenomenon can be attributed to the substantial allocation of billions of dollars towards these initiatives, along with the persistently unsatisfactory state of food insecurity. The successful completion of predetermined objectives is indicative of a project's satisfactory achievement. The relationship between project performance and project success has been well acknowledged, indicating a strong association with project objectives (Denicol, Davies & Krystallis, 2020). Ahmadabadi and Heravi (2019) have introduced an all-encompassing framework for evaluating project success. This framework encompasses various aspects, including environmental impact, financial aspects, quality, as well as alignment with user expectations, timeliness, commercial significance, health and safety considerations, as well as the satisfaction of project participants.

Project scope management is crucial in food security projects because it defines the boundaries and objectives of the project (Pheng & Pheng, 2018). The scope helps identify what specific aspects of food security the project aims to address, whether it's improving access to food, enhancing food production, or ensuring food safety. Nassar and Vasa (2022) claim that project leadership is essential in food security projects as it provides direction, motivation, and guidance



to the project team. Effective leaders can help navigate complex challenges such as addressing hunger, promoting sustainable agriculture, and managing resources effectively. According to Neef and Neubert (2021) there is need for stakeholder participation in food security projects because it involves the engagement of all relevant parties, including governments, non-governmental organizations (NGOs), local communities, and private sector entities. These stakeholders often have valuable knowledge, resources, and expertise that can contribute to the success of food security projects. According to Levinson and Herforth (2022), monitoring and evaluation (M&E) are essential in food security projects to assess progress, measure the impact, and make informed decisions. Monitoring and evaluation measures the project's effectiveness in improving food security (Kimweli, 2023).

### **1.1.3 The Agricultural Sector Development Support Programme (ASDSP)**

The Agricultural Sector Development Support Programme (ASDSP) is an initiative in Kenya, aimed at supporting the development of the agricultural sector in various counties, including Makueni County. The Agricultural Sector Development Support was designed to enhance agricultural productivity, food security, and livelihoods of smallholder farmers in Kenya. It aimed to improve various aspects of agriculture, including crop production, livestock rearing, agribusiness development, and sustainable natural resource management (ASDSP, 2021).

The primary goal of ASDSP is to improve food security in Kenya by increasing agricultural productivity and ensuring a stable and sufficient food supply. The program aim to boost the income of smallholder farmers by helping them adopt modern and sustainable farming practices. ASDSP seeks to contribute to the overall development of rural areas by investing in agriculture, which is a key economic activity in these regions (Chipeta et al., 2018). ASDSP also involves training and capacity-building activities for farmers to equip them with the knowledge and skills needed to improve their agricultural practices, infrastructure development-investments in rural infrastructure, such as irrigation systems, roads, and storage facilities, to improve farm-to-market access and reduce post-harvest losses and market access, that is, to enhance market access for farmers, helping them connect with buyers and ensuring fair pricing for their produce (Ng'ang'a, 2019).

The Kenyan government plays a central role in the program's implementation by providing policy support, funding, and coordination. International development agencies and donors often collaborate with the Kenyan government to provide financial and technical support. The involvement of smallholder farmers and local communities is crucial for the program's success. Their participation ensures that the program meets local needs as well as the set priorities. Funding for ASDSP come from various sources, including the Kenyan government, international development partners, and donor agencies (Borter & Malik, 2023).

#### **1.1.4 Makueni County**

Makueni County is one of the 47 counties in Kenya, located in the southeastern part of the country. It covers an area of approximately 8,008 square kilometers and an estimated population of 987,643 (KNBS, 2019). The County's administrative headquarters is in Wote Town. Makueni County is further divided into sub-counties and constituencies, including Makueni, Kibwezi East, Kibwezi West, Kilome, and Mbooni. The population of Makueni County is predominantly composed of Kamba people, who are known for their rich cultural heritage. The County has made significant strides in improving access to education. There are numerous primary and secondary schools, as well as tertiary institutions. Access to healthcare services has also improved in recent years, with several healthcare facilities, including hospitals and dispensaries, serving the population.

Makueni County's landscape varies from the hilly terrain in the eastern part to the lowlands and plateaus in the western and central regions. It is part of the arid and semi-arid lands (ASALs) of Kenya, which face challenges related to water scarcity and drought. Agriculture is the backbone of Makueni County's economy. The region is known for its production of various crops, including mangoes, papayas, maize, beans, and various vegetables. Livestock farming, particularly goat and cattle rearing, is also significant. Small-scale irrigation projects have been initiated to mitigate the impact of erratic rainfall in the region (Kimani, Gitau & Ndunge, 2019).

Makueni County is known for its innovative community-led water resource management programs. There have been successful efforts to harvest rainwater, construct sand dams, and

engage in water conservation to provide a more reliable water supply for agriculture and domestic use. The county is home to several wildlife conservation areas, including Chyulu Hills National Park and Tsavo West National Park, which offer opportunities for tourism and wildlife conservation. Like many arid and semi-arid regions, Makueni County faces challenges related to water scarcity, drought, and food security. Efforts to address these challenges have included investment in sustainable agriculture and water management projects (Muema et al., 2019).

## **1.2 Research Problem**

Food security is a critical concern in Kenya hence the need to develop projects that will enhance food security in the country. There is an underlying assumption that specific universally recognized project management methodologies exist, which enhance the proficiency of project management. These practices are anticipated to be consistent and effective across diverse types of organizations and projects, irrespective of their unique characteristics (Munene, Sang & Makau, 2022). Ignoring essential project management practices can lead to project failure, which can have financial, operational, and reputational consequences. The implementation of efficient project management practices is of utmost importance in order to guarantee the timely and cost-effective completion of projects, while also meeting the expectations and requirements of all relevant stakeholders.

Agricultural development projects play a pivotal role in addressing the food security challenge. The Agricultural Sector Development Support Programme (ASDSP) in Makueni County represents one such initiative aimed at enhancing food security. However, despite substantial investments in such projects, there is a growing concern about the efficacy of project management practices in achieving their intended outcomes. While there is ample evidence of the importance of effective project management in delivering successful projects across various sectors, there remains a significant gap in understanding how specific project management practices influence the performance of food security projects, particularly in the context of Makueni County, Kenya. The existing literature has not provided a comprehensive assessment of

the extent to which project management practices are being applied in the ASDSP and how these practices impact the achievement of food security objectives.

In a study done by Al-Hajjand Zraunig (2018) on project management practices and its impact on construction projects, there is a strong correlation between project management practices and successful projects. However, the focus was on construction projects. Odusanya et al. (2021) found that in developing countries, delays and cost overruns in IT projects can be minimized by conducting a thorough front-end project design and defining the project scope clearly. A study by Magana and Yusuf (2018) on project management practices and performance showed that project scope, project leadership, stakeholder analysis and monitoring and evaluation are significant to the performance of food security projects in Kilifi County. However the study was based on the horticultural food security projects especially those that are involved with smallholder farmers.

Despite the extensive efforts by the government, Makueni County and other NGOs, Makueni County still continues to contend with food insecurity. The area is constantly under relief food supply despite the food security measures that have been executed in the area. This shows that the ASDSP projects in Makueni County are still not meeting their goal of promoting food security. The study, therefore, sought to determine how the project management practices in the projects influence the performance of the food security projects in the County. The study thus answered the research question: What is the influence of project management practices on the performance of food security projects in Kenya: specifically the Agricultural Sector Development Support Programme in Makueni County, Kenya?

### **1.3 Research Objectives**

The main objective was to assess the project management practices and performance of food security projects in Kenya: a case of Agricultural Sector Development Support Programme in Makueni County, Kenya.

The study was guided by the following specific objectives:

1. To determine the influence of project scope management on the performance of food security projects in Makueni County.
2. To investigate the influence of project leadership on the performance of food security projects in Makueni County.
3. To determine the influence of stakeholder participation on the performance of food security projects in Makueni County.
4. To determine the influence of monitoring and evaluation on the performance of food security projects in Makueni County.

#### **1.4 Value of the Study**

The study may help identify the project management practices that are most effective in improving the food security projects. The adoption of these methods can potentially facilitate the generation of an adequate food supply for the purpose of sustaining food security, while concurrently empowering the community through the commercialization of any excess produce. This information can be used to develop best practices for managing similar projects in the future. The study might advance our understanding of project management techniques and raise performance expectations for project management specialists. Additionally, it might facilitate better management of donor-funded initiatives in non-profit and public food security projects. The study might assist decision-makers and planners in governmental and non-governmental organizations about key areas to concentrate on and help them avoid duplicating efforts to deliver relevant services.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Chapter two entails a review of the literature which is relevant to the study. Past studies are examined and resulting knowledge gaps are identified. This chapter also contains literature on the objectives and their relationship with the dependent variable. The theoretical framework, conceptual framework, empirical literature review and summary of the literature are also be discussed in this chapter.

#### **2.2 Theoretical Foundations**

The study was guided by project management competency theory and the stakeholder theory.

##### **2.2.1 Project Management Competency Theory**

McClelland & McBer developed competency theory in the 1980s. Competency is the fundamental trait that causes criterion-referenced effective and/or outstanding performance in a work or environment (McClelland & Boyatzis, 1982). This theory has important implications for food security project management practices, as it can help project managers to identify the competencies that are required for successful project implementation, and to develop strategies for building and strengthening these competencies within their teams. The theory allows the study to define what competencies are essential for effective scope management in food security projects. The theory also helps identify the leadership competencies critical for leading food security projects. The theory helps the study establish a framework for assessing the competency of project teams in implementing robust monitoring and evaluation processes within food security projects.

The theory assumes that project management competencies can be identified, developed, and transferred from one context to another. It also assumes that the identified competencies are relevant and critical for project success, and that project management competencies remain relatively stable over time. The theory also assumes that project management competencies can

be measured and assessed using appropriate tools and methods, such as competency frameworks, assessments, and performance evaluations.

The theory has some limitations, for instance, the theory may not adequately account for the influence of contextual factors, projects are dynamic and can change rapidly, assessing competencies can be subjective, and biases may influence evaluations. While competencies are important, they may not provide a complete predictive model for project success. To overcome these limitations, the study acknowledged and thoroughly analyze the contextual factors that might influence the applicability of competencies, recognize that competencies are one of several contributing factors to project success and used qualitative and quantitative data to identify the relative importance of competencies in the success or failure of food security projects.

### **2.2.2 Stakeholder Theory**

The concept of stakeholder theory pertains to a management and organizational framework that centers on the examination of the interconnections and dynamics between companies and their respective stakeholders (Freeman, Dmytriyev & Phillips, 2021). According to Derakhshan, Turner and Mancini (2019), stakeholder theory is a widely recognized framework that has been applied to many fields, including project management. Within the realm of food security initiatives, stakeholder theory can serve as a guiding framework for project management practices, ensuring the comprehensive consideration of the requirements and concerns of all stakeholders involved. A fundamental tenet of stakeholder theory posits that organizations ought to strive for the generation of value for all stakeholders, rather than solely prioritizing shareholders or owners. In the context of food security projects, stakeholders might include farmers, consumers, government agencies, NGOs, and other organizations involved in the food system. By taking a stakeholder-oriented approach to project management, organizations can ensure that they are meeting the needs of all stakeholders and creating positive social, economic, and environmental outcomes. Stakeholder theory was used in this study to help demonstrate stakeholder management implications on the performance of food security projects. It is evidence from the empirical literature that stakeholder participation is important and thus this

theory helped guide the study in proving that it has an influence on the performance of food security projects.

## **2.3 Project Management Practices and Performance of Food Security Projects**

The section provides empirical studies on the various project management practices considered in this study and their influence on performance of projects.

### **2.3.1 Project Scope Management and Performance of Food Security Projects**

Properly defining the scope of a project is essential to its success, as it sets the foundation for all subsequent project planning and execution (Ajmal, Khan & Al-Yafei, 2020). A project scope statement typically includes what the project aims to achieve, a list of the tangible products or outcomes that will be produced as part of the project (deliverables), a breakdown of the specific activities that will be performed to produce the project deliverables, any limitations or restrictions that will affect the project, such as time, budget, resources, or external factors and any assumptions or dependencies that underlie the project scope, such as availability of resources or access to technology (Althiyabi & Qureshi, 2021).

Gransberg and Maraqa (2022) emphasize the significance of delineating the project scope, as it facilitates the establishment of a common comprehension among all project stakeholders regarding the intended objectives of the project and what is required to achieve it, provides a clear basis for decision-making throughout the project, by providing a set of criteria against which proposed changes or additions can be evaluated. The establishment of project scope serves the purpose of mitigating scope creep, a phenomenon characterized by the progressive enlargement of a project beyond its initial parameters. This growth often results in financial overruns, delays, and compromised quality. To effectively manage the project scope, it is important to establish a change control process that allows for the formal review and approval of any proposed changes to the project scope. This helps to ensure that changes are made only when necessary and are carefully evaluated for their potential impact on the project's timeline, budget, and quality. Project scope management is a critical function that impacts the degree of project success and must be considered by project management (Al-Rubaiei, Nifa, & Musa, 2018). During the lifecycle of a project, many positive and negative changes take place. If these changes



are not controlled, scope creep may occur thus negatively affecting the project. Ideally, an uncertainty or failure in the management process of a project scope directly affects the timeline, quality and cost of a project (Ajmal et al., 2020). The project scope management process has steps like planning, gathering requirements and defining, developing a work breakdown. Thus, project scope management assures that enough work is done for project success (Artemus, 2021).

Sobieraj and Metelski (2021) state that project scope management contributes to the success of a project, challenges are encountered in its application, mainly due to the lack of proper tools that integrate scope management into project management in its totality. Additionally, failure to fully understand project requirements also affects execution of project management since at the beginning of the project, stakeholders lack full understanding of their needs leading to changes during the project lifecycle, consequently increasing the project timelines and costs (Kerzner, 2019).

Maqsoom et al. (2021) conducted a study as to whether small and medium construction enterprises which plan, monitor and control project scope significantly perform better than those without project scope management routines. The researchers used questionnaires for small and medium construction enterprises. The data was then analyzed using regression analysis. Conducting routine project scope management had a significant and positive impact on small and medium construction enterprises performance.

Thaddee, Prudence, and Valens (2020) examined Rwandan project scope change management for success. The researcher examined scope change reasons, project activity adjustments, project time, cost, and product changes, and scope change barriers as project success determinants. Descriptive research was used. Using interviews and questionnaires, the researcher collected primary data from 30 project managers selected using a census sampling technique. In addition, the collection of secondary data was facilitated through the evaluation of published materials. Project managers occasionally modify the project scope with the intention of aligning it with the predetermined project objectives. Moreover, alterations in project activities result in modifications to project schedules, expenditures, and the quality of project outputs. Changing project activities without changing project costs and timelines was seen to increase risks of not

having enough resources to complete the project and delays in project finalization. Lastly, increasing project costs and timelines was seen to lead to better project quality.

Abdilahe, Fakunle, & Adeboye (2020) delved into the influence of project scope administration on telecommunication endeavors within Somaliland. The investigation scrutinized aspects of project scope management, encompassing the blueprint for scope management, declaration of project scope definition, breakdown structure of tasks, validation of project scope, verification, and implementation of control measures. To obtain data from 59 Somaliland telecommunication stakeholders selected by simple random sampling a questionnaire was used. Microsoft Excel and SPSS Statistics Software analyzed the data. The study found that telecommunication projects prioritize project scope control, validation, and verification.

Ngure (2019) examined how project scope management approaches affect Kenyan liquefied petroleum gas enterprises. Kenyan licensed LPG importers and wholesalers completed questionnaires to acquire quantitative data. Census was done since the target population was large and accessible. Analyzed, interpreted, and exhibited in tables and graphs. To learn more, correlation and regression were performed. Operational performance improved with project finances, quality, and environment. The study established that scope management affected project performance.

### **2.3.2 Project Leadership and Performance of Food Security Projects**

The role of project leadership is of paramount importance in ensuring the success of food security projects. The implementation of effective leadership is crucial in ensuring the establishment of well-defined project objectives, efficient allocation of resources, and the successful execution of project activities (Godrich, Barbour & Lindberg, 2021). In contrast, poor leadership can lead to confusion, miscommunication, and project failure. Effective project leadership in food security projects requires a combination of technical expertise and leadership skills. Project leaders must have a thorough understanding of the challenges and complexities of food security, including issues related to agriculture, nutrition, and food distribution (Eigenbrod & Gruda, 2022).

Project leadership aims at improving the efficiency and effectiveness of projects through use of the available resources in an attempt to meet project objectives. These resources include time, cost and scope of the project and are usually constrained (Zaman et al., 2022). As such, project leadership largely involves decision making to ensure efficient use of the available constrained resources to ensure better project performance. Additionally, innovation on the part of the project leadership is increasingly crucial in ensuring successful performance of projects (Zheng et al., 2019). The performance of projects relies on project leaders who are capable of establishing the critical factors that ensure project success, as well as adopting leadership practices that sustain effective project practices (Sankaran, Vaagaasar & Bekker, 2020).

Alvarenga et al. (2019) examined project manager fundamental competencies for success in India. Univariate and multivariate analyses were performed. Communication, commitment, and leadership rank highest, according to data. In their study, Ogohi (2020) examined the impact of project leadership styles on the implementation of projects. The findings of this study indicate a significant correlation between management leadership styles and project success. Notably, project management control emerged as the most influential factor on project performance.

Aga, Noorderhaven & Vallejo (2019) conducted a field survey and collected data from 200 project managers working in the Non-Governmental Organization (NGO) sector in Ethiopia and found that team-building facilitates transformational leadership which in turn enhances project success. A study by Gebrehiwot and de Graaff (2021) examined the role of project leadership in the success of food security projects in Ethiopia. The study found that effective project leadership was critical for overcoming the challenges associated with food insecurity in the region, including limited resources, political instability, and climate variability. The study identified several key leadership practices that were associated with project success, including effective communication, stakeholder engagement, and adaptive management.

A study by Ojwang, Oduol and Oboko (2019) found that project leadership was a significant predictor of the success of agricultural development projects in Kenya. The study identified several key leadership competencies that were important for project success, including vision, communication, delegation, and team-building. In a research conducted by Nziva (2020)

employed a stratified random selection technique to choose a total of 113 participants from 116 individuals, who were then administered questionnaires to gather data. Project management leadership and Compassion International project success are positively and significantly correlated, with project management control having the biggest impact.

### **2.3.3 Stakeholder Participation and Performance of Food Security Projects**

Stakeholders are all individuals, groups and organizations who have vested interests in a project. These are the parties who are involved in the project and stand to lose or gain something as a result of the failure or success of the project. Stakeholders include the national and local governments, project donors, project managers, project beneficiaries and the community at large. Stakeholder participation entails contribution of ideas, time, resources and ideas to a project in order to achieve its objectives (Bahadorestani, Naderpajouh & Sadiq, 2020). Stakeholder participation also requires the stakeholders to take part in decision making, implementation of the project as well as monitoring and evaluation of the project so as to ensure its success.

Stakeholder participation is an essential component of food security projects. Effective stakeholder engagement can help to ensure that project activities are aligned with the needs and priorities of the community, and that project outcomes are sustainable over the long-term. In contrast, inadequate stakeholder participation can lead to a lack of buy-in and support for the project, which can undermine project success van Dijk et al., 2020).

A study by Ragasa et al. (2018) identified several key factors that facilitated stakeholder participation, including trust, transparency, and effective communication. Similarly, a study by Tadesse et al. (2019) examined the role of stakeholder participation in the success of food security projects in Ethiopia, and found that effective stakeholder engagement was critical, and that project outcomes were sustainable over the long-term. The study identified several key factors that facilitated stakeholder participation, including the use of participatory approaches, community mobilization, and the involvement of local government officials.

According to Anita, Geoffrey and Anne, (2019), stakeholder participation enhances the degree of engagement initiatives of the project which is achieved by identifying stakeholder needs on the onset of the project and fulfilling those needs by mobilizing financial, technical and human

resources to implement activities aimed at meeting the needs of the stakeholders and other project objectives. Anita et al. (2019) further states that project donors should actively involve community members in generation of project ideas for community needs assessment. Additional benefits of community involvement include incorporation of local knowledge in the project, creation of capacity to implement similar projects and maintenance of existing projects, and lower project costs.

Omari (2019) focused on land ownership, farming methods and farm inputs, education levels and cultural practices as the key stakeholder aspects influencing implementation of food security. Data was collected using 235 duly filled and completed semi-structured questionnaires from a randomly selected sample size of 384 farmers, and subsequently analyzed using descriptive statistics. The study concluded that stakeholder aspects improve food security projects while cultural practices hamper implementation of the projects.

#### **2.3.4 Monitoring and Evaluation and Performance of Food Security Projects**

M&E is a crucial aspect for projects to realize their goals and objectives, especially where food security projects are concerned. Effective M&E of performance of projects is an ongoing process that entails regularly tracking and recording how financial, technical and human resources are transformed into outputs, and consequently outcomes and impacts for communities (Islam & Kieu, 2020). Effective M&E can help project managers to track progress towards project goals and objectives. In contrast, inadequate M&E can lead to a lack of accountability, inefficiencies in project implementation, and suboptimal project outcomes (Hofisi & Chizimba, 2023).

According to Ford and Lyneis (2020) project monitoring informs the progress of the project while evaluation provides information for future reference for similar projects to ensure better performance. In executing a project, monitoring of the project costs, timelines, quality and proper risk management ensures successful project implementation within the predefined resources and timelines, thus ensuring better project performance. On the other hand, evaluation of a project helps in systematic assessment of the project's effectiveness, contribution and impact to the project stakeholders (Alexeew et al., 2020). While mid-term project evaluations help in taking timely corrective measure, post project evaluations provide insights and information that

may be used in formulation and improvement of ongoing or future similar projects (Williams et al., 2019).

Different countries place varying degrees of importance to M&E in the implementation of projects. As such, the interpretation of M&E is different across countries and thus it's instituted to attain different outcomes (Keogh et al., 2021). In South Africa, M&E is a fairly new concept and thus extensive research is required on it. Nevertheless, it is supported by legislation and also multiple role players are involved in its implementation in an effort to reform initiatives surrounding safeguarding the available limited resources, enforce accountability, improve transparency, improve service delivery, strengthen internal management processes, improve capacity and ensure value for money to meet the needs of the society (Witter, et al., 2022).

Ocharo, Rambo & Ojwang (2020) study focused on M&E framework factors including participatory M&E by the community beneficiaries, project staff trainings in M&E, sectoral coordination between government departments and M&E entities and the existence of an agricultural technology management agency to resolve technological challenges experienced by the farmers. The study employed interview schedules and structured questionnaires to collect data from a sample of 226 respondents from a pool of 550 respondents. Parametric data was analyzed using SPSS where a positive significant influence of M&E frameworks on performance of public agricultural projects was observed.

Ocharo and Rambo (2020) examined how monitoring and evaluation frameworks affect public agricultural initiatives in Galana Kilifi County, Kenya. Public agricultural initiatives in Galana Kilifi County, Kenya. Mixed methods research with descriptive survey and correlation designs was used in the pragmatic paradigm. The survey had 226 respondents: 21 senior, 82 intermediate, and 123 junior managers. Non-parametric data was descriptively evaluated using central tendency measures. The variables were correlated using Pearson's Product Moment Correlation Analysis( $r$ ). The study found that monitoring and evaluation frameworks improved public agricultural programs in Galana Kilifi County, Kenya.

In a study conducted by Mwanzia (2019), a descriptive survey design was employed to examine the impact of participatory monitoring and evaluation (M&E) on the performance of donor-

funded food security projects in Kibwezi. The data that was gathered was subjected to analysis through the utilization of both inferential and descriptive statistical methods. The research findings indicated a statistically significant positive correlation between M&E practices and the overall effectiveness of food security projects sponsored by donors.

## **2.4 Summary of Empirical Literature and Knowledge Gaps**

This chapter presented a review of literature related to the area under study. From the discussion outlined above, it was evident that performance of project is crucial and project management practices incorporated can lead to a successful completion of project. The literature research indicated that the concept of project success is a subject that is constantly debated and lacks consensus among scholars. The achievement of project management success is centered around the effective execution of project processes, with a particular focus on achieving predetermined cost. Furthermore, it considers the method in which the management process was executed. There existed a notable absence of consensus over the criteria utilized for evaluating the effectiveness of projects or project outcomes. The perception of project success or failure is significantly influenced by the level of client satisfaction with the final outcome. The majority of unsuccessful projects exhibit characteristics such as exceeding budgetary allocations, experiencing delays, or failing to meet expected standards of quality. The literature reviewed vividly indicated the various project management practices that influence the performance of food security projects. So much research has been done in construction and engineering related field on project management practices especially on sustainability of projects. This study sought to find the new knowledge on performance of food security projects based on the project scope, project leadership, stakeholder participation and monitoring and evaluation as the project management practices incorporated in the study.

**Table 2.1: Research Gaps Matrix**

<b>Variable</b>	<b>Author (year)</b>	<b>Title of the study</b>	<b>Methodology</b>	<b>Findings</b>	<b>Knowledge gap</b>
<b>Project scope management</b>	Thaddee, Prudence and Valens (2020)	Analysis of project scope change management as a tool for project success in Rwanda	Descriptive research design. Using interviews and questionnaires	Project managers occasionally modify the project scope with the intention of aligning it with the predetermined project objectives. Modifications give rise to alterations in project timeframes, expenditures, and quality of deliverables.	Contextual gaps The results won't apply to this study because of regional differences.
	Abdilahi, Fakunle & Adeboye (2020)	Extent to which processes associated with project scope management influence the implementation of telecommunication projects in Somaliland	Questionnaire	Control, validation and scope verification were the most adopted project scope management processes	Did not show how project scope management affects how well a project works.
<b>Project leadership</b>	Alvarenga et al. (2019)	Project manager core competencies to project success in India	Univariate and multivariate procedures	Leadership appears among the three most relevant aspects.	Conceptual gaps: focused on project implementation Contextual gaps: was conducted in India
	Aga, Noorderhaven & Vallejo (2019)	The relationship between transformational project leadership and project success	Field survey and collected data from 200 project managers	Team-building facilitates transformational leadership which in turn enhances project success	Focused on Non-Governmental Organization (NGO) sector in Ethiopia thus cannot be generalized to food security

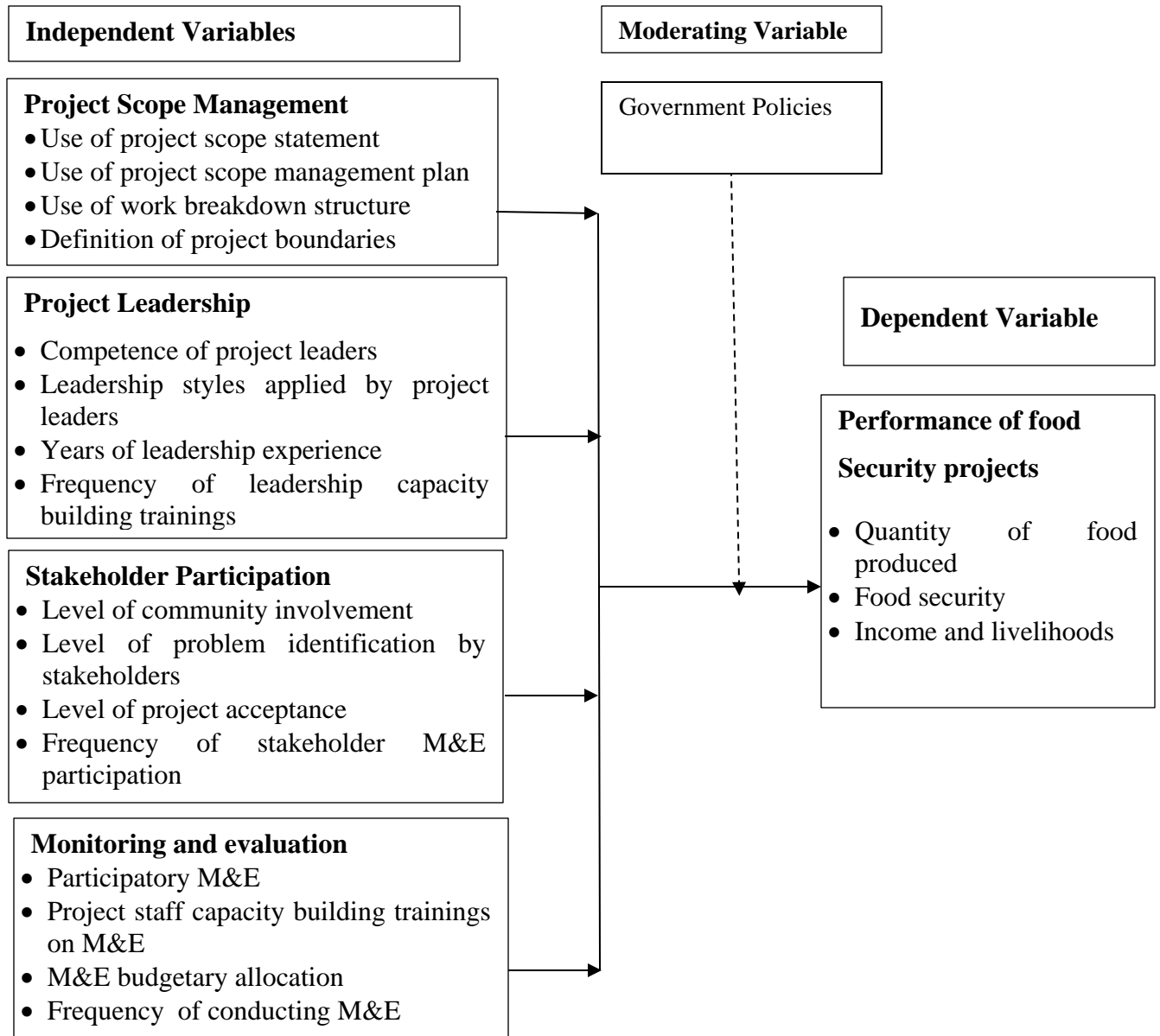


Variable	Author (year)	Title of the study	Methodology	Findings	Knowledge gap
					projects in Kenya.
	Nziva (2020)	The effect of project management leadership on performance of compassion international projects in Kitui county, Kenya.	Descriptive research design. Questionnaires from a sample of 113 respondents	Project management leadership and project success are positively and significantly correlated	Did not consider other indicators of project leadership such as frequency of leadership capacity building trainings.
<b>Stakeholder participation</b>	Omari (2019)	Stakeholder aspects influencing implementation of food security projects in Msambweni, Kenya	Ross-sectional descriptive case study	Stakeholder aspects such land ownership, farming methods and farm inputs, and education levels are key determinants that improve food security project	Did not consider other key indicators of stakeholder participation such as the stakeholders' level of problem identification, level of project acceptance and ownership
<b>Monitoring and Evaluation</b>	Ocharo & Rambo (2020)	Influence of Monitoring and Evaluation Frameworks on Performance of Public Agricultural Projects in Galana Kilifi County, Kenya	Interview schedules and structured questionnaires	Positive significant influence of monitoring and evaluation frameworks on performance of public agricultural projects in Galana, Kilifi County.	Other indicators of M&E such as M&E budgetary allocation and frequency of conducting M&E activities unconsidered
	Mwanzia (2019)	How participatory monitoring and evaluation affects the success of food security projects in Kibwezi that	Inferential and descriptive statistics	Donor-funded food security projects perform better with stakeholder engagement in monitoring and assessment.	Other indicators of M&E such as M&E budgetary allocation and frequency of conducting M&E

<b>Variable</b>	<b>Author (year)</b>	<b>Title of the study</b>	<b>Methodology</b>	<b>Findings</b>	<b>Knowledge gap</b>
		are paid for by donors			activities left out

## 2.5 Conceptual Model

The study can be conceptualized in a framework which is presented in a schematic interpretation explaining the relationship between the dependent variable which in this study was the performance of food security projects and the independent variables which were: project scope management, project leadership, stakeholder participation and monitoring and evaluation.



**Figure 2.1: Conceptual Model**

## **2.6 Hypothesis**

H<sub>1</sub>.Project scope management has no statistically significant influence on performance of food security projects in Makueni County, Kenya.

H<sub>2</sub>.Project leadership has no statistically significant influence on performance of food security projects in Makueni County, Kenya.

H<sub>3</sub>. Stakeholder participation has no statistically significant influence on performance of food security projects in Makueni County, Kenya.

H<sub>4</sub>.Monitoring and evaluation has no statistically significant influence on performance of food security projects in Makueni County, Kenya.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

In this chapter, we outline the methodology for our study across nine distinct sections. The structure includes an initial introduction, an in-depth explanation of the chosen research design, a focus on the target population, details about sample size and sampling procedures, a discussion on research instruments along with their piloting process, an assessment of instrument validity and reliability, a description of data collection methods, an explanation of data analysis techniques, a consideration of ethical aspects, and finally, the operationalization of the variables under investigation.

#### **3.2 Research Design**

A descriptive survey was suitable for the study. Descriptive survey research entails a systematic inquiry into an object or phenomena, conducted in a scientific manner (Siedlecki, 2020). Blumberg, Cooper, and Schindler (2014) assert that a descriptive survey design serves the purpose of providing a comprehensive depiction of the target population, with a specific emphasis on essential factors in order to ascertain the presence of associations among the variables being studied. The selection of this strategy is based on the study's utilization of a substantial sample size and a restricted geographical focus. Furthermore, this approach facilitated the gathering of data from participants in their authentic environments. The utilization of a descriptive survey design is advantageous due to its ability to facilitate a comprehensive examination of the issue being explored (Siedlecki, 2020).

#### **3.3 Target Population**

The study focused on the ASDSP food security initiative projects in Makueni County. The unit of analysis were the four projects under ASDSP, i.e., Irrigation Projects, Water Harvesting Projects, Soil Conservation Projects, and Livestock Production Projects. The study targeted the project managers in the four units of analysis. The study thus targeted the 181 project managers as distributed in Table 3.1.

**Table 3.1: Target Population**

<b>Projects</b>	<b>Number of Projects</b>
Irrigation Projects	56
Water Harvesting Projects	49
Soil Conservation Projects	34
Livestock Production Projects	42
Total	181

### **3.4 Sample Size and Sampling Procedure**

The study used the following sampling procedure and used a certain sample size.

#### **3.4.1 Sample Size**

A sample size is the representation of the population. The study used the Slovin Formula to determine the sample size. Slovin's formula works for simple random sampling

$$n = N \div (1 + Ne^2)$$

Where: n= sample size N= total population e= margin of error (0.05)

$$n = N / (1 + N(e^2))$$

$$n = 181 / (1 + 181(0.05^2))$$

$$n = 181 / (1 + 0.4525)$$

$$n = 124.6$$

$$n=125$$

Therefore, using the formula, the study had a sample size of 125 project managers.

#### **3.4.2 Sampling Procedure**

The study used proportional random sampling to select the sample from a population in respect to the project categories. Proportional random sampling ensures proportion representation of

strata in sample as in the population to help to increase the precision of estimates made from the sample.

### 3.5 Data Collection

The research employed questionnaires as the primary data collection tool. The reason for their widespread use can be attributed to their straightforwardness in terms of item management, scoring, and subsequent data analysis (Ghauri, 2005). The research employed a questionnaire that was designed to collect data on the main variables of interest from the selected participants in this study. The questionnaires was handed to the respondents for self-administration, allowing a suitable amount of time before collection.

### 3.6 Data Analysis

Questionnaires was checked for completeness; it was then coded and fitted into the computer for analysis. The data collected was analyzed using SPSS (V.25.0), statistical software. Both descriptive and inferential statistics were used to give an in-depth explanation of the findings from this study. A simple and multiple linear regression models were used to explain the relationship between the dependent and independent variables. Tables were used in the presentation of the findings. The general formula for the linear regression was as follows:

$Y = \beta_0 + \beta_1 X + \varepsilon$  for simple linear regression

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \quad \text{for the multiple regression.}$$

Where  $Y$  = performance of food security projects.

$B_0$  = Constant term

$\beta_1 - \beta_4$  = Regression coefficients

$X_1$  = Project scope

$X_2$  = Project leadership

$X_3$  = Stakeholder participation

$X_4$  = Monitoring and Evaluation]

### 3.7 Operationalization of Variables

**Table 3.2: Operationalization of Variables**

<b>Objective</b>	<b>Variable</b>	<b>Indicator</b>	<b>Measurement Scale</b>	<b>Data collection</b>	<b>Data analysis</b>
To determine the influence of Project Management Practices on performance of Food security projects in Makeni County.	Dependent variable	<ul style="list-style-type: none"> <li>• Quantity of food produced</li> <li>• Food security</li> <li>• Income and livelihoods</li> </ul>	Ordinal Scale	Questionnaire	<p>Inferential statistics-Regression analysis</p> <p>Descriptive statistics- frequencies, percentages means and standard deviations</p>
To determine the influence of project scope on performance of food security projects in Makeni County	Independent variable	<ul style="list-style-type: none"> <li>• Use of project scope statement</li> <li>• Use of project scope management plan</li> <li>• Use of work breakdown structure</li> <li>• Definition of project boundaries</li> </ul>	Ordinal Scale	Questionnaire	<p>Inferential statistics-Regression analysis</p> <p>Descriptive statistics- frequencies, percentages means and standard deviations</p>
To investigate the influence of Project leadership on the performance of food security projects in Makeni County.	Independent variable	<ul style="list-style-type: none"> <li>• Competence of project leaders</li> <li>• Leadership styles applied by project leaders</li> <li>• Years of leadership experience</li> <li>• Frequency of leadership</li> </ul>	Ordinal Scale	Questionnaire	<p>Inferential statistics-Regression analysis</p> <p>Descriptive statistics- frequencies, percentages means and standard deviations</p>



<b>Objective</b>	<b>Variable</b>	<b>Indicator</b>	<b>Measurement Scale</b>	<b>Data collection</b>	<b>Data analysis</b>
		capacity building training			
To determine the influence stake holder participation on the performance of food security projects in Makueni County.	Independent variable	<ul style="list-style-type: none"> <li>• Level of community involvement</li> <li>• Level of problem identification by stakeholders</li> <li>• Level of project acceptance and ownership</li> <li>• Frequency of stakeholder M&amp;E participation</li> </ul>	Ordinal Scale	Questionnaire	<p>Inferential statistics-Regression analysis</p> <p>Descriptive statistics- frequencies, percentages, means and standard deviations</p>
To determine the influence of monitoring and evaluation on the performance of food security projects in Makueni County	Independent variable	<ul style="list-style-type: none"> <li>• Participatory M&amp;E by project stakeholders</li> <li>• Project staff capacity building training on M&amp;E</li> <li>• M&amp;E budgetary allocation</li> <li>• Frequency of conducting M&amp;E</li> </ul>	Ordinal Scale	Questionnaire	<p>Inferential statistics-Regression analysis</p> <p>Descriptive statistics- frequencies, percentages means and standard deviations</p>

## CHAPTER FOUR

### RESULTS INTERPRETATION AND DISCUSSIONS

#### 4.1 Introduction

The chapter presents the analysis of the findings of the study. The chapter provides a thorough examination of the results, drawing meaningful interpretations and discussing their implications.

#### 4.2 Questionnaire Return Rate

In this study, a sample of 125 participants was selected to provide insights into the research objectives but received a total of 112 completed responses. The response rate of approximately 89.6% was achieved which indicates a high level of engagement and participation from the survey participants, suggesting that the sample is fairly representative of the population under study. Despite not achieving a 100% response rate, the data collected can be considered robust and reliable for the research objectives.

#### 4.3 Demographic Characteristics of Respondents

##### 4.3.1 Gender Distribution

Table 4.1 displays the gender distribution of respondents, along with the frequency and percentage of respondents in each gender category.

**Table 4.1: Gender distribution**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	62	55.4
Female	50	44.6
<b>Total</b>	<b>112</b>	<b>100</b>

The majority of respondents were male, accounting for 55.4% of the total, while female respondents made up 44.6% of the sample.

##### 4.3.2 Age Distribution

The data in Table 4.2 shows the diverse age distribution among the respondents.

**Table 4.2: Age distribution**

<b>Age</b>	<b>Frequency</b>	<b>Percentage</b>
------------	------------------	-------------------

18- 30	4	3.6
31- 40	23	20.5
41- 50	49	43.8
Over 50 years	36	32.1
<b>Total</b>	<b>112</b>	<b>100</b>

Most of the respondents (43.8%) were in the 41-50 years age category. There is also a significant presence of respondents over 50 years old (32.1%), while the younger age groups (18-30 and 31-40) have smaller representations in the sample of 3.6% and 20.5% respectively.

#### **4.3.3 Period of Involvement in Food Security Projects**

Table 4.3 provides insights into the distribution of respondents based on their period of involvement in food security projects.

**Table 4.3: Period of involvement in food security projects**

<b>Period</b>	<b>Frequency</b>	<b>Percentage</b>
0-3 years	3	2.7
4-6 years	26	23.2
7-10 years	38	33.9
Over 10years	45	40.2
<b>Total</b>	<b>112</b>	<b>100.0</b>

Most of the respondents (40.2%) had been involved in food security projects over 10 years, 33.9% for 7- 10 years, 23.2% for 4-6 years and the least (2.7%) for up to 3 years. The majority of respondents have moderate to extensive experience, with a significant proportion having been involved for over 10 years, indicating a high level of experience and expertise in the context of food security projects.

## 4.4 Findings on Project Scope Management and Performance of Food Security Projects in Makueni County

### 4.4.1 Descriptive Findings on Project Scope Management in Food Security Projects in Makueni County

Descriptive findings on project scope management in food security projects in Makueni County provide a comprehensive overview of how project scope management practices are applied in the context of initiatives aimed at improving food security in the region. These findings shed light on various aspects related to the use of project scope statement, use of project scope management plan, use of work breakdown structure and definition of project boundaries.

**Table 4.4: Descriptive findings on project scope management in food security projects in Makueni County**

Statement	SD	D	N	A	SA	Mean	Std.dev
The project scope statement is used in the project management	0(0%)	1(0.9%)	9(8%)	63(56.3%)	39(34.8%)	4.25	0.64
We have a project management plan that is effectively used	0(0%)	5(4.5%)	6(5.4%)	65(58%)	36(32.1%)	4.18	0.73
The project's objectives are realistic and achievable within the given timeframe	0(0%)	4(3.6%)	11(9.8%)	72(64.3%)	25(22.3%)	4.05	0.68
Work breakdown structure is always adopted	0(0%)	3(2.7%)	4(3.6%)	84(75%)	21(18.8%)	4.10	0.57
The project boundaries are clearly defined	0(0%)	0(0%)	3(2.7%)	84(75%)	25(22.3%)	4.20	0.46
The project's scope is periodically	0(0%)	5(4.5%)	9(8%)	55(49.1%)	43(38.4%)	4.21	0.78

reviewed and updated as necessary. Changes to the project scope are carefully considered and approved before implementation. Project's scope is effectively managed to ensure that all deliverables are completed on time and within budget	4(3.6%)	10(8.9%)	3(2.7%)	72(64.3%)	23(20.5%)	3.89	0.95
	2(1.8%)	3(2.7%)	6(5.4%)	73(65.2%)	28(25%)	4.09	0.75
<b>Aggregate</b>						<b>4.12</b>	<b>0.70</b>

From the results, the mean score of 4.25 indicates a high level of agreement among respondents that the project scope statement is actively used in project management. The relatively low standard deviation (0.64) suggests a relatively consistent and strong consensus on this statement. The mean score of 4.18 suggests that respondents generally agree that the project management plan is effectively utilized. The standard deviation of 0.73 indicates low variability in responses, and the overall agreement is reasonably strong. With a mean score of 4.05, most respondents agree that project objectives are realistic and achievable. The standard deviation of 0.68 suggests a moderate level of agreement with some variability. The mean score of 4.10 indicates strong agreement that the work breakdown structure is consistently adopted. The low standard deviation (0.57) reflects a high level of consensus on this statement. A mean score of 4.20 shows consensus among respondents that project boundaries are clearly defined. The remarkably low standard deviation (0.46) reflects an exceptionally low variance on this statement response. The mean score of 4.21 indicates that respondents largely agree that the project's scope is periodically reviewed and updated as needed. The standard deviation of 0.78 suggests a strong level of agreement with low variability in responses. With a mean score of 3.89, respondents generally agree that changes to the project scope are carefully considered and

approved before implementation. The low standard deviation (0.95) indicates a low range of responses and consensus on this statement. The mean score of 4.09 suggests that respondents agreed that the project's scope is effectively managed. The standard deviation of 0.75 indicates a moderate level of agreement with low variability. The aggregate mean score for all the statements was 4.12, with a standard deviation of 0.70. This implies an overall positive perception of project scope management practices among the respondents, with a high level of agreement and low variability in opinions.

#### 4.4.2 Correlation between Project Scope Management and Performance of Food Security Projects in Makueni County

The Pearson correlation coefficient (r) was used to measure the strength and direction of the linear relationship between project performance and scope management.

**Table 4.5: Correlation matrix for project performance and scope management**

		Project Performance	Scope management
Project Performance	Pearson Correlation	1	.445**
	Sig. (2-tailed)		.000
	N	112	112
Scope management	Pearson Correlation	.445**	1
	Sig. (2-tailed)	.000	
	N	112	112

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

The correlation between project performance and scope management is 0.445. The significance value (p-Value) associated with this correlation is 0.000. A p-value of 0.000 is less than the significance level of 0.05, which means that the correlation is statistically significant. The positive correlation coefficient of 0.445 suggests that there is a moderate positive linear relationship between project performance and scope management. This means that as scope management increases, project performance tends to increase as well, and vice versa.

#### 4.4.3 Regression between Project Scope Management and Performance of Food Security Projects in Makueni County

A simple linear regression analysis was conducted to explore whether project scope management practices have a significant impact on the performance of food security projects in Makueni County.

**Table 4.6: Regression between Project scope management and Performance of food security projects in Makueni County**

<b>Model Summary</b>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.445 <sup>a</sup>	.198	.190	.25399		
a. Predictors: (Constant), scope management						
<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.748	1	1.748	27.093	.000 <sup>b</sup>
	Residual	7.096	110	.065		
	Total	8.844	111			
a. Dependent Variable: project performance						
b. Predictors: (Constant), scope management						
<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.548	.292		8.731	.000
	Scope management	.367	.071	.445	5.205	.000
a. Dependent Variable: project performance						

The value of R is 0.445. This value represents the correlation between the dependent variable (performance) and the independent variable (scope management) in the model. The R Square value is 0.198, which is also expressed as 19.8%. R Square represents the proportion of variance in the dependent variable (performance) that is explained by the independent variable (Scope management) in the model. In this model, approximately 19.8% of the variance in the performance of the food security projects is accounted for by scope management.

The ANOVA (Analysis of Variance) table was used to assess the overall significance of the regression model. The ANOVA table shows that the p-value associated with the F-statistic is

0.000, which is less than the significance level of 0.05. This indicates that the regression model is statistically significant.

The unstandardized coefficient for the constant is 2.548. This represents the intercept of the regression equation when the predictor variable is set to zero. The unstandardized coefficient for scope management predictor is 0.367. This means that for every one-unit change in the scope management, performance of food security projects is expected to change by 0.367 units while holding other variables constant. The p-value is 0.000, which is less than the significance level of 0.05. This indicates that the coefficient is a statistically significant. We therefore rejected the null hypotheses;  $H_1$ . Project scope management has no statistically significant influence on performance of food security projects in Makueni County, Kenya and accept the alternative hypothesis that project scope management has a statistically significant influence on performance of food security projects in Makueni County, Kenya.

#### **4.4.4 Discussion of the Findings on the Influence of Project Scope Management and the Performance of Food Security Projects in Makueni County**

The findings related to project scope management in food security projects in Makueni County reflect a positive perception and effective application of scope management practices. Respondents appear to agree that the project scope statement is actively used in project management, project objectives are realistic and achievable, and that work breakdown structures are consistently adopted. They also affirm the clear definition of project boundaries and the regular review and updating of the project's scope. These findings align well with the literature on project scope management. It is evident that defining and managing the project scope are critical elements in project management. A well-defined scope helps ensure that project objectives are clear and achievable within the given timeframe (Ajmal, Khan & Al-Yafei, 2020). The results indicate that project boundaries are clearly defined, which is essential for ensuring that project activities are well-contained and do not extend beyond their intended parameters (Gransberg and Maraqa, 2022).

The positive correlation between project scope management and project performance, as demonstrated by a Pearson correlation coefficient of 0.445, signifies the importance of effective



scope management in enhancing the success of food security projects. This correlation supports the idea that effective scope management is essential for keeping projects on track and minimizing scope creep, which can lead to budget overruns and delays as also established by Ajmal et al., (2020).

The regression analysis further emphasizes the impact of scope management practices on project performance. Approximately 19.8% of the variance in project performance is explained by scope management. The findings highlight the significance of proper scope management in ensuring project success (Sobieraj & Metelski, 2021). It also underscores the importance of change control processes in preventing scope creep and ensuring that changes are carefully considered and approved before implementation (Gransberg & Maraqa, 2022). These findings resonate with existing research that emphasizes the positive impact of effective project scope management on project performance and the importance of managing project scope changes (Kerzner, 2019). The positive correlation between scope management and project performance is consistent with studies that highlight the benefits of adhering to scope management routines in project management (Maqsoom et al., 2021). Moreover, the results align with research showing that scope change management influences project success determinants (Thaddee et al., 2020).

#### **4.5 Findings on Project Leadership and Performance of Food Security Projects in Makueni County**

##### **4.5.1 Descriptive Findings on Project Leadership in Food Security Projects in Makueni County**

Descriptive findings on project leadership in food security projects in Makueni County provide a comprehensive overview of how project leadership practices are applied in the context of initiatives aimed at improving food security in the region. These findings shed light on various aspects related to the competence of project leaders, leadership styles applied by project leaders, leadership experience and frequency of leadership capacity building trainings.

**Table 4.7: Descriptive findings on project leadership in food security projects in Makueni County**

<b>Statement</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>Std.dev</b>
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The project leader is knowledgeable about the technical aspects of the project.	0(0%)	5(4.5%)	7(6.3%)	70(62.5%)	30(26.8%)	4.12	0.71
Project leaders apply effective leadership styles in managing the project	0(0%)	10(8.9%)	7(6.3%)	59(52.7%)	36(32.1%)	4.08	0.86
The project leaders have a vast experience in project management	0(0%)	6(5.4%)	7(6.3%)	64(57.1%)	35(31.3%)	4.14	0.76
Project leaders frequently attend leadership capacity building trainings to improve their skills	0(0%)	8(7.1%)	9(8%)	69(61.6%)	26(23.2%)	4.01	0.78
The project leader effectively communicates project status and progress to stakeholders	1(0.9%)	1(0.9%)	2(1.8%)	88(78.6%)	20(17.9%)	4.12	0.55
The project leader promotes a positive and collaborative project team environment	5(4.5%)	5(4.5%)	6(5.4%)	71(63.4%)	25(22.3%)	3.93	0.97
The project leader demonstrates strong decision-making and problem-solving skills.	0(0%)	4(3.6%)	7(6.3%)	54(48.2)	47(42%)	4.29	0.74
<b>Aggregate</b>						<b>4.10</b>	<b>0.77</b>

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From the results, the mean score of 4.12 indicates that respondents generally agreed that the project leader possesses technical knowledge about the project. The standard deviation of 0.71 suggests a moderate level of agreement with low variability in responses. The mean score of 4.08 suggests that respondents generally agreed that project leaders apply effective leadership styles. The relatively low standard deviation (0.86) indicates low variability in opinions and a consistent level of agreement. With a mean score of 4.14, respondents generally agreed that project leaders have significant experience in project management. The standard deviation of 0.76 indicates a low variability in responses. The mean score of 4.01 suggests that respondents generally agreed that project leaders attend capacity-building trainings. The standard deviation of 0.78 indicates a low variability. The mean score of 4.12 indicates that respondents generally agreed that the project leader effectively communicates project status. The low standard deviation (0.55) reflects a high level of consensus on this statement. Respondents generally agree (mean score of 3.93) that the project leader promotes a positive team environment. The relatively low standard deviation (0.97) indicates low variability in responses and a consistent level of agreement. The mean score of 4.29 suggests strong agreement that the project leader demonstrates strong decision-making and problem-solving skills. The standard deviation of 0.74 indicates low variability. The aggregate mean score for all the statements was 4.10, with a standard deviation of 0.77. This implies an overall positive perception of project leadership practice and low variability in opinions.

#### **4.5.2 Correlation between Leadership and Performance of Food Security Projects in Makueni County**

The Pearson correlation coefficient (r) was used to measure the strength and direction of the linear relationship between project performance and project leadership.

**Table 4.8: Correlation matrix between leadership and Performance of food security projects**

		<b>Project Performance</b>	<b>Project Leadership</b>
Project Performance	Pearson Correlation	1	.199*
	Sig. (2-tailed)		.036
	N	112	112
Project Leadership	Pearson Correlation	.199*	1

Sig. (2-tailed)	.036	
N	112	112

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

The results show a positive correlation coefficient of approximately 0.199 between project performance and project leadership and a p-value of 0.036 which is less than the significance level of 0.05. This shows that there is a weak positive and significant linear relationship between project performance and project leadership. This means that as project leadership increases, the project performance tends to increase as well, and vice versa, but the relationship is not very strong.

#### 4.5.3 Regression between Leadership and Performance of Food Security Projects in Makueni County

A simple linear regression analysis was conducted to explore whether project leadership practices have a significant impact on the performance of food security projects in Makueni County.

**Table 4.9: Regression between leadership and Performance of food security projects in Makueni County**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.199 <sup>a</sup>	.040	.031	.27789		
a. Predictors: (Constant), leadership						
ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.349	1	.349	4.525	.036 <sup>b</sup>
	Residual	8.494	110	.077		
	Total	8.844	111			
a. Dependent Variable: project performance						
b. Predictors: (Constant), leadership						
Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.	
1	(Constant)	3.306	.357		9.274	.000
	Project Leadership	.185	.057	.199	3.246	.036

a. Dependent Variable: project performance

The value of R is 0.199 which represents the correlation between performance and project leadership. The R Square value is 0.040, which is also expressed as 4.0%. R Square represents the proportion of variance in the project performance that is explained by the project leadership in the model. In this model, approximately 4.0% of the variance in project performance is accounted for by project leadership.

The ANOVA (Analysis of Variance) table was used to assess the overall significance of the regression model. The ANOVA table shows that the p-value associated with the F-statistic is 0.036, which is less than the significance level of 0.05. This indicates that the regression model is statistically significant.

The unstandardized coefficient for the constant is 3.306. This represents the intercept of the regression equation when the predictor variable is set to zero. The unstandardized coefficient for project leadership predictor is 0.185. This means that for every one-unit change in the project leadership, performance of food security projects is expected to change by 0.185 units while holding other variables constant. The p-value is 0.036, which is less than the significance level of 0.05. This indicates that the coefficient is a statistically significant. We therefore rejected the null hypotheses;  $H_2$ . Project leadership has no statistically significant influence on performance of food security projects in Makueni County, Kenya and accept the alternative hypothesis that project leadership has a statistically significant influence on performance of food security projects in Makueni County, Kenya.

#### **4.5.4 Discussion of Findings on the Influence of Project Leadership and the Performance of Food Security Projects in Makueni County**

The findings corroborate the importance of project leaders possessing technical knowledge about the project, as emphasized in the literature (Godrich, Barbour & Lindberg, 2021). The respondents' agreement regarding the knowledge of project leaders in technical aspects aligns with the literature's recognition of the importance of a leader's understanding of the project's complexities. Similarly, the agreement that project leaders apply effective leadership styles aligns with the literature, which underscores the significance of leadership styles in project success (Ogohi, 2020). This corroborates the literature's emphasis on the role of leadership styles in achieving successful project outcomes.

The positive correlation between project performance and project leadership supports the literature's assertions regarding the importance of effective leadership in project success (Aga, Noorderhaven & Vallejo, 2019). The positive correlation coefficient indicates that, as project leadership improves, project performance tends to increase, aligning with the literature's focus on the role of leadership in achieving project success. The regression analysis shows that project leadership practices have a significant impact on the performance of food security projects. This supports the literature's emphasis on leadership practices as a key determinant of project success (Ogohi, 2020). The literature's focus on leadership practices and their impact on project success is reflected in the findings' statistical significance.

#### **4.6 Findings on Stakeholder Participation and the Performance of Food Security Projects in Makueni County**

##### **4.6.1 Descriptive Findings on Stakeholder Participation in Food Security Projects in Makueni County**

Descriptive findings on Stakeholder Participation in food security projects in Makueni County provide a comprehensive overview of how Stakeholder Participation practices are applied in the context of initiatives aimed at improving food security in the region. These findings shed light on various aspects related to the level of community involvement, level of problem identification by stakeholders, level of project acceptance and frequency of stakeholder M & E participation.

**Table 4.10: Descriptive findings on Stakeholder Participation in food security projects in Makueni County**

<b>Statement</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>Std.dev</b>
The community is effectively involvement in the project management	1(0.9%)	4(3.6%)	9(8%)	73(65.2%)	25(22.3%)	4.04	0.73
Stakeholder are involved in identifying potential risks and challenges in the project	0(0%)	2(1.8%)	2(1.8%)	83(74.1%)	25(22.3%)	4.17	0.54

The project is well accepted in the community	1(0.9%)	2(1.8%)	3(2.7%)	87(77.7%)	19(17%)	4.08	0.59
The stakeholders are frequently involved in monitoring and evaluation of the project	3(2.7%)	7(6.3%)	4(3.6%)	73(65.2%)	25(22.3%)	3.98	0.87
The stakeholders are involved in decision-making processes.	1(0.9%)	2(1.8%)	0(0%)	83(74.1%)	26(23.2%)	4.17	0.6
The needs and interests of the stakeholders are taken into account	0(0%)	11(9.8%)	6(5.4%)	54(48.2%)	41(36.6%)	4.12	0.9
The communication process within the project involves all the stakeholders	0(0%)	6(5.4%)	9(8%)	46(41.1%)	51(45.5%)	4.27	0.83
<b>Aggregate</b>						<b>4.12</b>	<b>0.72</b>

The mean score of 4.04 indicates that respondents generally agree that the community is effectively involved in project management. The standard deviation of 0.73, since not high, suggests low variability in responses. With a mean score of 4.17, respondents agreed that stakeholders are involved in risk and challenge identification. The standard deviation of 0.54 is not high and indicates a high level of consensus. The mean score of 4.08 suggests that respondents generally agree that the project is well accepted in the community. The standard deviation of 0.59 was low, which indicates low variability in responses. The mean score of 3.98 indicates agreement that stakeholders are frequently involved in project monitoring and evaluation. The standard deviation of 0.87 is low and show a low variability in responses. The mean score of 4.17 indicates strong agreement that stakeholders are involved in decision-making processes. The standard deviation of 0.6 is not high and suggests a high level of consensus. With a mean score of 4.12, respondents agree that the needs and interests of stakeholders are considered. The standard deviation of 0.9 shows low variability in responses.

The mean score of 4.27 indicates strong agreement that the communication process involves all stakeholders. The standard deviation of 0.83 suggests low variability in responses. The aggregate mean score for all the statements was 4.12, with a standard deviation of 0.72. The standard deviation, which is below 1, is not considered high, and it implies an overall positive perception of stakeholder participation practice in project management, with a moderate level of agreement and low in opinions.

#### **4.6.2 Correlation between Stakeholder Participation and Performance of Food Security Projects in Makueni County**

The Pearson correlation coefficient (r) was used to measure the strength and direction of the linear relationship between project performance and stakeholder participation.

**Table 4.11: Correlation Matrix between stakeholder participation and Performance of food security projects**

		<b>Project performance Stakeholder participation</b>	
Project performance	Pearson Correlation	1	.381**
	Sig. (2-tailed)		.000
	N	112	112
Stakeholder participation	Pearson Correlation	.381**	1
	Sig. (2-tailed)	.000	
	N	112	112

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

The correlation results between project performance and stakeholder participation show a positive correlation coefficient of approximately 0.381 and a p-value of 0.000 which is less than the significance level of 0.05. This shows that there is a moderate positive and significant linear relationship between project performance and stakeholder participation. This indicates that as stakeholder participation increases, project performance tends to improve.

#### **4.6.3 Regression between Stakeholder Participation and Performance of Food Security Projects in Makueni County**

A simple linear regression analysis was conducted to explore whether project stakeholder participation practices have a significant impact on the performance of food security projects in Makueni County.



**Table 4.12: Regression between stakeholder participation and Performance of food security projects in Makueni County**

<b>Model Summary</b>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.381 <sup>a</sup>	.145	.137	.26218		
a. Predictors: (Constant), stakeholder participation						
<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.282	1	1.282	18.657	.000 <sup>b</sup>
	Residual	7.561	110	.069		
	Total	8.844	111			
a. Dependent Variable: project performance						
b. Predictors: (Constant), stakeholder participation						
<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.587	.342		7.555	.000
	Stakeholder Participation	.358	.083	.381	4.319	.000

a. Dependent Variable: Project performance

The value of R is 0.381 which represents the correlation between project performance and stakeholder participation. The R Square value is 0.145, which is also expressed as 14.5%. R Square represents the proportion of variance in the project performance that is explained by the stakeholder participation in the model. In this model, approximately 14.5% of the variance in project performance is accounted for by stakeholder participation.

The ANOVA (Analysis of Variance) table was used to assess the overall significance of the regression model. The ANOVA table shows that the p-value associated with the F-statistic is 0.000, which is less than the significance level of 0.05. This indicates that the regression model is statistically significant.

The unstandardized coefficient for the constant is 2.587. This represents the intercept of the regression equation when the predictor variable is set to zero. The unstandardized coefficient for stakeholder participation predictor is 0.358. This means that for every one-unit change in the stakeholder participation, performance of food security projects is expected to change by 0.358 units while holding other variables constant. The p-value is 0.000, which is less than the

significance level of 0.05. This indicates that the coefficient is a statistically significant. We therefore rejected the null hypotheses; **H<sub>3</sub>**. Stakeholder participation has no statistically significant influence on performance of food security projects in Makueni County, Kenya and accept the alternative hypothesis that stakeholder participation has a statistically significant influence on performance of food security projects in Makueni County, Kenya.

#### **4.6.4 Discussion of Findings on the Influence of Project Stakeholder Participation and the performance of Food Security Projects in Makueni County**

The high level of agreement that the community is effectively involved in project management supports the idea that community engagement is essential for the success of food security projects. The findings align with the literature's emphasis on the importance of effective community involvement in project management (Anita, Geoffrey, & Anne, 2019). The strong agreement that stakeholders are involved in risk and challenge identification aligns with the literature's recognition of the benefits of stakeholder participation in project risk assessment (Tadesse et al., 2019). The findings corroborate the idea that stakeholders can actively contribute to identifying potential challenges, which is critical for project success.

Similarly, the findings show that project acceptance in the community is generally agreed upon. This aligns with the literature's focus on the acceptance and support of the community as a key factor in project success (Bahadorestani, Naderpajouh & Sadiq, 2020). The high level of agreement with project acceptance reflects the importance of community buy-in for project outcomes. The results indicate that stakeholders are involved in decision-making processes. This is consistent with the literature, which emphasizes that stakeholder participation extends to decision-making, implementation, and monitoring and evaluation of projects (Anita, Geoffrey, & Anne, 2019). The high level of consensus on this statement aligns with the literature's emphasis on stakeholder involvement in project decision-making.

The findings show that stakeholder participation is positively correlated with project performance. This corroborates the literature's emphasis on the role of stakeholder engagement in achieving project objectives and long-term sustainability (van Dijk et al., 2020). The positive

correlation coefficient suggests that as stakeholder participation increases, project performance tends to improve, in line with the literature's focus on effective stakeholder engagement.

#### 4.7 Findings on Monitoring and Evaluation in Food Security Projects in Makueni County

##### 4.7.1 Descriptive findings on Monitoring and Evaluation in food security projects in Makueni County

Descriptive findings on Monitoring and Evaluation in food security projects in Makueni County provide a comprehensive overview of how Monitoring and Evaluation practices are applied in the context of initiatives aimed at improving food security in the region. These findings shed light on various aspects related to participatory M & E, project staff capacity building trainings on M & E, M &E budgetary allocation and frequency of conducting M & E.

**Table 4.13: Descriptive findings on Monitoring and Evaluation in food security projects in Makueni County**

Statement	SD	D	N	A	SA	Mean	Std.dev
All stakeholders are effectively involved in Monitoring and Evaluation of the project	1(0.9%)	5(4.5%)	4(3.6%)	63(56.3%)	39(34.8%)	4.20	0.78
The project staff receive capacity building trainings on monitoring and evaluation	5(4.5%)	8(7.1%)	9(8%)	44(39.3%)	56(41.1%)	4.05	1.09
There are adequate monitoring and evaluation resources	4(3.6%)	9(8%)	2(1.8%)	72(64.3%)	25(22.3%)	3.94	0.94
There are frequent monitoring and evaluation visits in the project management	2(1.8%)	3(2.7%)	13(11.6%)	75(67%)	19(17%)	3.94	0.77
Monitoring and evaluation findings	2(1.8%)	3(2.7%)	1(0.9%)	74(66.1%)	32(28.6%)	4.16	0.77

are used in decision making								
The project management has allocated sufficient budget for monitoring and evaluation activities	0(0%)	11(9.8%)	6(5.4%)	54(48.2)	41(36.6%)	4.12	0.9	
Monitoring and evaluation plan is used to track the project progress	0(0%)	6(5.4%)	7(6.3%)	46(41.1%)	53(47.3%)	4.30	0.81	
<b>Aggregate</b>						<b>4.10</b>	<b>0.87</b>	

From the results, the mean score of 4.20 suggests that respondents agreed that all stakeholders are effectively involved in monitoring and evaluation. The standard deviation of 0.78 is below 1, indicating low variability and a high level of consensus. The mean score of 4.05 indicates agreement, that project staff receive training in monitoring and evaluation. The standard deviation of 1.09 is above 1, signifying some variability in responses. The mean score of 3.94 suggests that respondents agree that there are adequate monitoring and evaluation resources. The standard deviation of 0.94 is below 1, indicating low variability in opinions. The mean score of 3.94 indicates agreement that there are frequent monitoring and evaluation visits. The standard deviation of 0.77 is below 1, implying low response variability. The mean score of 4.16 suggests that respondents agree that the findings of M&E are used in decision-making. The standard deviation of 0.77 is below 1, indicating low response variability. The mean score of 4.12 indicates agreement that the M&E budget allocation is sufficient. The standard deviation of 0.90 is below 1, implying low response variability. The mean score of 4.30 indicates strong agreement that the plan is used for tracking progress. The standard deviation of 0.81 is below 1, indicating low variability in the opinions. The aggregate mean score for all the statements was 4.10, with a standard deviation of 0.87, which is below 1. This implies an overall positive perception of monitoring and evaluation practices, with low variability in responses.

#### 4.7.2 Correlation between monitoring and evaluation and Performance of food security projects in Makueni County

A simple linear regression analysis was conducted to explore whether monitoring and evaluation participation practices have a significant impact on the performance of food security projects in Makueni County.

**Table 4.14: Correlation between monitoring and evaluation and Performance of food security projects in Makueni County**

		Project Performance	Monitoring and Evaluation
Project Performance	Pearson Correlation		.549**
	Sig. (2-tailed)		.000
	N	112	112
Monitoring and Evaluation	Pearson Correlation	.549**	1
	Sig. (2-tailed)	.000	
	N	112	112

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

The correlation results between project performance and monitoring and evaluation show a positive correlation coefficient of approximately 0.549 and a p-value of 0.000 which is less than the significance level of 0.05. This shows that there is a strong positive and significant linear relationship between project performance and monitoring and evaluation. This indicates that as monitoring and evaluation increases, project performance tends to improve.

#### 4.7.3 Regression between monitoring and Evaluation and Performance of Food Security Projects in Makueni County

A simple linear regression analysis was conducted to explore whether monitoring and evaluation practices have a significant impact on the performance of food security projects in Makueni County.

**Table 4.15: Regression between monitoring and evaluation and Performance of food security projects in Makueni County**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1 .549<sup>a</sup> .301 .295 .23707

a. Predictors: (Constant), monitoring and evaluation

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.662	1	2.662	47.359	.000 <sup>b</sup>
	Residual	6.182	110	.056		
	Total	8.844	111			

a. Dependent Variable: project performance

b. Predictors: (Constant), monitoring and evaluation

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.555	.220		11.605	.000
	monitoring and evaluation	.368	.053	.549	6.882	.000

a. Dependent Variable: project performance

The value of R is 0.549 which represents the correlation between project performance and stakeholder participation. The R Square value is 0.301, which is also expressed as 30.1%. R Square represents the proportion of variance in the project performance that is explained by the monitoring and evaluation in the model. In this model, approximately 30.1% of the variance in project performance is accounted for by monitoring and evaluation.

The ANOVA (Analysis of Variance) table was used to assess the overall significance of the regression model. The ANOVA table shows that the p-value associated with the F-statistic is 0.000, which is less than the significance level of 0.05. This indicates that the regression model is statistically significant.

The unstandardized coefficient for the constant is 2.555. This represents the intercept of the regression equation when the predictor variable is set to zero. The unstandardized coefficient for monitoring and evaluation predictor is 0.368. This means that for every one-unit change in the monitoring and evaluation, performance of food security projects is expected to change by 0.368 units while holding other variables constant. The p-value is 0.000, which is less than the significance level of 0.05. This indicates that the coefficient is a statistically significant. We therefore rejected the null hypotheses; **H<sub>4</sub>**.Monitoring and Evaluation has no statistically

significant influence on performance of food security projects in Makueni County, Kenya and accept the alternative hypothesis that Monitoring and Evaluation has a statistically significant influence on performance of food security projects in Makueni County, Kenya.

#### **4.7.4 Discussion of Findings on the Influence of Project Monitoring and Evaluation and the Performance of Food Security Projects in Makueni County**

The results reveal a high level of agreement (mean score of 4.20) that all stakeholders are effectively involved in M&E. This supports the literature's recognition of participatory M&E as a crucial aspect for project success (Islam & Kieu, 2020). Active involvement of stakeholders in M&E aligns with the idea that they play a vital role in tracking project progress and ensuring accountability. The strong agreement (mean score of 4.05) that project staff receive capacity building training on M&E is consistent with the literature's emphasis on the importance of building project staff's M&E skills (Ford and Lyneis, 2020). This training is essential for ensuring that M&E processes are effectively implemented to track project performance.

The results also indicate that there is strong agreement (mean score of 4.16) that M&E findings are used in decision-making. This is consistent with the literature's assertion that M&E information is crucial for informed decision-making and project improvement (Ford and Lyneis, 2020). The positive correlation between project performance and M&E (Pearson correlation of approximately 0.549) reinforces the empirical literature's view that effective M&E practices contribute significantly to project performance (Ocharo, Rambo & Ojwang, 2020).

### **4.8 Findings on Performance of Food Security Projects in Makueni County**

#### **4.8.1 Descriptive Findings on Performance of Food Security Projects in Makueni County**

Descriptive findings on Stakeholder Participation in food security projects in Makueni County provide a comprehensive overview of how Stakeholder Participation practices are applied in the context of initiatives aimed at improving food security in the region. These findings shed light on various aspects related to the quantity of food produced, food security, income and livelihoods.

#### **Table 4.16: Descriptive Findings on the Performance of Food Security Projects in Makueni County**

<b>Statement</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>Std.dev</b>
The project produces adequate food	2(1.8%)	5(4.5%)	5(4.5%)	76(67.9%)	24(21.4%)	4.03	0.78
The project produces affordable food for the community	0(0%)	4(3.6%)	12(10.7%)	66(58.9%)	30(26.8%)	4.09	0.72
The project has increased the income and improved the livelihoods of the community	0(0%)	5(4.5%)	7(6.3%)	64(57.1%)	36(32.1%)	4.17	0.73
The projects have reduced water use and wastage	4(3.6%)	9(8%)	2(1.8%)	72(64.3%)	25(22.3%)	3.94	0.94
Food produced by the project is available in the local markets	1(0.9%)	2(1.8%)	0(0%)	84(75%)	25(22.3%)	4.16	0.59
The project produces quality food	0(0%)	5(4.5%)	7(6.3%)	70(62.5%)	30(26.8%)	4.12	0.71
The project promotes the development of value chains for agricultural products in the community	0(0%)	9(8%)	8(7.1%)	59(52.7%)	36(32.1%)	4.09	0.84
The project is effective in promoting food security in the community	3(2.7%)	3(2.7%)	14(12.5%)	73(65.2%)	19(17%)	3.91	0.8
<b>Aggregate</b>						<b>4.06</b>	<b>0.76</b>

The mean score of 4.03 indicates agreement that the project produces adequate food. The standard deviation of 0.78 is below 1, suggesting low variability in responses. The mean score of



4.09 suggests that respondents agreed that the project produces affordable food. The standard deviation of 0.72 is below 1, indicating low variability. With a mean score of 4.17, respondents strongly agree that the project has improved income and livelihoods. The standard deviation of 0.73 is below 1, implying low variability. The mean score of 3.94 indicates agreement that the project has reduced water use and wastage. The standard deviation of 0.94 is below 1, signifying low variability in opinions. The mean score of 4.16 suggests that respondents strongly agree that project food is available in local markets. The standard deviation of 0.59 is below 1, indicating low opinion variability. The mean score of 4.12 indicates agreement that the project produces quality food. The standard deviation of 0.71 is below 1, suggesting low variability in responses. The mean score of 4.09 indicates agreement that the project promotes value chains. The standard deviation of 0.84 is below 1, signifying low opinion variability. The mean score of 3.91 suggests agreement that the project is effective in promoting food security. The standard deviation of 0.80 is below 1, indicating low variability. The aggregate mean score for all the statements was 4.06, with a standard deviation of 0.76, which is below 1. This implies an overall positive perception of the project's contributions to food production and availability with low variability in responses.

#### **4.9 Findings on the Influence of Combined Project Management Practices on Performance of Food Security Projects**

##### **4.9.1 Correlation Analysis Findings**

The correlation table 4.17 provide the strength and direction of the relationships between Project Performance and the various independent variables; Scope Management, Leadership, Stakeholder Participation, and Monitoring and Evaluation.

**Table 4.17: Combined Correlations Matrix**

		<b>Project Performance</b>	<b>Scope management</b>	<b>Leadership Participation</b>	<b>Monitoring &amp; Evaluation</b>
Project Performance	Pearson Correlation Sig. (2- tailed)	1			

Scope management	N	112				
	Pearson Correlation	.445**	1			
	Sig. (2-tailed)	.000				
Leadership	N	112	112			
	Pearson Correlation	.199*	.098	1		
	Sig. (2-tailed)	.036	.306			
Stakeholder Participation	N	112	112	112		
	Pearson Correlation	.381**	.388**	.284**	1	
	Sig. (2-tailed)	.000	.201	.112		
Monitoring and Evaluation	N	112	112	112	112	
	Pearson Correlation	.549**	.557**	.200*	.405**	1
	Sig. (2-tailed)	.000	.077	.134	.095	
	N	112	112	112	112	112

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

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

There is a moderately positive and significant correlation between Project Performance and Scope Management (Pearson Correlation = 0.445, significant at the 0.01 level). This suggests that as Scope Management improves, Project Performance tends to improve.

There is a weak positive and significant correlation between Project Performance and Leadership (Pearson Correlation = 0.199, significant at the 0.05 level). While statistically significant, the correlation is relatively low, indicating that the relationship between Project Performance and Leadership is not very strong.

There is a moderately positive and significant correlation between Project Performance and Stakeholder Participation (Pearson Correlation = 0.381, significant at the 0.01 level). This suggests that as Stakeholder Participation increases, Project Performance tends to improve.

There is a strong positive and significant correlation between Project Performance and Monitoring and Evaluation (Pearson Correlation = 0.549, significant at the 0.01 level). This

indicates that as Monitoring and Evaluation practices improve, Project Performance is likely to improve significantly.

#### 4.9.2 Multiple Regression Analysis

**Table 4.18: Multiple Regression Analysis**

<b>Model Summary</b>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.594 <sup>a</sup>	.353	.329	.23130		
a. Predictors: (Constant), Monitoring & Evaluation, leadership, stakeholder, scope management						
<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.119	4	.780	14.576	.000 <sup>b</sup>
	Residual	5.724	107	.053		
	Total	8.844	111			
a. Dependent Variable: project performance						
b. Predictors: (Constant), Monitoring & Evaluation, leadership, stakeholder, scope management						
<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.635	0.408		4.012	.000
	Scope management	0.24	0.059	0.27	4.068	.008
	Leadership	0.171	0.051	0.175	3.353	.020
	Stakeholder participation	0.163	0.054	0.171	3.019	.011
	Monitoring & Evaluation	0.257	0.065	0.384	3.954	.000
a. Dependent Variable: project performance						

The multiple correlation coefficient (R) is 0.594, indicating a moderate positive linear relationship between the combined set of predictor variables (Scope Management, Leadership, Stakeholder Participation, and Monitoring & Evaluation) and Project Performance. In other words, these predictor variables combined explain some of the variance in Project Performance. The coefficient of determination (R Square) is 0.353, which means that approximately 35.3% of the variance in Project Performance is accounted for by the combination of Scope Management, Leadership, Stakeholder Participation, and Monitoring and Evaluation. The adjusted R Square is 0.329. This is similar to R Square but adjusted for the number of predictors in the model. It

indicates that the combination of predictor variables accounts for about 32.9% of the variance in Project Performance.

The ANOVA table assesses the overall significance of the regression model. The F-statistic is 14.576, and the associated p-value is 0.000. This indicates that the regression model, which includes Scope Management, Leadership, Stakeholder Participation, and Monitoring & Evaluation, is statistically significant in predicting Project Performance.

The coefficients table provides information about the individual predictor variables and their contributions to the model. The constant represents the intercept of the regression equation. In this case, the constant is 1.635. The coefficient for Scope Management is 0.240. This indicates that for a one-unit change in Scope Management, Project Performance is expected to change by 0.240 units, holding other variables constant. The coefficient for Leadership is 0.171. For a one-unit change in Leadership, Project Performance is expected to change by 0.171 units, while other variables remain constant. The coefficient for Stakeholder Participation is 0.163. A one-unit change in Stakeholder Participation is associated with a 0.163 unit change in Project Performance, all else being equal. The coefficient for Monitoring & Evaluation is 0.257. A one-unit change in Monitoring & Evaluation is linked to a 0.257 unit change in Project Performance, with other variables held constant. In summary, the multiple regression model suggests that Scope Management, Leadership, Stakeholder Participation, and Monitoring & Evaluation collectively have a statistically significant relationship with Project Performance. The model explains approximately 35.3% of the variance in Project Performance, with each predictor variable contributing to the prediction.

#### 4.10 Summary of Hypotheses Testing

**Table 4.19: Summary of Results of Test Hypotheses**

<b>Hypothesis</b>	<b>Regression Model</b>	<b>Results</b>	<b>Decision</b>
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<p>H1. Project scope management has no statistically significant influence on performance of food security projects in Makueni County, Kenya.</p>	<p><math>y = \beta_0 + \beta_1 X_1 + e</math></p>	<p>{<math>R=0.445</math>, <math>R^2=0.198</math>,  <math>\beta=0.367</math>, <math>t=5.205</math>, <math>F</math>  <math>(1,110) = 27.093</math>,  <math>p &lt; 0.05</math>}</p>	<p>Reject <math>H_1</math></p>
<p>ii. H2. Project leadership has no statistically significant influence on performance of food security projects in Makueni County, Kenya.</p>	<p><math>y = \beta_0 + \beta_2 X_2 + e</math></p>	<p>{<math>R=0.199</math>, <math>R^2=0.040</math>,  <math>\beta=0.185</math>, <math>t=3.246</math>, <math>F</math>  <math>(1,110) = 4.525</math>,  <math>p &lt; 0.05</math>}</p>	<p>Reject <math>H_2</math></p>
<p>iii. H3. Stakeholder participation has no statistically significant influence on performance of food security projects in Makueni County, Kenya.</p>	<p><math>y = \beta_0 + \beta_3 X_3 + e</math></p>	<p>{<math>R=0.381</math>, <math>R^2=0.145</math>,  <math>\beta=0.358</math>, <math>t=4.319</math>, <math>F</math>  <math>(1,110) = 18.657</math>,  <math>p &lt; 0.05</math>}</p>	<p>Reject <math>H_3</math></p>
<p>iv. H4. Monitoring and evaluation has no statistically significant influence on performance of food security projects in Makueni County, Kenya.</p>	<p><math>y = \beta_0 + \beta_4 X_4 + e</math></p>	<p>{<math>R=0.549</math>, <math>R^2=0.301</math>,  <math>\beta=.368</math>, <math>t=6.882</math>, <math>F</math>  <math>(1,110) = 47.359</math>,  <math>p &lt; 0.05</math>}</p>	<p>Reject <math>H_4</math></p>

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## **CHAPTER FIVE**

### **SUMMARY CONCLUSIONS, RECOMMENDATIONS**

#### **5.1 Introduction**

The chapter presents the summary, conclusions and recommendations based on the findings and analysis presented in the research.

#### **5.2 Summary of Findings**

##### **5.2.1 Influence of Project Scope Management on the Performance of Food Security Projects in Makueni County**

The findings on project scope management in food security projects in Makueni County reveal a high level of consensus and effectiveness in the application of scope management practices. Respondents indicate that project scope statements are actively used, project management plans are effectively utilized, objectives are realistic and achievable, and work breakdown structures are consistently adopted. Project boundaries are clearly defined, and the project scope is regularly reviewed and updated. Changes to the project scope are carefully considered and approved before implementation, and the scope is effectively managed to ensure on-time and on-budget completion of deliverables. Furthermore, the statistical analysis shows a moderate positive linear relationship between scope management and project performance, with scope management explaining approximately 19.8% of the variance in project performance. These findings emphasize the significance of well-implemented scope management practices in enhancing the success of food security projects in Makueni County.

##### **5.2.2 Influence of Project Leadership on the Performance of Food Security Projects in Makueni County**

The findings on project leadership in food security projects in Makueni County indicate that project leaders exhibit a strong understanding of the technical aspects of their projects, effectively apply leadership styles, and possess significant project management experience. They frequently engage in leadership capacity-building activities and communicate project status effectively. While they promote a positive team environment, the findings show a moderate need

for improvement in this aspect. Additionally, project leaders demonstrate robust decision-making and problem-solving skills. The overall perception of project leadership practices is positive, with low variability in opinions. The statistical analysis reveals a weak but significant positive relationship between project leadership and project performance, with project leadership explaining approximately 4.0% of the variance in performance. These results underscore the importance of effective project leadership in the success of food security initiatives in Makueni County, with the potential for further enhancing team dynamics to achieve even better outcomes.

### **5.2.3 Influence of Stakeholder Participation on the Performance of Food Security Projects in Makueni County**

The findings on stakeholder participation in food security projects in Makueni County reveal a positive landscape of community engagement and collaboration. Respondents generally agree that the community effectively participates in project management, stakeholders actively identify risks and challenges, and the projects are well-accepted in the community. Frequent stakeholder involvement in project monitoring, decision-making, and the consideration of stakeholder needs and interests further highlights the significance of their role. Effective communication within projects is recognized, contributing to a harmonious environment. The statistical analysis underscores the strong correlation between stakeholder participation and project performance, with stakeholder participation explaining approximately 14.5% of the variance in project performance. These findings emphasize the vital role of stakeholders in achieving successful outcomes in food security initiatives and call for continued efforts to enhance their involvement and collaboration.

### **5.2.4 Influence of Monitoring and Evaluation on the Performance of Food Security Projects in Makueni County**

The findings on monitoring and evaluation (M&E) in food security projects in Makueni County reveal an encouraging picture of effective M&E practices. Respondents generally agree that all stakeholders are actively involved in M&E, and project staff receive capacity-building training in M&E. There is also recognition that M&E resources are adequate, and frequent M&E visits are conducted. Importantly, M&E findings are actively used in decision-making processes,

indicating their value in project management. Moreover, project budgets allocate sufficient resources for M&E activities, and M&E plans are instrumental in tracking project progress. The statistical analysis underscores a strong correlation between M&E and project performance, with M&E explaining approximately 30.1% of the variance in project performance. These findings emphasize the pivotal role of effective M&E practices in enhancing the success of food security projects, highlighting the need for continued investment and emphasis on these processes.

### **5.3 Conclusions**

Project scope management has a statistically significant influence on performance of food security projects in Makueni County. Active use of project scope statements greatly contributes to effective project management; enabling teams to stay focused and aligned with project objectives. The utilization of project management plans was seen as a key factor in ensuring efficient operations. Project objectives were perceived as realistic and achievable within the given timeframes, which is essential for overall project success.

It is evident that project leadership has a statistically significant influence on performance of food security projects in Makueni County. Project leaders generally possess technical knowledge about the project, apply effective leadership styles, have substantial experience in project management, attend capacity-building trainings, effectively communicate project status, promote positive team environments, and demonstrate strong decision-making and problem-solving skills.

Stakeholder participation has a statistically significant influence on performance of food security projects in Makueni County. The analysis indicates that the community is effectively involved in project management, and stakeholders are actively engaged in identifying potential risks and challenges in the project. The projects are well accepted in the community, and stakeholders frequently participate in monitoring and evaluation, as well as decision-making processes. The needs and interests of stakeholders are considered, and the communication process within the project involves all stakeholders. There is an overall positive perception of stakeholder participation in project management, with moderate agreement and low variability in opinions.



Monitoring and evaluation has a statistically significant influence on performance of food security projects in Makueni County. The analysis revealed a positive perception of M&E processes. All stakeholders are effectively involved in M&E, and project staff receives training in M&E. Adequate resources for M&E are acknowledged, and M&E activities, including frequent visits and findings utilization in decision-making, are prevalent. The M&E budget allocation is considered sufficient, and M&E plans are consistently used to track project progress. Overall, there is a favorable view of M&E practices, demonstrating a high level of consensus and low response variability.

#### **5.4 Recommendations**

The study recommends that there is need to strengthen the change control procedures to ensure that any changes to the project scope are well-documented, evaluated, and approved by the appropriate authorities. This will help prevent unauthorized scope changes that can disrupt the project. The project managers should continue the practice of periodic scope reviews and updates, ideally in collaboration with key stakeholders. This will ensure that the project remains aligned with the evolving needs and requirements.

There were some disagreement responses on project leader promoting a positive and collaborative project team environment. Thus there is need for team-building workshops or activities to foster a collaborative atmosphere among project team members. These activities can help improve team dynamics and communication. Project leaders should be provided with specific training in creating and maintaining a positive team environment and equip them with skills to motivate and engage team members effectively.

While community involvement in project management is positive, there is room to further engage the community in decision-making and problem-solving processes. There is need to encourage community members to actively participate in project planning and execution. To ensure projects maintain a high level of acceptance in the community, the project team should maintain transparent communication, and address any concerns or issues promptly. Building and maintaining trust is vital.

The study recommends that the project team should maintain and enhance the active engagement of all stakeholders in the M&E processes, encouraging their participation in data collection, analysis, and feedback mechanisms to ensure a comprehensive perspective. While there is recognition of adequate resources, there is need to ensure that the necessary tools and resources for M&E are consistently available to maintain the high standards observed.

### **5.5 Recommendations for Further Studies**

The study recommends for further studies on cross-comparative analysis of food security projects in multiple counties or regions in Kenya. This could investigate how variations in project scope management, leadership, stakeholder participation, and monitoring and evaluation influence project performance in diverse geographical and socioeconomic contexts.

The study further suggests that longitudinal studies should be undertaken to evaluate the long-term impact and sustainability of food security projects, considering both immediate outcomes and future community resilience.

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## APPENDICES

### Appendix I: Questionnaire

1. Gender

Male ( )

Female ( )

2. Age

18- 30 ( )

31- 40 ( )

41- 50 ( )

Over 50 years ( )

3. Period of involvement in food security projects

0- 3 years ( )

4 -6 years ( )

7 10 years ( )

Over 10 years ( )

### Part B: Project Scope Management

4. The listed statements reflect project scope management attributes. Please select 1 , 2 , 3 , 4 , or 5 to indicate how much you agree with the statements presented in reference to this food security project. Scale 1= Strongly disagree, 2= Disagree, 3 =Neutral, 4 = Agree, 5= Strongly agree

Statement	1	2	3	4	5
The project scope statement is used in the project management					
We have a project management plan that is effectively used					
The project's objectives are realistic and achievable within the given					

timeframe					
Work breakdown structure is always adopted					
The project boundaries are clearly defined					
The project's scope is periodically reviewed and updated as necessary.					
Changes to the project scope are carefully considered and approved before implementation.					
Project's scope is effectively managed to ensure that all deliverables are completed on time and within budget					

### Part C: Project Leadership

5. The listed statements reflect project leadership attributes. Please select 1 , 2 , 3 , 4 , or 5 to indicate how much you agree with the statements presented in reference to this food security project. Scale 1= Strongly disagree, 2= Disagree, 3 =Neutral, 4 = Agree, 5= Strongly agree

Statement	1	2	3	4	5
The project leader is knowledgeable about the technical aspects of the project.					
Project leaders apply effective leadership styles in managing the project					
The project leaders have a vast experience in project management					
Project leaders frequently attend leadership capacity building trainings to improve their skills					
The project leader effectively communicates project status and progress to stakeholders					
The project leader promotes a positive and collaborative project team environment					
The project leader demonstrates strong decision-making and problem-solving skills.					

**Part D: Stakeholder Participation**

6. The listed statements reflect stakeholder participation attributes. Please select 1 , 2 , 3 , 4 , or 5 to indicate how much you agree with the statements presented in reference to this food security project. Scale 1= Strongly disagree, 2= Disagree, 3 =Neutral, 4 = Agree, 5= Strongly agree

Statement	1	2	3	4	5
The community is effectively involvement in the project management					
Stakeholder are involved in identifying potential risks and challenges in the project					
The project is well accepted in the community					
The stakeholders are frequently involved in monitoring and evaluation of the project					
The stakeholders are involved in decision-making processes.					
The needs and interests of the stakeholders are taken into account					
The communication process within the project involves all the stakeholders					

**Part E: Monitoring and Evaluation**

7. The listed statements reflect project monitoring and evaluation attributes. Please select 1 , 2 , 3 , 4 , or 5 to indicate how much you agree with the statements presented in reference to this food security project. Scale 1= Strongly disagree, 2= Disagree, 3 =Neutral, 4 = Agree, 5= Strongly agree

Statement	1	2	3	4	5
All stakeholders are effectively involved in Monitoring and Evaluation of the project					
The project staff receive capacity building trainings on monitoring and evaluation					

There are adequate monitoring and evaluation resources					
There are frequent monitoring and evaluation visits in the project management					
Monitoring and evaluation findings are used in decision making					
The project management has allocated sufficient budget for monitoring and evaluation activities					
Monitoring and evaluation plan is used to track the project progress					

**Part F: Performance of Food Security Projects**

8. The listed statements reflect performance of food security projects attributes. Please select 1 , 2 , 3 , 4 , or 5 to indicate how much you agree with the statements presented in reference to this food security project. Scale 1= Strongly disagree, 2= Disagree, 3 =Neutral, 4 = Agree, 5= Strongly agree

Statement	1	2	3	4	5
The project produces adequate food					
The project produces affordable food for the community					
The project has increased the income and improved the livelihoods of the community					
The projects have reduced water use and wastage					
Food produced by the project is available in the local markets					
The project produces quality food					
The project promotes the development of value chains for agricultural products in the community					
The project is effective in promoting food security in the community					

**Thank you**