PROJECT MANAGEMENT PRACTICES AND PERFORMANCE OF SMALLHOLDER HORTICULTURAL EMPOWERMENT PROJECTS: A CASE OF JAPAN INTERNATIONAL CORPORATION AGENCY PROJECTS IN KAJIADO COUNTY, KENYA

BY

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DECLARATION

This Project is my original work and has not been submitted to any other university for any award.

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LIST OF ABBREVIATIONS

SHEP	Smallholder Horticultural Empowerment Projects
JICA	Japan International Cooperation Agency
GOK	Government of Kenya
WFP	World Food Programme
UNDP	United Nations Development Programme
HCDA	Horticultural Crop Development Agency
FAO	Food and Agricultural Organization
FCI	Farm Concern International
M&E	Monitoring and Evaluation

ABSTRACT

This study aimed to demonstrate how project management techniques influence the effectiveness of smallholder agricultural empowerment initiatives in Kenya. The objectives that guided the study were; examining the impact of project design on the execution of smallholder horticultural empowerment initiatives in Kenya, determining the impact of stakeholders' engagement on the execution of smallholder horticultural empowerment projects in Kenya, establishing the impact of project implementation on the effectiveness of smallholder horticultural empowerment projects in Kenya, and ascertaining the results of Kenyan smallholder horticulture empowerment programs and the effects of monitoring and assessment. The sample size of the study included 100 farmer groups. Both qualitative and quantitative research designs were used in this research, enabling the researcher to get deeper insights into the project with structured questionnaires. The pilot study in Kiambu County focused on farmers in that region. After data collection, correlation and regression tests were conducted on the data for analysis. Data analysis entailed descriptive statistics expressed as percentages, means, frequencies, and standard deviations, which were analyzed using statistical tools. Parametric Inferential statistics such as ANOVA be used to test hypotheses. Tables were applied in presenting the examined data and interpretations made, and finally, findings and recommendations were used to inform solutions performance of SHEP projects. The study concluded that each of the objectives had a significant influence on the independent variable, and recommendations were made.

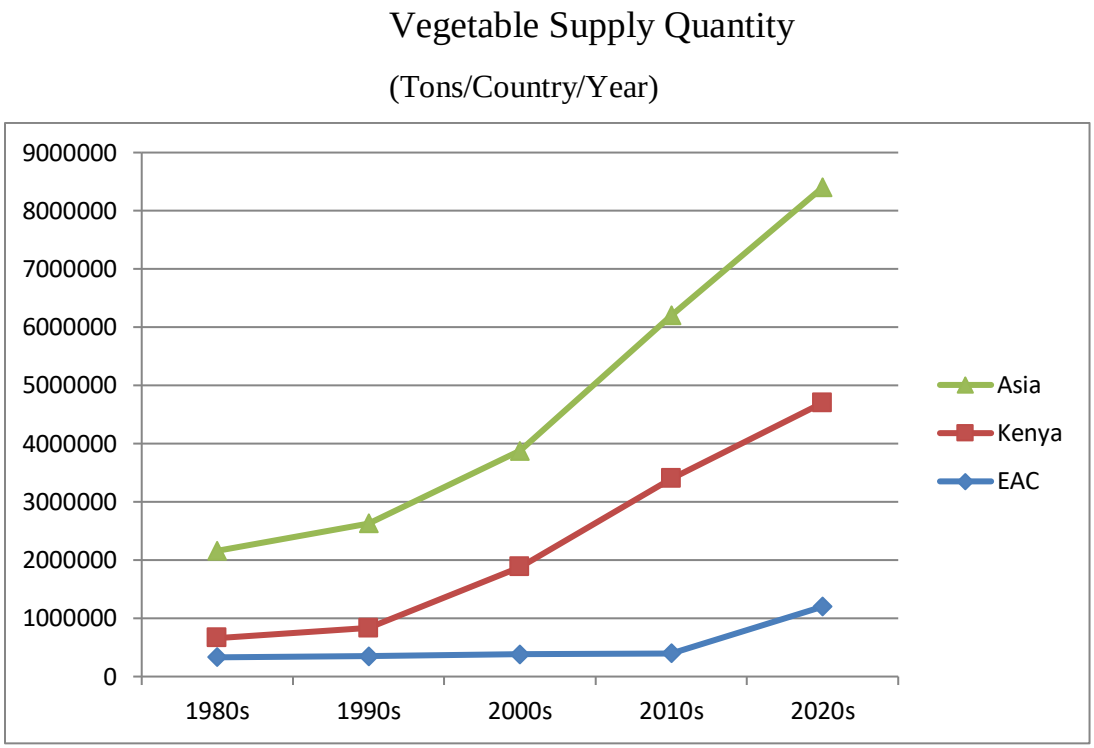
CHAPTER ONE: INTRODUCTION

1.1 Background to the study

The World Development Report 2008 claims that access to markets, climate change, and other factors are to blame for the high poverty rate among farmers. The report highlighted improved access to markets and encouraging smallholders to participate as essential strategies for reducing poverty. To realize this, the measures to be undertaken included improved farming techniques, improvement in extension services, sustained water and soil management, capacity to develop human resources, and infrastructure development (Aikawa, 2013). The agricultural sector in Kenya makes up 20% of the Gross Domestic Product, employs over 40% of the overall population, 70% of whom live in rural areas, and produces over 65% of foreign exchange earnings. Nonetheless, the performance of the agricultural sector has declined from the levels recorded from 2006 to 2015 (Chengula, 2018).

The horticultural business continues to be the fastest expanding sub-sector, recording an average growth rate of between 15% and 20% per year, despite the general decline in the agriculture sectors. Horticultural crop production rises in tandem with GDP growth. The increase in horticulture production in Kenya over the past two decades is depicted in figure 1 below. Smallholders play a crucial role in the horticultural sector. Depending on the production area, they comprise about 80–100% of the overall population and produce 60% of the total yield. On average, 96% of whole production from horticulture is consumed at the subsistence level or sold in local markets. The export market has not always been lucrative for small-scale farmers. Despite the 4% being exported, the profits realized are meager. The need for building the capacity of smallholder horticultural farmers, supporting them to increase productivity, have access to local and external markets, and gain more profit has been firmly identified. The expected outcome is to enhance the livelihoods of horticultural farmers and increase food security in Kenya (Team, 2009).

Figure 1.1:Change in the supply of vegetables in Asia, East Africa, and Kenya.



In a cooperative initiative with the Japan International Cooperation Agency, the Government of Kenya launched do the Smallholder Horticultural Empowerment to Projection 2006. Its primary objective is to address the various issues that small-scale horticultural farmers encounter in Kenya. The benchmark project aims to address problems in the agribusiness value chain and serve as a model for future projects, initially designed as a three-year initiative through a technical cooperation program between the Government of Kenyao (GOK) and the Japan International Cooperation Agency (JICA). The Project was carried out in 4 counties in Kenya; upon successful implementation and excellent outcomes, the project duration was extended to 2025, and the approach was duplicated to more counties (Team, 2009).

Smallholder Horticultural Empowerment Projects must address these issues: i) weak bargaining power, ii) low or decreasing productivity, and iii) post-harvest loss. The Project has addressed these issues through training for farmers in collaboration with Crucial County Agricultural staff like extension officers and county directors of agriculture. This Project uses the SHEP Approach, a specific set of methods and techniques for empowering smallholder horticultural farmers.

Sessions are conducted for farmer groups and group facilitators. SHEP, like other concepts aimed at achieving food security and alleviating poverty, for example, contract farming aims to increase production, provide information about access to local and international markets, grow profits, and improve livelihoods. It will be achieved through training on various topics, including how to access agricultural financing, why and how to use fertilizer, price setting, commodity trading, and strengthening farmer organizations.

This Project has led to improved livelihoods of horticultural farmers in targeted areas as higher incomes have been experienced in households where farmers implement the SHEP Approach. There is more collaboration and a general division of labor among genders as the approach is thoroughly inclusive. Other success factors from the Project have been; strengthening the capacity of the counterparts and extension officers, increased networking, including access to FABLIST, high-quality produce production, and enabling the bulk purchase of farm input by farmers through group activities. The horticultural sub-sector in Kenya is viewed as a great contributing factor to the nation's 2030 economic growth strategy as it generates jobs and opens up opportunities for international trade.

1.2 Statement of the Problem

Smallholder farmers in Africa, mainly in Kenya, face a hostile environment unfavorable to growth. This environment is characterized by a need for more technical skills, poor managerial ability, restricted access to inputs, financial services, and commercial marketplaces, and a scarcity of physical and natural resources like land, water, and irrigation systems. As a result, smallholders need help to participate in retail value networks effectively. When they do, the cost of transactions is prohibitively high due to these farming enterprises' tiny and scattered size.

Value Chain Partnerships are fast becoming good vehicles for including smallholders in commercial value chains. Value chain partnerships in the agricultural sector are well-defined as unpaid cooperative endeavors amongst various actors in the agribusiness value chain that have been established without hierarchy and strive for the sector's sustainability (FCI, 2019). These partnerships are fast bringing solutions to smallholders by helping them overcome problems like market failure through strategies like aggregation, increasing value chain efficiency through

increased production, cost reduction, and innovations. They are helping pool resources of smallholders together and therefore helping achieve more results than could be achieved by stand-alone smallholders. The SHEP approach, like contract farming, is used as a value chain partnership vehicle to drive performance in the sector. How well these are implemented impacts the results from the different projects by international organizations like WFP, UNDP, FCI, and other private partnerships.

Previous studies have shown that project management practices highly influenced the performance of projects in the agribusiness value chain, how the Project was implemented, carried out, and evaluated its impact. Therefore, there is necessary to appreciate how best project management practices have been leveraged before to ensure success and what can be improved to achieve optimal results.

1.3 Purpose of the Study

This study aimed to prove the impact of the project management practices on the functionality of smallholder horticultural empowerment projects by JICA in Kenya, particularly in Kajiado County.

1.4 Objectives of the Study

The following objectives guided this Study;

1. To examine the impact of the project design on the performance of SHEP projects in Kenya.
2. To determine stakeholder engagement's impact on SHEP projects' performance in Kenya.
3. To establish the impact of project implementation on the effectiveness of SHEP projects in Kenya.
4. To ascertain the impact of monitoring and evaluation on the effectiveness of SHEP projects in Kenya.

1.5 Research Questions

This Study sought to answer the following inquiries;

1. What factors influence project design on the effectiveness of SHEP Projects in Kenya?
2. How does stakeholder engagement influence SHEP Projects' performance in Kenya?

3. How has project implementation influenced the effectiveness of SHEP Projects in Kenya?

4. How do monitoring and evaluation impact the effectiveness of SHEP Projects in Kenya?

1.6 Research Hypothesis

The following hypothesis has guided the Study;

1. H_0: Project design has no significant impact on the effectiveness of SHEP projects in Kenya.

2. H_1: There is a significant impact of project design on the effectiveness of SHEP projects in Kenya.

3. H_0: There is no significant impact on stakeholder engagement's influence on SHEP projects' performance in Kenya.

4. H_1: A substantial shareholder influence engagement's influence on SHEP projects' performance in Kenya.

5. H_0: Project implementation has no significant impact on the effectiveness of SHEP projects in Kenya.

6. H_1: There is a significant impact of project implementation on the effectiveness of SHEP projects in Kenya.

7. H_0: There is no significant impact of surveilling and assessment on the effectiveness of SHEP projects in Kenya

8. H_1: There is a significant impact of surveilling and assessment on the effectiveness of SHEP projects in Kenya.

1.7 Significance of the Study

Over the previous ten years, a rise has been observed in value chain partnerships in the agribusiness sector to promote agribusiness. This Study highlighted what agribusiness value chains are, particularly in the horticulture sector, the retail value chain in horticulture, how they have been utilized, the gaps in the value chain, and how to bridge them.

This Study will help JICA understand the impact of the SHEP approach in agribusiness projects and how well it can be utilized to achieve optimal results. It will also help the Government to know what they have achieved and what they can do to make the Project worth the resources spent on it.

1.8 Basic Assumptions of the Study

The Study presumes that the participant has voluntarily answered correct answers and is impartial to the area of interest in the questionnaire. It is also assumed that relevant information about the research subject was available.

1.9 Limitations of the Study

The greatest limitation the investigator could have faced in this Study is inadequate information. It is a relatively new field in Kenya where individuals are still working on assumptions; the information could be inflated, obsolete, or inefficient. However, the researcher overcame this by referring to similar studies in other African countries.

Another challenge was getting the respondents in time; the researcher plans to use online questionnaires using the ODK tool, which will save time.

1.10 Delimitations of the Study

The study was undertaken primarily in Kajiado County, one of the four pilot counties of the Smallholder Horticultural Empowerment Project. The research was restricted to Smallholder Horticultural Empowerment projects in Kajiado County. The study has specifically addressed four variables; project design, stakeholder engagement, implementation, and surveilling and assessment.

1.11 Definition of significant terms used in the Study

Smallholders - Include small farmers who own and control the land they farm and those who do not. The farmland considered here is usually below 2 acres.

Value Chain - A concept describing the full process of creating a product or a service.

SHEP Approach - A series of training sessions for farmers and farmer groups and group facilitators emphasizing mindset change for farmers from "Grow and Sell" to "Grow to Sell."

Contract Framing - Agricultural production is carried out based on an agreement between a buyer and an agricultural producer. It sometimes involves a buyer

specifying the produce they want, the inputs to use, and post-harvest handling activities.

Value Chain Partnerships - Voluntary collaborative engagements amongst various players in the agribusiness value chain that has been institutionalized but are not hierarchical strive for the sustainability of the sector.

Commercial Value Chain - Vehicles are used to achieve organizational growth; in this case, they are used for development in agribusiness. They include contract farming and value chain partnerships. Horticultural Farming Growing of flowers, fruits and nuts, vegetables and herbs, flowers, fruits, nuts, vegetables, herbs, lawns, and decorative trees.

Sub-Sector - It is part of a large sector; for instance, horticulture is a subsector of the agriculture sector.

Stakeholder - A person, group, industry, or community with a stake in how a particular partnership, decision, or process turns out.

1.12 Organization of the Study

The research was broken down into five chapters, with the study backdrop overview coming first. The issue statement, the investigation aims, the investigation question, the importance and study limitations, beliefs, scope, and a glossary of important terminology utilized in the research, are then presented. The second chapter is devoted to a literature evaluation, thoroughly examining pertinent literature linked to the research topic and identifying research gaps. Chapter four discusses the research findings and interpretation, chapter three concentrates on the study methodology. Chapter Five summarizes the research results, offers conclusions, and recommends additional investigation. The document contains a reference list and any appendices used during the Study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter has looked into literature with an empirical focus on SHEP projects and how different project management practices have influenced their performance. This chapter has covered the theoretical and conceptual framework to summarize the reviewed literature and highlight the knowledge gap.

2.2 Project Design and Performance of SHEP Projects

The horticulture sub-sector in Kenya employs about 2.5 million individuals, implying that it is among Kenya's most prominent foreign exchange-earners. However, production in this sector could be higher if not for challenges experienced by smallholders and challenges encountered in the market for horticultural crops (George Mgendi, 2019). Farmer challenges include a subsistence mindset, the labor-intensive nature of horticultural crops, the refined agricultural technique required, farm inputs, market fluctuations, and low storability. The horticulture market faces difficulties due to the smallholders' lack of capability, the weak farmer organizations, the poor production, the constrained market channels, the erratic selling prices, and the underdeveloped production infrastructure (Dolan, 2010). To address these issues, GoK developed the SHEP program through ASDS, which aims to change smallholder attitudes in agriculture from a subsistence-centered approach to a more commercially minded one to increase agricultural production and encourage commercialization. JICA was asked to come on board to help implement the Project's technical cooperation by strengthening small-scale farmers' organizational management capacity.

Agricultural technology transfer is critical to increasing agricultural productivity in rural areas, particularly when demand exceeds production capacity (George Mgendi, 2019). SHEP is a thriving agricultural technology transfer from Asia that has played a key role in transforming agricultural productivity by transferring hard and soft skills to agricultural production. The SHEP Approach aims at changing the farmer's mindset from "grow and sell' to 'grow to sell.' It achieves this through building intrinsic motivation for farmers and promoting self-empowerment using the self-determination theory. These are accomplished through farmer training to conduct market research, strategic crop selection based on market signals, farmer group action plans, and applying agricultural technique practices. The approach which has primarily impacted the project design

has been the key driving factor of the Project's success, making SHEP shortlisted as the most successful Project in Kenya. The Project has measurable goals such as the improvement of farmer groups supported by one level of group empowerment indicators, up to 50% increase in average production per acre of an individual or per farmer group, the introduction of farming techniques by up to 80% of participating farmer groups or individual farmers (Team, 2009). The project objectives were met as farmers' incomes doubled in the Project's first and second phases, and the technique was successfully transferred to other parts. However, individualistic marketing still exists, resulting in low production, supply, and bargaining power for product prices.

ATTs, in most circumstances, fail due to weak linkages between the recipient and donor countries, lack of commitment by farmer groups or smallholders, and improper participation of stakeholders in the agriculture technology project. Unlike other ATTs that have been ineffective and unsustainable, SHEP, through the SHEP Approach, has continued to successfully achieve its objectives, duplicating 51 more counties in Kenya and other countries in Africa as well. It is attributed to the favorable policy environment already created by MOALF and the availability of technical capacity of the pre-trained county agricultural officers.

In Africa, SHEP has been successfully implemented in Malawi, Senegal, and Ethiopia. It was done by successfully training agricultural extension officers and government officials involved in the SHEP approach or 'returnees' as named by JICA. During training, the officers were assigned to develop action plans for individual countries with the help of JICA experts. Upon successful completion of work plans, the officers, in collaboration with respective government officials, were expected to evaluate their available resources and determine their availability in implementing the SHEP project. After successful initial implementation, JICA would come along as technical cooperation to scale up activities. Only after a country successfully implemented the approach (JICA, 2015).

A case study in Tanzania evaluating a similar agricultural transfer technology in Rice farming states that Rice Industry Development Support (RIDS) was a successful technical cooperation between the Ministry of Agriculture and Food Security Tanzania and JICA. The outcomes in rice production from the evaluation showed an increase in production, as well as an increment in the

productivity of rice in Tanzania. The project design was quite like the training and implementation techniques of the SHEP (George Mgendi, 2019).

2.3 Stakeholder Engagement and Performance of SHEP Projects

Dahiya and Okitasari define a stakeholder as an individual, a community, a sector, or an organization interested in the successful result of a particular choice, partnership, or process. Stakeholders in technical cooperation projects might consist of the Government, extension officers, non-governmental organizations, farmers, researchers, input suppliers, and traders. Shareholders can impact an implementer of an organization's operations, objectives, growth, and survival since they are unwilling to consistently support the Project's vision or objectives, which often translates to failure (Menoka, 2013). Various stakeholders have various interests and levels of investment in the Project, which sometimes leads to conflicts unless each stakeholder understands their role clearly. When various stakeholders in a project are closely allied, working together jointly to create plans and provide options that accomplish a shared goal, the sustainability of project benefits is assured. In addition, stakeholder engagement in a project ensures the achievement of project objectives.

Nevertheless, stakeholder participation should be voluntary to ensure commitment by various parties and full participation. The SHEP project in Kenya's success has been greatly attributed to the high level of ownership by stakeholders, from farmers to the Government. Through the SHEP Approach, the farmers are trained to act intrinsically.

The Ministry of Agriculture commits to developing capacity for people in Kenya in line with the SHEP Project objectives by clearly envisioning roles for each stakeholder involved in the process and by understanding what agricultural technology the local community leads and how it can be implemented to achieve the vision for the community.

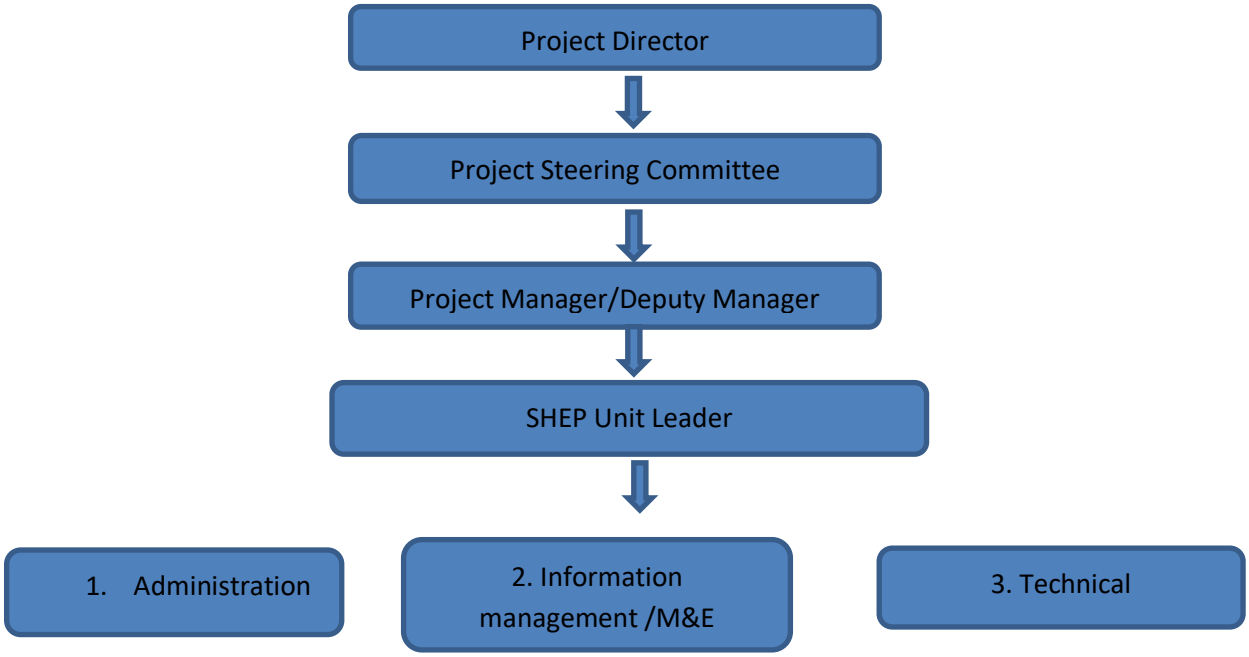
To comprehend the impact of stakeholders' engagement in the construction industry, (Menoka, 2013) found that, at any given point, there are six steps to the stakeholder engagement process. These include identifying the stakeholders, relating stakeholders to project targets, prioritizing stakeholder influences, managing expectations, measuring performance, and putting marks to

action. SHEP has achieved this so well through building capacity, changing mentalities, and ensuring ownership of the whole process.

2.4 Project Implementation and Performance of SHEP Projects

Government commitment and participation are cemented by all main stakeholders' involvement in the SHEP project's design and implementation. This has enhanced the effectiveness of the projects ensuring sustainable impact in recipient counties. To do this effectively, the project developed an implementing structure entailing i) the Project steering committee and ii) the Extension services delivery system. The project steering committee is responsible for making important decisions for the project. The team is made up of experts from MOALF and JICA.

Figure 2.1: Project Steering Committee for SHEP Project.



As part of the implementing structure, the extension delivery system aligns with Kenya's plan to secure sustainability. It is part of the factors that have catapulted the project to success (Team, 2009).

Figure 2.2: Extension Delivery System at SHEP Project

The project implementation process of SHEP is divided into four stages: setting up and detail designing of the project, direct model group training, indicated model group training, and wrapping up the project. The SHEP Approach, a core concept of SHEP projects, is used to build the capacity of implementing staff in various participating counties.

Figure 2.3: Details of the SHEP Approach

The targets for the SHEP approach are the various stakeholders in the SHEP project. These include Smallholders, county extension officers, county agricultural officers, and trainers. It seeks to promote the idea of farming as a business and raise internal motivation for continuous activities implementation. Promoting farming as a business entails sharing market information among market actors like farmers, buyers, and marketers.

2.5 Monitoring, Evaluation, and Performance of SHEP Projects

WFP describes Monitoring and Evaluation (M&E) as a group of actions that track and analyze a project'sproject's activities daily and measure their operational performance against project targets while making adjustments where necessary.

The increase in Structural Adjustment Programmes (SAPs) and the transfer of agricultural technology introduced in developing countries in the last decade has warranted the issue of gauging the economic benefit of these programs in these countries. There is an increasing need for donors and specific governments to measure developments during the adjustments. Therefore, there must be clear guidelines for monitoring these adjustments, especially in African countries where agriculture is and remains the most significant income earner (Sarris, 1990).

Despite the growing literature on evaluation and monitoring, there has yet to be an evident concurrence about Agriculture development M&E operations or agricultural technology transfer projects. However, any surveilling and assessment activities should start at the preparation level

and be carried out in the implementation phase and at each project's tail end or conclusion phase. Because of this, different terminologies are used for various M&E activities in the agricultural sector and beyond. These terminologies include baseline survey, needs assessment survey, and end-line survey. It is argued that project planning should offer precise, comprehensive attention to M&E activities (Dorward, 1988).

A study in Niger outlines that Sub-Saharan Africa has made great strides in agriculture. This success is largely attributed to clearly outlined agricultural and land management development indicators. However, a balance is required between quantitative and qualitative indicators for the successful measurement of outcomes (C.P. Reij, 2008)

In Kenya, agricultural development projects take a similar path for M&E . For SHEP projects in particular, performance measurement is carried out through a series of activities that include a baseline survey at the beginning of the project; infield training follow-ups, periodical follow-ups, periodic data surveys, review workshops, and evaluations done in the midterm; end term and ex-post.

Baseline surveys bring to light existing conditions before the start of a project, against which progress will be measured and comparisons made. SHEP projects involve a participatory baseline survey where smallholders fill in questionnaires that help them convert tacit knowledge to explicit knowledge, thereby enabling extension staff to advise farmers appropriately on their farming techniques and decision-making and address any information asymmetries issues like crop selection, inputs, fertilizers, market and quality of produce. From this, the farmer can make necessary changes and make farming activities more profitable. The project decision-makers can also choose target farmers or farmer groups for the study.

Periodic follow-ups, periodic surveys, and review workshops are carried out three months and one year after the baseline survey and training, respectively. These activities aim to assess the implementation of a group action plan by model farmer groups, evaluate achievements, identify challenges, and provide a way forward.

Evaluations for SHEP projects are continuous; they aim to determine the project'sproject's relevance, efficiency, effectiveness, impact, and sustainability. Assessments that are done in SHEP include ex-ante, mid-term, end-term, and ex-post. Other M&E activities carried out in SHEP projects include market surveys where farmers find information on products necessary in the market, the goods' quality, how to achieve quality, who the buyers are, and the gate prices. Consequently, this informs the farmers' crop selection process and action plan.

On that account, the successful implementation of tracking and assessing activities is purported to contribute significantly to the performance of all projects, notably Smallholder Horticultural Empowerment Projects in Kenya.

2.6 Theoretical Framework

2.6.1 Theory of Asymmetry of Information

The theory of asymmetry information states that in a situation with a breakdown in information sharing, the market cannot produce a mutually beneficial trade. This often happens when one party is not privy to information about the other party as a business entity, has insufficient information on the quality of service or products offered, and does not have enough information on the behavior patterns of the other party involved. These patterns have been observed in developing countries and rural communities in Kenya, as shown below.

2.6.1.1 Adverse selection

This happens when one party needs more information about the other party as a business entity. It can be observed in the relationship between traders and farmer groups. The assumption is that sometimes the traders need to learn the capacity of the smallholder farmer groups to produce crops, i.e., tomatoes. It might lead to traders offering tomato farmers fair prices. However, after assessing the quality of the product and realizing that it does not meet the quality standards, they start setting the buying price considering the percentage of spoiled produce and a pretty good crop. It reduces the buying prices from farmers. Consequently, farmer groups with the ability to produce quality produce lose the chance to get fair prices. As a result, good producers disappear from the market, and the available produce becomes of poor quality; thus, the market cannot generate a mutually beneficial trade.

Adverse selection can be overcome by signaling, whereby the party with information on the product quality will share it with the other party. In the case of smallholder farmers and traders or buyers, farmers who have good produce can display their products with something to prove the quality of their produce, such as a KenGAP certificate to traders. Another way to mitigate the adverse effect of adverse selection is screening, whereby one party collects information on the other party and sorts out inappropriate or unsuitable people for the transaction. Traders can know the previous record of business interactions of the farmer groups through the FABLIST forum and market surveys of the SHEP Approach. This will help reduce the gap between traders and smallholder farmers.

2.6.1.2 Moral Hazard

This is another situation of information asymmetry where one party takes actions that the other party cannot observe. For example, suppose an exporter cannot monitor how smallholder farmers control pests and diseases on the farm all the time while chemicals in the products are measured strictly, to avoid rejection by importing countries. In that case, the exporter will train farmers on when and how chemicals must be applied. For farmers who will not strictly follow instructions and whose produce is mixed with another good crop, it may lead to revoking of an exporter's license when the product is not quality.

Moral hazard situations can, however, be mitigated by strictly monitoring the activities of the other party; in the situation of farmer and exporter, the exporter can strengthen monitoring of contracted farmers. The exporter can also inform farmers of the consequences of produce rejection. The exporter can also find information on farmers or farmer groups that he or she would like to work with through interactions during Farmers Business Linkage Stakeholder Forums organized in SHEP.

In addition, information asymmetry can be experienced in other situations as well, like in transactions between buyers and smallholder farmers. Buyers know the special quality of horticultural produce in the markets, but farmers need to know the quality that buyers want. Both can agree on farm gate prices, but depending on the quality of produce, both stand to lose in the

market, with low quality fetching low prices, thus hurting the buyer and vice versa. Similarly, another way lack of information plays out is when cooperative officials try to improve the cooperative by rehabilitating agricultural infrastructure like irrigation. Other member farmers may only appreciate these efforts because of trust. Participating the farmers in decision-making is one strategy to lessen trust concerns.

2.6.2 Theory of Self Determination

Change agents aim to empower people by providing skills, knowledge, and services so they may become self-reliant. However, to achieve this, the target group has to be self-motivated. The theory of self-determination clearly distinguishes between inherent motivation and external inspiration. The internal driving force is based on internal motivation. Therefore, engagement in the task alone is the motivation, while outsiders give extrinsic motivation; it is narrow, focused, and exploiting. The task is usually the means to attain another objective.

The dependency syndrome among farmers is quite high. Only attend educational training if they were paid to do it. However, as SHEP staff, extension staff are encouraged to teach farmers the importance of attending training activities without being offered handouts to overcome this hurdle.

The theory of self-determination also suggests that people are motivated by supporting three fundamental requirements for relatedness, competence, and autonomy. The SHEP Approach seeks to empower people by raising their motivation improving their competence, and enhancing autonomy and relatedness.

The Need for Autonomy

This is the desire to feel like one is making choices without coercion. The SHEP activities that support this need include; Market survey where the farmer chooses the buyers based on information gathered, selecting suitable crops to grow and selecting new ones when needed, and a farmer making an action plan for production activities based on their resources.

The Need for Competence

The need to feel that one is effective in doing something and is getting better at it constantly. The SHEP activities support this when the farmers do their market survey, select crop enterprises on their own based on market information, prepare production calendars, and farmers acquiring appropriate skills and knowledge.

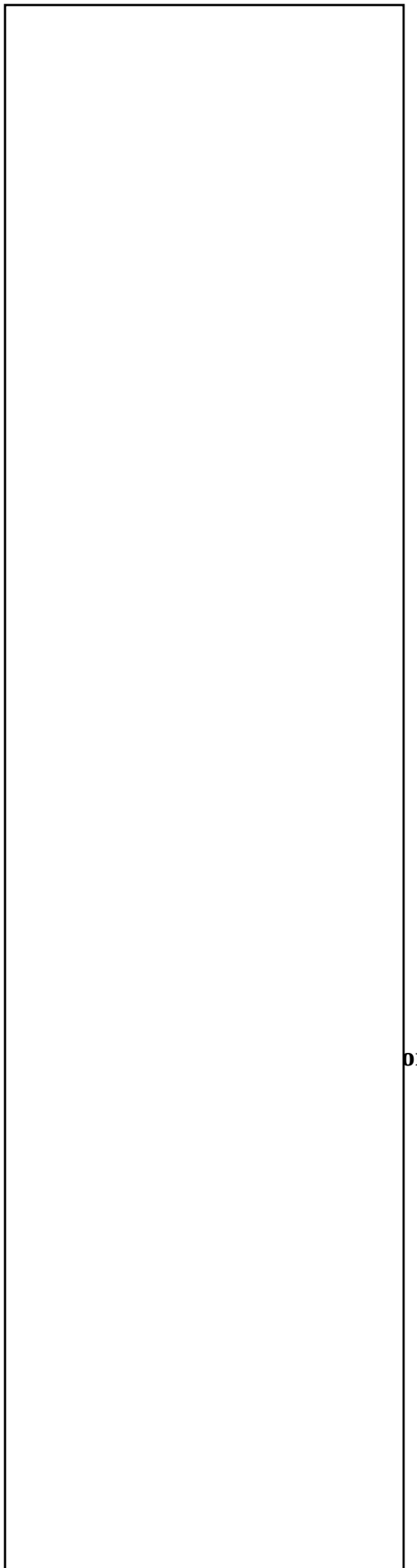
The Need for Relatedness

The desire to feel that one is psychologically attached to others. This is attained through networking and periodic surveys. Networking is done during FABLIST forums, training days, gender and family marketing, and group empowerment.

2.7 Conceptual Framework

The intellectual framework is a visual representation depicting the research variables' interrelationships. The project design components constituted the independent variables, the performance of the education project was the outcome construct, and government policy made up the restraining variable.

Independent Variables **Restraining Variable** **Dependent**



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2.8 Knowledge Gap

Variable	Author and Year	Title	Findings	Research Gap
System thinking approach - Agricultural Technology Transfer	Ssozi J. , 2019	The efficacy of agricultural development aid in Sub-Saharan Africa.	For Agricultural technology transfer to be successful, the recipient country should have complex systems matching those of the donor country in order for the technology to be impactful.	There is need to identify how to localize agricultural technology transfer so that it could reflect the demand of the farmers and consumers of recipient country.
Technical cooperation essentials and best practice	Aikawa, 2016	Joint Evaluation Report for the Kilimanjaro Agricultural Development Project in Tanzania	Government support is imperative for technical cooperation projects. The recipient government must create frameworks and policy environments that support and encourage ATTs.	Most agriculture technologies transfer are based on aid. It is futile for recipient governments to have policy and lasting frameworks to foster cooperation. There is need to determine other than policy and frameworks, what other elements should be considered by recipients to make the transfer successful.
Stakeholder engagements and why they are vital for technology transfer	Dahiya, Okitasari , 2018	Guidelines for multi-stakeholder partnerships that concentrate on sustainable development to achieve theO2030OAgendaOin Asia and the Pacific development.	Projects involving bilateral technical cooperation should have the support and involvement of all relevant stakeholders in technical project design and implementation are critical for increasing the effectiveness and long-term effects of technical assistance in recipient nations.	There is need to establish the policies for when key stakeholders do not effectively engage.

Table 2.1: Knowledge Gap

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the strategy used to accomplish thegoalsofthisstudy. Various subsections compare the study architecture, desired populace, sampling techniques, and selected sample. More specifically, the chapter covers the approach for gathering data, the research tool utilized, the pilot questionnaire, the reliability and legitimacy of the tool, and ultimately, the approach used for assessment and ethical issues to be addressed.

3.2 Research Design

A research design is an assortment of information investigated by formulating a hypothesis and later arriving at significant findings in an organized method.In this study,a descriptive researchstrategy was adopted. In particular, the survey design was used. Data collected from members ofthe population was used in determining the population's status regarding the various variables (Gay, 1976). This research design helped to systematically gather the information that describes the traits of the respondents to build generalizations or theories for the population they represent while showing the impact or lack thereof of the smallholder horticultural empowerment projects in the horticultural subsector in Kenya (Wambugu, 2015).

A cross-sectional survey using interviews and questionnaires was used to gather information.

3.3 Target Population

A target population is a groupthe researcher isparticularly interestedin studying to collect data from which generalizations and conclusions can be made later. For this study, the researcher used Farmer Groups in Kajiado County participating in SHEP Approach activities for purposes of the study. The county is among four pilot counties for the SHEP Project in Kenya.

3.3.1 Sample Size and Sampling Procedure

3.3.2 Sample Size

Krejcie and Morgan created the table to determine the proper sample size (1970). The sample size included 100 farmer groups, with a 95% confidence level and a 0.05 confidence interval. The

study employed purposive sampling by selecting farmer group leaders and smallholder farmers in groups that have undergone SHEP Approach training and are practicing in the respective counties.

3.4 Data Collection Method

To gather first-hand information, a structured questionnaire was utilized in this study. The questionnaire was chosen due to its ease of administration, cost-effectiveness, and ability to collect data from a geographically diverse population. The researcher will develop and review the questionnaire with supervisors to ensure consistency. The questionnaires were administered to the farmer group leaders online through a Google form link. The assumption was that all farmer group leaders had smartphone access, and a link (Google form) was shared to source information in all three divisions. The firstpart focused onthe basicinformation provided by the respondents, the second part on the variable of managerial techniques, and the third section on the effectiveness of SHEP projects and the success factors.

3.5 Pilot Study

Following its formation, the questionnaire was distributed to the leaders of farmer groups in Kiambu County as samples that mirror the study's intended population. This enabled the researcher to determine whether the instrument could produce the desired results. Additionally, it was used to evaluate the instrument's accuracy and dependability.

3.6 Validity of Research Instrument

(Robson, 2011) Thedegree of accuracy of the results is what is meant when a research tool is said to be valid—the instrument's ability to measure what is needed to be evaluated. An assessment was carried out on the instruments to establish content and construct validity that effective project management practices lead to improved project performance, specifically practices in the SHEP project. The supervisor determines whether the instruments are valid, and items on the instrument will be carefully examined to ascertain that it has good traits of what is being measured.

3.7 Reliability of Research Instruments

Instrument dependability is thelevelthat a research instrument regularly estimateswhatit is supposed to. The study employed a test-retest for internal consistency reliability toensure

whethertheinstrumentswerereliable. During the pilot survey, the questionnaire was given to 20 respondents at intervals of two weeks, and the scores were compared to estimate test-retest reliability. Cronbach's alpha correlation utilized a coefficient to assess the consistency of internal consistency. Internal consistency examines the relationships between the items in a given instrument and shows how conceptually cohesive the items are. To compute Cronbach's alpa, every scale score shall be compared to the respondents' total survey score. The difference between the two was equated to the variance for all individual item scores. Since the reliability coefficient must be equal to or greater than 0.70, the research instrument was chosen for the study.

3.8 Data Collection Procedures

Data collectionisthesystematic process of obtaining and analyzing information on parameters to evaluate the results and offer pertinent replies. Before beginning data collecting, the researcher acquired acknowledgment from the University of Nairobi and authorization from the NationalCommission for Science, Technology, andInnovation (NACOSTI). These permissions granted authorization to carry out the data collection exercise following the design and pilot testing of theresearch instrument. The school administration was also asked for permission to collect data. Having been granted permission to collect data, the researcher sought the respondent's consent before administering the questionnaire. The researcher followed ethical norms. In this respect, the respondents were notified before they participated in the objective of the research. Upon permission from respondents, the researcher continued to manage the questionnaires via phone interviews or by sharing the Questionnaire link for the respondent's independent completion discretion and in time prior to turning it over to the Researcher at a later stage.

3.9 Data Analysis Techniques

Dataanalysis helps give the data collection direction, focus, and identify gaps (Wambugu, 2015). The investigator thoroughly scrutinized the questionnaires, noted all the data collected, and checked for inconsistencies or incomplete questionnaires.
The Statistical Package for SocialSciences (SPSS) was used in the investigation to analyze the data gathered. The assessment was done using correlation analysis of the association amongst the

variables; regression analysis wascarried out to estimate the impact of projectmanagement techniques on project performanceof smallholder horticultural empowerment Kenya projects.

3.10 Ethical Consideration

As per (Sullivan, 2004), ethical concerns prohibit data fabrication or falsification and therefore encourage the quest for truth and knowledge, which is the main aim of the research. Ethical conduct is particularly important for collaborating because it fosters a culture of trust, responsibility, and mutually respectful among scientists. Before beginning the study, the researcher acquired research permission from the NACOSTI. Informed consent was used to gain voluntary involvement. To guarantee autonomy, consent was sought from the school administration and the research participants before the surveys were administered. The researcher guaranteed that study participants were not injured emotionally or physically due to their contribution. This also covered the participants' mental suffering. A researcher must design and conduct a study so that no damage is caused. All volunteers were handled with decency and could leave the research anytime.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION, AND DISCUSSION

4.1 Introduction

The research aims have been considered when analyzing the data and comments in this chapter. The main areas covered include the response rate to the questionnaire, the respondents' demographics, the performance of SHEP projects, project design and SHEP projects, stakeholder engagement and SHEP projects, project implementation and SHEP projects, and M&E and SHEP projects in Kenya.

4.2 Questionnaire Return Rate

100 farmers made up the target population, and they were handed questionnaires. Eighty-eight of these surveys were correctly completed, filled out, and submitted. The results of the questionnaire'sreturn rateareshown in Table 4.1.

Table 4.1: Questionnaire Return Rate

Responses	Frequency	Percentage
Returned Responses	88	88
Non-Responses	12	12
Total	100	100.0

A return rate of 70% or greater is adequate for social sciences data analysis, according to Mugenda&Mugenda (2003). This study met the criteria since 88% of the questionnaires were returned.

4.3 Demographic Characteristics of Respondents

To ensure the accuracy and comprehensiveness of the research findings, the study analyzed the participants' gender, age, and educational background. This demographic information was considered essential to understanding the study's results properly. Table 4.2 contains the results of this analysis.

Table 4.2: Demographic Characteristics of the Respondents

Variable	Frequency	Percentage	Cumulative Frequency
Gender			
Male	45	51.1	45
Female	43	48.9	88
Total		**88**	**100.0**
Age Bracket			
Below 25 years	3	3.4	3
26 – 30 years	36	40.9	39
31 – 35 years	42	47.7	81
36 – 40 years	7	8.0	88
Total		**88**	**100.0**
Highest level of Education			
Secondary level education	3	3.4	3
Diploma	30	34.1	33
Degree	49	55.7	82
Master	6	6.8	88
Total		**88**	**100.0**
Years of Project Operation			
More than five years	6	6.8	6
Four years	27	30.7	33
Three years	33	37.5	66
Two years	15	17.0	81
Less than two years	7	8.0	88
Total		**88**	**100.0**

The research findings intable 4.2 on gender show that 45 (51.1%) were male while 43 (48.9%) were female. This shows a thin line between the number of respondents by gender, indicating that both genders actively engage in SHEP projects.

On distribution, according to the study's findings, out of the 88 respondents who took part, those below 25 years were 3(3.4%), between 26-30 years were 36(40.9%), those between 31-35 years were 42 (47.7%) and those between 36-40 years were seven represented by 8%.

On the distribution of residents by their level of education, three respondents representing 3.4%, had attained at least the basic Kenyan education, 30(34.1%) had a diploma level, 49(55.7%) were the highest having attained a degree, and 6 representing 6.8% had attained Masters level.

On the last demographic characteristic that was sought on the distribution of residents by the number of years they had operated the project, 6 (6.8%) had practiced for more than five years, 27

(30.7) had practiced for about four years, 33(37.5%) had practiced for about three years and 15 (17%) had practiced for about two years and seven respondents had practiced for about one year representing 8%.

4.4 Performance of Smallholder Horticultural Empowerment Projects

This study aimed to collect opinions on how well smallholder horticultural empowerment schemes were working. The respondents were given statements to gather this input, and they were then asked to assess their degree of concordance on a Likert scale of 1 to 5. The options on the scale were 1 for "Strongly Agree," 2 for "Agree," 3 for "Neutral," 4 for "Disagree," and 5 for "Strongly Disagree." The study's findings are presented in Table 4.3.

Table 4.3: Performance of Smallholder Horticultural Empowerment Projects

Statements	5	4	3	2	1	Mean	SDV
	F (%)	F (%)	F (%)	F (%)	F (%)	n	
1.	Project activities are within the set schedule					27	
(30.7)	34						
(38.6)	2						
(2.3)	12						
(13.6)	13						
(14.8)	88	3.08	0.833				
2.	The resources allocated to the project were adequate for the achievement of project goals					27	
(30.7)	34						
(38.6)	2						
(2.3)	11						
(12.5)	14						
(15.9)	88	3.08	0.846				
3.	The project enabled farmers to plan their production calendar and select the crops to plant					23	
(26.1)	30						
(36.4)	4						

(4.5) 13

(14.8) 16

(18.2) 88 2.94 0.939

4. The project met the expectations of stakeholders 26

(29.5) 42

(47.7) 5

(5.7) 8

(9.1) 7

(8.0) 88 2.89 1.061

5. The project increased income for farmers, increased their knowledge of financial management and cost-cutting in production

6. 27

(30.7) 44

(50.0) 5

(5.7) 7

(8.0) 5

(5.7) 88 2.93 1.165

Composite Mean 2.89 0.869

The results of a review of the effectiveness of smallholder horticultural empowerment projects in Kajiado County are presented in Table 4.3. The investigator calculated the overall mean and standard deviation before comparing them to the mean values of every statement generated by the response variable indicators. The result of the variable was adversely affected if the line mean waslower than the composite mean. A smaller line item standard deviation also indicated a wider diversity of viewpoints on the subject than the composite standard deviation.

In the first statement on project activities being set within a certain schedule, the outcome obtained were as follows; 27(30.7%) of the residents strongly agreed, 34 (38.6%) were in agreement, 2(2.3%) were neutral, 12 (13.6%) were in disagreement, and 13 (14.8) strongly disagreed. The attained standard deviation was 0.833, and the average score was 3.08. The line group'smeanscorewas higher than the mixed group's mean score, while the line group's standard

deviation was lower than the mixed groups. This suggests that people's views on the statement's response variable varied.

On statement number 2 on the resources allocated to the project were adequate for the achievement of project goals, the study obtained that 27 (30.7%) strongly agreed, 34 (38.6%) agreedtothestatement, 2 (2.3%) were neutral aboutthestatement, 11 (12.5%) strongly disagreed, and 14 (15.9%) strongly disagreed. According to the data, the line item's mean and standard deviation were 3.08 and 0.846, respectively, which exceeded the combined mean and standard deviation. 69.3% of those surveyed concurred with this finding.

The study obtained responses on statement number 3 which stated that the project enabled farmers to plan their production calendar and select the crops to plant. The study had the following responses: 13 (14.8%) disagreed, 16 (18.2%) severely disagreed, 30 (36.4%) agreed, 4 (4.5%) agreed but were not sure, and 23 (26.1%) strongly agreed. The meanline item had a mean of 2.94 and a standard deviation of 0.939, greater than the equivalent values for the composite mean and standard deviation. This demonstrates thatthestatementhas a favorable impact on the response variable.

Regarding the second-to-last statement—that the project met stakeholders' expectations—26 respondents (29.5%) highly agreed, 42 respondents (47.7%) agreed, five respondents (5.7%) were neutral, eight respondents (9.1%) disagreed, and seven respondents (8.0%) severely disagreed. The line item's mean and standard deviation, 2.89 and 1.061, respectively, were greater than thecomposite mean and standard deviation. Most respondents agreed with the statement, indicating that it had a favorable impact on the response variable.

The study found the following results regarding the final claim that the project increased farmers' income, their understanding of financial management, and their ability to reduce production costs: 27 (30.7%) strongly agreed, 44(50%) agreed, 5 (5.7%) were neutral, 7 (8.0%) *disagreed*, and 5 (5.7%) strongly disagreed. The statement's line means, and standard deviation were 2.93 and 1.165, respectively. ComparedtotheCompositemeanandstandarddeviation, it was higher. 80.7% of those who responded in favor of the statement agreed

4.5 Project Design and Performance of Smallholder Horticultural Empowerment Projects

Thisstudy aimed to determine how smallholder horticultural empowerment programs in Kajiado County performed in project design. OnaLikertscale from 1to5, where one denoted "Strongly Disagree," 2 "Disagree," 3 "Neutral," 4 "Agree," and 5 "Strongly Agree," the participants were requested to express their level of agreement or disagreement with the statement. In Table 4.4, the study's results are laid out.

Table 4.4: Project Design and Performance of Smallholder Horticultural Empowerment Projects.

Statements	**5 F (%)**	**4 F (%)**	**3 F (%)**	**2 F (%)**	**1 F (%)**	**n**	**Mean**	**SDV**
1. The farmers are familiar with best practices in horticultural farming	50 (56.8)	23 (26.1)	6 (6.8)	9 (10.2)	0 (0)	88	2.42	0.984
2. The farmers have the best post-harvest handling equipment and storage facilities to ensure longer shelf life for produce	45 (51.1)	32 (36.4)	7 (8.0)	4 (4.5)	0 (0)	88	2.43	0.776
3. The farmers have a great attitude towards SHEP approach activities	36 (40.9)	41 (46.6)	4 (4.5)	1 (1.1)	6 (6.8)	88	3.30	0.767
4. The extension officers have made adoption of SHEP approach easy through constant evaluation visits	50 (56.8)	29 (33.0)	6 (6.8)	2 (2.3)	1 (1.1)	88	3.09	1.457
5. The increase in production and improved lifestyles among farmer groups by adoption of SHEP approach has caused and influx in uptake by other small holder farmers	32 (36.4)	47 (53.4)	5 (5.7)	3 (3.4)	1 (1.1)	88	2.81	0.725
Composite Mean							**2.81**	**0.742**

The following descriptive statistical results were obtained for statement one of the variable project designs: 50 (56.8%) strongly agreed, 23 (26.1%) agreed, 6 (6.8%) were neutral, and 9 (10.2%) disagreed. The line item means andstandard deviation, which were 2.42 and 0.984, respectively,*O*wereless than the composite mean and standard deviation. This indicated that the statement had a favorable impact on the response variable.

The study's outcomes were as follows regarding the second assertion: 45 (51.1%) strongly agreed, 32 (36.4%) agreed, 7 (8.0%) were indifferent, and 4 (4.5%) disagreed. Line-item means were 2.43 and 0.776, respectively, for the standard deviation. The statement harmed the variable and needs more research since the mean was less than the composite means. The study's conclusions on the third claim were as follows: 36 (40.9%) respondents strongly agreed, 41 (46.6%) agreed, 4 (4.5%) were neutral, and seven respondents disagreed. Compared to the composite mean and standard deviation, the line item mean was 3.30, and the standard deviation was 0.767, respectively. This demonstrated that the statement had a favorable impact on the response variable.

Regarding the fourth statement, 50 respondents (56.8%) strongly agreed, 29 respondents (33.0%) agreed, six respondents (6.8%) were neutral, two respondents (2.3%) disagreed, and one respondent severely disagreed. The mean item scoreof3.09 and standard deviationof1.457, higher than the composite mean and standard deviation, show a positive contribution to the response variable.

Regarding the final claim, the study found the following 47 percent (53.4%) highly agreed, 32 percent (36.4%) very agreed, 5 percent (5.7%) were neutral, 3percentdisagreed, and1percent stronglydisagreed. Most responders (89.8% of the sample) agreed with the statement. The line's mean value was 2.81, and its standard deviation was 0.725. This suggests that the comment favorably affected the response variable. The standard deviation was smaller than the overall standard deviation, and the line mean was greater than the composite mean. Thissuggests that people's views on the statement were divided.

4.5.1 Correlation Analysis Between Project Design and Performance of Smallholder Horticultural Empowerment Projects

This research used the Pearson Correlation Coefficient to examine the relationship between project design and smallholder horticultural empowerment programs (SHEPs) performance. The direction and strength of the connection between project design and SHEP performance must be determined; statistical analysis was used. Table 4.5 lists the correlation findings.

Table 4.4: Correlation Analysis between Project Design and Performance of SHEPs

Variable		Project Design	Performance of SHEPs
Project Design	Pearson Correlation	1	0.449**
	Sig. (2-Tailed)		0.000
	N	88	88
Performance of SHEPs	Pearson Correlation	0.449**	1
	Sig. (2-Tailed)	0.000	
	N	88	88

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

Table 4.4 results from the correlation study between smallholder horticulture empowerment project design and performance, showing a moderately positive coefficient of 0.449. There is a statistically significant correlation between project design and SHEP performance, as indicated by the p-value of 0.000

4.5.2 Regression Analysis of Project Design and Performance of Smallholder Horticultural Empowerment Projects

A regression analysis was carried out to determine the relationship between the performance of Small Hydroelectric Power (SHEP) projects and their respective designs in Kajiado County. To fulfill the initial objective of the study, a basic linear regression model was employed to test the hypothesis.

H_0: Project Design has no appreciable impact on a smallholder's success. Horticultural empowerment projects

H1: Project Design has a big impact on how well smallholders perform horticultural empowerment projects

The following model was used to test the initial hypothesis;

Where;

y= performance of SHEPs;

α= constant,

β_2= beta coefficient,

X_2= Project Design and

e= error term

Table 4.5: ANOVA for Project Design and Performance of SHEPs

Factor	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.539	1	1.665	16.150	0.000
Residual	8.324	87	1.031		
Total	**12.863**	**88**			

a. Dependent Variable: performance of SHEPs.

b. Predictors: (Constant) Project Design

The regression model in Table 4.5 was assessed for its goodness of fit using an analysis of variance. The F-significance value was determined to be 0.000, indicating statistical significance since it is lower than the threshold of 0.05 ($p<0.05$). Moreover, the F-ratio (1, 87) = 16.150 was significantly higher than the critical value of F=3.86, thus providing further evidence of the model's significance. These findings suggest that the model was statistically significant and that it may be relied upon.

Table 4.6: Model Summary for Project Design and Performance of SHEPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.449[a]	0.299	0.340	0.1015

a. Predictors (Constant), Project Design

The study's conclusions, which are shown in Table 4.6, explain how much the predictor variable affects the model's variability. The project's design is responsible for 29.9% of the variation in the performance of SHEPs, the response variable, according to the value of R Square, which is reported as 0.299.The study's conclusions in Table 4.7 explain how much the predictor variable affects the model's variability. The project's design is responsible for 29.9% of the variation in the performance of SHEPs, the response variable, according to the value of R Square, which is reported as 0.299.

Table 4.7: Coefficients of Project Design and Performance of SHEPs

	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
Variables	**B**	**Std. Error**	**Beta**		
(Constant)	0.264	0.167		0.049	0.000
Project Design	0.006	0.126	0.449	4.510	0.000

a. Dependent Variable: performance of SHEPs

An increment in project design with a unit led to a 44.9% rise in variability in SHEP performance, according to Table 4.7's standardized beta value of 0.449. At 0.05, the overall model was suitable for predicting SHEP performance. The0regression model would be the performance of SHEPs = 0.246+0.449 (Project Design) + e; t = 4.510; p 0.05.

The study's conclusions demonstrate that project design significantly affects how well SHEPs perform. The null hypothesis was thus disproved. The results of this study's analysis of the first variable project design (R2=0.299) show that 29.9% of0the0variations in SHEPs' performance0are explained0by this design. The model was considered important.

4.6 Stakeholder Engagement and Performance of Smallholder Horticultural Empowerment Projects

The second component of the study looked into how well Kajiado County's SHEPs performed concerning stakeholder involvement. The respondents were asked to rate the degree to which theyagreed ordisagreedwith an observation using a Likert scale from 1 to 5, where 1 represents Strongly Disagree (SD), 2 Disagree (D), 3 Neutral (N), 4 Agree (A), and5 Strongly Agree (SA). Table4.9 illustrates the outcomes.

Table 4.8: Stakeholder Engagement and Performance of Smallholder Horticultural Empowerment Projects

Statements	**5 F (%)**	**4 F (%)**	**3 F (%)**	**2 F (%)**	**1 F (%)**	**n**	**Mean**	**SDV**

6. Horticultural farmers are regularly invited to meetings to discuss the progress of the project	25 (28.4)	46 (52.3)	3 (3.4)	8 (9.1)	6 (6.8)	88	2.93	1.215
7. Smallholder horticultural farmers are highly involved in decision making on matters associated with SHEP project	34 (38.6)	45 (51.1)	1 (1.1)	5 (5.7)	3 (3.4)	88	3.48	0.908
8. Materials needed for implementation of SHEP projects are sourced from farmers in the project	26 (29.5)	40 (45.5)	3 (3.4)	9 (10.2)	10 (11.4)	88	3.03	1.133
9. Labor needed in horticultural production most of the time is provided by family and members of the community	29 (33.0)	37 (42.0)	1 (1.1)	10 (11.4)	11 (12.5)	88	3.16	0.887
10. The farmers are involved in planning of implementation activities for the project	32 (36.4)	34 (38.6)	8 (9.1)	9 (10.2)	5 (5.7)	88	2.97	0.970
Composite Mean							**2.91**	**0.902**

The study's findings on the second variable were as follows: Regarding statement number 1, 25 (28.4%) highly agreed with it, 46 (52.3%) agreed, 3 (3.4%) disagreed, 8 (9.1%)0disagreed, and 6 (6.8%) severely disagreed. The mean0and standard deviation for0the0line item were0both0higher than the average and0standard0deviation, respectively, at 2.93 and 1.215. The contribution of the statement to the response variable was favorable.

Statement number 2 gave the following findings; 34 (38.6%) strongly agreed, 45 (51.1%) were in agreement, one respondent was neutral, 5 (5.7%) disagreed with the statement, and 3 (3.4%) vehemently disagreed. One line item had a mean of 3.48 and a standard deviation of 0.908, and it was there. The mean and standard deviation were larger than the composite mean and standard deviation. Additionally, this line item contributed positively to the answer variable.

The study's conclusions for the third statement were as follows: 26 (29.5%) highly agreed, 40 (45.5%) agreed, 3 (3.4%) were indifferent regarding the statement, 9 (10.2) disagreed, and 10 (12.5%) severely disagreed. The line mean of 3.03 and the standard deviation of 1.133, which were higher than the composite mean and standard deviation, favorably impacted the response variable. 75% of those who responded agreed with the statement.

According to the study's findings, 29 (33%) participants completely agreed with the fourth statement, 37 (42%) participants agreed as well, 1 (1.1%) responded neutrally, 10 (11.4%) disagreed, and 11 (12.5%) strongly disagreed. The line item had a mean of 3.16 and a standard deviation of 0.887. The standard deviation was smaller, but the mean was larger than the composite

mean. The statement, therefore, contributed to the response variable positively with a divergent opinion.

The following were the findings for the fourth component's final statement: 32 (36.4%) strongly agreed, 34 (38.6%) agreed, 8 (9% were neutral), 90(10.2%)0disagreed, and05 (5.7%)0strongly disagreed with the statement. The mean and standard deviation of the line were 2.97 and 0.970, respectively, which were higher than the composites. As a result, the statement contributed favorably to the response variable. 75% of those who responded in favor of the statement did so.

4.6.1 Correlation Analysis between Stakeholder Engagement and Performance of SHEPs

This study aimed toinvestigatetherelationshipbetween SHEP success and the involvement of stakeholders. The researcher used the Pearson Correlation Coefficient todetermine the type and direction of this association. The findings of the correlation studyare presented in Table4.10.

Table 4.9: Correlation Analysis between Stakeholder Engagement and Performance of SHEPs

Variable		Stakeholder Engagement	Performance SHEPs
Stakeholder	Pearson Correlation	1	0.406**
Engagement	Sig. (2-Tailed)		0.000
	N	88	88
Performance of SHEPs	Pearson Correlation	0.406**	1
	Sig. (2-Tailed)	0.000	
	N	88	88

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

The correlation results presented in Table 4.8 indicate that there is a moderate positive correlation (0.406) between stakeholder engagement and the performance of SHEPs. The p-value of this correlation is 0.000, below the 0.05 level of significance, demonstrating a significant association. These findings suggest that stakeholderoengagementOhas a major impact on the effectiveness of SHEPs.

4.6.2 Regression Analysis of Stakeholder Engagement and Performance of SHEPs

In Kajiado County, Kenya, regression analysis was used to ascertain the connection between stakeholder participation and SHEP success. To meet the requirements of the study's second purpose, the hypothesis was put to the test using a straightforward linear regression model.

H_0: Stakeholder engagement has no appreciable impact on SHEP performance.

H_1: Stakeholder engagement significantly affects how well SHEPs perform.

The following model was used to test the second hypothesis;

$y= \alpha+\beta_1 X_1+e$

Where;

y= performance of SHEPs;

α= constant,

β_2= beta coefficient,

X_2= Stakeholder Engagement and

e= error term

Table 4.10: ANOVA for Stakeholder Engagement and Performance of SHEPs

Factor	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.697	1	3.433	37.000	0.000
Residual	7.167	87	0.923		
Total	**12.864**	**88**			

a. Dependent Variable: performance of SHEPs.

b. Predictors: (Constant) Stakeholder Engagement

The regression model in Table 4.10 was evaluated for goodness of fit using analysis of variance. The F-significance value of 0.000 was discovered to be less than 0.05 (p0.05). F (1, 87) = 37.000 was much bigger than the crucial value of F=3.86, indicating that the F-ratio was significant. This demonstrates how successful the model was.

Table 4.11: Model Summary for Stakeholder Engagement and Performance of SHEPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.406[a]	0.430	0.351	**0.96135**

a. Predictors (Constant), stakeholder engagement

Table 4.11 presents the study's findings, which shed light on the proportion of variability in the model that can be attributed to the predictor variable. The R-squared value of 0.430 indicates that stakeholder engagement accounts for 43% of the variance in the performance of SHEPs, while other elements left out of the model account for the remaining 57%. The study concludes that stakeholder participation has a major impact on SHEP performance.

Table 4.12: Coefficients of Stakeholder Engagement and Performance of SHEPs

	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
Variables	**B**	**Std. Error**	**Beta**		
(Constant)	0.304	0.565		0.214	0.001
Stakeholder Engagement	0.608	0.097	0.406	8.972	0.000

a. Dependent Variable: performance of SHEPs

The standardized beta coefficient obtained from Table 4.12 indicated that an increase of one unit in stakeholder engagement was associated with a 40.6% increase in the variability of performance in SHEPs. Based on stakeholder participation, the model proved reliable in predicting the success of SHEPs (p 0.05). The model was used to produce the following regression equation:

Performance of SHEPs = 0.304+0.406 (StakeholderEngagement) + e; t = 8.972; $p<0.05$.

Thus, the study deduced that stakeholder engagement significantly influences the performance of SHEPs; hence the study's null hypothesis was rejected.

According to the study, stakeholder engagement is a significant predictor variable that determines how well it performs of SHEPs in Kajiado County. The results indicate that this predictor variable can explain 43% of the variationsacross the response variable: the performance of SHEPs and sanitation projects (R2 = 0.430).

4.7 Project Implementation and Performance of Smallholder Horticultural Empowerment Projects

The third variable examined the effects of SHPE project execution in Kajiado County on performance. On a Likert scale of 1 to 5, with one denoting Strongly Disagree (SD), two denoting Disagree (D), three denoting Neutral (N), four denoting Agree (A), and five denoting Strongly Agree (SA), those who took part were asked to express their level of acceptance or disapproval with the provided statement. Table 4.14 results are displayed.

Table 4.13: Project Implementation and Performance of Smallholder Horticultural Empowerment Projects

Statements	**5 F (%)**	**4 F (%)**	**3 F (%)**	**2 F (%)**	**1 F (%)**	**n**	**Mean**	**SDV**
SHEP approach is the key concept for JCIA projects in Agribusiness	32 (36.4)	49 (55.7)	3 (3.4)	3 (3.4)	1 (1.1)	88	3.14	0.940
Regular training workshops organized by SHEP are essential for distributing information and building capacity of farmers on the approach	30 (34.1)	48 (54.5)	3 (3.4)	4 (4.5)	3 (3.4)	88	2.67	0.648
The use of extension officers to evaluate and support different farmers through the process has ensured the effective delivery of the project	38 (43.2)	45 (51.1)	2 (2.3)	2 (2.3)	1 (1.1)	88	3.81	0.519
Through networking events, information by farmers and for farmers can easily be found	33 (37.5)	40 (45.5)	5 (5.7)	6 (6.8)	4 (4.5)	88	2.95	1.214
The SHEP approach is tweaked to fit the community context during the implementation	33 (37.5)	41 (46.6)	4 (4.5)	6 (6.8)	4 (4.5)	88	3.16	1.059
Composite Mean							**3.04**	**0.610**

On the first statement, the study found that 36.4% (32 individuals) strongly agreed with the first statement, while 55.7% (49 individuals) were in agreement. Additionally, 3.4% (3 individuals) were neutral, 3.4% (3 individuals) disagreed, and 1.1% (1 individual) strongly disagreed with the

statement. The mean line-item score was 3.14, with a standard deviation of 0.940, more significant than the composite mean and standard deviation. These findings indicate that the statement positively impacted the response variable.

On the second statement, the study established that; 30 (34.1%) of the respondents strongly agreed, 48 (54.5%) were in agreement, 3 (3.4%) were neutral about the statement, 4 (4.5%) disagreed, 3 (3.4%) strongly disagreed. The mean of the line item was2.67, and the standard deviation was 0.648. The mean was lower than the composite mean, so the comment had a detrimental effect on the response variable and needed further review.

On statement number 3, the study had the following findings; 38 (43.2%) strongly agreed, 45 (51.1%) were in agreement, 2 (2.3%) were neutral, and three respondents were in disagreement. The mean was calculated to be 3.81, with a corresponding standard deviation of 0.519. The norm exhibited a higher value than the composite means, indicating that the statement positively impacted the response variable but with varying opinions.

On the fourth statement, the study obtained the following results; 33 (37.5%) of the respondents, 40 (45.5%) were in agreement, 5 (5.7%) were neutral about the statement, 6 (6.8%) were in disagreement, and 4 (4.5%) strongly disagreed. The line-item mean was 2.95, and the standard deviation was 1.214. The norm for the line item was lower than the composite means, meaning that the statement contributed negatively to the response variable and with convergent opinions. The information needed further review.

On the last statement, the study had the following findings; 33 (37.5%) strongly agreed, 41 (46.6%) were in agreement, 4 (4.5%) were neutral, 6 (6.8%) disagreed, and 4 (4.5%) strongly disagreed. The line mean was 3.16, and the standard deviation was 1.059, higher than the composite mean and standard deviation. The statement, therefore, contributed positively to the response variable.

4.7.1 Correlation between Project Implementation and Performance of SHEPs

A Pearson Product Moment Correlation was conducted to investigate the correlationbetween the implementation of projects and the performance of SHEPs. The correlation coefficients range was from +1 to -1, with +1 denoting a perfect positive connection and -1 denoting a flawless negativecorrelation. This analysis sought to establish the nature and magnitude of the link betweenthepredictorandtheresponsevariable. Table 4.15 displays the outcomes of the correlation analysis.

Table 4.14: Correlation for Project Implementation and Performance of SHEPs

Variable		Project Implementation	Performance of SHEPs
Project Implementation	Pearson Correlation	1	0.597**
	Sig. (2-Tailed)		0.000
	n	88	88
Performance of SHEPs	Pearson Correlation	0.597**	1
	Sig. (2-Tailed) n	0.000 88	88

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

The correlation outcomes in Table 4.14 demonstrate that there is a statistically significant relationship between project implementation and the performance of SHEPs. The p-value of 0.000 is smaller than the alpha value of 0.05, indicating a significant correlation. The coefficient of 0.597 suggests a mildly positive correlation exists between the explanatory factor and the project implementation and the dependent variable performance SHEPs, implying that project implementation significantly impacts the performance of SHEPs.

4.7.2 Regression Analysis for Project Implementation and Performance of Smallholder Horticultural Empowerment Projects

A simple linear regression model was used to assess the third hypothesis to achieve the study's third goal.

H_0: SHEP performance is greatly affected by project implementation.

H_1: SHEP performance is not greatly affected by project implementation.

The third utilizing, a hypothesisowasotested the following model;

$y= \alpha+\beta_3X_3+e$

Where;

y= Performance of SHEPs;

α= constant,

β_2= beta coefficient,

X_2= Project Implementation and

e= error term

Table 4.15: ANOVA for Project Implementation and Performance of SHEPs

Factor	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.935	1	4.987	60.200	0.001
Residual	7.929	87	0.828		
Total	**12.864**	**88**			

a. Dependent Variable: Performance of SHEPs

b. Predictors: (Constant) Project Implementation

Analysis of variance was applied in accessing the goodness of fit of the regression model in Table 4.15. A substantial result was revealed by the resulting F-significance value of 0.000, which was smaller than the predetermined alpha level of 0.05 (p0.05). The model was noteworthy since the F-ratio value of F (1, 87) = 60.200 was much higher than the crucial value of F=3.86. The outcomes so imply that the regression model offered a decent match.

Table 4.16: Model Summary for Project Implementation and Performance of SHEPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.597[a]	0.518	0.269	0.88124

a. Predictors (Constant), project implementation

Table 4.16 presents the findings of the study, which explain the proportion of the model's overall variability accounted for by the predictor variable. According to the R Square value of 0.518, project implementation accounts for 59.7% of the performance of SHEPs, with other unaccounted-for factors accounting for the remaining 40.3%. The study shows that project implementation significantly and favorably affects SHEPs' performance.

Table 4.17: Coefficients of Project Implementation and Performance of SHEPs

	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
Variables	**B**	**Std. Error**	**Beta**		
(Constant)	0.619	0.128		1.585	0.000
	0.202	0.021	0.597	6.063	0.000

a. Dependent Variable: performance of SHEPs

According to Table 4.17's findings, an average rise in project implementation resulted in a 59.7% rise in the variances in the performance of SHEPs. This resulted in a standardized beta value of 0.597. At 0.05, the whole model was adequate for predicting SHEP performance given project execution. This is how the regression model might look;

Performance of SHEPs = 0.619+0.597(Project Implementation) + e; t = 6.063; $p<0.05$.

After the study was completed, it was found that the alternative hypothesis may be accepted rather than the null hypothesis. These findings imply that the effectiveness of SHEPs is significantly influenced by how projects are carried out.

4.8 Monitoring and Evaluation and Performance of Smallholder Horticultural Empowerment Projects

The fourth variable in the study was to determine how monitoring and assessment affected the success of smallholder horticultural empowerment projects. Participants were asked to rate the degree of acceptance or disapproval with the statement on a Likert scale from 1 to 5, where one stood for "Strongly Disagree" (SD), 2 for "Disagree," 3 for "Neutral," 4 for "Agree," and 5 for "Strongly Agree" (SA). The outcomes of this analysis are shown in Table 4.17.

Table 4.18: Monitoring and Evaluation and Performance of Smallholder Horticultural Empowerment Projects

Statements	5 F (%)	4 F (%)	3 F (%)	2 F (%)	1 F (%)	n	Mean	SDV
Baseline surveys have been incorporated during the project planning phase	31 (35.2)	38 (43.2)	2 (2.3)	9 (10.2)	8 (9.1)	88	3.19	0.833
There is a team of experts available to participate in M&E practices	29 (33.0)	34 (38.6)	5 (5.7)	10 (11.4)	10 (11.4)	88	2.93	0.978

M&E activities are predetermined in the project planning phase	29 (33.0)	34 (38.6)	3 (3.4)	10 (11.4)	12 (13.6)	88	3.11	0.958
Changes are made in the project from results deduced from M&E activities	28 (31.8)	35 (39.8)	2 (2.3)	9 (10.2)	14 (15.9)	88	2.99	0.978
Feedback from M&E is quickly and effectively implemented	24 (27.3)	39 (44.3)	2 (2.3)	11 (12.5)	12 (13.6)	88	3.07	0.840
Composite Mean							**2.96**	**0.817**

On the last variable of the study, the following findings were obtained; on the first statement, 31 (35.2%) strongly agreed, 38 (43.2%) were in agreement, 2 (2.3%) were neutral, 9 (10.2%) disagreed, 8 (9.1%) strongly disagreed. The mean of the statement was 3.19, and the standard deviation was 0.833. The mean and the standard deviation were higher thanthe composite meanand standard deviation, respectively. The information, therefore, contributed positively to the response variable.

The results for statement number 2 were as follows: 29 respondents (33%) highly agreed, 34 respondents (38.6%) agreed, five respondents (5.7%) were neutral, ten respondents (11.4%) did not agree, and 12 respondents (13.6%) severely opposed. With a vertical mean of 2.93 and a standard deviation of 0.978, the statement appeared to hurt the response variable and required additional investigation.

According to the results of the third statement of the variable, 34 people (38.6%), 29 people (33%) strongly concurred, three people (3.4%) were neutral, ten people (11.4%) disapproved, and 12 people (13.6%) severely disagreed. The line item had a mean of 3.11 and a standard deviation of 0.958, greater than the composite mean. 71.6% of the respondents agreed with the statement, which helped the response variable well.

Following were the results for the fourth statement of the variable: 28 (31.8%) highly agreed, 35 (39.8%) also concurred, 2 (2.3%) were indifferent, 9 (10.2%) disapproved, and 14 (15.9%) severely opposed. The mean and standard deviation of the line item data were larger than the composite data, at 2.99 and 0.978, respectively. The statement contributed in favor of the answer variable.

The survey found that, about the final statement of the variable, 24 (27.3%) respondents highly concurred, 39 (44.3%) agreed, 2 (2.3%) were neutral, 11 (12.5%) disapproved, and 12 (13.6%) severely disliked. Compared to the composite mean and standard deviation, the vertical mean

was 3.07, and the standard deviation was 0.840. More than half of the respondents, or 71.7%, supported the statement as positively impacting the answer variable.

4.8.1 Correlation Analysis on Monitoring & Evaluation and Performance of SHEPs

The researcher used the Pearson Correlation Coefficient to analyze therelationship between monitoring, evaluation, and SHEP performance. It helps to determine the nature and direction of the connection between M&E and SHEP performance. The results of thecorrelation are shownin Table 4.20.

Table 4.19: Correlation Analysis on Monitoring & Evaluation and Performance of SHEPs

Variable		Monitoring and Evaluation	Performance of SHEPs
Monitoring and Evaluation	Pearson Correlation	1	0.381**
	Sig. (2-Tailed)		0.001
	n	88	88
Performance of SHEPs	Pearson Correlation	0.381**	1
	Sig. (2-Tailed)	0.001	
	n	88	88

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

The link between M&E and SHEP performance is displayed in Table 4.18. The results indicate a moderately positive association between M&E and SHEP performance of 0.381. A significant association between the two variables is also shown by statistical analysis, with a p-value of 0.001 falling below the threshold for a significance level of 0.05. M&E, therefore, has a big effect on how well SHEPs perform.

4.8.2 Regression Analysis for Monitoring & Evaluation and Performance of SHEPs

A straightforward linear regression model was used to investigate the fourth hypothesis to meet the study's fourth aim.

H_0: M&E do not significantly impact SHEP performance.

H_1: M&E significantly affect how well SHEPs perform.

The fourth hypothesis was tested using the following model;

$y= \alpha+\beta_4X_4+e$

Where;

y= performance of SHEPs;

α= constant,

β_2= beta coefficient,

X_2= Monitoring & Evaluation and;

e= error term

Table 4.20: ANOVA for Monitoring & Evaluation and Performance of SHEPs

Factor	Sum of Squares	df	Mean Square	F	Sig.
Regression	12.614	1	2.523	25.780	0.001
Residual	0.249	87	0.979		
Total	**12.863**	**88**			

a. Dependent Variable: performance of SHEPs.

b. Predictors: (Constant) Monitoring & Evaluation

An analysis of variance was used to assess the goodness of fit of the regression model in Table 4.19. A 0.000 F-significance value was less than 0.05 (p0.05)relevance. The F-ratio was important because it was substantially larger than the threshold value of F=3.86, which was F (1, 87) = 25.780. It proves how important the model was.

Table 4.21: Model Summary for Monitoring & Evaluation and Performance of SHEPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.381[a]	0.236	0.830	0.9890

a. Predictors (Constant), Monitoring & Evaluation

The study's results are shown in Table 4.21, which explains how much of the model's variability is explained by the predictor variable. The performance of the SHEPs is the dependent variable, and the R2 value of 0.236 indicates that monitoring and assessment account for about 23.6% of the

variance in performance. The findings imply that 76.4% of the variance is caused by factors other than this model. Based on the findings, the study concludes that monitoring and assessment have a favorable and statistically significant effect on the performance of the SHEPs.

Table 4.22: Coefficients of Monitoring & Evaluation and Performance of SHEPs

	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
Variables	**B**	**Std. Error**	**Beta**		
(Constant)	0.969	0.513		2.252	0.000
	0.210	0.093	0.381	7.742	0.001

a. Dependent Variable: performance of SHEPs

According to Table 4.22's findings, an increase of one unit in M&E led to a 38.1% rise in the overall performance variability of SHEPs, with a standardized beta value of 0.381. At p=0.0010.05, the whole model was suitable for predicting SHEP performance, given M&E . The result of the regression model would be the performance of SHEPs = 0.969+0.381 M&E + e; t = 7.742; p0.05.

Findings thus showed that the alternative view was accepted, and the study's null hypothesis was disregarded. Therefore, it concludes that monitoring and assessment greatly impact how well SHEPs perform. According to the study's conclusions, M&E (R2=0.296) accounts for 23.6% of the variances in SHEP performance in Kajiado County.

4.9 Summary of Results of the Test of Hypotheses

A summary of the results from the study's hypotheses is presented in Table 4.21.

Objective	Hypothesis	Regression Model	Results	The decision as a result of empirical evidence

To examine the effect of project design on performance of smallholder horticultural empowerment projects in Kajiado County	1. H_0: Project design has no discernible impact on performance of smallholder horticultural empowerment projects in Kajiado County	$y= \alpha+\beta_1X_1+e$	{R=0.449, R^2=0.299, β=0.449, t=4.510, F $(_{1,87})$ = 16.150, p<0.05}	Discard H_0 **Agree to take H_1**
To determine the influence of stakeholder engagement on performance of smallholder horticultural empowerment projects in Kajiado County	2. H_0: Stakeholder engagement has no discernible impact. on the performance of smallholder horticultural empowerment projects in Kajiado County	$y= \alpha+\beta_2X_2+e$	{R=0.406, R^2=0.430, β=0.406, t=8.972, F $(_{1,87})$ = 37.000, p<0.05}	Discard H_0 **Agree to take H_1**
To determine the project's impact implementation on the performance of smallholder horticultural empowerment projects in Kajiado County	3. H_0: Project effectiveness has no significant influence on the performance of smallholder horticultural empowerment projects in Kajiado County	$y= \alpha+\beta_3X_3+e$	{R=0.519, R^2=0.518, β=0.519, t=6.063, F $(_{1,87})$ = 60.200, p<0.05}	Discard H_0 **Agree to take H_1**
To ascertain the influence of monitoring & evaluation on the performance of smallholder horticultural empowerment projects in Kajiado County	4. H_0: Monitoring & Evaluation has no discernible impact on the performance of smallholder horticultural empowerment projects in Kajiado County	$y= \alpha+\beta_4X_4+e$	{R=0.381, R^2=0.236, β=0.381, t=7.742, F $(_{1,87})$ = 25.780, p<0.05}	Discard H_0 **Agree to take H_1**

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

The results, conclusions, suggestions, and opportunities for additional research are outlined in this chapter.

5.2 Summary of Findings

The summary in Chapter Four provides an overview of the significant findings obtained from the variables. It presents the results obtained from the analysis of the variables in detail.

5.2.1 Project Design and Performance of SHEPs

The study's main goal was to determine how project design affected how well SHEPs (Smallholder Horticultural Empowerment Projects) performed in Kajiado County. The variable's standard deviation was 0.742, and its mean was 2.81. The null hypothesis stated that project design had no discernible impact on SHEP effectiveness. R=0.449, R2=0.299, =0.449, t=4.510, F (1,87) = 16.150, p0.05 are the findings of the study. The research results revealed that project design was responsible for 29.9% of the variation in SHEP performance in Kajiado County. The null hypothesis was thus disproved, and it was determined that project design considerably impacts SHEP performance in Kajiado County.

5.2.2 Stakeholder Engagement and Performance of SHEPs

The second goal of this study was to look into how well Kajiado County's smallholder horticultural empowerment programs (SHEPs) were performing after involving stakeholders. The variable had a mean and a standard deviation of 2.91 and 0.902, respectively. The study's null hypothesis was no discernible relationship between stakeholder management and SHEP success. Stakeholder participation, however, was shown to be responsible for 43% of the variability in the performance of SHEPs in Kajiado County (R=0.406, R2=0.430, =0.406, t=8.972, F(1,87)=37.000, p0.05). It was determined that involvement by stakeholders strongly impacts SHEP performance in Kajiado County and that the null hypothesis was rejected.

5.2.3 Project Implementation and Performance of SHEPs

The final goal of the study was to ascertain how the Smallholder Horticultural Empowerment Projects (SHEPs) in Kajiado County performed as a result of the project's execution. The variable's average means andstandard deviation were 3.04 and 0.610, respectively. The results of the correlation analysis showed a moderately positive connection of 0.519 between the performance of SHEPs and the implementation of the project. R=0.519, R2=0.518, =0.519, t=6.063, F (1,87) = 60.200, p0.05, according to additional data. These findings show that 51.9% of the variability in the performance of SHEPs in Kajiado County may be attributed to project execution. As a result, the null hypothesis was disproved, and the study concluded that plagiarism was present because project execution had a major impact on SHEP performance in Kajiado County.

5.2.4 Monitoring & Evaluation and Performance of SHEPs

The fourth variable sought to determine how monitoring and assessment affected SHEP performance. This variable's mean and standard deviation were 2.96 and 0.817, respectively. The study investigated the null hypothesis that the effectiveness of smallholder horticultural empowerment projects is not significantly affected by monitoring and assessment. R=0.381, R2=0.236, =0.381, t=7.742, F (1,87) = 25.780, p0.05, were the results. These conclusions showed that 23.6% of the variability in the success of smallholder horticultural empowerment initiatives in Kajiado County is attributable to M&E . The study of that monitoring and assessment greatly impacted how smallholder horticultural empowerment projects perform, rejecting the null hypothesis in the process.

5.3 Conclusions of the Study

The research aimed to determine how project management techniques affected the success of smallholder horticultural empowerment programs in Kajiado County. The study's first objective sought to establish how project design influences the performance of smallholder horticultural empowerment projects in Kajiado County. According to research findings, the efficacy of smallholder horticultural empowerment initiatives has a moderately positive link with project design. Understanding the project design used in projects, project activities being accomplished on time, resources allocated for a project, and planning for production contributed to the performance of smallholder horticultural empowerment projects.

The second objective sought to determine if stakeholder engagement influenced the performance of smallholder horticultural empowerment projects in Kajiado County. The study showed a weakly positive association between stakeholder involvement and the success of programs empowering smallholders in horticulture. Factors such as regular meetings by farmers, involvement of farmers in decision-making, and sourcing materials for implementation of projects from farmers contributed to the performance of smallholder horticultural empowerment projects.

The findings for the third research goal showed that project implementation impacted how well smallholder horticultural empowerment programs in Kajiado County performed. The findings showed a strong relationship between smallholder horticultural empowerment project performance and execution. The study concludes that regular training for farmers, using extension officers to evaluate and support different farmers, organizing networking events, and tweaking empowerment projects to fit community context significantly influenced the performance of smallholder horticultural empowerment projects.

The final goal was to determine how tracking and assessing affected how smallholder horticultural empowerment programs in Kajiado County performed. The study found a good association between the success of smallholder horticultural empowerment projects and assessment and surveillance. The results from the study showed that incorporating baseline surveys in the planning process, allowing the M&E team to evaluate farming practices, inclusivity of changes made by the M&E team, and allowing feedback from the experts while incorporating it into the projects significantly influenced the performance of smallholder horticultural empowerment programs.

5.4 Recommendations of the Study

The study recommended the following things.;

i. The research found that project design significantly affects how well smallholder horticultural empowerment project's function. The study, therefore, recommends that in every farming project, project designs should be involved to ensure the highest version of the task.
ii. There is a need to incorporate all stakeholders in the projects and involve them in decision-making as this influences the performance of tasks.

iii. The research established that the overall project implementation process influences the performance of smallholder horticultural empowerment projects. The study, therefore, that training from professionals and extensive follow-ups should be done for the farmers from the beginning to the end of the project.

iv. The study also found that monitoring and assessment significantly influence smallholder horticultural empowerment projects' effectiveness. The study recommends that there should be frequent monitoring of the projects with pre-evaluation and post-evaluation applied.

5.5 Suggestions for Further Research

The report recommended the following studies be conducted in the future;

i. Environmental concerns in the Performance of Horticultural Projects in Kenya on a large scale.

ii. Application of Project Management Methodologies in the Management of Horticultural Projects in Kenya

APPENDICES

Appendix I: Letter of Transmittal

Dear respondent**,**

I am a graduate student at the University of Nairobi now pursuing a master's degree, which includes conducting a research project as one of the course requirements. Hence am pursuing a survey of *Project Management practices and their influence on the performance of SHEP Projects by JICA in Kenya.*

You are kindly asked to participate in the study. The given data will be handled discreetly and with the utmost secrecy.

I appreciate your help and active participation in this academic endeavor.

Yours Sincerely,

Brenda Oirere
L50/29507/2019

Appendix II: QUESTIONNAIRE

This study focuses on how project management practices affect the success of smallholder horticultural programs in Kajiado County. Please be aware that the researcher will only utilize your anonymous, private, and confidential comments for the study. Please respond to all inquiries as best you can.

SECTION A: DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

Please tick as appropriate)

1. What is your gender?

Male	{ }	Female	{ }

2. What age group do you fall into??

Less than 25years	{ }	26-30yrs	{ }
31-35years	{ }	above 36 years	{ }

3. 3. What level of education do you have??

Secondary	{ }	College	{ }
Degree	{ }	Masters	{ }

4. Kindly indicate the number of years you have operated your project.

Less than 5yrs	{ }	6-10yrs	{ }
11-15 years	{ }	Above15 years	{ }

SECTION B: TECHNOLOGICAL ADOPTION

Does adoption of agricultural technology influence horticultural production?

Use a (√) to give an appropriate response in the table below.

Key: [5] Strongly agree [4] Agree [3] Undecided [2] Disagree [1) strongly disagree

No	Statements	5	4	3	2	1
B1	The farmers are familiar with best practices in horticultural farming					
B2	The farmers have the best post-harvest handling equipment and storage facilities to ensure longer shelf life for produce					
B3	The farmers have a great attitude towards SHEP Approach activities and techniques					
B4	The extension officers have made adoption of SHEP approach easy through constant evaluation visits					
B5	The increase in production and improved lifestyles among farmer groups by the adoption of SHEP approach has caused an influx in uptake by other smallholder farmers					

SECTION C: IMPLEMENTATION OF SHEP APPROACH

Use (√) to show the appropriate response for the given key on the implementation of SHEP Approach and its influence on the performance of SHEP projects.

Key: [5] Strongly agree [4] Agree [3] Undecided [2] Disagree [1) strongly disagree

No	Statements	5	4	3	2	1
C1	SHEP Approach is the key concept for JICA projects in agribusiness					
C2	Regular training workshops organized by SHEP are essential for distributing information and building the capacity of farmers on the approach					

C3	The use of extension officers to evaluate and support different farmers through the process has ensured the effective delivery of the project					
C4	Through networking events, information by farmers and for farmers can easily be found					
C5	The SHEP Approach is tweaked to fit the community context during the implementation					

SECTION D: STAKEHOLDER ENGAGEMENT

Use (√) to show the appropriate response to the given key on stakeholder engagement and its influence on the performance of the SHEP projects

Key: [5] Strongly agree [4] Agree [3] Undecided [2] Disagree [1) strongly disagree

No	Statements	5	4	3	2	1
D1	Horticultural farmers are regularly invited to meetings to discuss the progress of the project					
D2	Smallholder horticultural producers play a significant role in the SHEP project's decision-making process					
D3	Materials needed for the implementation of SHEP projects are sourced from farmers in the project					
D4	Labor needed in horticultural production most of the time is provided by family and members of the community					
D5	The farmers are involved in the planning of implementation activities for the project					

SECTION E: MONITORING, EVALUATION, AND PROJECT PERFORMANCE

Use (√) to show the appropriate response on the given key, what effect the impact that assessment and surveillance have on performance of SHEP projects

Key: [5] Strongly agree [4] Agree [3] Undecided [2] Disagree [1) strongly disagree

No	Statements	5	4	3	2	1
E1	Baseline surveys have been cooperated during the project planning process					
E2	There is a team of experts available to participate in surveillance and assessment activities					
E3	Surveillance and assessment doings are predetermined in the project planning phase					
E4	Changes are made in the project from results deduced from M&E activities					
E5	Feedback from M&E is quickly and effectively implemented					

SECTION F: PROJECT PERFORMANCE

Use (√) to show the appropriate response on the given key on the performance of SHEP projects

Key: [5] Strongly agree [4] Agree [3] Undecided [2] Disagree [1) strongly disagree

No	Statements	5	4	3	2	1
F1	The project activities were accomplished within the set schedule					
F2	The resources allocated to the project were adequate for the achievement of project goals					
F3	The project enabled farmers to plan their production calendar and select the crops to plant					
F4	The project met the expectations of the stakeholders					
F5	The project increased income for farmers and increased their knowledge of financial management and cost-cutting in production					

INTERVIEW SCHEDULE

i. How has farmers' adoption of agricultural technology influenced the production of horticultural crops?

ii. Which SHEP approach tools has the project used to ensure the project is implemented successfully?

iii. What are the strategies the SHEP projects have used to ensure stakeholder engagement?

iv. What strategies can be used to enhance the utilization of M&E feedback in the project?

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