

Influence Of Capacity Building for Monitoring and Evaluation on Performance of Smallholder's Tea Farming Project in Nyamira County, Kenya.**Stephen Moseria Mesa¹,  Charles Mallans Rambo²,  Angeline Sabina Mulwa³ **

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 [10.52283/NSWRCA.AJBMR.20250902A07](https://doi.org/10.52283/NSWRCA.AJBMR.20250902A07)**Abstract:**

Tea is a significant cash crop in the agricultural sector, particularly among smallholder tea farmers, for generating income. Smallholder tea farmers' engagement in capacity building for monitoring and evaluation is crucial in promoting continuous development, enabling various organizations and communities to adapt and thrive. This leads to fostering a sense of ownership and empowerment.

However, research indicates that smallholder tea farmers especially in developing countries are affected by inconsistency and inadequate involvement in capacity-building methods for monitoring and evaluation. As a result, the performance of smallholder tea farming projects has been adversely impacted.

Therefore, the purpose of this study is to examine the influence of capacity building for monitoring and evaluation on the performance of smallholder tea farming projects. Drawing inspiration from the theory of constraints, this study employed purposive and simple random sampling techniques to achieve a non-biased sample of 379 respondents and 12 tea factory board members. Data were collected using questionnaires and interview guides. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. Quantitative and qualitative information were analyzed using both descriptive and inferential statistics.

The ANOVA results indicated that the F-statistic (1, 369) = 6.633 was significant at a p-value of $0.010 < 0.05$, implying that the predictor coefficient is not equal to zero. Hence, the regression model provides a significantly better prediction of the performance of smallholders' tea farming projects. The results revealed a significant relationship between capacity building for monitoring and evaluation and the performance of smallholder tea farming projects in Nyamira County.

Keywords: Capacity Building, Monitoring and evaluation, Smallholder tea Projects.

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I. INTRODUCTION

Research Background

Ayuka (2017) maintains that the tea industry faces numerous challenges due to poor capacity-building processes. This has created anxiety regarding the sustainability of the industry. As a result, growers bear the negative impact caused by the lack of proper capacity-building opportunities for smallholder tea farmers.

Ondieki (2017) established that tea is consumed locally, nationally, and internationally. For instance, the number of tea consumers across the vast Indian population has remained limited, and tea-drinking was heavily localized in regions where the plant was commonly found, such as northeastern India. Jason Goodwin posits that tea was not consumed by the native population outside of northeastern India until the seventeenth century. Thus, the tea plantation industry in India was mainly driven by demand in Britain and its existing and former colonies, where tea consumption had been expressly promoted as a means of increasing British revenues and perpetuating British cultural imperialism. In these regions, many local populations still maintain the British style of tea culture (Ngumo, 2014).

Even when tea growing was opened up to local farmers in Kenya, these farmers have continued to be affected by inconsistencies and lack of involvement in capacity-building methods for monitoring and evaluation. This has resulted in the poor performance of tea farmers and, consequently, low tea production volumes. This implies that engaging smallholder tea farmers in capacity building for monitoring and evaluation ensures consistency in tea production and adequate supply of tea to factories (Fair et al., 2023).

A study carried out by Ateka (2018) found that Nyamira County in Kenya is known for large-scale tea production, which also serves as the county's main source of income. However, the trend in tea farming has been changing negatively due to the poor payments farmers receive as bonuses. As a result, farmers have increasingly turned to poultry keeping, banana farming, and avocado farming as alternatives to tea. Many of those who have already ventured into these alternatives are recording impressive results and earning substantial incomes from their new ventures.

Oirere (2017) opines that smallholder tea farmers have shifted toward private buyers. He further adds that poor practices, lack of in-service training for farmers, and project dynamism have contributed to the outcry among tea smallholders. In Nyamira County, no effective mechanisms currently exist to ensure that recommendations from previous capacity-building monitoring and evaluation reports are consulted when addressing current challenges (Nyamira County Agricultural Official Report, 2015).

Hence, the researcher undertook this study to examine the influence of capacity building for monitoring and evaluation on the performance of smallholder tea farming projects in Nyamira County, Kenya.

Aim and Originality of Study

Several adverse forces presently threaten the tea agricultural sector worldwide, including Kenya. The first threat stems from weak trends in exports and poor capacity-building methods for monitoring and evaluation. Furthermore, the issue of tea export pricing is a consequence of global tea exports increasing more rapidly than world consumption, which has resulted in depressed auction prices (Havinal, 2020).

A study by Katuwal (2020) established that tea farmers face higher input prices, which means that profits may not necessarily be higher under tea production. Similarly, farmers encounter challenges related to finding reliable workers and attending adequate capacity-building workshops. Additionally, the mass migration of men to foreign countries for employment has contributed to a shortage of skilled labor for tea cultivation and production. Other markets also remain inaccessible due to tariff and non-tariff barriers. While tea remains a leading foreign exchange earner and the major single export commodity for Kenya, there is still insufficient resource support for promoting tea exports in international markets (Karlo, 2023).

Research conducted by the Kenya Tea Development Agency (KTDA, 2017) indicates a significant gap that must be addressed: farmers in Nyamira County have long complained about low bonus payments caused by inadequate budget allocations for smallholder tea farmers. Moreover, farmers have been subjected to non-involvement and poor capacity-building initiatives for monitoring and evaluation. As a result, many farmers have abandoned tea farming and widely adopted poultry, banana, and avocado farming instead. Most of those who have transitioned to these alternatives are recording better outcomes and higher earnings compared to the tea sector, which is plagued by numerous challenges (Ateka, 2018).

Kamanga (2023) emphasizes the need for further investment in Kenya's tea trading and marketing efforts, not only to sustain existing markets but also to diversify markets and products. In an attempt to address the existing gap, this study sought to investigate the impact of capacity building for monitoring and evaluation on the performance of smallholder tea farming projects in Nyamira County, Kenya.

II. Literature Review and Development of Hypotheses

Research carried out by Ondieki (2016) found that capacity building for monitoring and evaluation provides collective strength to execute relevant tasks, thereby fostering the performance of smallholder tea farming projects. Furthermore, Ondieki (2016) asserts that capacity building promotes continuous development in organizations, groups, institutions, and individuals, thereby enabling them to continuously adapt to change. However, none of these can be successful if various groups within and outside the organization do not contribute to the capacity-building process. The strength of capacity building is so significant that it can enhance workforce productivity, retrain extension workers on current technology, and keep them abreast of emerging innovations (Ondieki, 2016).

Internationally, group motivation achieved through capacity building enhances the ability to influence overall group performance. The International Labour Organization has also advocated for employee motivation through capacity-building methods (Makokha et al., 2019). A study conducted by Jagero (2012) established that capacity building enhances human resource development, thereby making group members more prepared to perform their tasks and capable of assuming newer and higher responsibilities within organizations. Thus, employees who have undergone capacity-building training sessions are more capable of handling diverse tasks.

Njoroge (2015) found that stakeholder engagement in capacity building improves performance and strengthens mechanisms for supporting human resource development. Similarly, Naidoo (2010) notes that although monitoring and evaluation are vital in promoting development and democracy, their effectiveness is hindered by inadequate stakeholder engagement and a lack of necessary skills.

A study conducted by Narendra K. (2020) revealed that the tea sector faces numerous challenges, including a lack of capacity building for smallholder tea farmers and difficulties in accessing loans from the Ministry of Agriculture. Agriculture has traditionally been perceived by banks as a high-risk investment, and many farmers lack the collateral required to secure credit. Additionally, small landholding sizes and limited delivery of fertilizers negatively affect both the quantity and quality of green leaf production. The AFA – Tea Directorate (2024) reports that these issues have significantly impacted smallholder tea growers. Therefore, it is necessary to investigate the impact of capacity building for monitoring and evaluation on the performance of smallholder tea farming projects in Nyamira County, Kenya.

Theoretical Framework

A theoretical framework refers to an outline for establishing the arguments in a research investigation, consisting of a foundational assessment of existing theories. Researchers create theories in order to make predictions, draw conclusions, and explain phenomena (Tegan, 2022).

The theory of constraints was used in this study to demonstrate how smallholder tea farmers may efficiently manage their tea farming projects using systems thinking and constraint management (Kohli & Gupta, 2010). Effective project management is often challenging due to inherent uncertainty and the need to balance three diverse and conflicting obligations: due date, budget, and content. This triad of constraints often referred to as the triple constraints of project management (time, scope, and cost) has long been recognized as a critical measure of project success. Managing these constraints is pivotal because they represent fundamental aspects of a project's execution and ultimate success. The triple constraints criterion underscores that time, scope, and cost are interrelated factors that collectively define the project's trajectory. Conversely, a reduction in budget may necessitate a reduction in scope or an extension of the project timeline. This interconnected nature of constraints requires a delicate balancing act to achieve a successful project outcome (Kamanga, 2023).

Each of the three constraints scope, cost, and time has its own distinct impact on project execution. Scope defines the value that the project aims to deliver through capacity building and serves as a benchmark for evaluating success. Cost, on the other hand, represents the financial resources required, and time denotes the project's schedule. However, because these constraints are interconnected, changes in one constraint can significantly affect the others. For example, if a project's scope is expanded, it may lead to increased costs and extended timelines. Conversely, if the budget is constrained, it may necessitate a reduction in scope or schedule adjustments (Kamanga, 2023).

Hamid et al. (2012) point out that the impact of one constraint on the others can affect project expectations and outcomes over the long term. Therefore, careful consideration of budgetary allocation is crucial to managing the cost constraint effectively. Projects are often expensive undertakings, and inadequate budget planning can lead to significant challenges. A well thought out budget ensures that financial resources are allocated appropriately to meet the project's needs and mitigate potential risks. It also provides a framework for managing costs throughout the project's lifecycle, helping to avoid budget overruns and ensuring that the project remains on

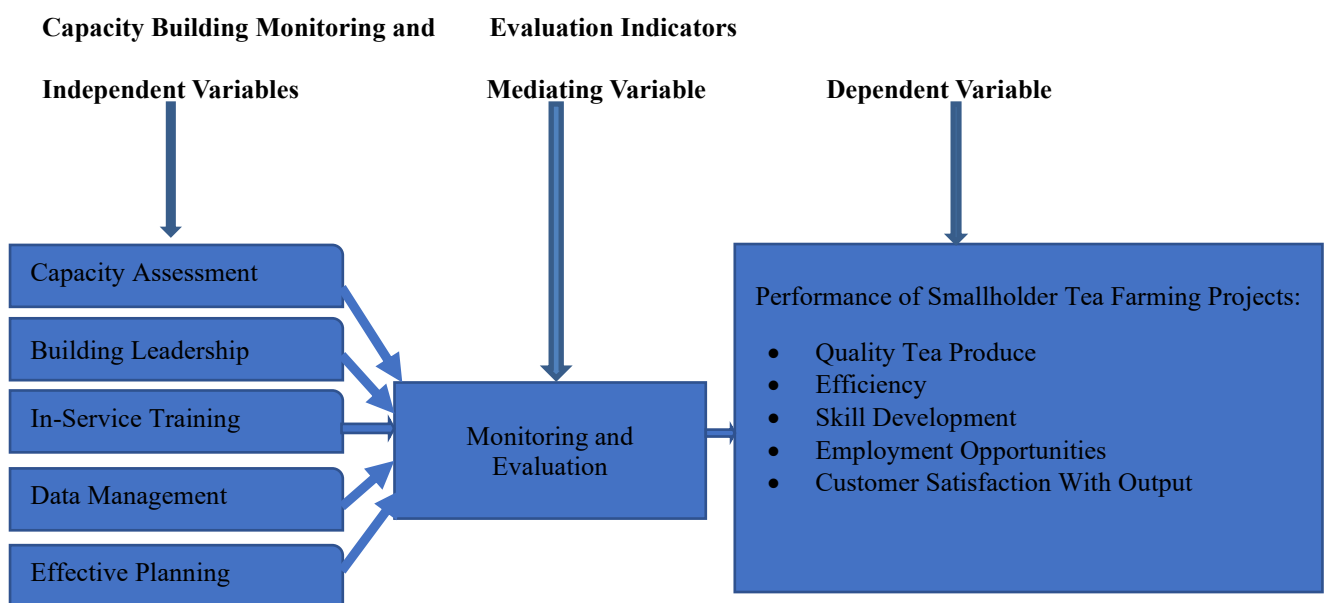
track.

This manuscript is drawn from Moseria (2025), a research study that sought to examine the monitoring and evaluation practices, project team dynamics, and performance of smallholder tea farming projects in Nyamira County, Kenya. The manuscript specifically focuses on the impact of capacity building for monitoring and evaluation on the performance of smallholder tea farming projects. All the supervisors contributed to the manuscript through scholarly input and revisions. Their numerous insightful and constructive comments were beneficial to this study, and they approved the submitted version. The study is therefore anchored on the conceptual framework as illustrated below.

Conceptual Framework

Adom et al. (2018) maintain that a conceptual framework is a diagrammatic representation of the relationships among the variables under study.

Figure 1: Theoretical Model



Note: Author's own work

The framework links the independent and dependent variables with the intervention of a mediating variable. The dependent variable is the performance of smallholder tea farming projects. The independent variables include capacity assessment, building leadership, in-service training, data management, and effective planning. The mediating variable in this study is monitoring and evaluation.

For the purpose of this study, capacity building is defined as the process of developing and strengthening the skills, instincts, abilities, processes, and resources that organizations and communities need to survive, adapt, and thrive. It also aims to enhance institutional capacity for monitoring and evaluation in terms of efficiency, skill development, employment opportunities, customer satisfaction with output, and the enhancement of smallholders' capabilities, thereby promoting the performance of tea farming projects.

III. Methodology

Research Paradigm

Creswell (2018) states that a research paradigm is a basic set of beliefs that guide action and shape the nature of research that a researcher brings to a study. Furthermore, in the field of pragmatism studies, the researcher actively engages with individual participants, and the analysis is subjective, relying on current facts and personal impressions.

This research was conducted within the framework of the pragmatism paradigm, which incorporates the

epistemological, axiological, ontological, and methodological foundations of the study (Ondieki, [2016](#)). The study adopted pragmatism as its guiding paradigm based on the recognition that people or phenomena cannot be analyzed objectively, as the researcher, context, and social reality all influence the outcomes of research.

Research Design

Kothari and Garg ([2013](#)) maintain that a research design is a structure, outline, or scheme within which research should be carried out in order to discover solutions to the problem under investigation.

This study adopted a descriptive survey design and a correlational research design to analyze the data collected. These designs were selected based on the type of data obtained in the study. The data collection aimed to generate both descriptive and inferential information, necessitating the use of descriptive and inferential statistical analyses.

Data Collection Methods

The study adopted a pragmatic approach, which facilitated the use of diverse data collection instruments, including a well-structured questionnaire and an interview guide. Pragmatism, as a research paradigm, emphasizes practical solutions and the use of various methods to address research questions effectively. This approach allows researchers to leverage both quantitative and qualitative data collection techniques, providing a more comprehensive understanding of the study's subject (Creswell, [2018](#)).

In this context, a questionnaire was employed as a primary tool for data collection. According to Mellenbergh ([2008](#)), a questionnaire is valuable for acquiring objective data because it minimizes the manipulation of participants. By providing standardized questions and response options, questionnaires allow for the systematic collection of data from a larger sample, ensuring that the information gathered is consistent and comparable across participants. This objectivity is crucial for analyzing patterns and trends within the data, leading to reliable and generalizable findings.

Kothari and Garg ([2013](#)) maintain that, while questionnaires are effective for gathering quantitative data, they may not capture the full depth of participants' experiences, emotions, and perspectives. To address this limitation, the study incorporated an interview guide as a complementary tool. The interview guide was designed to elicit rich, detailed information about participants' personal sentiments, perceptions, and opinions. This qualitative approach allows for a deeper exploration of the topics under investigation, as interviewers can ask open-ended questions and probe further based on participants' responses.

Creswell ([2018](#)) opines that the use of an interview guide supports the triangulation of data. Triangulation refers to the process of using multiple data sources or methods to cross-verify and enrich the findings. By combining quantitative data from questionnaires with qualitative insights from interviews, the study can achieve a more nuanced and robust understanding of the research topic. This method helps to validate and enhance the credibility of the data, providing a more comprehensive view of the participants' experiences and viewpoints.

Questionnaire Return Rate

Out of the 379 questionnaires administered to participants involved in smallholder tea farming projects across the four constituencies in Nyamira County (North Mugirango, Borabu, West Mugirango, and Kitutu Masaba), 371 were duly filled and returned, resulting in a return rate of 97.89%. The questionnaire return rate results are presented in [Table 1](#).

Table 1: Questionnaire Return Rate

Constituency	Sampled	Returned	Return Rate
North Mugirango	142	139	97.89
Borabu	119	117	98.32
West Mugirango	73	72	98.63
Kitutu Masaba	45	43	95.56
Total	379	371	97.89

Note: Author's own work

The high response rate was achieved because the researcher visited the sampled respondents during data collection and administered the instruments to each participant in person. The high return rate of 97.89% facilitated the gathering of sufficient data that could be generalized to determine the influence of capacity

building for monitoring and evaluation on the performance of smallholder tea farming projects in Nyamira County, Kenya.

The questionnaire return rate was considered adequate, as per Kothari (2013), who recommends that a return rate of more than 50% is satisfactory and contributes toward the collection of sufficient data that can be generalized to represent participants' opinions regarding the study problem in the target population.

Table 1 indicates the questionnaire return rate of the participants engaged in smallholder tea farming projects from the four constituencies: North Mugirango, Borabu, West Mugirango, and Kitutu Masaba.

Distribution of Respondents by Gender

It was imperative to investigate the respondents' gender in order to establish gender parity in the management of smallholder tea farming projects. The information collected on gender was significant for government policy decision-making. Therefore, the respondents were asked to state their gender, and the results are presented in Table 2.

Table 2: Distribution of Respondents by Gender

Gender	Frequency	Percent
Females	193	52.0
Males	178	48.0
Total	371	100

Note: Author's own work

Table 2 shows that over 50% of the respondents, 193 (52%), were female, while their male counterparts were 178 (48%). The findings indicate that female tea farmers outnumbered their male counterparts by a relatively small margin, suggesting that there is still gender parity in smallholder tea farming projects. This implies that a majority of women devote their time and actively engage in tea farming projects to generate income for self-sustainability, thereby enhancing the performance of smallholder tea farming projects. In contrast, men tend to prefer other forms of employment, particularly those of an office-based nature.

IV. Data Analysis Results

Capacity building for monitoring and evaluation is defined as the process of developing and strengthening the skills, instincts, and abilities that organizations and communities need to survive, adapt, and thrive. Participants were requested to express their level of agreement or disagreement with seven statements related to capacity building for monitoring and evaluation, using a 5-point Likert scale, where: Strongly Agree (SA) = 5, Agree (A) = 4, Neutral (N) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1. The results were analyzed and presented using frequency and percentage for each response to each item. Additionally, the mean score and standard deviation were calculated and reported.

Table 3: Capacity Building for Monitoring and Evaluation and Performance of Smallholder Tea Farming Project

STATEMENTS	SA	A	N	D	SD	Mean	Std. dev
1. Monitoring and evaluation institutional capacity development is evident in smallholder tea farming project	200(53.9%)	147(39.7%)	17(4.6%)	5(1.3%)	2(0.5%)	4.45	0.697

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2. Financial resources for monitoring and evaluation development influences performance of smallholders' tea farming project	215(58%)	137(36.9%)	19(5.1%)	0(0.00%)	0(0.00%)	4.53	0.594
3. Monitoring and evaluation human resource development is important in performance of smallholder tea farming project	143(38.5%)	198(53.4%)	16(9.3%)	0(0.00%)	14(3.8%)	4.23	0.847
4. Smallholder capabilities does not influence performance of smallholders' tea farming project	15(4.0%)	34(9.2%)	17(4.6%)	137(36.9%)	168(45.3%)	1.90	1.105
5. Performance of smallholders' tea farming project rely on monitoring and evaluation preparation	95(25.6%)	161(43.4%)	105(28.3%)	6(1.6%)	4(1.1%)	3.91	0.833
6. Capacity building makes smallholders tea farmers confident of their work	243(65.5%)	103(27.8%)	23(6.2%)	2(0.5%)	0(0.00%)	4.58	0.633
7. Motivation is evident amongst well trained smallholder tea farmers	221(59.6%)	135(36.3%)	13(3.5%)	1(0.3%)	1(0.3%)	4.55	0.606
Composite mean and std. deviation						4.02	0.831

Note: Author's own work

Seven statements were developed to determine the extent to which capacity building for monitoring and evaluation influences the performance of smallholder tea farming projects.

Statement (1): "Monitoring and evaluation institutional capacity development is evident in smallholder tea farming projects" had a mean score of 4.45 and a standard deviation of 0.697. The results indicate that out of 371 study participants, 200 (53.9%) strongly agreed, 147 (39.7%) agreed, 17 (4.6%) were neutral, 5 (1.3%) disagreed, and 2 (0.5%) strongly disagreed.

The mean score of 4.45 exceeded the composite mean of 4.02, implying that institutional capacity development in monitoring and evaluation positively influences the performance of smallholder tea farming projects. The lower standard deviation of 0.697 compared to the composite value of 0.831 indicates a strong consensus among smallholder tea farmers.

These findings correspond to the results of Kithinji (2015), who established that institutional capacity development in monitoring and evaluation promotes team cohesiveness, thus positively influencing project performance.

During an interview with members of the tea factory's Board of Management, one member stated:

"Capacity building methods for monitoring and evaluation have enabled smallholder tea farmers to apply day-to-day skills as guided by agricultural extension officers, leading to increased productivity."

Statement (2): "Financial resources for monitoring and evaluation development influence the performance of smallholders' tea farming projects" had a mean of 4.53 and a standard deviation of 0.594.

The results indicate that out of 371 study participants, 215 (58%) strongly agreed, 137 (36.9%) agreed, and 19 (5.1%) were neutral. The mean score of 4.53, which is higher than the composite mean of 4.02, suggests that

financial resources for monitoring and evaluation development positively influence the performance of smallholder tea farming projects.

The relatively low standard deviation of 0.594, compared to the composite standard deviation of 0.831, indicates a strong consensus among respondents. These findings are consistent with those of Amante and Eakins (2009), who concluded that the availability of financial resources for monitoring and evaluation plays a significant role in enhancing the performance of smallholder tea farming projects.

Statement (3): "Monitoring and evaluation human resource development is important in the performance of smallholder tea farming projects" had a mean of 4.23 and a standard deviation of 0.847.

The results show that out of 371 study participants, 143 (38.5%) strongly agreed, 198 (53.4%) agreed, 16 (4.3%) were neutral, and 14 (3.8%) strongly disagreed. The mean score of 4.23 was above the composite mean of 4.02, suggesting that human resource development in monitoring and evaluation positively influences the performance of smallholder tea farming projects.

However, the standard deviation of 0.847 slightly higher than the composite standard deviation of 0.831—indicates a greater diversity of opinion among the smallholder tea farmers on this statement.

These findings are consistent with those of Kithinji (2015), who concluded that monitoring and evaluation human resource development positively impacts the performance of smallholder tea farming projects.

Statement (4): "Smallholder capabilities do not influence the performance of smallholders' tea farming projects" had a mean of 1.90 and a standard deviation of 1.105.

The results indicate that out of 371 study participants, 15 (4.0%) strongly agreed, 34 (9.2%) agreed, 17 (4.6%) were neutral, 137 (36.9%) disagreed, and 168 (45.3%) strongly disagreed with the statement. The mean score of 1.90 was well below the composite mean of 4.02, indicating a general disagreement with the statement and thus suggesting that smallholder capabilities do influence the performance of smallholders' tea farming projects.

The relatively high standard deviation of 1.105 compared to the composite standard deviation of 0.831 reflects a more divergent set of views among the respondents. These findings contradict those of Karlo (2023), who argued that smallholder capabilities do not significantly affect the performance of smallholders' tea farming projects.

Statement (5): "Performance of smallholders' tea farming project relies on monitoring and evaluation preparation" had a mean of 3.91 and a standard deviation of 0.833.

The results indicate that out of 371 study participants, 243 (65.5%) strongly agreed, 103 (27.8%) agreed, 23 (6.2%) were neutral, and 2 (0.5%) disagreed with the statement. The mean score of 3.91 was slightly below the composite mean of 4.02, implying a relatively lower consensus compared to other indicators.

This suggests that while a majority acknowledged the importance of monitoring and evaluation (M&E) preparation, there is still a need to enhance M&E readiness among smallholder tea farmers to more effectively influence project performance. The slightly higher standard deviation of 0.833 compared to the composite standard deviation of 0.831 indicates a modest divergence of opinions among respondents.

These findings contradict those of Muturi (2018), who found that strengthening M&E preparation among smallholder tea farmers positively influences the performance of tea farming projects.

Statement (6): "Capacity building makes smallholders tea farmers confident of their work" had a mean of 4.58 and a standard deviation of 0.633. The results indicate that out of 371 study participants, 243 (65.5%) strongly agreed, 103 (27.8%) agreed, 23 (6.2%) were neutral, and 2 (0.5%) disagreed with the statement. The mean score of 4.58 was well above the composite mean of 4.02, suggesting that capacity building significantly enhances smallholder tea farmers' confidence in their work, thereby positively influencing the performance of tea farming projects.

The relatively low standard deviation of 0.633, compared to the composite standard deviation of 0.831, indicates a strong convergence of opinion among the respondents. These findings align with those of Onduru (2012), who found that capacity building increases the confidence of smallholder tea farmers, thus enhancing project performance.

Statement (7), which posited that "Motivation is evident amongst well-trained smallholder tea farmers," had a mean of 4.55 and a standard deviation of 0.606.

The results indicate that out of 371 study participants, 221 (59.6%) strongly agreed, 135 (36.3%) agreed, 13 (3.5%) were neutral, 1 (0.3%) disagreed, and 1 (0.3%) strongly disagreed. The mean score of 4.55 was above the composite mean of 4.02, suggesting that motivation is indeed evident among well-trained smallholder tea farmers. This, in turn, positively influences the performance of smallholder tea farming projects.

The relatively low standard deviation of 0.606 compared to the composite standard deviation of 0.831 reflects a high level of consensus among respondents. These findings are consistent with Kimathi (2012), who reported that motivating well-trained smallholder tea farmers positively influences the performance of tea farming projects.

The composite mean and standard deviation for all statements related to capacity building for monitoring and evaluation were 4.02 and 0.831, respectively. This indicates that, on average, participants agreed that capacity

building for monitoring and evaluation has a positive influence on the performance of smallholder tea farming projects, according to the Likert scale interpretation.

Correlation Analysis on Capacity Building for Monitoring and Evaluation and Performance of Smallholders' Tea Farming Project

The study sought to examine the relationship between capacity building for monitoring and evaluation and the performance of smallholders' tea farming projects. Pearson correlation coefficient was used to test the relationship between capacity building for monitoring and evaluation and the performance of smallholders' tea farming projects. This was done at a 95% level of confidence. The correlation results are presented in [Table 4](#).

Table 4: Correlations of Capacity Building for Monitoring and Evaluation and Performance of Smallholders' Tea farming project

Capacity Building for Monitoring and Evaluation Statements		Performance of Smallholders' Tea farming project
1. Monitoring and evaluation institutional capacity development is evident in smallholder tea farming project	Pearson correlation sig. (2-tailed) n	0.458* 0.000 371
2. Financial resources for monitoring and evaluation development influences performance of smallholders' tea farming project	Pearson correlation sig. (2-tailed) n	0.369* 0.000 371
3. monitoring and evaluation human resource development is important in performance of smallholder tea farming project	Pearson correlation sig. (2-tailed) n	0.427* 0.000 371
4. Smallholder capabilities does not influence performance of smallholders' tea farming project	Pearson correlation sig. (2-tailed) n	0.309* 0.000 371
5. Performance of smallholders' tea farming project rely on monitoring and evaluation preparations	Pearson correlation sig. (2-tailed) n	0.513* 0.000 371
6. Capacity building makes smallholders tea farmers confident of their work	Pearson correlation sig. (2-tailed) n	0.464* 0.000 371
7. Motivation is evident amongst well trained smallholder tea farmer	Pearson correlation sig. (2-tailed) n	0.388* 0.000 371
Capacity Building for Monitoring and Evaluation (overall correlation)	Pearson correlation Sig.(2-tailed) n	0.476* 0.000 371

(n=371); *Correlation is significant at 0.05 level (2-tailed)

Note: Author's own work

To test the extent of the relationship between Capacity Building for monitoring and evaluation and Performance of Smallholders' Tea farming project; several characteristics of Capacity Building for monitoring and evaluation and Performance of Smallholders' Tea farming project "were analyzed based on the following hypothesis; H_0 : There is no significant relationship between Capacity Building for monitoring and evaluation and Performance of Smallholders' Tea farming project. The corresponding mathematical model for the hypothesis was identified as follows: Performance of Smallholders' Tea farming project = f (Capacity Building for monitoring and evaluation). The correlation results indicated that all the P-values under significant 2-tailed were found to be significant since the P-values < 0.05 . Statement 1 (Monitoring and evaluation institutional capacity development is evident in smallholder tea farming project ; $r=0.458$, P-value= $0.000 < 0.05$), Statement 2; (Financial resources for monitoring and evaluation development influences performance of smallholders' tea farming project ; $r=0.369$, P-value= $0.000 < 0.05$), Statement 3; (monitoring and evaluation human resource development is

important in performance of smallholder tea farming project ; $r=0.427$, $P\text{-value}=0.000<0.05$) ,Statement 4; (Smallholder capabilities does not influence performance of smallholders' tea farming project ; $r=0.309$, $P\text{-value}=0.000<0.05$), Statement 5; (Performance of smallholders' tea farming project rely on monitoring and evaluation preparations'=0.513, $P\text{-value}=0.000<0.05$), Statement 6; (Capacity building makes smallholders tea farmers confident of their work ; $r=0.464$, $P\text{-value}=0.000<0.05$)and Statement 7; (Motivation is evident amongst well trained smallholder tea farmer =0.388, $P\text{-value}=0.000<0.05$)”

Correspondingly, the overall correlation coefficient for Capacity Building for monitoring and evaluation and Performance of Smallholders' Tea farming project was found to be 0.476 with “a P-value of $0.000 < 0.05$,implying that there is a significant relationship between Capacity Building for monitoring and evaluation and Performance of Smallholders' Tea farming project leading to rejection of the null hypothesis (H_0 : There is no significant relationship between Capacity Building for monitoring and evaluation and Performance of Smallholders' Tea farming project) and acceptance of the alternative hypothesis, and hence the research findings conclude that there is a significant relationship between Capacity Building for monitoring and evaluation and Performance of Smallholders' Tea farming project.” This result is in agreement with a study by Ondieki (2016) which established that Capacity Building for monitoring and evaluation is significant in building confidence, technical competency and coerciveness of project teams leading to Performance of Smallholders' Tea farming project.

Regression Analysis of Capacity Building for Monitoring and Evaluation on Performance of Smallholders' Tea Farming Project

Simple linear regression was used to assess how capacity building for monitoring and evaluation influences the performance of smallholders' tea farming projects. It was necessary to gather the views of participants regarding the influence of capacity building for monitoring and evaluation on the performance of smallholders' tea farming projects. The rationale for using the simple regression model was to establish whether capacity building for monitoring and evaluation, as a predictor, significantly or insignificantly predicts the performance of smallholders' tea farming projects. These findings are further discussed in the subsequent sub-themes.

Model Summary Table of Capacity Building for Monitoring and Evaluation and Performance of Smallholders' Tea Farming Project.

The model summary aimed to establish whether capacity building for monitoring and evaluation is a predictor that significantly or insignificantly influences the performance of smallholders' tea farming projects. The model summary is presented in [Table 5](#).

Table 5: Regression Model Summary table of Capacity Building for Monitoring and Evaluation and Performance of Smallholders' Tea farming project

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.476 ^a	0.226	0.224	0.424

a. Predictors: (Constant), Capacity Building for Monitoring and Evaluation

Note: Author's own work

The model summary table indicated a positive correlation ($R = 0.476$) between capacity building for monitoring and evaluation and the performance of smallholders' tea farming projects as predicted by the regression model. Furthermore, 22.6% of the variation in project performance was explained by capacity building for monitoring and evaluation. This finding aligns with the results of Ondieki (2016), who reported that capacity building for monitoring and evaluation significantly enhances the confidence, technical competency, and coerciveness of project teams, ultimately improving the performance of smallholders' tea farming projects.

ANOVA of Capacity Building for Monitoring and Evaluation and Performance of Smallholders Tea Farming Project

The research sought to assess if the regression for ANOVA model was best fit for predicting Performance of Smallholders' Tea farming project after use of Capacity Building for monitoring and evaluation. The regression ANOVA findings are presented in [Table 6](#).

Table 6: An ANOVA of The Regression of Capacity Building for Monitoring and Evaluation and Performance of Smallholders' Tea Farming Project

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.423	1	19.423	107.769	0.000 ^b
	Residual	66.381	369	0.180		
	Total	85.803	370			

Dependent Variable: Performance of Smallholders' Tea farming project

Predictors: (Constant), Capacity Building for Monitoring and Evaluation

Note: Author's own work

The "ANOVA results indicated that (F-statistics (1,369) = 107.769 is significant at P value $0.000 < 0.05$ implying that the predictor co-efficient is at least not equal to zero and hence the regression model results in significantly better prediction of Performance of Smallholders' Tea farming project".

V. CONCLUSION

The study concludes that capacity building and evaluation significantly influence the performance of smallholders' tea farming projects. The small p-values obtained indicate a statistically significant relationship between capacity building in monitoring and evaluation and project performance.

Implications Of the Study

It is hoped that this study will contribute significantly to the agricultural sector, individual farmers, project management, and the sustainability of successful projects that positively impact community development and institutional viability. Furthermore, the study's findings are expected to inform policy formulation in project design, implementation, management, and capacity building for monitoring and evaluation, ultimately enhancing the performance of smallholders' tea farming projects.

Limitations and Call for Future Study

Limitations refer to weaknesses that are typically beyond the researcher's control and may affect the study design, results, and ultimately, the conclusions Wordvice, H.J. (2021).

In this study, some respondents were unwilling to provide complete information. This was evident as several participants declined to be interviewed. The researcher addressed this limitation by clearly explaining the purpose of the study and assuring respondents that their answers would be treated with the highest level of confidentiality, and that no names would be recorded.

Further research is recommended to examine the influence of capacity building in monitoring and evaluation on the performance of smallholders' tea farming projects in Nairobi County, Mombasa County, and Kericho County.

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Competing Interest Statement

No funding was received by the researcher while writing this manuscript. The study was conducted without any financial or commercial relationships involving the supervisors, and they have no potential conflicts of interest related to the content of this manuscript.

Author (s) Contribution Statement

The supervisors, Prof. Charles Mallans Rambo and Dr. Angeline Sabina Mulwa, revised, reviewed, and approved the final manuscript. The corresponding author, Stephen Moseria Mesa, wrote and developed the manuscript in accordance with the recommended guidelines.

Informed Consent of Participant:

No informed consent. The corresponding author is Stephen Moseria Mesa.

Data Availability Statement.

Data will be available immediately after the paper has been published online.

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