

Monitoring and Evaluation Systems in World Bank-Funded Climate-Smart Agriculture Projects: Evidence from Uasin Gishu County, Kenya

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Abstract: *In response to demands for transparency in donor-funded agricultural projects, this study examines the role of monitoring and evaluation (M&E) systems in enhancing the performance of the World Bank - funded Kenya Climate Smart Agriculture Project (KCSAP) in Uasin Gishu County. Guided by the Theory of Change and Utilization - Focused Evaluation Theory, the research investigates M&E human capacity by assessing staffing and training level, experience and resource availability through a mixed - method approach. Data from 231 stakeholders, including M&E officers and farmers, were collected via questionnaires and interviews, analyzed using SPSS, regression, and thematic techniques. Findings reveal a significant positive correlation and significance ($P=0.001$) between M&E human capacity and project performance, accounting for 43.5% of variance, with a composite mean score of 2.28 indicating modest contribution. The study recommends tailored M&E training and enhanced frameworks to boost agricultural productivity and sustainability.*

Keywords: Monitoring and Evaluation (M&E), Human Capacity, World Bank Funded, Donor Project, Agricultural Productivity

1. Introduction

The use or adoption of M&E frameworks has surged in popularity (Muvhuti, 2023). In fact, despite over fifteen years of practical experience in climate change adaptation initiatives, M&E has recently earned a greater spotlight, awareness, and order as a strategically important toolkit for primarily assessing what seems to be performing properly and what is not, including measures to impact projects and improve results (Kim & Lee, 2021). This success stems largely from M&E components like human capacity, work plans, routine monitoring, and data use (Clements, 2020). These aspects guarantee credibility, efficiency, informed choices, and continuous project development, which ultimately improve agricultural output and adaptation to climate change.

Notably for agricultural and extension investments, M&E frameworks have demonstrated their critical roles in tracking and assessing project performance and effectiveness (Otundo 2024). M&E systems use have improved significantly in agriculture - related initiatives both globally and locally. Such widespread use has been inspired by an increasing desire for accountability and productive resource utilization. Recent empirical evidence illustrates how a well - designed oversight system can greatly enhance the outcome or results of projects (Mbugua, 2024). Levinson and Herforth (2022), for instance, noted that in agricultural projects, M&E framework ensures desired outcomes are fulfilled and resources are effectively managed.

The NAP - Ag (National Adaptation Plan) represents a few of the M&E system examples designed for oversight and evaluation of developments within agricultural sectors (Chingarande et al., 2020). This oversight system, as reported

by FAO & UNDP (2023), has enabled many countries, including Latin America, Africa, and Asia, to make major strides in agriculture (Adetuyi et al., 2022). The FAO, as a key organization involved in various agriculture - related projects in these continents, has consistently promoted M&E adoption.

Other than FAO, the World Bank and a couple of other international agencies have voiced support for the integration of M&E frameworks into different development initiatives for greater success (Wolfensoh, 2020). As a result, a growing percentage of states from different continents have begun deploying different M&E systems to oversee agricultural programs (Amin et al., 2023). Such widespread acceptance has helped ensure surveillance, training, and continual advancement to M&E system and framework. Numerous success stories now highlight the critical role of M&E systems in guiding projects (Bordon, 2020). For instance, in Brazil, the prevalent deployment of the M&E framework across various agricultural programs has brought about improved yields and sustainable development.

Moreover, comparable positive accounts of effective adoption of such oversight systems have been experienced in India, where the adopted M&E system based on technology has proven efficient for tracking agricultural projects (Suresh Kumar & Palanisami, 2021). This has prompted many donor organizations to include M&E as a prerequisite for every project they fund. This considered the many benefits that such a system provides, such as not only improving transparency and accountability, but also allowing firms to acquire real - time information, assess achievements, take rational measures to boost their operations, and fulfill the initiative's desired outcomes (Zaman et al., 2023).

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

The highlighted prerequisite demands that M&E systems guarantee that agricultural initiatives attain the expected results (Maitho & Kyalo, 2025). As established, many African countries have adopted different oversight frameworks, like the FAO M&E framework, which have all been critical in tracking and assessing various agricultural and rural growth initiatives and policies (FAO & UNDP, 2023). Each of the M&E frameworks utilized across Africa has significantly contributed to increased climate change adaptability, accessibility to markets, especially for small - scale farmers, and encouraging inclusive rural community growth (Koima, & Mukulu, 2020). Such frameworks involve various tasks, such as data gathering, evaluation, and analysis, which aim to enhance comprehension of agricultural programs' success and influence.

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

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

systems and tools towards productivity. This dearth of information points out the demand for an exhaustive study into how M&E systems help boost agricultural output.

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

2. Statement of the Problem

In Kenya, a large part of the economy is driven by agriculture; however, continual poor performance, inadequate yields, environmental impacts, and market instability frequently occur, threatening food availability and prosperity. Addressing such challenges has prompted several initiatives, such as the KCSAP, a program co - funded by the Kenyan government and the World Bank to encourage sustainable farming practices to better agricultural productivity. However, despite the vitality of M&E frameworks used in such projects, their effectiveness in boosting agricultural productivity, particularly in donor - funded undertakings in Kenya, faces critical inefficiencies stemming from human capacity, routine program monitoring, work plans, and data use, explaining why a number of such initiatives fail to achieve their set goals.

Human capacity pertains to the competencies, experience, and productivity of those responsible for the layout, deployment, and oversight of M&E systems, which usually has a direct effect on the system's potential to present practical insights. However, human capacity inefficiencies in terms of inept M&E training, lack of technical experience, low staff population and resource availability have led to poor performance in World Bank funded projects. In filling this gap, the study investigated how human capacity in M&E systems influenced Agricultural Productivity in KCSAP project within Uasin Gishu County. This paper evaluates the effect of the highlighted M&E key parameters on project effectiveness and sustainability. The research endeavors to offer practical suggestions that could enhance the performance of donor - funded projects like KCSAP through better oversight and assessment practices.

Research hypothesis

The hypothesis below was tested

H₀: There is no substantial connection between human capacity for M&E and the performance of the World Bank - funded Kenya Climate - Smart Agricultural Project in Uasin Gishu.

3. Literature Review M&E Human Capacity

Agricultural productivity has plummeted recently, resulting in a severe food shortage and many other issues, including increased poverty (Steensland, 2021). Studies into this current

situation have mostly linked such challenges to a shortage of readily available inputs, inadequate investment in agricultural infrastructure and technological advances, natural resource constraints, and weather interruptions, among many other factors (Vandecasteele, 2022). As a result, boosting agriculture has evolved into an essential goal for numerous nations and groups, with cultivating crops at the forefront of the advancement agenda (Onyiriuba et al., 2020).

The World Bank's support for emerging economies to address food security through innovative solutions is evident. The World Bank, for instance, has been working with the farming industry, whereby they have collaborated with local authorities on multiple projects to enhance climate adaptability, output, and long-term viability. Research by (Swinnen & Kuijpers, 2020) estimates that the World Bank's yearly spending on multiple global initiatives usually varies between US dollars 15 to 20 billion.

These funds have supported several nations to meet their respective national objectives (Raga, 2020). In the agricultural sector, the World Bank's assistance with livestock farming and cultivation of crops has proven invaluable in leveraging institutional innovation through encouraging small-scale producers to take part in the agricultural products supply chain (Kim & Lee, 2021). The bank has continuously called for climate-smart approaches to agricultural initiatives to boost food security. Varga (2020) noted the significant investments the World Bank has made in agribusiness, with nearly all of the institution's interventions centered around inclusiveness, efficiency, and sustainable development.

The bank's endeavors have been fundamental toward promoting sustainable farming methods, expanding input use, closing produce deficits, and bettering farmer produce and access to markets (Swinnen & Kuijpers, 2020). Study evidence by Raga (2020) shows that many World Bank-funded initiatives have proved successful in boosting livestock and crop production and promoting the entry of smaller-scale farmers, including medium-sized enterprises, into agri-food supply chains through new institutions like cooperatives and productive partnerships (van Niekerk, 2020). Additionally, the initiatives by the World Bank have proven beneficial, more so in pushing for the enactment of sustainability and food-safety laws, as well as intelligent climate practices.

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

Some of the notable success in agricultural initiatives supported by world bank are attributed to M&E systems

adopted, and more the various critical aspects such as human capacity. Strong (M&E) human capacity is frequently needed for better project performance (Musili, 2020). Nabibya et al. (2023) note the critical role that human capacity plays in M&E, particularly in ensuring project success. They point out two key aspects, namely the experience and expertise levels, which they believe professionals undertaking M&E activities should possess. According to Adugna (2021), having proficient M&E staff that have practical interpersonal abilities and are devoted to doing their work is essential for the project leaders to accomplish high success rates or efficiency.

To this end, having proficient M&E human resources is essential for projects to do even better and remain sustainable over time. Ensuring M&E personnel receive adequate training and are skilled in their positions often helps improve the project's effectiveness (Kegoli, 2023). A study by Musili (2020) posits that M & E program staff deserve resources and incentives that equip them with essential skills, tools, and time to effectively perform their oversight roles during project implementation. Most studies have acknowledged the critical role that M&E personnel hold in achieving the desired project outcomes. The empirical evidence above clearly shows why project managers should consider human capacity when hiring M & E personnel. Recognizing this fact necessitates prioritizing M&E expertise and experience when recruiting personnel for such roles.

4. Theoretical Framework

Utilization - Focused Evaluation (UFE) Theory

This evaluation theory points out the relevance of devising evaluations that are beneficial and applicable to the intended recipient (Miller, 2023). It typically zeroes in on figuring out and satisfying stakeholders' information needs, and afterwards applying findings from assessments to guide decisions and better the program (Ramírez et al., 2022). Michael Quinn Patton came up with this theory to stress the value of establishing useful and personalized evaluations.

As indicated, one underlying foundations of this theory is the vitality of evaluation to those using it. It particularly suggests that evaluation frameworks or procedure ought to be customized to satisfy key stakeholders' desires and needs (Okul et al., 2021). Additionally, the evaluation process should be proactive, with everyone involved taking part in all phases, from concern identification to comprehension and applying the evaluation findings.

Another focus of this theory is building capacity among stakeholders to ensure they possess basic understanding to successfully apply to engage in evaluation (Miller, 2023). Capacity building typically involves training and guidance in evaluation procedures and data analysis, including designing systems and procedures that allows use of evaluation discoveries to inform choices.

This theory is mostly employed in many different evaluation contexts, such as program assessment, policy reviews, and organizational appraisals (Patton et al., 2024). The endpoint is usually to guarantee that the evaluation process is trustworthy, relevant, and beneficial to the target audience and that the outcomes or insights gained are effectively put to

use to bring about positive change or boost the organization's performance or the initiative under scrutiny (Okul et al., 2021). In this investigation, Utilization - Focused Evaluation assisted in clarifying complex initiatives such as the KCSAP by systematically capturing the project's objectives and the practical actions required to achieve them.

Examining the progress and identifying any flaws or challenges additionally helped determine whether the project's targets were successfully met. It also helped assess whether the verification techniques and measurable indicators are dependable and robust (Uwizeyimana, 2020). It also offered invaluable knowledge into how the evaluation methods used have promoted transparency and accountability, leading to greater results for stakeholders and local farmers. In general, applying a logical framework method helped shed light on the contribution of the M&E system in improving agricultural productivity.

Theory of Change (ToC).

This oversight tool is comm/only applied to initiatives to establish the measures required to accomplish a specific objective. In the planning phase, the ToC usually assists in detecting risks, assumptions, and challenges (Hertz et al., 2021). For purposes of monitoring, ToC guarantees that the metrics applied to detect major points of change and success are determined. Additionally, it assist discovering project areas or stages that require adjustments (Reinholz, & Andrews, 2020). ToC, like UFE, is frequently used by global funding organizations as well as local charities to convey project goals and impact over time.

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

5. Methodology

This study adopted a mixed - methods approach (MMR), in which multiple data types, descriptive (qualitative) and numerical (quantitative), were gathered and evaluated independently or together to arrive at an interpretation. The incorporation of various data sets contributed to a greater comprehension of the M&E significance within the KCSAP initiative, especially in regards to agricultural productivity. Given the methodology adopted above, an exploratory sequential design proved ideal because it meticulously incorporates qualitative insights with quantitative outcomes to draw the ultimate findings. This study process was beneficial because it guaranteed the information coming from the preliminary phase was utilized to guide the subsequent stage of obtaining information.

Uasin Gishu County was selected as the study's location. This region is centered along Kenya's Rift Valley. Among the aspects considered were extensive agricultural practices,

including large - scale wheat and maize farming, in addition to livestock dairy farming. In addition, this particular area was observed to receive substantial funding not just from nonprofit organizations and donors, but also from regional and national authorities.

The study targeted a total of 660 persons comprising farmers, project coordinating unit personnel, M&E officers, socials from MOALD, donors' agencies, project pool experts, and project directors. This set of targeted participants were sourced from national, and Uasin Gishu County record databases, service records kept by agricultural extension officers, cooperatives, and community - based organization members' hip records, past project records, and Ministry of Agriculture reports and internal records.

A blend of simple random and purposive sampling approach was deployed during the selection of responders or participants from the targeted population. For determination of sample size Yamane's (1967) formula was then employed to construct the sample project. The calculation was as detailed below.

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

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

"e" represented Precision error at 95% confidence level of =0.05

$e^2 (0.05)^2$

$nn = 250$ which represents the size of the sample with 95% confidence level. This means that a total of 250 respondents were sampled.

Table 1: Sample Size and Sampling Procedure

Category	Targeted Population	Size of the Sample	Procedure for Sampling
Donors	20	8	Purposive
Project Coordinating Unit	20	8	Simple Random
M&E Officers	20	8	Purposive
Project Pool of Experts	100	38	Simple Random
Steering Committee	20	8	Simple Random
Ministry of Agriculture and Livestock Development staff	50	19	Simple Random
Directors	30	11	Purposive
Farmers	400	150	Simple Random
Total	660	250	

Source: Author 2024

The study collected qualitative data and quantitative data using interview guides and questionnaires, respectively. Questionnaires were developed for agricultural officers and farmers, whereas interview guides promoted in - depth discussions and interviews with various parties involved in KCSAP within Uasin Gishu County. The approaches outlined guaranteed collection of exhaustive, and reliable data. This was essential to comprehending the crucial role M&E systems served in ensuring the KCSAP Project's success in improving agricultural productivity as well as sustainable practices.

To evaluate study reliability, a test group consisting of 10 percent of the overall study participants was selected (Meeker

et al., 2020). The test study's location was a small sub - county within Uasin Gishu County called Kapseret. This place was selected due to its unique features, including weather patterns, economic variables, and agricultural practices that, in a way, conveyed those of Uasin Gishu County.

Validation of study tools and instruments was done by looking at the research's content, usefulness, design, and standards, among other things. For confirmation of the subject matter, study tools were piloted and shared with a specialist group for examination. Additionally, the usefulness of tools, internal coherence, and test - retest accuracy evaluation methods was employed.

Other methods like factor examination and convergent strategies were implemented to interpret the questionnaires responses and confirm the study's tools' aptitude to gauge the listed conceptual ideas. Results were subsequently assessed using predictive and combined evaluation strategies to figure out the relationship between the study tools and outside parameters. The outlined approaches, along with several others not mentioned, made certain that the tools used precisely and efficiently identified multiple research contrasts.

Statistical and analytical approaches were used to detect data trends and interactions. The process entailed cleaning data and coding for further analysis using statistical tools such as the SPSS software version 26, or any other suitable software. Excel sheet was used to clean and structure the data obtained. Thereafter SPSS software version 26 helped analyze the data obtained. Data was analyzed in two folds. First, descriptive statistics including inferential statistics (regression analysis) and central tendency (mode, mean, and median) measures were calculated. This helped to explore the distribution of both independent and dependent variables.

The relationships between study variables were established through inferential statistics. Specifically, linear regression and correlation analyses were performed. The connection

between the highlighted variables were determined using the following regression model;

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

Here, Y signified Performance of World Bank Project; β_0 = Constant term; X_1 = Training Level; X_2 = Staffing Level; X_3 = Experience; X_4 = Resource Availability; ε = the model error term, and " β_1 , β_2 , β_3 , and β_4 " are independent variables coefficients.

The data obtained was presented using graphic tools like tables and charts, after which inferential statistical tests, such as ANOVA or t - test, determined the connection between the highlighted variables.

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

6. Findings and Discussions

The study achieved a remarkable 92.4% response rate, with 231 of 250 distributed questionnaires returned. This return rate on the questionnaire was a result of enthusiastic cooperation by the study's target audience throughout the data collection process. Of the questionnaires distributed 7.6% were not returned and may have been influenced by various factors rendering them unsuitable for analysis. Nevertheless, the substantial return rate instills confidence that the data faithfully represents the respondents' views.

Table 2: M&E Human Capacity and World Bank - funded KCSAP Performance

Statements (M&E Human Capacity)	Std (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std Deviation
Several trainings are given to staff members who are always busy implementing the project	9 (3.9%)	24 (10.4%)	0 (0%)	100 (43.3%)	98 (42.4%)	4.1	1.09
Many staff members are experienced in their work, thus resulting in good productivity	10 (4.3%)	27 (11.7%)	0 (0%)	100 (43.3%)	94 (40.7%)	4.04	1.12
Low staff numbers make the organization not able to render good services	90 (39.0%)	87 (37.7%)	6 (2.6%)	27 (11.7%)	21 (9.1%)	2.13	1.28
There are enough resources to implement the projects being undertaken in the Climate-Smart Agricultural Project	30 (13.0%)	88 (38.1%)	0 (0%)	56 (24.2%)	57 (24.7%)	3.09	1.45
There are no resources to implement the projects being undertaken in the Climate-Smart Agricultural Project	63 (27.3%)	85 (36.8%)	0 (0%)	22 (9.5%)	61 (26.4%)	2.7	1.58
Many staff members are not trained in any skill, causing the organization to lose many clients	62 (26.8%)	96 (41.6%)	3 (1.3%)	36 (15.6%)	34 (14.7%)	2.49	1.4
Overall composite Mean and Std deviation						2.82	1.62

The descriptive statistics and correlational result illustrated that there is an association between M&E Human Capacity and KCSAP Performance in Uasin Gishu. The results are coherent with those of other comparable empirical studies that states "to accomplish sustainable income - generating endeavors, effective leadership is necessary". Nabibya et al.

(2023) notes the critical role that human capacity plays in M&E, particularly in ensuring project success. M&E personnel are usually expected to demonstrate high dedication and commitment levels. The high levels of attention that are required while evaluating the specifics of a project are the reason that M&E activities typically take a

significant amount of time. As a result of this, it is frequently asked of M&E workers to go above and beyond to operate under difficult conditions outside of their formal working hours. Clements (2020) proposed in their study that M&E officials and staff members must be provided with resources and incentives that allow them to acquire the expertise, equipment, and opportunity to successfully carry out their oversight tasks throughout the project's implementation. . When employing workers for monitoring and evaluation, project managers should consider human capacity, as demonstrated by the empirical findings presented.

Correlations Analysis

"Pearson's correlation" was the statistical tool used to analyze examine the M&E Human Capacity - project performance relationship (refer to Table 3). Cumulative scores were determined using participant response ratings at a confidence level of 95%.

Table 3: M&E Human Capacity and World Bank - funded KCSAP Performance

Variable	Statistics	Performance of World Bank-funded Climate-Smart Agricultural Project
M&E Human Capacity	Pearson	0.435**
	P-value	<0.001
	N	231

Note: (n = 231); ** The correlation is statistically significant at the 0.01 level (two-tailed).

As determined, the findings, exhibit a positive statistically significant correlation, pointing out the necessity of M&E human capacity in ensuring project success. This is attributed to P - value value (<0.001). This finding is further backed by the $r = 0.435$ Pearson's correlation coefficient, which points to a slight positive relationship between the studied variables. Considering the p - value, the study's null hypothesis is thus rejected, proving that M&E human capacity and KCSAP performance has a significant relationship. This evidence implies that improving the skills and expertise of human personnel in charge of M&E results in enhanced performance and greater productivity.

Regression coefficient analysis

The model employed regression analysis to study the correlation between M&E human capacity and KCSAP performance. Table 4 summarizes the findings.

Table 41: M&E Human Capacity and World Bank - funded KCSAP Performance

Model Outline

Framework	R	R Square	Amended Square	Std. Error of the Estimate
1	0.660 ^a	0.435	0.425	0.52337

Predictor: (Constant), M&E Human Capacity

ANOVA

Model	Sum of Squares	df	Mean Squares	F	Sig.
1	Regression: 4.402	1	4.402	16.008	0.000 ^b
	Residual: 63.500	229	0.277		
Total	67.902	230			

a. Setting up for M&E Human Capacity and Performance of the World Bank-funded Climate-Smart Agricultural

Project in Usain Gishu County, Kenya.

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

Coefficients

Analysis	Unstandardized Coefficients		Standardized Coefficients	T	Sig (p-value)
	B	Std. Error	Beta		
(Constant)	2.115	0.245	-	8.642	0
1 M&E Human Capacity	0.285	0.072	0.44	4	0

Independent Variable: M&E Human Capacity.

In this regression model, a positive $R^2=0.435$ correlation between the studied variables was observed. The 43.5% project performance variation was caused by M&E Human Capacity's major contribution to KCSAP performance. The certainty of this effect is further refined by the adjusted $R^2 = 0.425$. The model's statistical significance is additionally established by KCSAP performance, considering the notable F - value of 16.008 derived from the ANOVA analysis as well as a P - value, < 0.001, which is significantly below the required (0.05) threshold. Looking at the regression coefficients while retaining other variables constant, a constant 2.125 value and a 0.246 M&E Human Capacity are noted. This suggests that any advancement of M&E human capacity, especially in skills, culminates in a 0.246 boost in KCSAP performance. The 0.52337 estimated standard error implies a moderate predictive accuracy level.

The model equation for regression is stated as follows:

$$Y = 2.125 + 0.282X_1 + \varepsilon$$

Whereby:

Y = KCSAP Performance

X₁ = M&E Human Capacity

ε = term for Error.

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

Qualitative Data on M&E Human Capacity and KCSAP Performance

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

"Capacity building is key to all organizations since they contribute to better skills enhanced by the training. Project coordinators were fully engaged in the projects and trying so much to involve the community at the same time organizing Barasa so that they could be made aware of the project being implemented" KII - Respondent 1 - 9

7. Conclusion

The study of M&E human capacity and KCSAP performance demonstrated that personnel with skills and expertise contribute to project execution. The result is coherent with Nabibya et al. (2023) study who also noted the critical role that human capacity plays in M&E, particularly in ensuring project success. Clements (2020) proposed in their study that M&E officials and staff members must be provided with resources and incentives that allow them to acquire the

expertise, equipment, and opportunity to successfully carry out their oversight tasks throughout the project's implementation.

8. Recommendation

M&E human resources is essential for projects to do even better and remain sustainable over time. Ensuring M&E personnel receive adequate training and are skilled in their positions often helps improve the project's effectiveness. The empirical evidence above clearly shows why project managers/coordinators need to enhance M&E Human capacity to guarantee that the project interventions concede with needs of the communities. Considering this necessitates prioritizing M&E expertise and experience when recruiting personnel for such roles.

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