



INTEGRATION MANAGEMENT ON MONITORING AND EVALUATION PROCESS, KIAMBU COUNTY AGRICULTURAL PROJECTS

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ABSTRACT

Integration management is a key element in monitoring and evaluation (M&E) of activities in projects since it entails coordination of all project activities and elements in order to track and assess the performance of projects for achievement of outputs and outcomes. The main objective of this study was to investigate the impact of integration management on the monitoring and evaluation (M&E) process of agricultural projects in Kiambu County. The study aimed to determine the role of planning, and stakeholder management in the M&E process of agricultural projects in Kiambu County. The research was based on constraint theory, and stakeholder theory. A descriptive research design was used, and the target population consisted of 150 project managers and 150 M&E practitioners working in the agricultural projects of Kiambu County government. The sample size of 171 respondents was determined using the Yamane 1967 formula, and data was collected using questionnaires. Pilot testing was conducted with 17 respondents from Gatundu North constituency. The reliability of the data collection instrument was assessed using Cronbach's Alpha, and construct and convergent validity were used. The data was analyzed using descriptive statistics such as means, frequencies, proportions, and deviation, as well as inferential statistics such as Pearson correlation and multiple regressions to assess the relationships between variables. Finally, the results were presented using tables and charts. The study established that planning had a moderate positive correlation with monitoring and evaluation process denoted by $r=0.435$, stakeholder management had moderate and positive correlation with monitoring and evaluation process in Kiambu county agricultural projects, which is denoted by $r=0.585$. The study recommends awareness to be made on integration management and its influence in the M&E process in the implementation of agricultural projects. The study further recommends the ministry of Agriculture to emphasize on stakeholder management in effort to promote M&E process in the implementation of agricultural projects.

Key Words: monitoring and evaluation, planning, stakeholder management, agricultural projects

INTRODUCTION

The practice of implementing monitoring and evaluation has become prudent globally in execution of projects since it tracks and assesses the performance of projects for achievement of outputs and outcomes (Lebogang, 2019). In projects, integration management focuses on sustaining stability in various aspects like cost, scope, human and stakeholder resource management, quality assurance, risk mitigation, project timeline among others. These are interconnected processes and cannot be performed in silos (Brown, 2021). From the e-resource scheduler (2020), the management of resources in monitoring and evaluation systems is done by facilitating the staff in order to meet the demand for monitoring and evaluation information. Roles are assigned to particular staff hence easy to measure performance, avoid overlap or duplication as well as establish the need to train staff members.

In Brazil, Iqbal, Raffat, Sarim and Shaikh (2018) noted that Integration management in projects example in the construction industry entails the assembling of building or infrastructure. The stakeholders are involved in projects activities especially the design manager, project practitioners, political parties` leaders and members and architect due to the roles and responsibilities that they take towards the particular projects. The backbone of management identified when implementing these projects is the integration of all aspects and project elements. Project integration concept was developed due to various limitations that were experienced during the project life cycle. Limitations like delayed timelines, machine and equipment faults and failure, budget overruns, inability to meet or exceed customer expectations. These challenges resulted to inability to meet project goals and objectives. In New Zealand integrated project management software was utilized during the implementation of majority of infrastructural development projects. The software managed to facilitate project success through effective management of project activities (Wilkinson, 2018).

Monitoring and evaluation systems in the world were first developed in Egypt. Ancient Egyptians continuously tracked outputs in agriculture mainly livestock and grain production over 5,000 years ago. Years later the first world countries, including the Organization for Cooperation and Development (OECD), then incorporated M&E. Currently, the OECD and first world countries adopt the use of result-based M&E systems in their projects (Kanyamuna & Phiri, 2019). Ghana developed and open day policy to involve non-state actors and to bridge diversification among stakeholders as well as share skills to M& E public sector. The National Development Planning Commission implements the monitoring, evaluation and coordination of development projects of all types, whereas the ministry implements only flagship government projects, through the use of real-time monitoring and rapid evaluations. The absence of an advocated national M&E policy has inhibited the structuring and institutionalizing of M&E. Evaluations conducted are purely done because of donor requirement so there is almost no room for the indigenization of M&E practice. Evaluation findings are only used ineffectively in that there is limitation in use of data driven decision-making, partially because the state lacks adequate capacity internally to enforce M&E agenda and to generate assessment substantiation and to facilitate its use (Akanbang & Abdallah, 2021).

Just like other African states the establishment of National Integrated Monitoring and Evaluation System (NIMES) in Kenya in the year 2004 combined with the policy on e-government resulted to the development of M&E to be a crucial component of not only policy formulation but also in implementation phase at the national level (Muchelule,2018). Integrated M&E systems at both

county and national levels are well institutionalized with an established practice of M&E with over 10 years' experience in the enforcement of NIMES. Various stakeholders at the central and devolved level attend forums that are key to safeguard that assessment reports are disseminated and authenticated. Kenya expects to use NIMES to facilitate informing stakeholders on development plans, policies and policy dialogues within the government, civil society, private sector organizations as well as development partners (GOK 2018).

In 2016, the Kenyan government published the policies that guide the development of County Integrated Monitoring and Evaluation Systems (CIMES), whose purpose is tracking the actual progress of county projects and evaluate results and effects. The use of an integrated information system was to ensure that information is disseminated to all relevant stakeholders (Emmanuel, 2018). Welime (2019) noted that Kenya NIMES is only fairly functional given the several aspects that are missing or not being done. Supportive supervision and data auditing is hardly ever done and neither is it being frequently set. Integration management in monitoring and evaluation systems has faced hindrances like the inadequate number and capacity of staff to conduct monitoring and evaluation, delayed disbursement of funds and poor communication among project stakeholders as well as lack of clear guidelines and awareness on monitoring and evaluation process (Otieno,2019).

Integration management skills enables contractors to track the progress of projects, make predictions and distribute resources, manage disasters and issues, effectively communicate issues and develop plans for the project as early as possible. Its primary goal is to guarantee that project execution process is smooth and risks are avoided or mitigated timeously. Skills in Integration management contain four major components mainly the ability to plan effectively, allocate resources, manage project elements and communicate effectively in project management (Chepng'eno and Kimutai, 2021).

Ngatia's (2018) found that program officers coordinated with their counterparts in agribusiness NGOs in Murang'a County on matters of M&E, there were regular trainings in M&E either via in-service training or by formally training staff, despite the years of experience in monitoring and evaluation. Wanjiku (2018) found that the absence of proper partnerships and poor coordination of M&E activities largely affected the performance of local projects in Kenya. The staff implementing projects in Kiambu county government like project coordinators executes monitoring and evaluation roles which are guided by the County Integrated M&E system (Emmanuel, 2018).

Statement of the Problem

The agricultural sector is the backbone of Kenya`s economy with 33 percent contribution in GDP. It provides employment to 53.8% of Kenya`s population as at 2020 that is more than the 40 percent of population in urban areas as well as 70 percent of the population in rural areas (Julia, 2021) A decline in agricultural productivity has been noted in the recent years have shrunk by 1.8% in the third quarter of 2021 being its weakest performance due to reduced production in coffee export, tea productions, cane production as well as fruit production. (Julia, 2021) Small-scale farmers as well as agricultural enterprises have had challenges in improving the quality of their agricultural produce as well as lacked capacity to grow their business enterprise. Furthermore, the county governments require to be strengthened to build capacity to develop agricultural sector as well as create sustainable market systems for the produce (Maina, 2021). Fears over food shortage have

loomed the country after the announcement of depleted stores by the national cereals and produce board claiming to require 10.34 billion to restock the stores (Ouma, 2021). In Kiambu county agriculture is one of the major key players supporting 80 percent of rural population hence crucial in reduction of poverty level (Kiambu CIDP, 2017). The implementation of projects in Kiambu has not been successful despite the adoption of M&E practices as well as CIMES guidelines (Odhiambo, 2019).

The M&E systems in the county do not promote the proper sharing of data so as to facilitate planning and decision making especially to the local people. The systems also lack strategies to facilitate both stakeholder participation and timely report dissemination (Gitari, 2018). Ineffective monitoring practices in government projects have been attributed to misuse of resources, conflict of interest, defective planning as well as poor communication. (Muchelule, 2018) . Fourteen projects in Kiambu were identified as incomplete with the risk of losing 330 million to stalled projects. The project team members failed to evaluate the performance of the contractor as well as utilization of funds (Odhiambo, 2019).

88% of CDF projects in Juja were still behind schedule and had already exceeded the set budget. Furthermore 80% of CDF projects are incomplete having exceeded their set completion date and lacked relevance (Kerubo, 2021) hence there is need to establish role of integration management in projects on monitoring and evaluation process in Kiambu county agricultural projects.

Research Objectives

- i. To establish the influence of planning on the M&E process in Kiambu county agricultural projects.
- ii. To establish the effect of stakeholder management on the M&E process in Kiambu County agricultural projects.

LITERATURE REVIEW

Theoretical Review

The Constraint Theory

The constraint theory was developed by Eliyahu Goldratt in 1984. The Theory of Constraints (TOC) is a management paradigm which views any system that can be managed as to having limitations in achieving more of its goals due to few or small number of constraints. At some point a constraint is present, and TOC employs a converging practice to recognize the limitation and subsequently reorganize the surrounding association. TOC adopts the popular idiom "a chain is no stronger than its weakest link." meaning that procedures have vulnerability due to the weakest person or part which has the probability to break or damage them resulting to unexpected adverse results or outcome (Goldratt, 1984). The TOC is a procedure for categorizing the most significant limiting factor (i.e. restriction) that impedes goal accomplishment and then sequentially trying to improve that constraint to guarantee that it is no longer the limitation. The core concept of the TOC is that since all processes have a limiting factor they can be improved by ensuring that the limiting factor is enhanced. Spending some time optimizing non-constraints is a significant result of this provided benefits to the entire system but only improvements to the limiting factor which also resulted to meeting set goal or profitable (Learn Productivity, 2013).

TOC intends to offer accurate and consistent and keen concentration on enhancing the present constraint so that it no longer curbs goal accomplishment; at that point, the focus shifts to the next limitation. TOC's underpinning power comes from its capacity to maintain an exercise and healthy concentration on a single goal (profit) in order to eliminate the primary impairment (the limitations) to meeting stated goals. From Goldratt view is that having great focus in the constraints is of essence in TOC. In project management the TOC revolves around the idea that all projects look like A-plants: that all initiatives eventually lead to a finished product. As a result, institutional buffers to safeguard synchronization points and a final project buffer to guard the entire initiative are essential for safeguarding the project. According to Khan (2010) the TOC is an improving common process.

This is most applicable when handling projects that are aimed at benefitting many people like agricultural projects which are the focus of the current study. The implementation of TOC enhances the development of appropriate M& E plans; continuous improvement is required and is facilitated by identifying the limitations and work towards eliminating the limitation. Developing relevant plans timeously which are implemented to improve the monitoring and evaluation process. Also TOC facilitates the development of organizational assets; these include the required and relevant frameworks that will promote monitoring and evaluation culture that is vibrant and effective. Once a framework is deemed ineffective it is revised or improved so that it may translate to its capacity to develop corrective measures for management of project budget overruns, promote sustainability in projects as well as improvement in project service delivery.

Stakeholder Theory

The stakeholder theory was developed by Freeman (2004). The theory is essentially focuses on contribution of every significant project stakeholders. It promotes participation in that the stakeholders are able to give thoughts and opinions about what they intend to realize, the results of project activities as well as inclusivity in the preparation of policies and execution of the set ideas and objectives. The theory suggests that in order to achieve success the stakeholders are to be included and have their various needs met. This also includes those who might not gain any profit from the product or services. The central idea is that a government's achievement is determined by how successfully it manages interactions with different interested parties. This stakeholder theory has a relationship with this research in that, the relevant stakeholders is assigned and participate data collection process mostly in the selection of M&E of data tools or instruments, that they also collate information, develop M&E plans, schedules and activities. The contribution of interested party in project and M&E results to promoting transparency, accountability among the stakeholders, project and program sustainability, and develop community stakeholder positive attitudes toward programs (Sulemana, 2018). Mulongo, (2018) concur with this theory, involvement of all the interested party is very crucial since it results to proper dissemination of project information is shared and instruments used in data collection and dissemination are suitable as they are considered by the same individuals. Nevertheless, Kiptum, Mandela and Murira (2018) contrast with the previous declaration that comprising shareholder's full yield good outcome. According to them for any decent to be comprehended, it is mandatory to create conducive environments that may results in efficiency and encourage satisfaction of the action accomplished in any level.

The theory therefore supports stakeholder engagement in M&E process and how it may affect implementation of M&E systems. The theory guides the projects team in identification of

stakeholders. For the project objectives to be met the parties that will be affected by the project or who are interested in the project outcomes should be mapped out, and then a system is developed to establish those that are to be involved and those that are to be kept updated on the project progress. The involvement of the stakeholders in monitoring and evaluation activities will promote ownership; generate a pool of ideas that will facilitate the management of budget and improved service delivery. The stakeholder theory also guides the aspect of receiving stakeholder feedback, dissemination of monitoring and evaluation findings and reports as well as creating conducive environment that will facilitate learning and development of corrective measures for improved public service delivery.

Conceptual Framework

A conceptual framework is an illustration that presents the study variables (Muchemwa, Padia & Callaghan, 2018). The predictor variables for this study are; M &E planning, stakeholder management, M&E team management, and M&E technology. The dependent variable is M&E process. The conceptual framework shows that the two variables may be related either significantly or insignificantly.

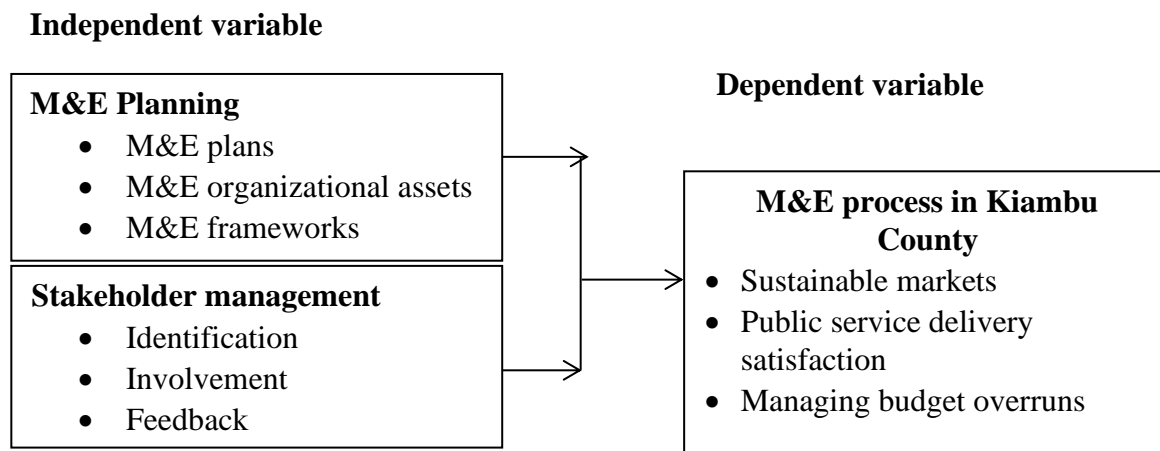


Figure 2. 1: Conceptual Framework

Monitoring & Evaluation Planning

Monitoring and Evaluation (M&E) planning is the process of identifying and defining the key indicators, data sources, methods, and responsibilities for monitoring and evaluating a program or project. It is an essential component of the project management cycle and helps to ensure that the project is on track, goals are being achieved, and lessons are learned for future projects.

The M&E plan is a paper that defines a system that associations’ strategic data collected from different systems to decisions that improves project success (Gyorkos, 2018). M&E planning aims at helping a project manager to achieve their key functions of directing and controlling the application of project components, connect and with the various stakeholders involved (Kelly & Magongo, 2019). The planning and designing phase may identify potential problems proactively previously they can have negative impacts on project cost and schedule during the project execution phase. Project planning aids in the creation of a benchmark for implementation. The procedure of planning entails developing activities that promote meeting of clients' expectations

and existing assets are characterized first, adjusted to arrange task objectives, with the goal that accessible decisions are recognized and surveyed and the appropriate structures, methodologies and strategies to achieve the targets are selected (Puthamont & Charoenngam, 2018).

The M&E planning enables you to monitor performance levels at particular points in time and gain insight into the program's status as it is being implemented. The selection of suitable performance measures and the development of an information-gathering strategy are both stated by Phiri (2018). M&E planning verifies project performance data. To ensure that project efficiency has been enhanced and managed within the context of M & E planning, these initiatives should be planned. Effective planning guarantees that various resources are available for projects, that components are provided accurately, that the workforce received training for their jobs, that specific goals are set, and that actual deliveries are characterized, amongst other things (UNEG, 2017). An ineffective strategic plan for effective M&E execution is to blame for up to 74% of failed M&E observed in various initiatives, according to UNDP (2015). A vast majority of organizations don't even allocate funds for M&E planning; instead, they use M&E procedures that have been copied and pasted, which will have an adverse effect on the execution activities and result in the failure of the M&E execution process as a whole. According to Thai (2018), M&E through are completed in a project for success. This is backed up by Ling (2018), whose research in Singapore led to the development of successfully monitored and reviewed plans that produced favorable outcomes. Regardless of whether a project is funded by governmental or non-governmental organizations, this is crucial to its success. UNDP (2015) outlined the essential components of a thorough M&E plan. These comprise planning for M&E time or length of time, planning for monetary system and human capital, preparation for anticipated results and appropriate measures, and guidelines that suffer from process and guidelines.

The M&E process ought to begin either during shortly following the project design phase. Proper and slightly earlier making preparations can help to inform the project design and permit for enough time to organize reserves and organize training prior to the project execution. The M&E plans should also be conducted by the stakeholders (those using the M&E system). According to Kohli and Chitkara (2018), M&E planning could perhaps begin right at the start of a project or programme. In order to commit funds to the execution of important M&E tasks, M&E professionals must evaluate the M&E needs while designing and organizing the project.

Stakeholder Management

Stakeholder management is an essential component of monitoring and evaluation (M&E). Stakeholders are individuals or groups who are interested or affected by the outcomes of a project, program, or policy. Effective stakeholder management helps to ensure that all interested parties are aware of the monitoring and evaluation process, are able to provide input into the process, and have their concerns addressed. According to Bourne (2018), a stakeholder is a person, group, or organizations that may affect, be influenced, or perceive itself as being impacted by a project, programme, or portfolio decision, operation, or consequence. Stakeholders' involvement in M&E is essential because it maintains projects on schedule and often warranties early detection of difficulties, decreasing the risk of major cost overruns, significant interruptions, and non-conformity to project terms (Goodman & Sanders Thompson, 2018). Involving stakeholders when identifying and selecting projects as well in project planning, implementation, monitoring, and assessment, determine project success (Maina, 2019).

Stakeholder engagement is increasingly becoming a key element is project implementation that ensures successful project implementation globally (Karlsen, Graee, & Massaoud, 2018). An

effective relationship between the stakeholders and the organization promotes success and creates a sustainable competitive advantage (Barić, 2018). Additionally, their impact in management is felt as they instigate important cooperate decisions that would make positive impacts as well as develop strategic plans according to society's needs, values, and expectations (Pandi-Perumal et al., 2019). Implementing a project without comprehensive stakeholder engagement can result in unviable projects or projects that aren't valuable to the majority of consumers. Though in the private market, the only way to improve success of a project is to enhance participation of all stakeholders (Mieszkowski & Kardas, 2018).

Empirical Review

Planning and Monitoring and evaluation process

Urbanski and Haque (2019) conducted research on how risk management affects the successful completion of projects in construction companies in the United Kingdom. The study involved surveying 145 project managers who were selected through purposive sampling, which is a non-probability sampling technique. The data was collected using questionnaires. Results revealed that there is a significant positive relationship between project planning and successful project implementation. Callistus and Clinton (2018) showed a study on M&E practices in the construction firms in Switzerland. The organizations' annual reports were examined and relevant data obtained. The researchers established that M&E planning plays a great role in performance of projects in construction firms through ensuring that adequate resources are allocated to M&E and a skilled team is recruited for M&E activities.

Hubert and Mulyungi (2018) evaluated project planning on performance of NGOs projects in Rwanda. The target population was drawn from M&E professionals in NGOs. The study used Simple random sampling with a sample of 144 professionals. Data was collected using questionnaires. Results showed that the NGOs were knowledgeable about M&E planning. Effective M&E planning significantly affected project performance. Juma (2015) sought to establish factors influencing adoption of M&E systems in commercial banks in Kenya. This study adopted a descriptive survey design. The study targeted 43 bank managers and census sampling was adopted. Questionnaires and interview guides in gathering data. Findings revealed that the bank allocates adequate funds for monitoring and evaluation which has enabled commercial banks to successfully implement M&E systems. Kanyangi and Okello (2018) investigated the impact of project monitoring skills on the execution of a M&E system in funded projects in Kakamega Local Govt. Their study used a descriptive approach, with a target of 263 projects. Primary data was collected using questionnaire. The research found that project planning skills improved the effectiveness of M&E systems development and that there was a significant positive interaction between project planning skills and implementing M&E system.

Stakeholder Management and Monitoring and evaluation process

Gilmore, Ndejjo, Tchetchia, Claro, Mago, Diallo and Bhattacharyya (2020) studied community engagement for COVID 19 prevention and control. This was a systematic study that used a sample of 37 articles. Community involvement was through collaboration with the local leaders, faith-based organizations, community groups, and individual community members. These stakeholders were involved in designing and planning, risk communication, surveillance and outlining and logistics and administration. Stakeholder involvement enhanced prevention and control of the contagious disease. Chirau, Mapitsa, Amisi, Masilela, and Dlakavu (2020) sought stakeholders' perceptions on development of a national evaluation system in Africa. The study target was national directors for monitoring and evaluation in both the government and nongovernmental organizations. Questionnaires were used for data collection. Results showed that involvement of

stakeholder in M&E enhances effective implementation of M&E system. Stakeholders are delegated various roles during M&E which strengthens M&E systems in the countries.

Njama (2015) examined the factors of the effectiveness of the M&E system for AMREF Kenya's WASH programme. Using descriptive research design and a target population was 66 AMREF employees using census. Results showed that stakeholders were involved to a little extent. Their participation was low particularly in decision making process and communication of M&E results and findings. Results further showed that there exists a strong significant association between interested party participation and successful implementation of M & E systems. Bonareri (2020) studied elements affecting successful implementation of M&E systems in Makueni County using descriptive survey design. The study sampled included 200 project members and 45 county staff sampled using simple random sampling. Data was collected using questionnaires and interview guides. The findings suggest that stakeholders' views were incorporated in the planning and designing and M&E system though on lower levels.

RESEARCH METHODOLOGY

The study design used was descriptive. The targeted population was the agricultural projects implemented by the Kiambu county government. The unit of analysis is the total number of agricultural projects (150) under three categories namely National Agricultural and Rural Inclusive Growth Project (NARIGP), Agriculture livestock and Irrigation Project as well as Fisheries Project (Kiambu CIDP plan 2013-2017). The unit of observation is project and M&E practitioners, working in the devolved government projects. For every project one project manager and one monitoring and evaluation practitioner is selected hence total of 300 target respondents. The sample size of project and monitoring and evaluation practitioners was determined using Yamane 1967 formula, to arrive at a sample size of 117 respondents. The study used stratified random sampling technique to ensure enough samples are selected from the strata of interest.

The primary data gathering tool for this study was questionnaires. A representative sample for pilot is recommended at 10% of sample size (Njenga & Osiemo, 2018). The questionnaire was pretested with 17 participants from the Gatundu North constituency. The software to be used SPSS version 28. Descriptive statistical techniques, such as means, incidences, percentages, and standard deviation, were utilized to analyze the quantitative data. In addition, inferential statistical techniques such as regression and correlation analysis were applied. Findings were tabulated. A multiple regression analysis was used to evaluate the association between project integration and implementation of M&E systems and make predictions on how changes in the predictor variable would cause a change in the predicted variables.

RESEARCH FINDINGS AND DISCUSSIONS

The sample size of this study was of 171 officers from management and monitoring and evaluation practitioners from NARIGP, Agriculture livestock and Irrigation Project as well as Fisheries Project. Out of 171 questionnaires distributed, 141 questionnaires were returned and considered complete to be included in the analysis. This represents a response rate of 82.5% which was sufficient for analysis of integration management on monitoring and evaluation process in Kiambu County agricultural projects which is considered sufficient in making conclusion from findings of the study (Linus, 2018).

Descriptive analysis

M&E planning

The first objective of this study was to analyze the effect of planning on the monitoring and evaluation process in Kiambu county agricultural projects. Planning and evaluation was evaluated

on a number of constructs which included relevance of Agricultural project indicators and objectives to stakeholders, capacity of County to monitor, allocation of resources to M&E, planning prior execution of M&E and flexibility of M and E in evaluating varying Agriculture projects. These findings are presented in table 4.1 below.

Table 4.1: Description of planning and implementation of M&E process

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	N	%	n	%	n	%	n	%	n	%	n	%
Agricultural project indicators and objectives are relevant and understood by the stakeholders.	31	22.0	25	17.7	10	7.1	63	44.7	12	8.5	141	100.0
The county has built its capacity to monitor and evaluate agricultural projects.	39	27.7	21	14.9	11	7.8	64	45.4	6	4.3	141	100.0
There are enough resources in the county allocated to facilitate of M &E of agricultural projects	46	32.6	14	9.9	6	4.3	66	46.8	9	6.4	141	100.0
M&E planning has made the county to establish project management policies and procedures	33	23.4	18	12.8	16	11.3	70	49.6	4	2.8	141	100.0
Planning before conducting Monitoring & Evaluation is undertaken for all agricultural projects	20	14.2	16	11.3	26	18.4	75	53.2	4	2.8	141	100.0
Project planning in the county is flexible to monitor and evaluate varying agriculture projects	19	13.5	30	21.3	15	10.6	67	47.5	10	7.1	141	100.0

Most respondents agreed that Agricultural project indicators and objectives were relevant and understood by the stakeholders as implied by 44.7% and 8.5% of those who agreed and strongly agreed respectively. Also, respondents also agreed that the County had built its capacity to monitor and evaluate agricultural projects (45.4% of those who agreed and 4.3% of strong agreements). Officers further claimed that there were enough resources in the county allocated to facilitate of M &E of agricultural projects (46.8% of those who agreed and 6.4% of strong agreements). It was observed that M&E planning had made the county to establish project management policies and procedures as implied by 49.6% of agreements and 2.8% of strong agreements. Planning before conducting Monitoring & Evaluation was undertaken for all agricultural projects (as shown by 53.2% of agreements and 2.8% of strong agreements). Finally, on M&E planning, most respondents agreed that the project planning in the county was flexible to monitor and evaluate varying agriculture projects (as shown by 47.5% of agreements and 7.1% of strong agreements).

Stakeholder management

The second objective of this study was to analyze the effect of stakeholder management on the M&E process in Kiambu County agricultural projects. Stakeholder management on the M&E process was evaluated on a number of constructs which included assessment of stakeholders interests in the counties project, incorporation of stakeholders’ views while developing plan,

incorporation of stakeholders’ contribution in the design, engaging of stakeholders while conducting data collection for M&E, Feedback mechanism communicate the findings to protect actions and finally involvement of stakeholders in M &E data collection process. These findings are presented in table 2 below.

Table 2: Description of stakeholder management on the M&E process

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Stakeholder interests are well assessed in county agriculture projects	19	13.5	15	10.6	13	9.2	73	51.8	21	14.9	141	100.0
Stakeholders` opinions are usually integrated in developing M& E plans.	18	12.8	21	14.9	7	5.0	79	56.0	16	11.3	141	100.0
The design of M&E systems incorporates all stakeholders contribution	21	14.9	16	11.3	14	9.9	81	57.4	9	6.4	141	100.0
The stakeholders are fully engaged while conducting data collection for M&E	25	17.7	11	7.8	15	10.6	82	58.2	8	5.7	141	100.0
Feedback mechanism communicate the findings to protect actions	18	12.8	13	9.2	23	16.3	72	51.1	15	10.6	141	100.0
Stakeholders are enrolled in gathering M &E data	14	9.9	11	7.8	17	12.1	80	56.7	19	13.5	141	100.0

On stakeholder’s management, most respondents agreed that Stakeholder interests were well assessed in county agriculture projects as implied by 51.8% of agreements and 14.9% of strong agreements. Respondents also agreed that Stakeholders` views were usually incorporated in developing M& E plans (as shown by 56.0% of agreements and 11.3% of strong agreements).

Further, the respondents agreed that the design of M&E systems incorporated all stakeholders’ contribution as shown by 57.4 % of agreements and 6.4% of those who strongly agreed. Officers felt that the stakeholders were fully engaged while conducting data collection for M&E (as shown by 58.2% of agreements and 5.7% of strong agreements) and feedback mechanism communicated the findings to protect actions (as shown by 51.1% of agreements and 10.6% of strong agreements). In terms of stakeholders' engagement, the participants concurred that stakeholders were included in the process of collecting M&E data, with 56.7% of them indicating agreement and 13.5% indicating strong agreement.

M&E process

Finally, under this section, we evaluate M & E process in Kiambu county agricultural projects. The M&E process was evaluated on a number of constructs which included implementation of M&E process on successful completion of agricultural projects, monitoring and evaluation process aids in managing budget overruns, timeliness of information from the system and finally

promotion of learning and implementation of corrective measures. These findings are presented in table 3 below.

Table 3: M & E process

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
The implementation of M&E facilitated the successful completion of agricultural projects.	7	5.0	22	15.6	64	45.4	44	31.2	4	2.8	141	100.0
Monitoring and evaluation process aids in managing budget overruns	5	3.5	22	15.6	24	17.0	69	48.9	21	14.9	141	100.0
There is timely from M & E feedback	11	7.8	26	18.4	39	27.7	51	36.2	14	9.9	141	100.0
Monitoring and evaluation promotes learning and implementation of corrective measures.	21	14.9	13	9.2	37	26.2	54	38.3	16	11.3	141	100.0
Monitoring and evaluation promotes creation of sustainable markets for agricultural produce	19	13.5	14	9.9	39	27.7	51	36.2	18	12.8	141	100.0

Most respondents were neutral that the application of M&E facilitated the successful completion of agricultural projects as implied by 45.4% who reported neutral. There was a slight agreement that monitoring and evaluation process aided in managing budget overruns in the application of agriculture projects in Kiambu County as implied by 48.9% who reported agreement and 14.9% who strongly agreed. It was further agreed that there was timely M&E feedback as implied by 36.2% of agreement and 9.9% strongly agreements respectively. Also, there was agreement that M&E promoted learning and application of corrective measures overruns in the implementation of agriculture projects in Kiambu County as implied by 38.3% who reported agreement and 11.3% who strongly agreed. This implies need for continued emphasize of M&E as a tool in overruns in the implementation of agriculture projects in Kiambu County to stress its importance amongst agricultural officers. Finally, the study found a 36.2% of agreement that monitoring and evaluation promoted creation of sustainable markets for agricultural produce

Inferential analysis

Association between planning and monitoring and evaluation process implementation in Kiambu county agricultural projects

Table 4 shows the association between M&E planning and monitoring and evaluation process implementation in Kiambu county agricultural projects.

Table 4: Association between Planning and M&E Process Implementation

		Correlations	
		Monitoring and evaluation process	M&E planning
Monitoring and evaluation process	Pearson Correlation	1	.435**
	Sig. (2-tailed)		.000
	N	141	141
M&E Planning	Pearson Correlation	.435**	1
	Sig. (2-tailed)	.000	
	N	141	141

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

It was observed that M&E planning had moderate and positive correlation with monitoring and evaluation process in Kiambu county agricultural projects, which is denoted by $r=0.435$. The correlation coefficient value suggests that correlation between M&E planning and Monitoring and evaluation process was significant at $\alpha=0.05$ in the implementation in Kiambu county agricultural projects. This suggests that the planning significantly and positively influenced monitoring and evaluation process in Kiambu county agricultural projects implementation. Therefore, an enhancement in planning by one unit would lead to rise of monitoring and evaluation process in Kiambu county agricultural projects implementation by 0.435. The research findings agree with those of Hubert and Mulyungi (2018) who analyzed project planning on performance of NGOs. Results showed that the NGOs were knowledgeable about M&E planning and that effective M&E planning significantly affected project performance.

Association between Stakeholder management and M&E process implementation

Table 5 presents the association between Stakeholder management and M&E process implementation in Kiambu county agricultural projects.

Table 5: Association between Stakeholder management and M&E process implementation

		Correlations	
		Monitoring and evaluation process	Stakeholder Management
Monitoring and evaluation process	Pearson Correlation	1	.585**
	Sig. (2-tailed)		.000
	N	141	141
Stakeholder management	Pearson Correlation	.585**	1
	Sig. (2-tailed)	.000	
	N	141	141

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

It was observed that stakeholder management had moderate and positive correlation with monitoring and evaluation process in Kiambu county agricultural projects, which is denoted by $r=0.585$. The correlation coefficient value suggests that correlation between Stakeholder management and Monitoring and evaluation process was significant at $\alpha=0.05$ in the implementation in Kiambu county agricultural projects. This implies that the Stakeholder

management significantly and positively influenced monitoring and evaluation process in Kiambu county agricultural projects implementation. Therefore, a rise in Stakeholder management by one unit would lead to increase of monitoring and evaluation process in Kiambu county agricultural projects implementation by 0.585. The research findings agree with a study conducted by Chirau, Mapitsa, Amisi, Masilela, and Dlakavu (2020) they sought stakeholders’ perceptions on development of a national evaluation system in Africa. The study target was national directors for monitoring and evaluation in both the government and nongovernmental organizations. Results showed that involvement of stakeholder in M&E enhances effective implementation of M&E system. Stakeholders are delegated various roles during M&E which strengthens M&E systems in the countries.

Regression analysis

Regression is a statistical technique that can be used to evaluate the linear association between a number of variables, usually two or more. In a regression output, the R square indicates how effectively the values fit the data. Regression analysis demonstrates how variance in one parameter predicts variability in another. The study found integration management explains 67.6% of the variations in the monitoring and evaluation process implementation in Kiambu county agricultural projects.

Table 6: Effects of integration management on the M&E process in Kiambu county agricultural projects

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.822 ^a	.676	.667	2.37625	

a. Predictors: (Constant), M&E Technology, M&E Planning, M&E Team Management, Stakeholder Management

The importance of integration management in estimating the monitoring and evaluation process implementation in Kiambu county agricultural projects is seen in Table 6. Integration management factors strongly predict the monitoring and evaluation process implementation in Kiambu county agricultural projects with an $F(4, 136) = 71.069$, $P\text{-value} = 0.000 < 0.05$.

Therefore, we conclude that the multiple regression is a best fit for analyzing the contribution of Integration management factors on the M&E process implementation in Kiambu county agricultural projects

Table 7: Significance of integration management on the M&E process in Kiambu county agricultural projects

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1605.175	4	401.294	71.069	.000 ^b
	Residual	767.932	136	5.647		
	Total	2373.106	140			

a. Dependent Variable: M&E Process

b. Predictors: (Constant), M&E Technology, M&E Planning, M&E Team Management, Stakeholders Management

Table 8 below shows relative contribution of each Integration management factors to the M&E process in Kiambu county agricultural projects. This was computed using the computed variables which were aggregated arithmetically from the constructs of each independent and dependent variable.

Table 8: Relative contribution of integration management on the M&E process in Kiambu county agricultural projects

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.832	.841		3.366	.001
1 M&E Planning	.061	.036	.102	1.668	.098
Stakeholder management	.115	.045	.182	2.546	.012

a. Dependent Variable: M&E Process

$$\text{Monitoring and evaluation process implementation} = 2.832 + 0.061X_1 + 0.115X_2$$

Where X1=M&E Planning, X2= Stakeholder management,

These findings imply that monitoring and evaluation process in Kiambu county agricultural projects implementation would improve by 2.832 units when integration management factors are exempted from the model. The findings also imply that when M&E planning increase by one unit monitoring and evaluation process in Kiambu county agricultural projects implementation would improve by 0.061 units. Monitoring and evaluation process in Kiambu county agricultural projects implementation would also improve by 0.115 units when Stakeholder management increases by one unit.

Conclusion

The study concluded that integration management influenced the M&E process in the implementation of Kiambu county agricultural projects. M&E planning had positively influenced monitoring and evaluation process implementation in Kiambu county agricultural projects. Also, stakeholder management positively influenced monitoring and evaluation process implementation in Kiambu county agricultural projects.

Recommendation

The study recommends that M&E planning is to be reviewed continuously and have stakeholders understand its influence in monitoring and evaluation process in Kiambu county agricultural projects. Evaluation on the number of constructs is required such as relevance of agricultural project indicators and objectives to stakeholders, the capacity of county to monitor its projects, allocation of resources in M&E, planning prior to execution of M&E process and flexibility of M & E system.

The study further recommends the ministry of Agriculture to emphasize on stakeholder management in effort to promote M&E process in the implementation of agricultural projects. On top of that the assessment of stakeholders’ interests in the county project is crucial in order to incorporate stakeholder’s views during planning, data collection process as well as providing timeous feedback to stakeholders.

Areas for further research

The study was limited to the effect of integration management on monitoring and evaluation process in Kiambu county agricultural projects, further research can be conducted in other counties as well as establish influence of policies on monitoring and evaluation process.

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