

Monitoring and Evaluation Data Collection Practices and Performance of Livelihood Programmes: A Case of Caritas, Catholic Diocese of Meru, Kenya

Joshua M. Thambura¹, Naomi Mwangi², John Mbugua² & Reuben Kikwatha¹

¹ Faculty of Business and Management Science, University of Nairobi, Kenya

² Faculty of Education, University of Nairobi, Kenya

Correspondence: Joshua M. Thambura, Faculty of Business and Management Science, University of Nairobi, Kenya. Tel: 254-7-2235-1312. E-mail: jthambura@must.ac.ke

Received: November 21, 2022

Accepted: December 31, 2022

Online Published: January 9, 2023

doi:10.5539/jsd.v16n1p124

URL: <https://doi.org/10.5539/jsd.v16n1p124>

Abstract

The objective of the study was to determine the influence of monitoring and evaluation data collection practices on the performance of livelihood programmes at Caritas Meru, Kenya. The target population was 465 composed of 441 smallholder farmer group leaders 21 project staff and 3 senior managers of Caritas Meru. The Sample size was 215 in clusters of 191 farmer group leaders, 21 project staff, and 3 senior managers, calculated using the Cooper and Schindler (2003) formula. Questionnaires, Key informant interviews, and Focus Group Discussions were utilized to collect data. Descriptive statistics comprises frequencies, percentages, means, and composite mean whereas Pearson correlation (r) and multiple regression analysis were used as inferential statistics. The study found that M&E data collection practices are effectively used at Caritas Meru with a composite mean of 3.98 and that the livelihood programmes had good performance with a composite mean score of 3.87. The results indicate that there was a positive correlation between monitoring and evaluation data collection and performance of livelihood programs, $r(207) = .453, p < .05$. The null hypothesis (H_0) was thus rejected since $p=0.000 < 0.05$. The study concluded that M&E data collection practices were a significant variable influencing the performance of livelihood programs at Caritas Meru. The study recommended effective and efficient use of M&E data collection best practices to deliver, valid and reliable data to promote project performance. The study recommends a further study using a similar methodology on programmes in other sectors for the generalization of the results.

Keywords: M&E data collection, programme performance, M&E tools, data quality, data handling

1. Introduction

The performance of programmes and projects has been used as a stake yard to measure the accomplishment of project activities among development agents (Bhuinyan, et al.,2020). It is the ultimate concern to project proponents and stakeholders in both the public and private sectors. High performance of projects is achieved by creating a well-planned project schedule, working within a budget and within the project scope. The three elements of project performance are commonly referred to as the “golden triangle” or “triple constraints” (Boukanos, 2007). With incremental knowledge and eventual development of the project management field, the “triple constraints” was regarded as insufficient to define programme and project performance. In the recent past, the concept of project performance expanded to include the impact on the project team, benefit to the project organization, impact on the customer, and future plans (Volden & Welde, 2022).

The “triple constraints” criteria in project performance have, however, been challenged by scholars as being insufficient for various reasons (Boukanos, 2007). When considering the time aspect, delays in project completion will increase the total cost which emanates from the charged penalties. Yet, such projects are still considered as well performing. In consideration of customer acceptance, a project which was implemented on time, within cost and to some quality parameters requested, may be rejected by customers and sponsors. Studies in various fields have isolated factors affecting the performance of projects which include; planning, communication, project mission, stakeholders’ involvement, management support, project staff, client satisfaction, technical skills, monitoring and feedback (Turner & Muller, 2005; Wang & Huang, 2006; Agarwal & Rathod, 2006). According to Davis (2014), project performance factors are organized into nine themes. They incorporate collaboration and

communication, timing, distinguishing/concurring goals, stakeholder fulfillment, and utilization of conclusive items. Others are cost/spending viewpoints, abilities of the task administrator, vital advantages of the undertaking, and top administration support. Regardless of the study being complete, it didn't address the contribution of M&E in project execution.

Monitoring and evaluation has emerged in recent times and is widely used by NGOs, project-based organizations, and government institutions to track performance (Musyimi & Ondara, 2022). In most developing countries, M&E is commonly perceived as donor-directed activity hence carried out to satisfy the project financiers (Nyakundi, 2014). In some cases, the level of a programme performance is an indicator of programme success or failure leading to stakeholder satisfaction. Therefore, performance should be systematically measured using M&E planned tools to ascertain the expected outcomes (Okafor, 2021). The global importance of monitoring and evaluation (M&E) is rated high as an information source that is vital in providing feedback, accountability, and assisting in budget allocation decisions (World Bank, 2022).

The situation of M&E of social projects in Kenya is captured by the Kenya Social Protection Review (2012), describing it as weak and where it is done, the information is not shared with the public. Additionally, many NGOs meet numerous bottlenecks during the implementation of M&E systems (Hughes, 2002; Ramesh, 2002). A study by Dobi (2012) established that the lack of systematic adoption of M&E systems was the reason for ineffective M&E in many projects. Fowler (1997) has argued that NGOs have limitations in monitoring, evaluation, and review instruments consequently not being able to account for their achievements. In pursuit of understanding the perception of NGOs, Shapiro, (2011) argues that oftentimes perceived as a donor-driven agenda rather than a project management process. The perception negatively influences the effective mainstreaming of M&E practices in NGOs.

The lack of effective M&E practices in projects has been attributed to the misappropriation of resources, inadequate planning, poor communication, and irreconcilable situation (Chesos, 2010; Mamer, 2010). Several studies agree that M&E undertaken in different sectors influence the performance of projects differently (Yusuf, 2015; Prabhaar 2008; Ika et. al., 2012; Chin, 2012). A Study on project performance by Hyvai (2006) found that absence or ineffective project monitoring leads to over 60% of substantive project failure. This is an outcome of a bloated project budget and delayed completion time (Ike, Diallo & Thuillier, 2012). The established knowledge gap from the studies resulted in this research that established the consequence of M&E practices on the performance of livelihood programmes. Though much has been researched on M&E systems and NGOs as organizations, little has been documented on the influence of M&E practices and the performance of livelihood programmes implemented by Caritas. This study investigated the influence of monitoring and evaluation data collection practices on the performance of livelihood programmes implemented by Caritas in Meru Catholic Diocese, Kenya.

The meaning of "livelihood", a concept in project management refers to a means of making a living; and includes peoples' livelihood capabilities and activities, as well as their tangible assets and intangible assets (Wang C., 2018). Caritas Meru a non-profit faith-based organization (FBO) under the Catholic Diocese of Meru has a livelihood programme which is the focus of this study. The organization's website page describes the mandate of Caritas as the facilitation of marginalized communities to meet their developmental needs. Livelihood programmes are the focus of Caritas Meru among other developmental activities. Most livelihood programme activities include agriculture and livestock productivity in Meru and Tharaka Nithi counties. These counties describe the geographical scope of operation due to the social structure of the Catholic Church network and the trust of farmers in its operations ([Caritas Meru livelihood programmes], n.d.).

1.1 Performance of Livelihood Programmes

The level of performance of a development project or programme determines its level of success or failure. Kamau and Mohamed (2015) postulate that the good performance of a project is a result of various contributing factors with the main one being M&E. Studies on factors influencing projects and programme performance in various sectors have been done globally. A study done in Kenya on M&E factors influencing the performance of development projects revealed that budgetary provision, size of the monitoring team, choice of devices and methods, and M&E plan were instrumental in determining the success of development projects (Wachaiyu, 2016). The study affirms that M&E is a critical determinant of project performance, though significant development projects had not effectively adopted it. The implication of the findings is that M&E significantly influenced project performance.

According to Ntiniya, (2016) in a study on the effect of M&E on the performance of projects by CDF, it was established that M&E timeliness, M&E budgeting, and M&E result usage positively influenced the performance

of projects. The variables that were studied were; M&E timeliness, stakeholder participation, M&E budget, plan and M&E results usage. Wanjiru, (2013), attributed project success in a separate study on M&E systems in NGOs to; strategies and apparatuses utilized in M&E, the job of the board in activities of the M&E, training in M&E and specialized ability of the project team.

Wongtschowski et al (2016) expound on the performance factors in agricultural projects which include among others M&E for accountability and IT. In a survey of nearly 900 households and 119 farmer groups across 14 districts of Uganda, an assessment was done on the performance of the National Agricultural Advisory Services (NAADS) (Benin et al., 2007). The study tools used were household surveys and farmer group surveys. The data collected from the household survey included: the adoption and productivity of new technologies; awareness and use of improved production practices; participation of households in the market; and access to advisory services and other institutions. Additionally, the farmer group survey collected data related to the empowerment of farmers in the management of advisory services. The study found that NAADS performed significantly due to the adoption of new technologies introduced to farmers. Despite the rating of advisory services being high among farmers, several constraining factors affected productivity. The notable constraints were: a shortage of capital, unavailable credit, lack of quality inputs, inadequate farmland, unfavorable weather, and challenges of pests and diseases (Benin et al., 2007).

Determination of a programme performance depends on data collected during M&E. This data collection process should therefore be conducted with a high level of integrity for legitimacy purposes. Data collection in M&E in this study was measured by the reliability and usability of the data collection tool, data validity, data collection frequency, and timeliness. The capacity of group leaders and project staff to handle and analyze M&E data was also investigated. The integrity of the data collection process and practices during M&E informed the level of project performance. Incorrect data may lead to false alarms or eventual project failure hence waste of resources and opportunity. Concern for the quality of data is captured by Wongtschowski et al., (2016), observing that in most cases, despite data systems having been designed, data is not collected, and if collected, it turns out to be of doubtful quality. This situation is a reflection of the lack of performance incentives that persists due to a lack of evaluation culture in the public sector (World Bank, 2000). A case study by IFAD (2013) cited in Wongtschowski et al., (2016), is a typical example of poor-quality M&E data collection. In this case, data was collected by extension workers who exaggerated figures to reflect what their supervisors wanted to avoid the risk of being fired or demoted.

INTRAC, (2017) proposed principles to ensure data collected in M&E would become useful. The first principle was to keep things simple by choosing methods and tools that work in the context of the programme being undertaken. Secondly, planning the whole M&E process will avoid collecting data that is unnecessary or which cannot be analyzed. Lack of planning will lead to information that cannot be scientifically analyzed and used because of poor collection methodology, timeliness, and scope. The third principle would be ensuring the reliability, credibility, and validity of data collected. Bakewell et. al. (2003), cited by INTRAC (2017) explain that:

Data is viewed as reliable when there is certainty that comparative outcomes would be gotten if the information collection was rehashed inside a similar period, utilizing similar practices. In the event that the data is reliable, it implies that it isn't excessively reliant on the abilities and genuineness of the individual gathering it. Data validity is achieved when it quantifies or portrays what it set out to gauge or depict. Information is viewed as dependable when it is reasonable, and is steady with a 'sound judgment' perspective. In any case, since information isn't valid doesn't mean it is inaccurate. It just implies that it needs further checking (p.2)

The fourth principle cited addresses the ethics of data collection. INTRAC (2003) identifies some common ethics in M&E which include; avoidance of harm whenever data is collected, consideration of benefits and costs of; stakeholders' involvement, voluntary participation in M&E, respect of confidentiality, respected anonymity, informed consent, and being Culturally sensitive.

1.2 M&E Data Collection and Performance of Livelihood Programmes

Attempts have been made by scholars in diverse fields to investigate how data collected during project M&E affect outcomes in regard to validity and accuracy. The type of data that is collected during M&E includes both qualitative and quantitative. According to Hiter (2021), quantitative data uses numbers and statistics to quantify the change in the form of digits, units, ratios, percentages, and proportions. Qualitative data on the other hand comprise descriptive words in narrative form. Inadequate data collection leads to an inaccurate decision resulting in non-performance of the venture.

Wongtschowski et al (2016), postulate that M&E systems are commonly designed in projects or programmes, but the data collected is not sufficient or it's not of the requisite quality. Poor information-gathering culture, particularly in the public sector, has influenced how important evaluation is considered and valued (World Bank, 2000). A study by Khatiala, (2013) carried out in Nairobi and Nyanza regions to determine the influence of M&E tools and practices on the performance of projects, revealed that performance reviews, project management software, earned value management, and variance analysis enhanced project performance. Khatiala (2013) further discovered that 70% of the respondents supported increased broad and better utilization of the instrument resulting in improved Project performance.

Data collected from different sources in a project may validate findings through triangulation of collection methods of the M&E system. According to Gebremedhin, Getachew, and Amha (2010), primary data is collected directly by the M&E system and secondary data exist as sources of information for monitoring and evaluation. The methods for collecting data in M&E system include questionnaires, key informant interviews, observations, project documents, surveys, and focus group discussions. Kusek and Rist (2004), argue that, in order for M&E methods to be effective, managers are enabled by the key indicators to consider the degree to which planned or pledged deliverables would be realized. They further argue that some development projects collect massive data during M&E that can't be utilized. Therefore, the absence of lucidity concerning the end clients of data leads to a collection of an unnecessary amount that is wasted (Guijt, 1999).

Nasambu (2016) consents that an increase in data collection frequency provides more data which facilitates managers to track trends. Taking measurements often during the project activity will reduce the guesswork about what happens in between measurement interludes. When long periods of time between measurements are allowed, it leads to increased chances of data error (Gebremedhin et al., 2010). This view is supported by Guijt (1999), by asserting that data needs to be collected at ideal moments with definite regularity for information to be worthwhile.

2. Methodology

The conceptual framework that guided the study consisted of the Performance of Livelihood Programmes as the dependent variable and Monitoring and Evaluation data collection as the independent variable. The relationship is illustrated in figure 1.

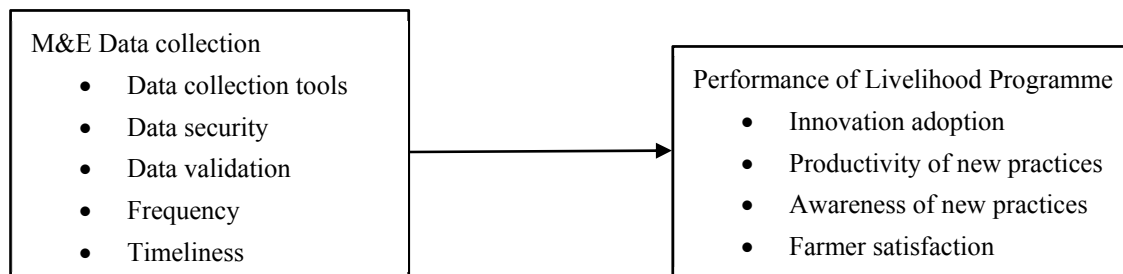


Figure 1. Conceptual framework

The study used descriptive research design whereby the researcher does not influence the existing variables but makes observations and measures the phenomenon. It was based on pragmatic research paradigm which embraces both qualitative and quantitative methods of study. The target population was 465 spread across the two counties of Meru and Tharaka Nithi which is the territorial jurisdiction of Caritas Meru operating under Catholic Diocese of Meru. It comprised of 441 farmer group leaders, 21 project staff and 3 senior managers. Research sample size was determined by use of Cooper and Schindler (2003) formula to obtain 215 respondents. The questionnaire tool contains questions in ordinal scale using Likert type 5-point scale on an agreement continuum; Strongly Disagree(SD), Disagree(D), Neutral (N), Agree (A) and Strongly Agree(SA). Data collection was by a ten item Likert type survey questionnaire, interview guide and focus group discussion guide. Data processing was attained through coding and entering raw data in the Statistical Package for Social Sciences (SPSS) software version 22 computer programme. Percentages and frequencies were descriptive statistics used to present data. Inferential statistics used were linear regression, ANOVA and multiple linear regression

3. Results

The study results were presented in descriptive statistics that include frequencies and percentages as well as the inferential analysis comprising of correlation coefficient and ANOVA.

3.1 Monitoring and Evaluation Data Collection Practices

The study sought to investigate the influence of monitoring and evaluation data collection practices on performance of livelihood programs implemented by Caritas in the Meru Catholic Diocese. Ten items were used to examine the monitoring and evaluation data collection, captured in Item five of the questionnaire. The first question sought to establish whether the monitoring tools used to collect data were reliable. As shown in Table 1, 190(91.8%) of the respondents pointed out that the tools used to collect data for monitoring were reliable, where 125(60.4%) agreed and 65(31.4%) strongly agreed. On the other hand, 13(6.7%) indicated that the tools were not reliable, where 11(5.3%) disagreed and 3(1.4%) strongly disagreed. A small number of respondents 3(1.4%) were not sure whether the monitoring tools used to collect data were reliable. These results imply that, in the opinion of the respondents, the monitoring tools used for data collection were reliable. Only less than a tenth of the respondents upheld a divergent opinion.

The second question sought to establish whether monitoring tools were easy to use in data collection. The majority of the respondents 181(87.5%) indicated that the monitoring tools were easy to use in data collection, where 119(57.5%) agreed and 62(30.0%) strongly agreed. On the contrary, 21(10.2%) opined that the monitoring tools were not easy to use, where 14(6.8%) disagreed and 7(3.4%) strongly disagreed. A small proportion of the respondents 5(2.4%) were not sure whether monitoring tools were easy to use in data collection. These results imply that, in the opinion of the respondents, monitoring tools were easy to use in data collection. Only a tenth of the respondents upheld a contrary opinion.

The respondents were asked in the third question whether farmers' group leaders were adequately trained on how to collect monitoring and evaluation data. The majority of the respondents 149(72.0%) pointed out that the farmers' group leaders were adequately trained on the collection of data for monitoring and evaluation, where 97(46.9%) agreed and 52(25.1%) strongly agreed. On the other hand, 34(16.5%) indicated that the farmers' group leaders were not well trained in the collection of monitoring and evaluation data, where 32(15.5%) disagreed and 2(1.0%) strongly disagreed. Slightly more than a tenth of the respondents 24(11.6%) were not sure whether group leaders were adequately trained on the collection of data for monitoring and evaluation. These results signify that, in the opinion of the respondents, farmers' group leaders were well-trained on the collection of monitoring and evaluation data. Nearly three-quarters of the respondents upheld this opinion. However, during focus group discussions, farmer leaders expressed the need for more training on the use of IT gadgets.

In regard to the fourth question, the respondents were asked whether farmers' group leaders were adequately trained in the handling of monitoring and evaluation data. Two-thirds of the respondents 137(66.2%) opined that the farmers' group leaders had requisite competence for handling monitoring and evaluation data, where 91(44.0%) agreed and 46(22.2%) strongly agreed. However, 40(19.3%) held a differing opinion where 36(17.4%) disagreed and 4(1.9%) strongly disagreed. A seventh of the respondents (14.5%) were unsure of the competency of farmers' group leaders in handling monitoring and evaluation data. These results signify that, in the opinion of the respondents, farmers' group leaders were adequately trained in the handling of monitoring and evaluation data. Only a seventh of the respondents held a differing opinion.

Question five on data collection sought to establish whether the frequency of monitoring and evaluation was adequate for the project. The majority of the respondents 162(78.3%) believed that the rate of monitoring and evaluation for the project was satisfactory, where 114(55.1%) agreed and 48(23.2%) strongly agreed. Nearly a fifth of the respondents 35(16.9%) were unsure on the adequacy of the monitoring and evaluation for the project. A small proportion of the respondents 10(4.8%) pointed out that the frequency of monitoring and evaluation for the project was inadequate, where 6(2.9%) disagreed and 4(1.9%) strongly disagreed. These results suggest that, in the opinion of the respondents, monitoring and evaluation of the project was done regularly. Nearly four-fifths of the respondents upheld this opinion.

The sixth question sought to establish whether monitoring and evaluation activities were carried out on time. The question was intended to find out the timeliness of M&E activities. The majority of the respondents 172(83.1%) indicated that monitoring and evaluation activities were done in a timely manner, where 118(57.0%) agreed and 54(26.1%) strongly agreed. Nearly a seventh of the respondents 27(13.0%) were unsure of the timeliness of the monitoring and evaluation activities. A small proportion of the respondents 8(3.9%) pointed out that timelines did not adhere to monitoring and evaluation activities, where 6(2.9%) disagreed and 2(1.0%) strongly disagreed. These results suggest that, in the opinion of the respondents, monitoring and evaluation activities were carried out on time. More than four-fifths of the respondents upheld this opinion.

Question seven inquired whether monitoring and evaluation data collected influenced the performance of the project. The majority of the respondents 196(94.6%) pointed out that monitoring and evaluation data collected

influenced the performance of the project, where 116 (56.0%) agreed and 80(38.6%) strongly agreed. Less than a twentieth of the respondents 8(3.9%) were unsure of the influence of monitoring and evaluation data on project performance. A small number of the respondents 3(1.5%) opined that there was no influence of monitoring and evaluation data on project performance, 2(1.0%) disagreed, and 1(0.5%) strongly disagreed. This was a confirmatory question about the relationship between M&E data collection and the performance of the livelihood programme.

The eighth question queried the 19 project staff respondents whether they were competent in monitoring and evaluation activities. Nearly nine-tenths of the respondents 17(89.4%) believed that they were competent in matters pertaining to monitoring and evaluation, where 10(52.6%) strongly agreed and 7(36.8%) agreed. However, 2(10.6%) of the respondents indicated that they were not competent in monitoring and evaluation activities, where 1(5.3%) disagreed and an equal proportion strongly disagreed. These results imply that the project staff included in the study believed that they were competent in monitoring and evaluation activities. Only a tenth of the respondents held a differing opinion.

The project staff respondents were asked in question nine whether adequate data were collected by monitoring and evaluation tools. The majority of the project staff respondents 14(73.7%) believed that the data collected by monitoring and evaluation tools were adequate, where 9(47.4%) agreed and 5(26.3%) strongly agreed. Nearly a fifth of the respondents 3(15.7%) were unsure of the adequacy of data collected by monitoring and evaluation tools. A small proportion of the respondents 2(10.6%) believed that the data collected by monitoring and evaluation were inadequate, where 1(5.3%) disagreed and an equal proportion strongly disagreed. These results imply that the project staff believed that the data collected by monitoring and evaluation tools were adequate. Nearly three-quarters of the respondents upheld this opinion.

The tenth question sought to establish whether the monitoring and evaluation data collected had validity. Slightly above two-thirds of the project staff respondents 13(68.4%) pointed out that the monitoring and evaluation data had validity, where 7(36.8%) agreed and 6(31.6%) strongly agreed. A fifth of the respondents 4(21.1%) were unsure of the validity of the monitoring and evaluation data. A small proportion of the respondents 2(10.5%) indicated that the monitoring and evaluation data lacked validity. These results suggest that the monitoring and evaluation data collected had validity. Only a tenth of the respondents held a contrary opinion. The assurance of M&E data validity was explained by group leaders during the FGD. *“The records are read to the members to confirm the validity of entries. Errors of omission and commission are corrected during the group meetings.”* The composite means of the questionnaire items supported the findings that data collection tools were reliable and easy to use. It also showed that data was timely, adequate, and valid.

Table 1. Data collection in monitoring and evaluation

M & E Data collection Item	SD		D		NS		A		SA		Mean
	F	%	F	%	F	%	F	%	F	%	
Monitoring tools used to collect data are reliable	3	1.4	11	5.3	3	1.4	125	60.4	65	31.4	4.15
Monitoring tools are easy to use in data collection	7	3.4	14	6.8	5	2.4	119	57.5	62	30.0	4.04
Farmer group leaders are adequately trained on how to collect M&E data	2	1.0	32	15.5	24	11.6	97	46.9	52	25.1	3.80
Farmer group leaders are adequately trained in handling M&E data.	4	1.9	36	17.4	30	14.5	91	44.0	46	22.2	3.67
The frequency of M&E was adequate for the project	4	1.9	6	2.9	35	16.9	114	55.1	48	23.2	3.95
M&E activities were carried out on time	2	1.0	6	2.9	27	13.0	118	57.0	54	26.1	4.04
M&E data collected influenced the performance of the project	1	.5	2	1.0	8	3.9	116	56.0	80	38.6	4.31
Project staff are competent in M&E activities	1	5.3	1	5.3	0	0.0	7	36.8	10	52.6	4.05
Adequate data is collected by evaluation tools	1	5.3	1	5.3	3	15.7	9	47.4	5	26.3	3.84
M&E data collected has validity	0	0.0	2	10.5	4	21.1	7	36.8	6	31.6	3.89
Composite Mean											3.98

Note, SD=strongly disagree, D=Disagree. NS-Not sure, A=Agree, SA=Strongly agree

3.2 Performance of Livelihood Programmes

The dependent variable of the study was the performance of livelihood programs implemented by Caritas in the Meru Catholic Diocese. Ten items were used to examine the performance of livelihood programs, captured in Item ten of the questionnaire in Table 2. In respect to the first question, the respondents were asked whether they found the innovations promoted in the project affordable. More than four-fifths of the respondents (85.5%) demonstrated that the innovations promoted in the project were affordable, where 65.7% agreed and 19.8% strongly agreed. However, 10.2% of the respondents indicated that the innovations were not affordable, where 9.2% disagreed and 1.0% strongly disagreed. A small proportion of the respondents (4.3%) were unsure of the affordability of innovations promoted in the project. These results imply that, to a very large extent, the innovations promoted in the project were affordable. Only a tenth of the respondents held a contrary opinion.

In respect to the second question, the respondents were asked whether they adopted the innovations during the lifetime of the program. Remarkably, 90.3% of the respondents reported that they adopted the innovations during the lifetime of the program, where 67.6% agreed and 22.7% strongly agreed. On the contrary, 5.3% stated that they did not adopt the innovations during the lifetime of the program. A small proportion of the respondents (4.3) were unsure on whether they adopted the innovations during the lifetime of the program. These results imply that, to a very large extent, the respondents had adopted the innovations during the lifetime of the program. More than nine-tenths of the respondents upheld this opinion.

In respect to the third question, the respondents were asked whether they could implement the new innovations without being supervised by the project team. The majority of the respondents (83.1%) testified that they could implement the new innovations without guidance from the project team. However, 13.5% of the respondents indicated that they could not implement the new innovations without supervision by the project team. A small proportion of the respondents (3.4%) were unsure of their ability to implement new innovations without

supervision by the project team. These results suggest that, to a large extent, the respondents could implement the new innovations without being supervised by the project team. More than four-fifths of the respondents upheld this opinion.

In respect to the fourth item of the questionnaire, the respondents were asked whether the project was relevant to the needs of the farmers. Nearly nine-tenths of the respondents (87%) opined that the project was relevant to the needs of the farmers, where 54.15% agreed and 32.9% strongly agreed. On the contrary, a tenth of the respondents (10.1%) stated that the project was not relevant to the needs of the farmers. A small proportion of the respondents (2.9%) were unsure of the relevance of the project in addressing the farmers' needs. These results imply that, to a very large extent, the project was relevant to the needs of the farmers. Only a tenth of the respondents held a divergent opinion.

In the fifth item of the questionnaire, the respondents were asked whether they were satisfied with the project services. The majority of the respondents (83.1%) attested that they were satisfied with the services offered by the project, where 58.5% agreed and 24.6% strongly agreed. On the other hand, 14.0% of the respondents indicated that they were not satisfied with the project services, where 12.6% disagreed and 1.4% strongly disagreed. A small number of the respondents (2.9%) were unsure of their level of satisfaction with the project services.

The sixth item of the questionnaire inquired whether the project had improved the income status of the farmer households. Remarkably, 99.1% of the respondents attested that the project had improved the income status of the farmer households, where 69.6% agreed and 29.5% strongly agreed. In an FGD, respondents stated that *"we have money most of the time when we sell our farm produce and also can borrow from the group at a low-interest rate."* Nonetheless, a very small proportion of the respondents (1.0%) indicated that the project had not improved the income status of the farmer households. These results signify that the project had improved the income status of the farmer households. Almost all the respondents upheld this opinion.

The seventh question inquired whether the project had connected the farmers to the market. Nearly half of the respondents (48.3%) testified that farmers were connected to the market through the project, where 42.5% agreed and 5.8% strongly agreed. On the other hand, 35.3% of the respondents indicated that the project had not connected the farmers to the market, where 23.7% disagreed and 11.6% strongly disagreed. Nearly a fifth of the respondents (16.4%) were unsure of whether the farmers were connected to the market through the project. These results imply that to a moderate extent, the project had connected the farmers to the market. Close to half of the respondents upheld this opinion.

The eighth questionnaire item inquired on whether farming activities supported by the project had become more profitable. A high majority of the respondents (95.7%) attested that farming activities supported by the project had become more profitable, where 74.9% agreed and 20.8% strongly agreed. A small proportion of the respondents (2.4%) were unsure of the influence of the project support on the profitability of the farming activities. A very small proportion of the respondents (1.9%) specified that the farming activities had not been more profitable as a result of the project assistance. These results signify that, to a large extent, farming activities supported by the project had become more profitable. Almost all the respondents upheld this opinion.

With respect to the ninth questionnaire item, the respondents were asked whether they had acquired all the knowledge and skills on the new practices promoted by the program. The majority of the respondents (78.8%) affirmed that they had acquired all the knowledge and skills on the new practices promoted by the program, where 64.7% agreed and 14.0% strongly agreed. On the other hand, 16.4% of the respondents attested that they had not acquired all the knowledge and skills on the new practices promoted by the program. Less than a twentieth of the respondents 4.8% were not sure whether they had acquired all the knowledge and skills on the new practices promoted by the program. These results suggest that, to a large extent, the respondents had acquired all the knowledge and skills on the new practices promoted by the program. More than three-quarters of the respondents upheld this opinion.

The tenth questionnaire item inquired on whether information on new practices by the project could be accessed easily by farmers. The majority of the respondents (69.6%) indicated that information on new practices by the project was easily accessed by the farmers, where 58.0% agreed and 11.6% strongly agreed. On the other hand, 15.9% of the respondents specified that information on new practices by the project was not easily accessed by the farmers, where 11.6% disagreed and 4.3% strongly disagreed. Slightly more than a seventh of the respondents (14.5%) were unsure of the ease of accessibility of information to the farmers on new practices by the project. These results suggest that, to a large extent, information on new practices by the project could be accessed easily by farmers. More than two-thirds of the respondents upheld this opinion. The respective composite means in Table 2 are in support of the findings that livelihood programmes performed well and outcomes satisfied stakeholders.

Table 2. Performance of livelihood programmes

Livelihood program Item	SD		D		NS		A		SA		Mean
	F	%	F	%	F	%	F	%	F	%	
The innovations promoted in the project are affordable to me	2	1.0	19	9.2	9	4.3	136	65.7	41	19.8	3.93
I adopted the innovations during the lifetime of the programme	0	0	11	5.3	9	4.3	140	67.6	47	22.7	4.08
I can implement new innovations without being supervised by the project team	3	1.4	25	12.1	7	3.4	120	58.0	52	25.1	3.93
The project was relevant to the needs of the farmers	0	0	21	10.1	6	2.9	112	54.1	68	32.9	4.10
I am satisfied with the project services	3	1.4	26	12.6	6	2.9	121	58.5	51	24.6	3.76
The project has improved income the status of the farmer households	2	1.0	0	0	0	0	144	69.6	61	29.5	4.27
Farmers have been connected to the market through the project	24	11.6	49	23.7	34	16.4	88	42.5	12	5.8	3.07
Farming activities supported by the project have become more profitable	1	.5	3	1.4	5	2.4	155	74.9	43	20.8	4.14
I have acquired all knowledge and skills on the new practices promoted by the programme	0	0	34	16.4	10	4.8	134	64.7	29	14.0	3.76
Information on new practices by the project can be accessed easily by farmers	9	4.3	24	11.6	30	14.5	120	58.0	24	11.6	3.61
Composite Mean											3.87

Note, SD=strongly disagree, D=Disagree. NS-Not sure, A=Agree, SA=Strongly agree

3.3 Regression Analysis and Hypothesis Testing

A Pearson product-moment correlation was done to examine the relationship between monitoring and evaluation data collection and the performance of livelihood programs. These results indicate that there was a positive correlation between monitoring and evaluation data collection and performance of livelihood programs, Pearson’s $r(207) = .453, p < .001$ are presented in Table 3.

Table 3. M & E data collection and performance of livelihood program correlation

	M & E data collection	Performance of livelihood program
M & E data collection	Pearson Correlation	1
	P - Value	.453**
	N	207
Performance of livelihood program	Pearson Correlation	.453**
	P - Value	1
	N	207

The correlation coefficient, $r = .453$, shown in table 2 indicates that there is a moderate correlation between

monitoring and evaluation data collection and the performance of livelihood programs. The R² column in table 4 indicates the proportion of the outcome variable (performance of livelihood programs) that can be explained by the model. The result indicates that 20.5% of the performance of livelihood programs can be explained by monitoring and evaluation data collection predictor. Consequently, other factors contribute 79.5% of the proportion to the performance of the livelihood programme at Caritas Meru.

Table 4. Model Summary for M & E data collection

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.453	.205	.201	4.446

The ANOVA presented in table 5 tests whether or not the model is a significant predictor of the outcome variable (performance of livelihood programs). The results indicate that the model is a significant predictor $F(1, 205) = 52.86, p < .001$. The null hypothesis that there is no relationship between monitoring and evaluation data collection and the performance of livelihood programs was thus rejected. The research hypothesis that there is a statistically significant relationship between monitoring and evaluation data collection and the performance of livelihood programs was subsequently supported.

Table 5. ANOVA for M & E data collection

Model		Sum of Squares	df	Mean Square	F	P - Value
1	Regression	1044.7	1	1044.7	52.86	.000
	Residual	4051.7	205	19.76		
	Total	5096.4	206			

The regression coefficients table indicates how the individual predictor variables contribute to the regression model. Since the p-value is $< .001$, concluding that monitoring and evaluation data collection significantly contributes to the model. The relationship between monitoring and evaluation data collection and the performance of livelihood programs can be captured in a model which takes the form of a statistical equation as described below;

$$Y = b_0 + b_1X_1$$

Where,

Y represents the performance of livelihood programs

and X_1 represents monitoring and evaluation data collection

Replacing the coefficients (b_0 and b_1) with the correct values, a predictive model is arrived at,

Therefore, Performance of livelihood programs = $27.050 + (.405 * \text{M \& E data collection})$

Hence, the results of the regression in table 4 indicated that the model explained 20.5% of the variance and that the model was significant, $F(1, 205) = 52.86, p < .001$. It was subsequently established that monitoring and evaluation data collection significantly predicted the Performance of livelihood programs ($b_1 = .405, p < .001$), shown in table 6.

Table 6. Regression coefficients for M & E data collection

Model	Unstandardized Coefficients		Standardized Coefficients		P - Value
	B	Std. Error	Beta	t	
1 (Constant)	27.050	1.648		16.411	.000
Monitoring and Evaluation data collection	.405	.056	.453	7.270	.000

4. Discussion

The importance of data collection in the programme M&E was established from the study findings. M&E data collection practices that influenced livelihood project performance included the reliability of monitoring tools 190(91.8%), ease of monitoring tools use 181(87.5%), adequate training in data collection and handling 137(66.2%), frequency of M&E activities 162(78.3%), and timeliness of M&E 172(83.1%). Other practices were influence of data on performance 196(94.6%), staff competence in M&E 17(89.4%), adequacy of data collected 14(73.7%) and data validity 13(68.4%). The results were supported by Kiprotich (2018) whose study in the construction sector concluded that efficient integrated data management systems ensure a significant contribution to project performance. A review study by Okello (2021) established a relationship between M&E data management and infrastructural project performance. It identified three levels of M&E data management as baseline M&E data management, impact M&E data management, and compliance M&E data management. Okello (2021) made the conclusion that M&E data management enhanced project performance in the infrastructure sector which was similar to the findings of this study on livelihood programs.

A study by Muchelule et al. (2017), revealed that monitoring tools had no significant effect on project performance in Kenyan State Corporations ($\beta_2 = 0.073$, $p > 0.05$). This contradicted what this study found that ease of use and reliable monitoring tools influence the performance of livelihood programmes. Wongtschowski et al., (2016) found out that data collection in M&E measured the levels of data collection tool use, data validity, data collection frequency, and timeliness of collecting data which was collectively regarded as the integrity of the data collection process. According to Nasambu (2016), an increase in data collection frequency provides more data which facilitates managers to track trends and ultimately positively influence the performance of livelihood programs.

5. Conclusion

The study objective was to determine the influence of monitoring and evaluation data collection practices on the performance of livelihood programmes at Caritas in the Catholic Diocese of Meru, Kenya. From the study findings, the study concluded that data collection practice in M&E was a significant variable influencing the performance of livelihood programs implemented by Caritas Meru. Quality M&E data can only be collected when there are optimal conditions created. During the study, it was also established that reliable data collection tools ought to be simple and easy to use. Some of the tools cited were; meeting minutes, attendance lists, mobile phones, SMSs, photographs, record journals, and other mobile phone applications. Other aspects of data collection were frequency of collection, timeliness, handling, reliability, and data adequacy. The regression coefficient model tested the null hypothesis where $p < .05$ thus rejecting it. Therefore, it was concluded that there is a statistically significant relationship between monitoring and evaluation data collection and the performance of livelihood programs implemented by Caritas in the Meru Catholic Diocese.

6. Recommendations

The study consequently made recommendations as follows: -

- (i) Caritas Meru should ensure an effective and efficient M&E quality data collection system to increase programme performance
- (ii) M&E data collection tools should be designed appropriately to capture quality data by Caritas Meru, NGOs, and government projects
- (iii) Farmer group leaders should be well trained on the M&E data collection tools to ensure reliable data collection
- (iv) A further study using a similar methodology on programmes in other sectors for generalization of the results.

References

- [Caritas Meru livelihood programmes]. (n.d.) Retrieved from <http://www.caritasmeru.org/livelihood-programmes.html>
- Bakewell, O., Adams, J., & Pratt, B. (2003). *Sharpening the Development Process; A practical guide to monitoring and evaluation*. INTERAC, UK
- Bhuinyan, S., Gadekar, P., Agrawal, N., Basak, S., & Raut, Y. (2020). Measuring Project Performance and Success Factors of Construction Sites. *International Journal of Innovative Research in Technology*, 5(11).
- Chen, H., Yu, P., Hailey, D., & Cui, T. (2020). Identification of the essential components of quality in the data collection process for public health information systems. *Health Informatics Journal*, 26(1), 664-682. <https://doi.org/10.1177/1460458219848622>
- Cooper, D. R., Schindler, P. S., & Sun, J. (2006). *Business research methods*. Retrieved from

http://sutlib2.sut.ac.th/sut_contents/HI399963.pdf

- Gebremedhin, B., Getachew, A., & Amha, R. (2010). Results-based monitoring and evaluation for organizations working in agricultural development: A guide for practitioners.
- Guijt, I. (1999). *Seeking Surprise: Rethinking monitoring for collective learning in rural resource management. Communication Studies*. Wageningen: Wageningen University.
- Hiter, S. (2021). *What is quantitative data?* Retrieved October 21, 2022, from <https://www.datamation.com/big-data/what-is-quantitative-data/>
- International Fund for Agricultural Development (IFAD). (2012). *A Guide for Project MEL*. Rome: IFAD.
- INTRAC. (2017). *Data Collection*. Intrac for civil societies, UK.
- Khatiala, M. P. (2013). *The influence of monitoring & evaluation tools and practices on project delivery capability (PDC): A case of HIV/aids interventions in Nairobi and Nyanza regions*. Unpublished Master's Thesis, University of Nairobi, Nairobi, Kenya.
- Kiprotich, E. B. (2018). Influence of Quality Information Output On Performance of Construction Projects in South Rift, Kenya. *International Journal of Economics, Commerce, and Management*, VI(5).
- Kusek, J. Z., & Rist, R. C. (2004). *Ten Steps to a Results-Based Monitoring and Evaluation System: A Handbook for Development Practitioners*. World Bank Publications, Washington: USA. <https://doi.org/10.1596/0-8213-5823-5>
- Muchelule, Y., Iravo, A. M., Odhiambo, R., & Shalle, I. N. (2017). Effect of Monitoring Practices on Project Performance of Kenyan State Corporations. *European Scientific Journal*, 13(19). <https://doi.org/10.19044/esj.2017.v13n19p264>
- Musyimi, C. M., & Ondara, A. (2022) Collaborative monitoring and evaluation practices and performance of county-funded projects in Uasin Gishu County, Kenya. *International Academic Journal of Information Sciences and Project Management*, 3(7), 102119.
- Nasambu. (2016). *Factors influencing the performance of monitoring and Evaluation systems in non-government organizations in lira District, northern Uganda* (Unpublished Master's Thesis). Uganda Technology and Management University.
- Nyakundi, A. A. (2014). *Factors Influencing Implementation of Monitoring and Evaluation Processes on Donor Funded Projects; A Case of Gruppo Per Le Relazioni Transculturali -Grt Project in Nairobi, Kenya* (Unpublished Master's Thesis), University of Nairobi, Kenya.
- Okafor, A. (2021). Influence of Monitoring and Evaluation System on the Performance of Projects. *IJRDO - Journal of Social Science and Humanities Research*, 6(8), 34-49.
- Okello, A. M. (2021). Monitoring and Evaluation Data Management and Project Performance: A Review on Infrastructure Projects. *Research & Development*, 2(3), 43-49.
- Volden, G. H., & Welde, M. (2022). Public project success? Measuring the nuances of success through ex-post evaluation. *International Journal of Project Management*, 40(6). <https://doi.org/10.1016/j.ijproman.2022.06.006>
- Wang, C. (2018). An Analysis of Rural Household Livelihood Change and the Regional Effect in a Western Impoverished Mountainous Area of China. *Sustainability*, 10(6), 1-17. <https://doi.org/10.3390/su10061738>
- Wongtschowski, M., Oonk, L., & Mur, R. (2006). Monitoring and evaluation for accountability and learning, KIT working papers 2016-3. Amsterdam: Royal Tropical Institute.
- World Bank. (2022). *The World Bank, Monitoring and Evaluation*. Retrieved October 29, 2022, from http://web.worldbank.org/archive/website01506/WEB/IMAGES/10_ME.PDF

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).