



**INFLUENCE OF DATA DISSEMINATION PRACTICE IN PARTICIPATORY MONITORING AND EVALUATION ON PERFORMANCE OF SELF-HELP GROUPS IN NAIROBI COUNTY, KENYA**

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**ABSTRACT**

**Purpose:** The main objective of this study was to examine the influence of M&E data dissemination on the performance of self-help groups in Nairobi City County, Kenya.

**Methodology** A cross-sectional research design was used for this study because the study focused on explaining the ‘what’ behind a given phenomenon using a survey strategy. The study targeted 178 self-help groups operating in Nairobi City County, Kenya. The unit of observation consisted of consists of either coordinators or chairpersons in charge in each of the 178 self-help groups.

**Findings:** The study found M&E data dissemination to have a positive ( $\beta_1=0.281$ ) significant ( $p$  value= 0.000) influence on performance of self-help groups in Nairobi County.

**Recommendations:** The study findings confirmed that M&E data dissemination significantly affects the performance of self-help groups in Nairobi City County, Kenya. Self-help groups should streamline procedures for sharing data regarding monitoring and evaluation of self-help groups. Leaders should revise and review the procedures for verifying information about membership, utilization of finances, and loan amounts to enable accurate and valid monitoring and evaluation of self-help groups’ activities.

**Keywords:** Participatory monitoring and evaluation, M &E data dissemination, performance of self-help groups

## Background of the study

Oware (2020) noted that performing self-help groups comprise of committed members and effective leaders. One of the strategic processes believed to underscore performance is the effectiveness of monitoring and evaluation practices meant to measure results and recommend suitable corrective actions to prevent interruptions to operations. Scholarly evidence concerning the relationship between participatory monitoring and evaluation practices and the performance of organizations has produced scanty yet strong evidence (Abdirahaman, 2022). The effectiveness of participatory monitoring and evaluation practices is founded on involving stakeholders in each program that a group or organization implements (Jackson, 2013); thus, the centrality of carefully identifying parties to whom information is shared and the nature of worthwhile information sharing cannot be understated.

Globally, the foundation of participatory monitoring and evaluation practices is the increased necessity for organizations to strengthen and deepen primary stakeholders' contribution as active participants in interventions (Purvis et al., 2019). Primary stakeholders are expected to take the lead in tackling and analyzing the steps being taken to advance towards collectively agreed results and making decisions about suitable corrective actions in the process (Jamwal et al., 2021). Monitoring and evaluation (M&E) practices have long been critical aspects of consideration that funding agencies use to assess the actual change against predetermined objectives (Speer, 2012). The role of M&E practices is to charge the extent to which a given assistance has been successful or not successful. In order to achieve this goal, M&E involves experts carrying out an assessment against particular indicators already in place to determine the progress route of an activity. However, the current wave of increased expectations from agencies has led to the acceptance of a more participative approach towards monitoring and evaluation.

Participatory monitoring and evaluation practices allow stakeholders to execute a timely corrective action because of the possibility of rapidly learning from mistakes. Other benefits expected to emanate from adopting a participatory stance in monitoring and evaluation include increased motivation due to highlighting the successes of people and strengthened relationships caused by systematic and continual exchange of information (Jamaal, 2018). Contrary to this expectation, Wright's (2013) study covering the Rift Valley and Western Kenya where the VSLA program was being implemented revealed no serious documented evidence of monitoring and evaluation involving local women taking part in the activities. According to CARE guidelines, membership is between 20 and 30 to ease management and fund transactions (CARE, 2017).

## Statement of the Problem

About 61% of self-help groups fail during within the first year of registration with the remaining barely operating past three years (Ministry of Social Services, 2023). The self-help groups have not adequately performed their role of minimizing social exclusion and extending the culture of monetary saving, solidarity, and teamwork (Bargoria, 2018). Studies on self-help groups in Kenya show that between 23% and 30% of the local communities neither belong nor participate in self-help group activities, making them to miss out on several socioeconomic development opportunities (Were & Kimaru-Muchai, 2021). A report by Bunning et al. (2020) revealed that the larger part of the existing self-help groups' problem lies in their inability to resolve conflicts through mutual discussion and collective leadership. The self-help groups have not adequately performed their role of minimizing social exclusion and extending the culture of monetary saving, solidarity, and teamwork (Bargoria, 2018).

## Objective of the study

The main objective of this study was to the influence of M&E data dissemination on the performance of self-help groups in Nairobi City County, Kenya.

## THEORETICAL REVIEW

Data management theory focuses on organizations' ability to quantify information gain or loss can only improve our ability to design good representations, storage mechanisms, and analysis. The theory is linked to the processes through which organizations manage databases to make the best use of them (Deepa et al., 2022). The theory was proposed to elucidate ways through which small and large organizations can achieve efficient and effective dissemination data and information. The core element of data management is accessing data through the click of a button. The theory explains how various platforms that organizations use to gather data such as social media, internal records, and websites. The theory was relevant to this study because it provided a basis for interpreting ways through which self-help groups collect, process, and retrieve data about their projects. It specifically focuses on securing the captured M&E data to ensure it is properly stored.

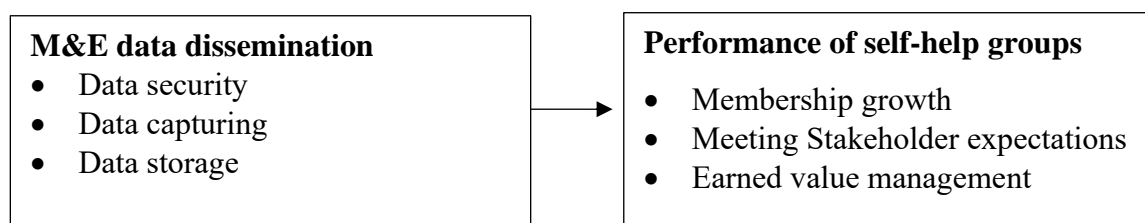
## LITERATURE REVIEW

### Conceptual Framework

The Independent variable (M&E data dissemination) is conceptualized as the variable that can influence performance of self-help groups. Figure 1 shows the conceptual framework.

#### Independent Variables

#### Dependent Variable



**Figure 1: Conceptual Framework**

### *M&E Data Dissemination*

Data dissemination in the context of M&E revolves around the process and practice of sharing data for purposes of supporting productivity, efficiency, and decision-making. According to Wang et al. (2020), data dissemination involves managing an organization's data to increase its meaningfulness for decision-making by making it available to the intended users. To make the created and collected data meaningful during monitoring and evaluation, it must be ingested, stored, organized, and maintained well within an organization's files in a way that it can be retrieved when needed for use (Kioko, 2022).

### *Performance*

The concept of performance implies the ability of any undertaking carried out either individually or collaboratively to achieve a particular goal or key performance indicator (Peenstra & Silvius, 2018). Performance depicts the ability of a group or project achieve the desired goals in line with the key performance indicators (Murphy, 2020). It can be applied to various contexts, including individuals, teams, organizations, systems, and processes. Self-help groups have predetermined goals that they must achieve. The achievement is measured against key performance indicators that define their success (Murphy, 2020). Hence, self-help groups can only be considered to succeed if they accomplish or successfully execute their tasks, activities, or functions with a particular level of effectiveness and efficiency.

## EMPIRICAL REVIEW

### M&E Data Dissemination and performance of self-help groups

Deepa et al. (2022) explored the potential of blockchain technology in addressing challenges associated with big data dissemination. The authors conducted a critical review on big data, focusing on up-to-date approaches, opportunities, and future directions. The paper highlights the growing interest in big data and the challenges it faces, such as security, privacy, and efficient management. Based on the study findings, there is need for organizations focusing on aspects such as secure data acquisition, storage, analytics, and privacy preservation in the course of data management. Overall, the article provides a valuable overview of the potential benefits of integrating blockchain technology with big data management, highlighting both current approaches and promising future directions for research and development. Despite the study not contextualized to self-help groups in Nairobi City County, it provides crucial dynamics of data management including enhanced data security, improved data traceability, and fostering trust in data-driven processes that the self-help groups could emulate.

The article by Tenopir et al. (2020) explored the practices and perceptions of scientists worldwide regarding data sharing, management, use, and reuse. The study investigates how researchers handle and share their data, examining the challenges and benefits associated with these practices. The research provides insights into the global landscape of data-related behaviors among scientists, shedding light on the current state of data sharing in the scientific community. The researchers used the Usability and Assessment Working Group of Data ONE, an NSF-funded environmental cyberinfrastructure project. data collection involved distributing a survey to a multinational and multidisciplinary sample of scientific researchers in a two-wave approach in 2017–2018. The study findings revealed that lack of access to data in real-time was an impediment to the progress of science, and such access was caused by poor data management, particularly data sharing and data reuse.

Sahal et al. (2020) studied the application of big data and stream processing platforms to meet the requirements of Industry 4.0, specifically in the context of predictive maintenance. Concerning data management, the study explored the use of new technologies in addressing the needs of Industry 4.0 for efficient and timely predictive maintenance. Sahal et al. (2020) delved into the mapping of requirements for a predictive maintenance use case, highlighting the role of big data and stream processing platforms in enhancing manufacturing systems within the framework of Industry 4.0. The study elucidated the centrality of effective data management to support informed decision processes.

## RESEARCH METHODOLOGY

A cross-sectional research design was used for this study because it focused on explaining the ‘what’ behind a given phenomenon using a survey strategy (Turner, 2020). The study targeted 178 self-help groups operating in Nairobi City County, Kenya. The unit of observation consisted of consists of either coordinators or chairpersons in charge in each group. These individuals were considered as representatives with valuable insights into the technical aspects of the self-help groups since each is unique and has a different organizational structure. A sample of 124 was drawn from the population of 178 using Yamane’s 1961 formula. Both stratified and purposeful sampling were used. The techniques allowed the researcher to select and engage the participants based on their knowledge and experience of the self-help groups. The study used closed-ended questionnaires to collect quantitative data and semi-structured interviews for qualitative data. Statistical Package for Social Sciences (SPSS) was used for analysis. Descriptive and inferential analysis were conducted. Thematic analysis was used to analyze the qualitative data.

## RESEARCH FINDINGS, ANALYSIS & DISCUSSION

The study distributed 124, where 103 were returned with a response rate of 83.1% which was sufficient to permit proceeding to data analysis and reporting of the findings.

### Descriptive Statistics

Respondents were requested to give their opinion on how they agreed with statements that measure the study variables. A 5-point Likert scale was used where 1= Strongly Disagreed, 2 =Disagreed, 3 =Neutral, 4= Agreed, 5= Strongly agreed. The study used measure of central tendency i.e. frequency, mean and standard deviation to describe the patterns of responses. The descriptives are as follows based on the study variables.

### M&E Data Dissemination

The study aimed to analyze the effect of M&E data dissemination on the performance of self-help groups in Nairobi City County. The respondents indicated the level of agreement with the provided statements depicting M&E data dissemination in self-help groups. Table I provides a detailed analysis of the findings.

**Table I: Descriptive Analysis on M&E data dissemination**

Statement	Mean	Std. Dev.
The procedures for data sharing in the self-help group are clear and well-defined.	4.1165	.71813
There are established protocols for verifying and validating information about membership, use of finances, and loan amounts.	3.8388	.62501
Data gathered and disseminated to the stakeholders is accurate and reliable for informing decision-making before disseminated.	4.0874	.67311
The self-help group has ensured effective security measures to ensure records are not interfered and data is safe and secure during dissemination.	3.9777	.73684
The leadership regularly updates the data sharing practices to comply with the data protection laws and regulations.	3.6680	.78293
Members have a seamless access to and retrieval of the relevant data when needed for decision-making.	3.7359	.71467
Aggregate score	3.904	0.7084

The study confirmed that there are procedures for data sharing in most self-help groups, which are clear and well-written ( $M = 4.1165$ ;  $SD = 0.7181$ ) and established protocols for verifying and validating information about membership, use of finances, and loan amounts ( $M = 3.8388$ ;  $SD = 0.62501$ ). Based on the study findings, most self-help groups gathered and disseminated data exhibits accuracy and reliability for informing decision-making ( $M = 4.0874$ ;  $SD = 0.67311$ ). Descriptive analysis further revealed that most self-help groups have ensured effective security measures to ensure records are not interfered and data is safe and secure during dissemination ( $M = 3.9777$ ;  $SD = 0.73684$ ). Leadership teams engage in regularly updating the practices for data sharing to ensure compliance with the data protection laws and regulations  $M = 3.6680$ ;  $SD = 0.78293$ ). Most self-help groups' seamless access to and retrieval of the relevant data when needed for decision-making was evidenced by a mean of 3.7357 (agree) and a standard deviation of 0.71467 that indicated that the responses were closely clustered around the mean. The findings reflect the assertion by Murphy (2020) that data dissemination facilitates rapid decision-making and enables individuals and teams to understand procedures and practices necessary to elicit performance.

### *Performance of Self-help groups*

The study aimed to analyze the participants' rating of the performance level of self-help groups in Nairobi City County. Measuring performance began by analyzing the number of years a self-help group has been in operation. The results indicate that most of the self-help groups have been in operation for 10 years (19.4%) followed by those that have been operating for 7, 8, and 9 years, which tied at 8.7%. The data shows that most of the self-help groups have operated for a long period, making them a suitable sample for this study. The results also show that 56.3% (n = 58) of the respondents had experienced major setbacks while 43.7% (n = 45) had not. The data shows that some self-help groups are grappling with performance setbacks, consistent with the observation by Kamala and Jyothi (2018). Additionally, it indicates that the findings presented in this research originate from respondents who had experienced setbacks and those who have not.

**Table II: provides a detailed analysis of the findings.**

Statement	Mean	Std. Dev.
The self-help group membership has been increasing over time.	4.0680	.83151
Members that join the self-help group are retained.	4.1359	.68669
Our loaning processes allow members to access loans conveniently.	3.8524	.71013
Loans given out enable members to generate income and are returned in time and the interest paid promptly.	3.8058	.70096
The savings amounts have been increasing over time.	4.3204	.68904
The self-help group has enabled members to improve their standards of living.	3.9126	.72904
Aggregate score	4.016	0.7246

Majority of the respondents expressed that self-help groups are satisfying performance measures, indicating that most members are contented with the levels of performance realized by self-help groups. Most of the participants agreed that the membership has been rising over time (M = 4.0680; SD = 0.83151) and members who join the self-help groups are retained (M = 4.1359; SD = 0.68669). The respondents also agreed that loaning allow members to access loans conveniently (M = 3.8524; SD = 0.71013). The study further revealed that loans given out enable members to generate income and are returned in time and the interest paid promptly (M = 3.8058; SD = 0.70096). Most of the participants agreed that the savings amounts have been increasing over time (M = 4.3204; SD = 0.68904 and that the self-help group has enabled members to improve their standards of living (M = 3.9126; SD = 0.72904). The aggregate mean of 4.016 indicated that most participants agreed with the statements depicting performance of self-help groups. A standard deviation of 0.7246 indicated that the participants' responses were closely clustered around the mean, implying that most of the participant agreed that their self-help groups are achieving performance prospects. However, research reports by Bullen and Sokheang (2015) and Kioko (2022) revealed that the number of CARE and Oxfam self-help groups that succeed in demonstrating performance through membership retention and savings levels is low.

### **Correlation Analysis**

From the findings, M&E data dissemination demonstrated a strong positive correlation with performance of self-help groups ( $r = 0.692$ ;  $p = 0.00$ ). The result indicate that effective M&E data dissemination is associated with improved performance of self-help groups in Nairobi City County. Past research, including Deepa et al. (2022) and Sahal et al. (2020) also ascertained that M&E data dissemination was associated with higher performance of levels of various organizations in different contexts.

**Table III: Correlation Coefficients**

		M&E Data dissemination
Performance of self-help groups	Pearson Correlation	.692**
	Sig. (2-tailed)	.000
	N	103

**Regression Analysis**

The association between the independent variable (M&E Data dissemination) and the dependent variable (performance of self-help groups) was examined using multivariate regression analysis. The coefficient of the variable 'M&E data dissemination' is 0.281 ( $p = 0.031$ ;  $p < 0.05$ ), suggesting that M&E data dissemination has a significant relationship with the performance of self-help groups in Nairobi City County. The result implies that implementing effective Data dissemination has a significant effect on the performance of self-help groups in Nairobi City County. Similar to the study's findings, existing literature recognizes that data dissemination informs improved performance of organizations (Deepa et al., 2022; Sahal et al. 2020; Tenopir et al., 2020). Although most of these studies were conducted in contexts whose contextual dynamics exhibit dissimilarity to Kenya, getting similar findings indicates the universality of the applicability of the M&E data dissemination. Moreover, the data management theory recognizes the potential role of data dissemination in informing operation processes, without which activities may not produce the intended benefits.

**Table IV: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.111	.271		.410	.682
1 M&E Data dissemination	.281	.128	.290	2.193	.031

The regression model was as follows:

$$Y = .111 + .281X_1 \dots\dots\dots(i)$$

**Thematic Analysis****Active Participation**

The study confirmed that active participation is key in the running of self-help groups. P2 said that it is easy to engage the current membership of seven in all decisions, particularly those involving assessing members' business growth and funds. Involving members in all decision-making endeavors eliminates the likelihood of conflicts occurring in the group. We ensure each member is satisfied with what we decide and the valuations we make. Sometimes we allow time to think or redo a work of accounting for transactions that have occurred over time. No conflict has occurred during the past several years (P3).

However, incidences of some executives acting without member involvement were evident. The study revealed that *some executives may act on their own by making choices that do not satisfy other members' needs* (P4). The chairman I replaced took about Ksh. 46,000 we had collected from the treasurer '*na hajawahi onekana*' (never to be seen again). The treasurer ought to inform us before giving away the cash, as it caused a serious loss (P4).

The consequence of not involving members in making crucial decisions is mostly the failure of self-help groups. P1 narrated that the membership oscillations that characterize their self-help group result from a lack of participation in the group's management of operations.

### CONCLUSION OF THE STUDY

The study intended to find out the influence of M&E data dissemination on performance of self-help groups in Nairobi City County, Kenya. The emphasis was based on enabling seamless access and sharing of information. The study found that there is a significant influence of M&E data dissemination on performance of self-help groups. Therefore, it is concluded that effective M&E data dissemination has a significant positive impact performance of self-help groups in Nairobi City County.

### RECOMMENDATION

The study findings confirmed that M&E data dissemination significantly affects the performance of self-help groups in Nairobi City County, Kenya. In relation to this finding, self-help groups should streamline procedures for sharing data regarding monitoring and evaluation of self-help groups. Leaders should revise and review the procedures for verifying information about membership, utilization of finances, and loan amounts to enable accurate and valid monitoring and evaluation of self-help groups' activities. The study revealed that most participants rated leaders' effort to regularly update practices for data sharing in compliance with laws and regulations. It is imperative that these practices are reviewed regularly to prevent breach of laws and legal actions.

### REFERENCES

- Abdirahman, A. M. (2022). *Participatory Monitoring and Evaluation and Performance of Community Based IDP Projects in AFGOYE, Lower Shebelle Somalia* (Doctoral dissertation, University of Nairobi).
- Bargoria, K. (2018). Challenges experienced by women in Self-help Group in Tinderet Sub-County, Nandi County Kenya, *IOSR Journal of Humanities And Social Science (IOSR-JHSS)*, 23(06), 2018, 50-58.
- Bullen, D., & Sokheang, H. (2019). *Identification and effectiveness of self-help groups in Cambodia*. Penang, Malaysia: CGIAR Research Program on Aquatic Agricultural Systems. Program Report: AAS-2015-11.
- Bunning, K., Gona, J. K., Newton, C. R., Andrews, F., Blazey, C., Ruddock, H., ... & Hartley, S. (2020). Empowering self-help groups for caregivers of children with disabilities in Kilifi, Kenya: Impacts and their underlying mechanisms. *PLoS One*, 15(3), e0229851.
- CARE International (2019). *CARE Global VSLA Reach 2018*. CARE.
- Deepa, N., Pham, Q. V., Nguyen, D. C., Bhattacharya, S., Prabadevi, B., Gadekallu, T. R., ... & Pathirana, P. N. (2022). A survey on block chain for big data: Approaches, opportunities, and future directions. *Future Generation Computer Systems*, 131, 209-226.
- Jackson, E. T. (2013). Interrogating the theory of change: evaluating impact investing where it matters most. *Journal of Sustainable Finance & Investment*, 3(2), 95-110.
- Jamaal, N. (2018). Effects of participatory monitoring and evaluation on project performance at Kenya Marine and Fisheries Research Institute, Mombasa, Kenya. *International Academic Journal of Information Sciences and Project Management*, 3(1), 1-15.
- Jamwal, A., Agrawal, R., Sharma, M., Kumar, V., & Kumar, S. (2021). Developing A performance framework for Industry 4.0. *Procedia CIRP*, 98, 430-435.
- Kamala, S., & Jyothi, U. (2018). Dynamics and performance of women self-help groups in Telangana state. *International Journal of Educational Science and Research*, 8(3), 1-6.
- Kioko, M. (2022). *Effect of self-help group practices on poverty levels of women in Machakos County* (Doctoral dissertation, Strathmore University).



- Murphy, K. R. (2020). Performance evaluation will not die, but it should. *Human Resource Management Journal*, 30(1), 13-31.
- Oware, P. M. (2020). Informal social protection actors: A focus on women self-help groups in Kenya. *International Social Work*, 63(5), 612-625.
- Peenstra, R. T., & Silviu, A. J. (2018). Considering performance in projects: exploring the perspective of suppliers. *International Journal of Information Systems and Project Management*, 6(2), 5-22.
- Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of performance: in search of conceptual origins. *Performance science*, 14(3), 681-695.
- Sahal, R., Breslin, J.G., Ali, M.I. (2020) Big data and stream processing platforms for Industry 4.0 requirements mapping for a predictive maintenance use case. *Journal of manufacturing systems*. 54, 138-151.
- Speer, J. (2012). Participatory governance reform: a good strategy for increasing government responsiveness and improving public services? *World Development*, 40(12), 2379-2398.
- Tenopir, C., Rice, N. M., Allard, S., Baird, L., Borycz, J., Christian, L., ... & Sandusky, R. J. (2020). Data sharing, management, use, and reuse: Practices and perceptions of scientists worldwide. *PloS one*, 15(3), e0229003.
- Turner, J. R. (2020). Cross-sectional study. In *Encyclopedia of Behavioral Medicine* (pp. 576-577). Cham: Springer International Publishing.
- Wang, J., Yang, Y., Wang, T., Sherratt, R. S., & Zhang, J. (2020). Big data service architecture: a survey. *Journal of Internet Technology*, 21(2), 393-405.
- Were, P. O., & Kimaru-Muchai, S. W. (2021). Evaluation of Self-Help Groups in Promoting Women Socio-Economic Empowerment in Kibra Sub-County, Nairobi City County, Kenya. *Journal of Global Awareness*, 2(1), 6-17.