



**OPERATIONAL RISK MANAGEMENT AND PERFORMANCE OF
HUMANITARIAN ORGANIZATION PROJECTS IN KENYA, A CASE OF
TURKANA COUNTY**

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ABSTRACT

Purpose: The main objective of the study was to assess the influence of operational risk management on performance of humanitarian organization projects in Kenya. Specifically, the study sought to assess the effect of capacity building and evaluate the influence of incident monitoring on the performance of humanitarian organization projects in Kenya.

Methodology: The research utilized a descriptive correlation research design. The study targeted 189 humanitarian organizations with approximately 1,515 employees who have executed projects in Turkana County from 2021 to 2023 and they formed our target population.

Findings: The study's findings revealed that comprehensive capacity building in risk management is a critical factor in improving project outcomes. The integration of risk incident monitoring into daily operations was recognized as a critical factor impacting overall project performance.

Recommendations: It is recommended that Humanitarian organizations prioritize capacity-building initiatives by investing in regular training, workshops, and mentorship programs for staff. Humanitarian organizations should implement strong incident monitoring systems that leverage technology to track and report risks in real time. These systems should include mechanisms for collecting, analyzing, and disseminating data on emerging threats or operational challenges.

Keywords: *Operational risk management, Capacity building, incident monitoring, performance of humanitarian organization projects*

Background of the study

Operational Risk Management (ORM) in humanitarian organization projects is a critical facet of ensuring that aid and resources reach those most in need, despite the myriads of unpredictable challenges that can arise. The landscape of humanitarian organization projects is fraught with operational risks, including security concerns, logistical hurdles, and financial unpredictability. These risks, if not managed effectively, can severely impede the objectives of humanitarian organization projects, threatening the delivery of essential services and aid to vulnerable populations. Besiou and Van Wassenhove (2020) have underlined the broad spectrum of uncertainties and potential adverse events that can derail projects, emphasizing the need for a comprehensive approach to ORM.

The significance of ORM in humanitarian organization projects cannot be overstated, particularly given the unique environment in which these initiatives operate. Characterized by high levels of uncertainty, urgent needs, and constrained resources, the humanitarian sector demands robust risk management to navigate these challenges. Research has consistently shown a positive relationship between effective ORM and the successful execution of humanitarian missions. Oloruntoba and Gray (2006), as well as Jahre and Jensen (2010), have documented the pivotal role that ORM plays in enhancing the efficiency, effectiveness, and sustainability of humanitarian organization projects. These studies underscore the importance of ORM in not only mitigating risks but also in maximizing the impact of humanitarian aid.

Kenyan Perspective of Operational Risk Management

In Kenya, humanitarian organization projects are often implemented in regions that are prone to natural disasters, such as droughts and floods, or in areas affected by socio-political issues including refugee crises and internal displacement. The complexity of these environments necessitates robust ORM to ensure the successful delivery of aid and support. Kamau (2013) highlights the importance of understanding the local context and involving community stakeholders in the planning and execution of projects to mitigate operational risks. This participatory approach not only enhances the relevance and effectiveness of interventions but also contributes to building resilience within communities. One of the key aspects of operational risk management in Kenyan humanitarian organization projects is the emphasis on logistics and supply chain management. The geographic and infrastructural challenges in remote areas require innovative solutions to ensure the timely and secure delivery of supplies. Security risks are another critical consideration for humanitarian organization projects in Kenya, particularly in regions affected by terrorism and inter-communal conflicts. Operational risk management in this context involves rigorous security assessments and the implementation of safety protocols to protect personnel and beneficiaries. According to Agranoff & McGuire (2016), collaboration with local authorities and security agencies is essential for obtaining accurate security information and ensuring the safe execution of projects.

Statement of the Problem

Humanitarian organization projects are typically assessed based on their success in achieving set goals, including adherence to timelines. The One Laptop per Child (OLPC) initiative, launched in 2013, aimed to distribute laptops to enhance education in public primary schools but experienced significant delays. By mid-2018, only 19,000 out of the planned 25,000 schools had received laptops. This shortfall led to a shift in government strategy towards establishing computer labs, driven by the project's high costs, poor execution due to inadequate ICT skills in schools, and prioritization of basic learning materials (Sun-Connect, 2019). A critical issue in these projects is the complex coordination needed among various stakeholders, such as international donors, local governments, and community groups.

Problems like conflicting priorities among stakeholders, communication breakdowns, and bureaucratic delays often complicate project execution (Kovács & Spens, 2007). For example,

the OLPC project was hindered by infrastructure problems, including a lack of electricity in many schools, with only 2,037 out of 20,368 targeted schools connected to the national grid. This severely limited the effective use of the technology (Kalmey, 2015). The literature highlights the crucial role of effective Operational Risk Management (ORM) in improving humanitarian organization project outcomes by ensuring alignment with community needs and capabilities. Yet, there is a noticeable lack of focused research on ORM specific to humanitarian organization projects in Kenya. Bridging this research gap is essential for identifying and addressing unique operational risks, thus fostering more effective humanitarian interventions in areas like Turkana County.

Objectives of the study

The main objective of this study was to assess the influence of operational risk management on performance of humanitarian organization projects in Kenya.

Specific Objectives

- i. To assess the effect of capacity building on the performance of humanitarian organization projects in Kenya.
- ii. To evaluate the influence of incident monitoring on the performance of humanitarian organization projects in Kenya.

THEORETICAL REVIEW

The study was anchored on the Resource-Based View (RBV) Theory and High-Reliability Organization (HRO) Theory. The Resource-Based View Theory, originally articulated by Wernerfelt in 1984 and further developed by Barney in 1991, posits a firm-centric model where the basis for competitive advantage lies in the firm's possession of unique, valuable, rare, inimitable, and non-substitutable resources and capabilities (Wernerfelt, 1984; Barney, 1991). The application of RBV in various contexts, including humanitarian organization projects, illustrates its versatility and utility in strategic management. In the sphere of humanitarian organization projects, capacity building in risk management emerges as a pivotal strategic resource, aligning with the RBV's core premises. The nature of humanitarian efforts—often deployed in volatile, uncertain, complex, and ambiguous (VUCA) environments—demands a robust framework for anticipating, responding to, and adapting to myriad risks. Studies underscore the significance of risk management capacity as a unique resource that can significantly impact project performance. For instance, research conducted by Oloruntoba and Gray (2006) on disaster management and humanitarian logistics highlighted the critical role of risk management capabilities in enhancing response effectiveness and efficiency. Boin and McConnell (2007) emphasized the strategic value of learning and adaptability in managing crises, suggesting that organizations with developed capacities in these areas tend to perform better during and after crises.

High-reliability organization Theory represents a significant shift in how organizations approach the management of risk and uncertainty, particularly in environments where the stakes of failure are exceptionally high. Originating from studies on organizations that operate in complex, high-hazard domains—such as nuclear power plants, air traffic control, and aircraft carrier operations—HRO theory has since expanded its reach to include a wide array of sectors keen on enhancing their reliability and safety protocols (Roberts, 1990; Weick & Sutcliffe, 2011). At the heart of HRO theory lies the principle of mindfulness, which entails a collective preoccupation with the potential for failure, a reluctance to simplify interpretations, a sensitivity to operations, a commitment to resilience, and a deference to expertise (Weick & Sutcliffe, 2011). This mindful approach encourages organizations to remain vigilant and responsive to the slightest indications of anomalies, thereby enhancing their ability to anticipate and manage unexpected events. Applying HRO principles to humanitarian organization projects offers a compelling framework for improving the efficacy and reliability of interventions in crisis or

disaster situations. Humanitarian organization projects, by their very nature, operate within environments of significant uncertainty and unpredictability, where the consequences of failure can have dire implications for vulnerable populations. The theory links risk incident monitoring in humanitarianism organization projects.

LITERATURE REVIEW

This section examined the key concepts relevant to this study. The independent variables were the individual operational risk management: capacity building and risk incident monitoring. The dependent variable was the performance of humanitarian organization projects in Kenya in Turkana County. Figure 1 shows the conceptual framework.

Independent Variables

Dependent Variable

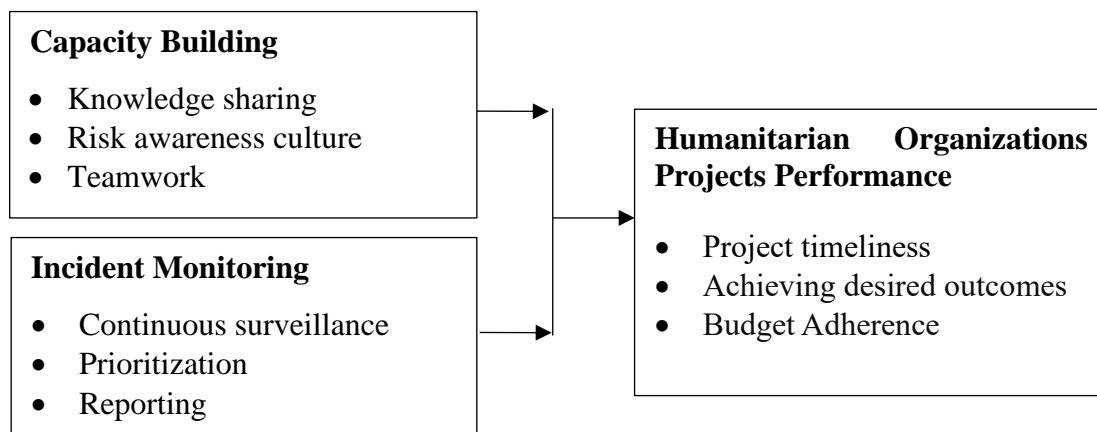


Figure 1: Conceptual Framework

Capacity Building

Capacity building plays a crucial role in enhancing project outcomes. Knowledge sharing among team members ensures timely access to relevant information and expertise, thereby potentially speeding up project timelines. A strong risk awareness culture within the team helps in identifying and mitigating risks early, which aids in completing planned activities without major disruptions. Additionally, fostering teamwork promotes collaboration and leverages diverse skills, enhancing the overall realization of desired outcomes in humanitarian initiatives.

Incident Monitoring

In incident management, continuous monitoring of incidents allows for swift responses to unexpected events, minimizing their impact on project timelines. Continuous surveillance helps in identifying emerging issues early, enabling proactive measures to be taken to ensure the completion of planned activities as scheduled. Clear communication and regular reporting throughout the project lifecycle facilitate stakeholder engagement and transparency, ultimately supporting the successful realization of desired outcomes in humanitarian efforts.

Humanitarian Organization Projects Performance

The dependent variable, Humanitarian organization Projects Performance, encompasses project timeliness, completion of planned activities, and realization of desired outcomes. Timely completion of projects ensures that aid or services reach beneficiaries when needed, while successfully finishing all planned activities is essential for achieving project objectives effectively. Ultimately, the success of humanitarian organization projects is measured by their ability to achieve desired outcomes and make a positive impact on the communities they serve, underscoring the importance of effective management across all identified variables.

EMPIRICAL LITERATURE REVIEW

Capacity building and the performance of humanitarian projects

The study by Otibine (2016), titled "*Effects of Capacity Development Strategies on the Performance of the Department for International Development in Kenya*," aimed to shed light on the impact of various capacity-building measures on the performance metrics of DFID in Kenya. The research objectives were twofold: first, to catalog the specific strategies DFID employs in its capacity-building efforts, and second, to evaluate how these strategies affect the organization's effectiveness. Employing a case study design, Otibine (2016) was able to gain an in-depth perspective on DFID's operations, allowing for a nuanced analysis of its strategies and outcomes. The investigation revealed that DFID's approach to capacity development is multifaceted, focusing on areas such as financial management proficiency, human resources growth, and the leverage of technology and communication systems. A notable emphasis was placed on the continuous modernization of operational systems. The findings of Otibine's (2016) study pointed to the significant positive effects of these capacity development strategies on DFID's operational performance. Key benefits included the enhancement of financial operations, such as fund disbursement to beneficiaries and financial planning, and the bolstering of program management capabilities. Additionally, the strategies were found to improve DFID's internal and external relational dynamics, thereby supporting a more effective collaboration with stakeholders and a healthier organizational culture within DFID in Kenya.

In their research, Kanyi and Rosemary (2023) embarked on an insightful investigation titled "*Capacity Building and Performance of Donor-Funded Projects in Nairobi City County, Kenya*." This study was aimed at understanding the impact of capacity building on the success rates of projects receiving donor funding within Nairobi County. Specifically, the research delved into the influence of technical, managerial, and governance competencies on the performance outcomes of these projects. Employing a descriptive survey methodology, the study focused on a target demographic of 55 donor-funded projects, involving 311 project personnel in total. Through a carefully selected purposive random sampling technique, the researchers engaged with 94 participants, representing approximately 30% of the initial target group. The analytical approach combined both descriptive and inferential statistical methods to interpret the collected data. Findings from the study underscored a significant positive correlation between the competencies in technical, managerial, and governance aspects and the successful execution of donor-funded initiatives in Nairobi County. One of the critical insights from the research was the identification of existing staff training programs across the projects.

Risk incident monitoring and the performance of humanitarian organization projects

In their 2013 study, "*The Influence of Monitoring & Evaluation Tools and Techniques on Project Delivery Capability (PDC): A Case of HIV/AIDS Interventions in Nairobi and Nyanza Regions, Kenya*," Khatiala and Matasyoh (2013) explored the impact of various Monitoring and Evaluation (M&E) tools on the effectiveness of HIV/AIDS project deliveries in Kenya. The study, which involved a descriptive methodology with 40 participants, assessed the contribution of tools such as Earned Value Management, Variance Analysis, Performance Reviews, and Project Management Software. Findings showed a notable adoption of these tools, with a significant percentage of respondents advocating for their expanded use to enhance project delivery capabilities. Moreover, the study suggested increasing training on M&E processes, enforcing existing structures, documenting lessons learned, and customizing M&E solutions to the local context. It also recommended further research on the application of these tools in non-health sectors and across different project phases.

Risk incident monitoring constitutes a foundational pillar in the management and successful execution of humanitarian organization projects. At its core, this process involves a systematic approach to identifying, assessing, and managing potential risks that could impede the

achievement of project objectives. The unique and often volatile environments in which humanitarian efforts are deployed underscore the critical nature of effective risk management. The essence of risk incident monitoring lies in its proactive stance towards potential threats, ensuring that project managers and stakeholders are not merely reacting to adverse events, but are prepared for them. This preparation is crucial in humanitarian contexts, where the stakes are high, and the impact of failure can be severe. According to Boin and McConnell (2007), effective risk management in such settings requires an understanding of the complex interplay between different types of risks, including logistical, financial, security, and reputational risks.

The effectiveness of humanitarian responses to major disasters can be significantly influenced by the organizational structures of the agencies involved. Two illustrative examples are the responses to the 2010 Haiti earthquake and the 2004 Indian Ocean tsunami. These cases highlight how different structural approaches can impact the delivery and efficiency of aid. In the case of the 2010 Haiti earthquake, the disaster created an extraordinarily chaotic and challenging environment for aid delivery. Jensen (2010) notes that organizations with decentralized and flexible structures were more effective in this setting. Such structures allowed these organizations to adapt quickly to the rapidly changing conditions on the ground. Decentralization facilitated faster decision-making at local levels, bypassing the often slow and bureaucratic processes that can hamper immediate relief efforts. This agility proved crucial in addressing the urgent needs of the affected populations, from medical care to shelter and food distribution.

RESEARCH METHODOLOGY

The research utilized a descriptive correlation research design. It uses surveys so it gathers data through questionnaires and interviews. This choice was driven by the intention to collect and evaluate primary data to examine the nature of associations between independent and dependent variables. According to the NGOs Co-ordination Board (2023) there were 189 humanitarian organizations with approximately 1,515 employees who have executed projects in Turkana County from 2021 to 2023 and they formed our target population. From the 189 humanitarian organizations that executed humanitarian organization projects from 2021 to 2023 in Turkana County, according to the NGOs Co-ordination Board (2023), 10% (19 organizations) were selected to form the sample size. Within each organization, 2 field officers, 2 project officers, 1 finance officer, and 2 monitoring and evaluation officers were included in the sample. The total sample size was therefore 133. A semi-structured questionnaire was used to collect primary data.

RESEARCH FINDINGS

The study distributed 133 employees from 19 organizations implementing humanitarian projects in Turkana County. A total of 100 questionnaires were received, representing a 75% response rate which was considered adequate to represent the population of the study as suggested by Kothari (2024) and Saunders (2019).

Descriptive Statistics

For the descriptive statistics, the analysis incorporated the mean as the measure of central tendency. Additionally, percentages, standard deviation, and frequencies were utilized to offer concise summaries of the study findings. The scores of 'strongly disagree' and 'disagree' have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.4. The score of 'neutral' has been taken to represent a statement that is neither agreed nor disagreed upon, equivalent to a mean score of 2.5 to 3.4. The score of 'agree' and 'strongly agree' have been taken to represent a statement that is agreed upon equivalent to a mean score of 3.5 to 5.

Capacity Building

The first objective of this study was to assess the effect of capacity building on the performance of humanitarian organization projects in Kenya. The respondents were asked to indicate their level of agreement with key statements that were formulated from the sub-constructs of capacity building which were knowledge sharing, risk awareness culture, and teamwork. The findings are shown in Table 1.

Table 1: Descriptive Statistics on Capacity Building

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std Dev
Comprehensive risk capacity building is a major factor influencing performance of the humanitarian projects.	3%	3%	4%	43%	47%	4.28	0.91
Structured mechanisms for disseminating best practices on risk management enables project teams to handle crisis promptly.	1%	2%	2%	37%	58%	4.49	0.73
A strong organizational focus on risk management capacity building fosters a culture of proactive risk management among project teams.	1%	2%	2%	39%	56%	4.47	0.73
A common understanding of risk management increases teamwork among project team members.	1%	2%	8%	37%	52%	4.37	0.80
Comprehensive risk management capacity building leads to more timely responses to unforeseen crises in humanitarian projects.	1%	1%	3%	43%	52%	4.44	0.70
Strengthening the capabilities of project teams to handle risks impacts on project performance.	1%	0%	11%	42%	46%	4.32	0.75
Project teams with the capacity to proactively address financial risks related to project budgets leads to budget adherence.	2%	0%	12%	43%	43%	4.25	0.82
Overall						4.37	0.56

Key: SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA= Strongly Agree

The overall mean score of 4.37, with a standard deviation of 0.56, indicates a strong consensus among participants on the positive impact of capacity building on project performance, with minimal variation in responses. Comprehensive risk capacity building emerged as a key factor influencing the performance of humanitarian projects, reflected by a mean of 4.28 and a standard deviation of 0.91. This shows that participants widely recognize the importance of enhancing risk-related skills in improving project outcomes, although the responses varied somewhat on this statement. Structured mechanisms for disseminating best practices on risk management were also highly valued, with a mean score of 4.49 and a standard deviation of 0.73. Participants strongly agreed that having formal systems in place for sharing best practices enables project teams to handle crises promptly, underscoring the critical role of knowledge sharing and structured communication in improving crisis response.

In addition, a strong organizational focus on risk management capacity building fosters a proactive risk management culture among project teams, as shown by a mean of 4.47 and a standard deviation of 0.73. This reflects the belief that prioritizing risk management skills within organizations encourages teams to take preemptive action, preventing or mitigating potential risks before they escalate. A common understanding of risk management was also seen as essential in increasing teamwork among project members, with a mean score of 4.37 and a standard deviation of 0.80. This highlights that shared risk management knowledge promotes collaboration and unity, which are crucial for the smooth execution of humanitarian projects.

Moreover, comprehensive risk management capacity building was perceived to lead to more timely responses to unforeseen crises, as demonstrated by a mean score of 4.44 and a standard deviation of 0.70. Participants agreed that investing in the right training equips teams to respond more effectively to unexpected challenges. Strengthening the capabilities of project teams to handle risks further enhances project performance, as supported by a mean of 4.32 and a standard deviation of 0.75. This reinforces the view that bolstering team capacities in risk management has a direct positive impact on how well projects are executed.

However, these findings align with but also face challenges highlighted by Cvetković (2021) in the study "*Capacity Development of Local Self-Governments for Disaster Risk Management.*" Cvetković notes that while capacity-building initiatives are essential, their success is contingent upon various factors such as the existing institutional framework, resource availability, and the specific needs of the local context. This suggests that while capacity building is widely recognized as beneficial, its effectiveness is not guaranteed across all settings. The study underscores that a one-size-fits-all approach to capacity building may not address the nuanced needs of different organizations, particularly in contexts where institutional or resource constraints exist.

Finally, the capacity to proactively address financial risks related to project budgets was rated with a mean score of 4.25 and a standard deviation of 0.82. Participants expressed a strong belief that building financial risk management skills aids teams in adhering to project budgets, although responses were slightly more varied for this statement. The findings of this study are consistent with the work of Kanyi and Rosemary (2023), who found a significant positive correlation between competencies in technical, managerial, and governance aspects and the successful execution of donor-funded initiatives in Nairobi County. Both studies emphasize that enhancing organizational capacity, particularly in risk management and decision-making, is vital for the success of projects.

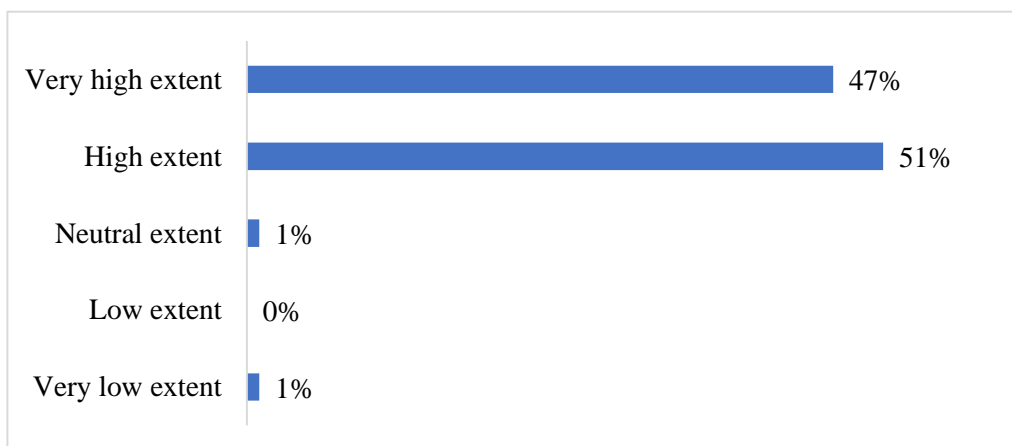


Figure 1: Extent to which Capacity Building contributes to project performance

The results presented in Figure 1 show that the majority of participants agreed that capacity building significantly contributes to project performance. Specifically, 51% indicated that it contributed to a high extent, while another 47% felt it contributed to a very high extent. Only 1% was neutral, and minimal responses indicated a low (0%) or very low extent (1%).

Incident Monitoring

The second objective of this study was to assess the effect of Incident Monitoring on the performance of humanitarian organization projects in Kenya. The data collected from various statements provided valuable insights into how Incident Monitoring influences project performance. The findings are presented in Table 2 below.

Table 2: Descriptive Statistics on Incident Monitoring

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std Dev
The integration of risk incident monitoring into the daily operations influences overall project performance.	0%	2%	5%	57%	36%	4.27	0.65
Continuous surveillance improves the detection of risk incidents.	2%	0%	0%	47%	51%	4.45	0.70
Regular monitoring of risk incidents leads to timely identification of emerging risks that should be prioritized.	1%	1%	1%	45%	52%	4.46	0.67
Structured risk reporting provides visibility of risk incidents.	1%	1%	2%	50%	46%	4.39	0.68
Timely identification of incidents allows for proactive adjustments to project schedules.	1%	1%	7%	41%	50%	4.38	0.75
Incident monitoring ensures that deviations from project plans are promptly addressed.	2%	1%	2%	41%	54%	4.44	0.77
Timely management of risk incidents can mitigate unforeseen costs	1%	3%	4%	38%	54%	4.41	0.79
Overall						4.40	0.56

Key: SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA= Strongly Agree

The overall mean score of 4.40, with a standard deviation of 0.56, indicates a strong consensus among respondents that incident monitoring has a significant positive impact on the performance of humanitarian projects, with minimal variability in their responses. The integration of risk incident monitoring into daily operations was identified as a key factor influencing overall project performance, with a mean score of 4.27 and a standard deviation of 0.65. This finding suggests that participants agreed on the importance of embedding risk monitoring into everyday project operations to enhance overall performance, though there was some variation in the strength of this agreement. Continuous surveillance of risk incidents was rated even higher, with a mean score of 4.45 and a standard deviation of 0.70, reflecting a strong belief that ongoing monitoring improves the detection of risk incidents, allowing organizations to address potential threats more effectively.

Regular monitoring of risk incidents, which leads to the timely identification of emerging risks, was given a mean score of 4.46 with a standard deviation of 0.67, emphasizing the crucial role of consistent incident tracking in prioritizing new risks before they escalate. Structured risk reporting, which provides visibility into risk incidents, was also seen as important, scoring a mean of 4.39 with a standard deviation of 0.68. This reflects participants' views that having formal reporting mechanisms ensure that risk incidents are clearly communicated and can be acted upon swiftly. The timely identification of incidents, allowing for proactive adjustments to project schedules, was another key factor highlighted by participants, with a mean score of 4.38 and a standard deviation of 0.75. This finding shows that the ability to detect incidents early enables teams to make necessary adjustments, ensuring that projects stay on track. Additionally, incident monitoring was found to be essential in addressing deviations from project plans promptly, as indicated by a mean score of 4.44 and a standard deviation of 0.77. This suggests that regular monitoring helps prevent significant disruptions by addressing problems as soon as they arise.

Timely management of risk incidents was also noted for its role in mitigating unforeseen costs, receiving a mean score of 4.41 with a standard deviation of 0.79. This emphasizes the financial benefits of effective incident monitoring, which helps organizations avoid unexpected expenses and maintain financial stability throughout the project cycle. The findings of this study align with the research by Khatiala and Matasyoh (2013), which demonstrated a significant adoption of Monitoring & Evaluation Tools and Techniques, with a large portion of respondents advocating for the expanded use of these tools to enhance project delivery capabilities. Both studies highlight the critical role of effective monitoring and incident management in improving project outcomes, particularly in humanitarian contexts where risks and uncertainties are more pronounced.

However, these findings must also be viewed in light of the challenges highlighted by Safarpour (2020) in the study "*Challenges and Barriers of Humanitarian Aid Management in 2017 Kermanshah Earthquake.*" Safarpour emphasizes that while incident monitoring is critical, its success is often constrained by factors such as lack of coordination among stakeholders, communication barriers, and cultural challenges in the field. The study demonstrated that despite the potential of monitoring practices, humanitarian contexts marked by complex logistical and organizational issues may limit their effectiveness. For example, in the aftermath of the Kermanshah Earthquake, the lack of integration among aid agencies and misaligned priorities hindered the timely and effective implementation of monitoring systems. These barriers suggest that incident monitoring alone cannot guarantee improved project outcomes unless foundational challenges are addressed.

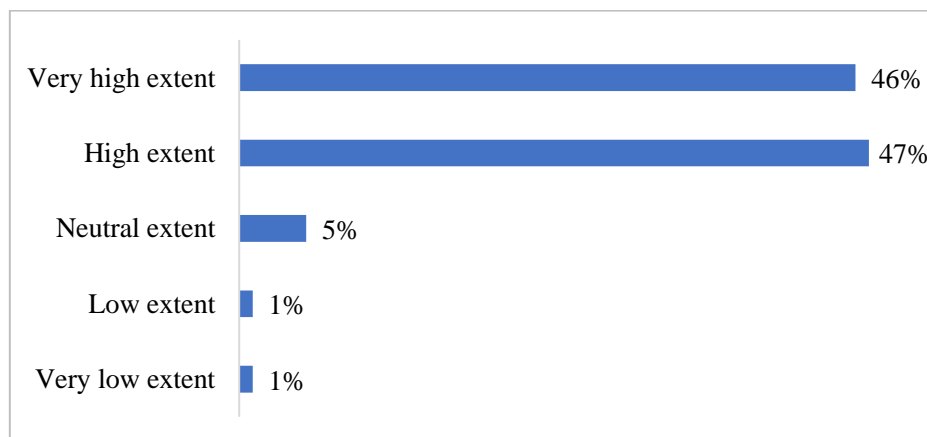


Figure 2: Extent to which Incident monitoring contributes to project performance

As shown in Figure 2, majority of participants agreed that incident monitoring significantly contributes to project performance. Specifically, 47% indicated it contributed to a high extent, while 46% believed it contributed to a very high extent. A smaller portion of respondents remained neutral (5%), with 1% indicating a low extent and another 1% reporting a very low extent.

Performance of humanitarian projects

This section looked at the performance of humanitarian projects in Turkana County, Kenya and the findings are presented in Table 3 below.

Table 3: Descriptive Statistics on project performance

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std Dev
All the projects in the last 3 years were completed within schedule	1%	1%	1%	45%	52%	4.46	0.73
The organization has ensured that all project beneficiaries get their entitlements within the planned timelines	1%	1%	2%	50%	46%	4.39	0.82
In the past 3 years, beneficiaries have consistently been receiving their entitlements as per the proposals.	0%	1%	8%	40%	51%	4.41	0.68
All planned project activities have been implemented in the last 3 years.	1%	1%	4%	45%	49%	4.40	0.71
Within the last 3 years, stakeholders have shown satisfaction with project outcomes	2%	1%	5%	43%	49%	4.36	0.83
All the projects within the last 3 years did not have cost overruns	1%	0%	5%	52%	42%	4.34	0.65
In the last 3 years, all project expenses were incurred and paid within the project life cycle.	1%	0%	11%	42%	46%	4.32	0.73
Overall						4.38	0.50

Key: SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA= Strongly Agree

The performance of humanitarian projects in Turkana County, Kenya over the past three years demonstrates positive outcomes, as reflected in the analysis of key performance indicators. To begin with, respondents strongly agreed that all projects were completed within the planned schedule, as evidenced by a high mean score of 4.46 and a relatively low standard deviation of 0.73. This consistency in responses suggests a general satisfaction with the timeliness of project completion. Furthermore, the organization appears to have ensured that project beneficiaries received their entitlements within the planned timelines, with a mean score of 4.39. Although the slightly higher standard deviation of 0.82 indicates some variability in opinions, the overall agreement remains strong, pointing to an efficient distribution system. Similarly, the implementation of planned project activities has been consistent, with respondents giving this aspect a mean score of 4.41 and a standard deviation of 0.68, further underscoring the projects' overall success in delivering their intended outcomes.

Stakeholder satisfaction with project outcomes also scored highly, with a mean of 4.36. However, the standard deviation of 0.83 indicates some divergence in perceptions, likely due

to differing experiences with specific projects. Despite this, the overall sentiment remains positive, reflecting broad contentment with the projects' impacts. In terms of financial management, respondents largely agreed that projects did not experience cost overruns, with a mean score of 4.34 and a low standard deviation of 0.65, indicating that most projects were completed within their allocated budgets. Additionally, the statement that all project expenses were incurred and paid within the project life cycle scored a mean of 4.32, with a standard deviation of 0.73, again showing strong agreement with a slight degree of variation. Overall, the average performance of the humanitarian projects across all the evaluated indicators stands at a mean of 4.38, with a standard deviation of 0.50. This highlights a generally high level of satisfaction with project outcomes, timely execution, and financial management, with minimal variation in responses. The data points to effective project planning, implementation, and stakeholder satisfaction across the board, marking the last three years as a period of notable success for humanitarian initiatives in Turkana County, Kenya.

Secondary Data on Project Performance

The *Kenya RAPID (Resilient Arid Lands Partnership for Integrated Development) program*, implemented between September 2015 and September 2020, was designed to address critical issues surrounding water security, sanitation, and livelihood resilience in Kenya's arid and semi-arid counties, including Garissa, Isiolo, Marsabit, Turkana, and Wajir. With a budget of \$35.5 million and a target of 450,000 beneficiaries, the program sought to improve living conditions in these drought-prone regions by focusing on three key strategic objectives (SOs). The first strategic objective, SO 1, aimed to establish a responsive and accountable governance framework at the county level, ensuring the sustainable provision of water and pasture. This involved supporting county governments in managing water resources efficiently and involving local communities in governance through the creation of water user associations (WRUAs).

The second strategic objective, SO 2, focused on developing and operationalizing replicable and scalable business models for sustainable water, sanitation, and hygiene (WASH) services, as well as livestock service delivery. Kenya RAPID engaged the private sector to support these efforts, including partnerships with companies like Safaricom, which introduced mobile water payment systems like *Maji Milele* to increase transparency and accountability in water management. Additionally, innovative technologies, such as solar-powered pumps and real-time water monitoring systems, were integrated to ensure the long-term sustainability of WASH services. This approach also improved livestock management by creating market linkages and providing veterinary support to help communities better manage their livestock and adapt to climate challenges.

The third strategic objective, SO 3, worked to increase communities' access to sustainable WASH services while improving rangeland management. The program rehabilitated and constructed over 140 water points, including boreholes and water pans, providing both people and livestock with access to safe water. In tandem, hygiene campaigns and the Community-Led Total Sanitation (CLTS) approach were implemented to improve sanitation and reduce waterborne diseases. By the end of the program in 2020, Kenya RAPID had successfully met its objectives, delivering tangible improvements in water access, sanitation, and resilience in the five target counties, setting a strong example for humanitarian projects in drought-prone areas.

Inferential Analysis Results

Correlation analysis

Correlation analysis is employed to assess the strength and direction of the relationship between operational risk management (including capacity building and incident monitoring) and the

performance of humanitarian organization projects in Kenya, specifically in Turkana County. The results are displayed in Table 4.

Table 4: Correlation Analysis -Capacity Building

		Incident Monitoring	Capacity Building
Project Performance	Pearson Correlation	.878**	.702**
	Sig. (2-tailed)	.000	.000
	N	100	100

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

The Pearson correlation coefficient of 0.702 indicates that as capacity building efforts increase, project performance also tends to improve significantly. This relationship is statistically significant, as evidenced by the p-value of 0.000, which is well below the conventional threshold of 0.01 for significance. This strong correlation suggests that initiatives aimed at enhancing the skills, knowledge, and capabilities of project teams within humanitarian organizations have a substantial impact on the overall performance of projects. It implies that effective capacity building may lead to better resource utilization, improved decision-making, and enhanced project outcomes. With a sample size of 100, the correlation is robust, reinforcing the validity of these findings. These results highlight the importance of investing in capacity-building programs as a strategic approach to improving project performance in humanitarian efforts, particularly in contexts such as Turkana County, Kenya, where operational challenges can be significant. Consequently, organizations may benefit from prioritizing capacity-building activities to foster a more effective and efficient project implementation framework.

The correlation analysis results presented in Table 4 demonstrate a very strong positive relationship between Incident Monitoring and Project Performance, with a Pearson correlation coefficient of 0.878. This indicates that as the effectiveness of incident monitoring increases, so does the performance of humanitarian projects. The significance level of 0.000 confirms that this relationship is statistically robust and not due to chance. With a sample size of 100, these findings emphasize the critical role that effective incident monitoring plays in enhancing project performance. Organizations that implement rigorous monitoring processes can better identify and respond to incidents as they arise, leading to more timely interventions and ultimately improving project outcomes. The high correlation suggests that incident monitoring is a vital component of operational risk management within humanitarian organizations. By ensuring that risk incidents are continuously monitored and addressed promptly, organizations can mitigate potential disruptions and align their operations more closely with project objectives. Therefore, investing in comprehensive incident monitoring systems can significantly enhance the overall effectiveness of humanitarian projects, especially in challenging contexts like Turkana County, Kenya.

Regression Analysis

Regression analysis was conducted to examine the relationship between the independent variables and the dependent variable.

Capacity building

The study sought to assess the influence of capacity building on the performance of humanitarian organizations in Turkana County, Kenya. The model summary presented in Table 5 provides valuable insights into the relationship between capacity building and project performance in humanitarian organizations. The R value of 0.702 indicates a strong positive correlation between capacity building and project performance. This suggests that as the capacity building efforts within an organization increase, so does the performance of their

projects. The R Square value of 0.492 implies that approximately 49.2% of the variance in project performance can be explained by the capacity building predictor. This indicates a substantial portion of project performance outcomes is influenced by capacity-building initiatives, though it also suggests that there are other factors affecting project performance that are not accounted for by this model.

Table 5: Capacity Building-Model Summary ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.702 ^a	.492	.487	.359	1.759

a. Predictors: (Constant), Capacity Building

b. Dependent Variable: Project Performance

The ANOVA results presented in Table 6 show that at a F-statistic of 94.995, significance level (Sig.) is at 0.000 much lower than the commonly used alpha level of 0.05. This strong significance suggests that capacity building has a substantial impact on project performance in humanitarian organizations.

Table 6: ANOVA for Capacity Building

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.213	1	12.213	94.995	.000 ^b
	Residual	12.599	98	.129		
	Total	24.811	99			

a. Dependent Variable: Project performance

b. Predictors: (Constant), capacity building

The coefficients presented in Table 7 show that the unstandardized coefficient for capacity building is 0.627.

Table 7: Coefficients for Capacity Building

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	1.641	.284		5.789	.000
Capacity building	.627	.064	.702	9.747	.000

a. Dependent Variable: Project performance

From the results, the model can now be presented as follows:

$$Y = 1.641 + 0.627X_1 + \epsilon$$

The results suggest that a one-unit increase in capacity building would lead to a 62.7% improvement in the performance of humanitarian projects in Turkana County, Kenya, when regressed independently with the dependent variable. With a p-value of 0.000, which is below the standard threshold of 0.05, it implies that capacity building has a significant and positive effect on the performance of humanitarian projects in the region. The study is supported by the

findings of Otibine (2016) who established that capacity building is essential in the positive performance of the Department for International Development in Kenya.

Incident Monitoring

The study sought to assess the influence of incident monitoring on the performance of humanitarian organizations in Turkana County, Kenya. The model summary presented in Table 8 sheds light on the relationship between incident monitoring and project performance within humanitarian organizations. The correlation coefficient (R) is reported as 0.878, indicating a very strong positive relationship between incident monitoring and project performance. This high value suggests that as the practices of incident monitoring improve, project performance tends to enhance significantly. The R Square value (R²) is 0.771, which means that approximately 77.1% of the variance in project performance can be explained by incident monitoring. This substantial percentage indicates that incident monitoring is a crucial predictor of project performance, highlighting its importance in operational risk management.

Table 8: Incident Monitoring-Model Summary ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.878 ^a	.771	.769	.241

a. Predictors: (Constant), Incident monitoring

The ANOVA results presented in Table 9 show that at F-statistic of 330.580, significance level (Sig.) is at 0.000 much lower than the commonly used alpha level of 0.05. This strong significance suggests that Incident monitoring has a substantial impact on project performance in humanitarian organizations in Turkana County, Kenya.

Table 9: ANOVA for Incident Monitoring

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.138	1	19.138	330.580	.000 ^b
	Residual	5.673	98	.058		
	Total	24.811	99			

a. Dependent Variable: Project performance

b. Predictors: (Constant), Incident Monitoring

The coefficients presented in Table 10 show that the unstandardized coefficient for capacity building is 0.790.

Table 10: Coefficients for Incident Monitoring

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.908	.193		4.717	.000
Incident Monitoring	.790	.043	.878	18.182	.000

a. Dependent Variable: Project performance

From the results, the model can now be presented as follows:

$$Y=0.908+0.790X_3+\epsilon$$

The findings suggest that for each one-unit increase in incident monitoring, project performance is expected to rise by 79%. This significant positive coefficient highlights a strong direct relationship between the effectiveness of incident monitoring practices and the overall success of humanitarian projects in Turkana County, Kenya. These findings are supported by the works of Othman and Beydoun (2019) who suggest that understanding and prioritizing risks enables a more efficient and effective operational framework, ultimately enhancing the project's ability to achieve its objectives within its resource limitations.

CONCLUSION OF THE STUDY

The findings revealed that capacity building and incident monitoring all significantly influence project performance. Capacity building emerged as a critical factor in improving project outcomes by equipping staff with the skills, knowledge, and competencies needed to address challenges effectively. Training programs, workshops, and on-the-job mentorship enhanced operational efficiency, reduced errors, and ensured the timely achievement of project objectives. Organizations with strong capacity-building initiatives demonstrated greater resilience and adaptability, which directly translated to improved performance in the face of resource and environmental constraints. Incident monitoring further contributed positively to project performance by allowing for real-time tracking and reporting of risks and challenges. This proactive approach enabled early detection and swift resolution of issues, reducing the likelihood of recurring problems. Incident monitoring enhanced accountability, transparency, and decision-making processes, leading to greater operational efficiency and timely delivery of services. As a result, humanitarian projects benefited from improved outcomes and strengthened trust among beneficiaries.

RECOMMENDATION

Humanitarian organizations should prioritize capacity-building initiatives by investing in regular training, workshops, and mentorship programs for staff. These initiatives should focus on developing technical, managerial, and problem-solving skills tailored to the unique challenges of humanitarian operations. Humanitarian organizations should implement strong incident monitoring systems that leverage technology to track and report risks in real time. These systems should include mechanisms for collecting, analyzing, and disseminating data on emerging threats or operational challenges.

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