



Effectiveness of Risk Identification Strategies in Enhancing the Sustainability of Donor-Funded Christian Health Association of Kenya in Manyatta Sub-County

Edith Chugu Mwachoki, Lango Bernard and Juma Edwin
The Catholic University of Eastern Africa, Kenya
Email: edithmwachoki@email.com

Abstract: The sustainability of donor-funded health projects remains a challenge due to financial, operational, institutional, staffing, and service-delivery risks. This study assessed the effectiveness of risk identification strategies in enhancing the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County, Kenya. Guided by Systems Theory and Stakeholder Theory, the study adopted a mixed-methods convergent parallel design. A census approach was used to include 150 participants. Quantitative data were collected using structured questionnaires and analysed using SPSS Version 26 through descriptive statistics, Pearson Product-Moment correlation, and simple linear regression. Qualitative data were collected through semi-structured interviews and analysed thematically. Findings showed that risk identification strategies were perceived as effective, with a composite mean of 3.96 (SD = 1.00). Pearson correlation revealed a strong, positive, and statistically significant relationship between risk identification strategies and project sustainability ($r = .742, p < .01$). Regression analysis showed that risk identification strategies explained 55.1% of the variation in project sustainability ($R^2 = .551$), with the model being statistically significant, $F(1,76) = 93.273, p < .001$. The null hypothesis was rejected. The study concludes that systematic risk assessment, stakeholder involvement, risk documentation, and early-warning mechanisms significantly enhance project sustainability. The study recommends strengthening these practices through regular risk reviews, stakeholder participation, improved documentation, effective early-warning systems, and continuous staff capacity building.

Keywords: Risk identification strategies; project sustainability; donor-funded projects; CHAK; risk assessment; stakeholder involvement; risk documentation; early-warning mechanisms.

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1. Introduction

Donor-funded projects play an important role in supporting health and development, particularly in developing countries where government resources are often inadequate (World Bank, 2022). In the health sector, donor funding has supported healthcare access, health-system strengthening, and human-resource development (WHO, 2020). However, sustaining project activities and benefits after donor support ends remains a persistent challenge (UNDP, 2021). Sustainability therefore extends beyond financial continuity to include

the capacity of institutions to maintain services, systems, and project benefits over time (Dubois & Silvius, 2020).

Risk identification is an essential component of project risk management because it enables organisations to recognise potential threats before they affect project objectives. According to PMI (2020), systematic identification of risks provides a basis for developing appropriate responses and improving project performance. In donor-funded health projects, potential risks may include funding delays, changes in donor priorities, staff turnover, policy changes, and institutional capacity constraints (Kerzner, 2021). Strategies such as risk assessment, stakeholder consultation, risk registers,

and early-warning mechanisms can enable project managers to anticipate such risks and take timely action (Hopkin, 2018). Effective risk identification can consequently contribute to better resource use, continuity of activities, and project sustainability.

Globally, the sustainability of donor-funded health interventions remains a concern because projects operate within changing financial, institutional, and operational environments. Evidence from Africa indicates that institutional capacity and human-resource challenges can undermine the continuation of donor-supported health interventions after external funding declines (Karamagi, 2020). Osei et al. (2023) similarly found that weaknesses in institutional systems and programme continuity can limit the sustainability of donor-funded health initiatives. These challenges demonstrate the importance of identifying potential risks early enough to support informed project decisions.

In Kenya, donor-funded health programmes have contributed to HIV/AIDS care, maternal and child health, immunisation, and health-system strengthening (Republic of Kenya, 2020). The Ministry of Health (2021) recognises the continued contribution of development partners to health-sector programmes. However, sustainability remains challenging where interventions depend substantially on external financial and technical support. Mwanza (2026) associate this challenge with factors such as limited local capacity, ownership, and risk-management mechanisms. The Christian Health Association of Kenya is an important partner in Kenya's health sector through its network of faith-based health institutions. In Manyatta Sub-County, donor-funded health interventions operate within a context of resource and institutional challenges that may affect their continuity (Karanja, 2024). Staffing and human-resource management challenges can further constrain the sustained delivery of project-supported services (Thuku & Nelson, 2020). Where potential risks are not identified early, such challenges may adversely affect project implementation and the continuity of benefits.

Despite the importance of risk identification in project sustainability, limited empirical attention has been given to its effectiveness in donor-funded Christian Health Association of Kenya projects at the sub-county level. This study therefore examines the effectiveness of risk identification strategies in enhancing the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County.

1.2 Statement of the Problem

Donor-funded health projects contribute significantly to addressing human-resource and service-delivery gaps in Kenya, particularly in underserved communities (WHO, 2022). In Manyatta Sub-County, donor support has

facilitated health workforce development, training, and health-system strengthening to improve access and quality of healthcare (McPake et al., 2023). However, sustaining these interventions beyond the donor funding period remains a challenge due to continued dependence on external resources and limited local ownership (UNDP, 2021).

A major concern was inadequate identification of risks that threaten project continuity. Donor-funded CHAK projects may face risks related to funding, staffing, policy changes, institutional capacity, and service delivery. When such risks are not identified early, opportunities for timely intervention are reduced, potentially resulting in disruption of project activities and loss of project gains (MOH, 2022).

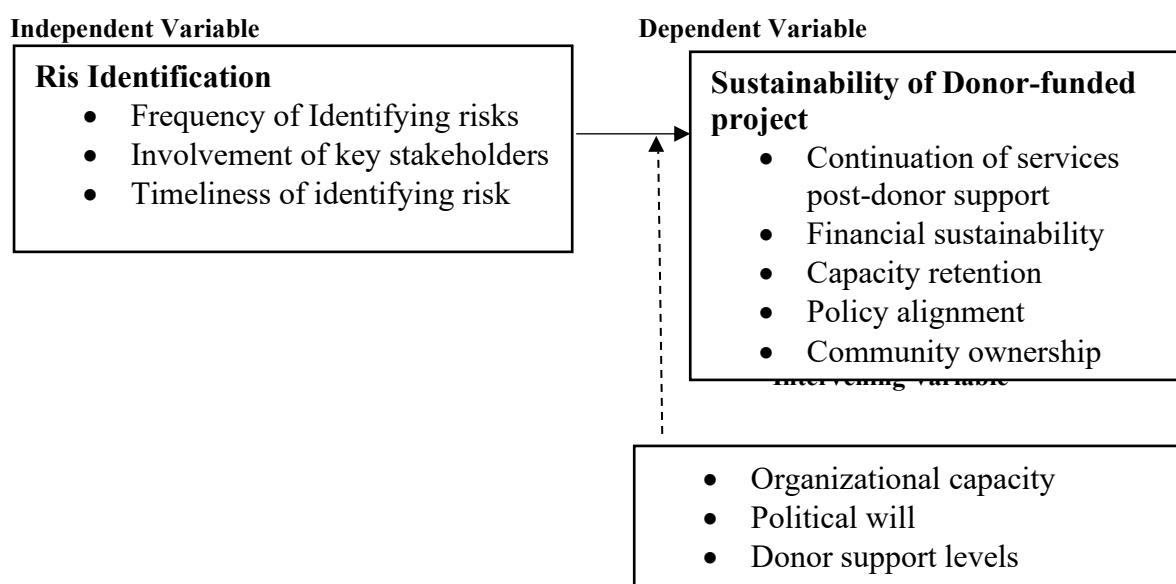
In Manyatta Sub-County, weaknesses in risk assessment, stakeholder involvement, and early-warning mechanisms may limit the ability of donor-funded Christian Health Association of Kenya projects to respond to emerging threats (Ontieri, 2022). Consequently, project gains may not be sustained after donor support declines (MOH, 2022). Despite studies on risk management and project sustainability, limited empirical evidence exists on the effectiveness of risk identification strategies in sustaining donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County. This study therefore assessed the effectiveness of risk identification strategies in enhancing the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County, Kenya.

1.3 Research Objective

Risk identification helps donor-funded projects recognise potential threats that may affect implementation and sustainability. Assessing these strategies was therefore important in understanding their contribution to the continuity of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County. Therefore, the objective of the study was to assess the effectiveness of risk identification strategies in enhancing the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County, Kenya.

1.4 Conceptual Framework

The figure below presents the conceptual framework of the study. The independent variable was risk identification strategies, while the dependent variable was the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County, Kenya. The framework also identifies relevant moderating factors that may influence the relationship between risk identification strategies and project sustainability but were not the primary focus of the study.



Source: *Researcher (2026)*

2. Literature Review

This section reviews empirical literature on risk identification strategies and the sustainability of donor-funded projects, highlighting key findings and research gaps relevant to donor-funded CHAK projects in Manyatta Sub-County, Kenya.

2.2 Theoretical Framework

This study is guided by Systems Theory and Stakeholder Theory both of which are well-known theories regarding the sustainability of projects received funding from donors.

2.2.1 Systems Theory

Systems Theory, developed by Ludwig von Bertalanffy, views an organisation as an interconnected system whose components interact to achieve common objectives (Bertalanffy, 1968). The theory emphasizes interdependence, interaction, feedback, and adaptability among system components (Skyttner, 2005).

The theory is relevant to risk identification because risks affecting one component of a project may influence other components and ultimately affect project sustainability. A systems perspective therefore enables project managers to identify risks by examining the relationships between project resources, activities, stakeholders, and outcomes (Williams et al., 2017).

In this study, Systems Theory guided the examination of the effectiveness of risk assessment, stakeholder involvement, risk documentation, and early-warning mechanisms in enhancing the sustainability of donor-

funded Christian Health Association of Kenya projects in Manyatta Sub-County, Kenya. The theory was relevant because effective identification of risks enables projects to anticipate threats, strengthen responses, and maintain project activities and benefits over time.

A key strength of Systems Theory is its holistic approach, which helps explain how effective risk identification in one project component can support the sustainability of the wider project system (Skyttner, 2005). However, the theory gives limited attention to the influence of stakeholder interests on risk identification. This limitation was addressed through Stakeholder Theory, which emphasizes the importance of stakeholder participation in organisational decision-making (Freeman, 1984).

2.2.2 Stakeholder Theory

Stakeholder Theory was developed by Freeman (1984) and emphasizes the importance of considering the interests and contributions of individuals and groups who can affect or are affected by an organisation's activities. The theory highlights stakeholder identification, engagement, participation, and accountability as important elements of effective decision-making (Freeman, 1984).

The theory is relevant to risk identification because stakeholders possess different knowledge, experiences, and interests that can help projects identify potential risks. Their involvement can improve information sharing, transparency, and ownership of project decisions, thereby supporting project continuity and sustainability (Awa et al., 2024).

In this study, Stakeholder Theory guided the examination of stakeholder involvement in risk identification and its

contribution to the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County, Kenya. The theory was particularly relevant because Christian Health Association of Kenya projects involve different stakeholders, including project staff, health facilities, government agencies, donors, and community members, whose participation can strengthen the identification of risks that may affect project sustainability.

A key strength of Stakeholder Theory is its emphasis on participation and shared responsibility in decision-making. However, balancing the interests and influence of different stakeholders can be challenging, particularly where stakeholders have unequal power and resources (Ruseva et al., 2021). Despite this limitation, the theory complements Systems Theory by providing a stakeholder-centred perspective on risk identification and project sustainability.

2.2 Review of Empirical Literature

This section reviews empirical studies on risk identification strategies and the sustainability of donor-funded projects, focusing on evidence relevant to risk assessment, stakeholder involvement, risk documentation, and early-warning mechanisms.

2.2.1 Risk Identification Strategies and Sustainability of Donor-Funded Projects

Risk identification is the systematic process of recognising potential threats and uncertainties that may affect the achievement of project objectives (ISO, 2018). In donor-funded health projects, early identification of financial, operational, institutional, and political risks provides a basis for timely responses and can strengthen the continuity of project activities and benefits beyond donor funding. The effectiveness of this process depends on the extent to which projects use structured assessment, stakeholder participation, documentation, and early-warning mechanisms.

Evidence from developing-country projects suggests that systematic risk identification enhances project resilience. Ding (2025), for example, found that stakeholder mapping and contextual analysis improved the preparedness of donor-funded health projects in Cambodia and Nepal. However, Farooq et al. (2021) found that risk identification approaches that overlooked local social and political conditions reduced project effectiveness in Pakistan. These findings suggest that identifying risks is not sufficient; the process must also be participatory and context specific.

Evidence from sub-Saharan Africa similarly indicates that weak identification of operational and governance risks can undermine the sustainability of donor-supported health interventions. Toure and Oduro (2021) reported that inadequate anticipation of logistical and

governance risks contributed to difficulties in sustaining donor-supported health workforce interventions in Sierra Leone and Liberia. In contrast, programs that incorporated participatory planning and early-warning mechanisms demonstrated greater capacity to maintain services during periods of uncertainty (WHO Africa, 2022). The contrasting findings indicate that the effectiveness of risk identification depends on how systematically identified risks are documented, communicated, and monitored.

Kenyan evidence also supports the importance of structured risk identification. Njoroge and Otieno (2022) found that donor-funded projects incorporating baseline risk assessments, risk registers, stakeholder forums, and continuous monitoring were better positioned to respond to staffing, political, and funding-related challenges. However, the study examined projects across different counties and donor program, limiting its ability to explain the effectiveness of risk identification strategies within faith-based health projects at the sub-county level.

In Manyatta Sub-County, empirical evidence on risk identification and the sustainability of donor-funded CHAK projects remains limited. Existing local reports point to challenges associated with inadequate stakeholder participation, limited contextual risk analysis, and weak preparedness for funding and staffing disruptions (Embu County Health Department Report, 2023). However, these observations do not establish the extent to which specific risk identification strategies influence project sustainability. This gap justified the present study, which examined the effectiveness of risk identification strategies in enhancing the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County.

3. Methodology

The study employed a mixed-methods approach using a convergent parallel design to obtain both quantitative and qualitative evidence on the effectiveness of risk identification strategies in enhancing the sustainability of donor-funded Christian Health Association of Kenya (CHAK) projects. Quantitative and qualitative data were collected concurrently, analysed separately, and integrated during interpretation to provide a comprehensive understanding of the study problem.

The study was conducted in Manyatta Sub-County, Embu County, Kenya, and targeted 150 participants comprising frontline health workers, health facility in-charges, health administrators, human resource officers, and donor project coordinators and implementing partners. Given the manageable size of the target population, a census approach was adopted, allowing all 150 participants to be included in the study. Data were collected using structured questionnaires and semi-structured interview guides. The instruments covered risk assessment, stakeholder involvement, risk

documentation, early-warning mechanisms, and project sustainability. Content validity was enhanced through expert review, while a pilot study involving 15 participants was conducted in Runyenjes Sub-County. Questionnaire reliability was assessed using Cronbach's alpha, with coefficients of 0.70 or higher considered acceptable.

Data collection commenced after obtaining the requisite research approvals and permissions. Participants were adequately informed about the study and provided informed consent before participation. Participation was voluntary, and confidentiality and anonymity were maintained throughout the research process. Data were securely handled and used exclusively for academic purposes.

Quantitative data were coded and analysed using SPSS Version 26. Descriptive statistics, Pearson Product-Moment correlation, and simple linear regression were used to examine the relationship between risk identification strategies and project sustainability.

Qualitative interview data were analysed thematically, and the findings from both strands were integrated during interpretation to enhance the depth and credibility of the study findings.

The study obtained ethical approval and relevant research authorisation before data collection. Participants provided informed consent and participated voluntarily, with the right to withdraw at any time. Confidentiality and anonymity were maintained throughout data collection, analysis, and reporting, and the data were used solely for academic purposes.

4. Results and Discussion

A total of 138 out of 150 targeted participants responded, representing an overall response rate of 92.0%. This high response rate provided an adequate basis for analysis and enhanced the credibility of the findings (Babbie, 2021). The findings are presented using descriptive and inferential statistical analyses, as shown in Table 1.

Table 1: Response on Risk Identification Strategies

n=78

Statements	SD % F	D % F	N % F	A % F	SA % F	Mean	Std Dvt
Potential risks to project sustainability are clearly identified at the beginning of CHAK projects.	2 (2.6)	5 (6.4)	8 (10.3)	38 (48.7)	25 (32.1)	4.01	0.95
Risk identification is a continuous process throughout project implementation.	3 (3.8)	6 (7.7)	7 (9.0)	35 (44.9)	27 (34.6)	3.99	1.03
Frontline staff are involved in identifying operational risks affecting project sustainability.	2 (2.6)	8 (10.3)	9 (11.5)	34 (43.6)	25 (32.1)	3.92	1.01
Risk identification tools and guidelines are available at health facilities.	4 (5.1)	8 (10.3)	11 (14.1)	33 (42.3)	22 (28.2)	3.78	1.11
There is a structured process for documenting and reporting identified risks.	3 (3.8)	7 (9.0)	10 (12.8)	35 (44.9)	23 (29.5)	3.87	1.03
Early identification of risks has helped improve the continuity of donor-funded services.	2 (2.6)	4 (5.1)	8 (10.3)	37 (47.4)	27 (34.6)	4.06	0.94
Risk identification includes both clinical and non-clinical (administrative/financial) threats.	3 (3.8)	5 (6.4)	9 (11.5)	36 (46.2)	25 (32.1)	3.96	0.98
Risk identification strategies have contributed to improving the sustainability of CHAK projects.	2 (2.6)	4 (5.1)	7 (9.0)	38 (48.7)	27 (34.6)	4.08	0.91
Composite Mean and Standard Deviation						3.96	1.00

Source: Field Data (2026).

Based on the overall results shown in Table 1, respondents generally perceived risk identification strategies as effective in enhancing the sustainability of donor-funded CHAK projects, with a composite mean of

3.96 (SD = 1.00). This was supported by the qualitative findings. KI1 explained that, *“Every project begins with a risk mapping exercise where possible financial, operational and community-related risks are identified*

before implementation starts." KI4 similarly noted that, *"Identifying risks during project planning enables us to prepare contingency measures that reduce interruptions during implementation."* These findings suggest that early risk identification provides a basis for anticipating threats and protecting project continuity.

Risk identification at the planning stage received strong agreement ($M = 4.01$, $SD = 0.95$). This indicates that potential risks were generally considered before project implementation. The finding agrees with Ding (2025), who found that systematic risk identification during planning enhanced project resilience. From a Systems Theory perspective, early identification allows risks affecting one project component to be addressed before they disrupt other interconnected components.

The findings further showed that risk identification was continuous during project implementation ($M = 3.99$, $SD = 1.03$). KI2 explained that, *"Risks change as projects progress; therefore, our teams regularly review potential risks during project implementation meetings."* KI5 similarly observed that, *"Continuous monitoring allows us to identify new challenges before they become major problems."* This qualitative evidence reinforces the quantitative finding that risk identification extends beyond the planning stage. The finding is consistent with Farooq et al. (2021), who emphasized continuous monitoring as important for responding to emerging uncertainties.

Frontline staff involvement in risk identification was also positively rated ($M = 3.92$, $SD = 1.01$). KI3 explained that, *"Healthcare workers and field officers are usually the first to notice operational risks because they interact directly with beneficiaries."* KI6 added that, *"By getting information from frontline staff, management will be able to respond promptly to new risks of a project."* These findings demonstrate the value of frontline knowledge in identifying operational risks and support Stakeholder Theory, which emphasizes stakeholder participation in decision-making (Freeman, 1984). The finding also agrees with Toure and Oduro (2021), who associated staff participation with improved organisational preparedness.

The availability of risk identification tools and guidelines recorded a comparatively lower mean ($M = 3.78$, $SD = 1.11$). Although respondents generally agreed that such tools were available, the higher variation suggests differences in their use across facilities. KI5 explained that, *"Most facilities employed had a risk register and reporting form, but some were remote and needed more support and training."* KI2 further noted that, *"While there are standards in place, staff are subject to the required local resources and capacity."* This suggests that the effectiveness of risk identification may depend not only on the availability of tools but also on staff capacity and resources. Njoroge and Otieno (2022)

similarly emphasized the importance of structured risk registers and monitoring frameworks.

The existence of a formal process for identifying and reporting risks was also supported ($M = 3.87$, $SD = 1.03$). KI4 stated that, *"The identified risks are recorded and reported on through the appropriate lines of authority for timely action."* KI1 added that, *"Risk reports are reviewed regularly during project management meetings to guide corrective actions."* These responses demonstrate that documentation and reporting facilitate communication and timely decision-making. The finding is consistent with Farooq et al. (2021), who found that structured risk documentation supports organisational learning and risk response.

The strongest operational finding concerned the contribution of early risk identification to service continuity ($M = 4.06$, $SD = 0.94$). KI6 observed that, *"The identification of risk at an early stage will allow contingency plans to be put in place to ensure vital health services can continue, even in the event of an unforeseen event."* KI3 similarly noted that, *"A number of service disruptions have been prevented due to risks being identified at an early stage."* These findings suggest that proactive identification enables Christian Health Association of Kenya projects to respond before risks escalate into service disruptions. This supports Ding (2025), who found that proactive risk identification strengthened project resilience and continuity.

Respondents also agreed that risk identification covered both clinical and non-clinical risks ($M = 3.96$, $SD = 0.98$). KI2 explained that, *"We assess financial, operational, clinical, procurement and compliance risks in projects."* KI5 added that, *"Beyond clinical risks, many other issues could jeopardize donor confidence and sustainability."* The findings indicate that sustainability depends on recognising risks across different project components rather than focusing only on clinical service delivery. This supports Systems Theory, which views organisational components as interconnected, while Stakeholder Theory highlights the importance of diverse stakeholder knowledge in identifying different categories of risk.

Finally, respondents reported that risk identification strategies contributed to project sustainability, recording the highest mean ($M = 4.08$, $SD = 0.91$). KI1 observed that, *"Early identification of risks and acting before they are serious challenges has been one of the key factors to the success of most projects."* KI4 similarly stated that, *"The reason why it would be hard to continue programmes sponsored by donors is because many risks would go unnoticed until it is too late."* These responses provide qualitative support for the quantitative finding and demonstrate how timely risk identification can contribute to project continuity.

Findings show that risk assessment, continuous risk identification, stakeholder involvement, risk documentation, and early-warning practices were perceived to strengthen the sustainability of donor-funded Christian Health Association of Kenya projects. The findings support Systems Theory by demonstrating the importance of addressing risks across interconnected project components and Stakeholder Theory by highlighting the contribution of different actors to effective risk identification.

4.4 Inferential Statistics Findings

Inferential analysis was conducted to examine the relationship between risk identification strategies and the

sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County, Kenya. Quantitative data were analysed using IBM SPSS Version 26. Pearson Product-Moment correlation and simple linear regression analyses were performed at a 5% level of significance ($\alpha = 0.05$).

Pearson Correlation Analysis

Pearson Product-Moment correlation analysis was used to determine the strength and direction of the relationship between risk identification strategies and the sustainability of donor-funded CHAK projects. The results are presented in Table 2.

Table 2: Pearson Correlation between Risk Identification Strategies and Sustainability of Donor-Funded Christian Health Association of Kenya Projects

Variables	Risk Identification Strategies	Sustainability of Donor-Funded CHAK Projects
Risk Identification Strategies	1.000	.742**
Sustainability of Donor-Funded Christian Health Association of Kenya Projects	.742**	1.000

Note: $p < 0.01$ (2-tailed).

Source: Field Data (2026)

The findings revealed a strong, positive, and statistically significant relationship between risk identification strategies and the sustainability of donor-funded Christian Health Association of Kenya projects ($r = .742$, $p < 0.01$). This indicates that higher levels of effective risk identification were associated with higher levels of project sustainability.

The finding suggests that systematically identifying potential financial, operational, institutional, staffing, and service-delivery risks enables project teams to anticipate challenges and respond before they adversely affect project activities. Consequently, effective risk identification can contribute to continuity of services, efficient use of resources, and maintenance of project benefits beyond the donor funding period.

The strength of the relationship further indicates that risk identification strategies are an important factor associated with project sustainability. However, correlation alone does not establish whether risk identification strategies predict sustainability; hence, simple linear regression analysis was conducted.

Simple Linear Regression Analysis.

Simple linear regression analysis was conducted to determine whether risk identification strategies significantly predicted the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County. The regression model was specified as:

$$Y = \beta_0 + \beta_1 X + \varepsilon$$

Where:

Y represents the sustainability of donor-funded Christian Health Association of Kenya projects, X represents risk identification strategies, β_0 is the constant, β_1 is the regression coefficient, and ε is the error term. The results showed that risk identification strategies explained 55.1% of the variation in the sustainability of donor-funded Christian Health Association of Kenya projects ($R^2 = .551$). This indicates that risk identification strategies made a substantial contribution to explaining differences in project sustainability, while the remaining 44.9% of the variation was attributable to other factors not included in the model.

Table 3: Simple Linear Regression Model Summary

Model	R	R Square (R^2)	Adjusted R Square	Std. Error of the Estimate
1	.742	.551	.545	.461

Dependent Variable: Sustainability of Donor-Funded CHAK Projects

Predictor: Risk Identification Strategies

Source: Field Data (2026)

The value of $R = .742$ indicates a strong positive association between risk identification strategies and project sustainability. The R^2 value of .551 indicates that 55.1% of the observed variation in project sustainability was explained by risk identification strategies.

The adjusted R^2 of .545 indicates that, after accounting for the predictor in the model, approximately 54.5% of

the variation in project sustainability was explained by risk identification strategies. The remaining 45.5% may be explained by other factors outside the model, such as funding conditions, institutional capacity, leadership, government policies, and the broader operating environment.

Table 4: ANOVA Results for Risk Identification Strategies and Project Sustainability

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	28.746	1	28.746	93.273	.000
Residual	23.423	76	.308		
Total	52.169	77			

Dependent Variable: Sustainability of Donor-Funded CHAK Projects

Predictor: Risk Identification Strategies

Source: Field Data (2026)

The ANOVA results indicate that the regression model was statistically significant, $F(1,76) = 93.273$, $p < 0.001$. This demonstrates that risk identification strategies significantly predicted the sustainability of donor-funded Christian Health Association of Kenya projects. The

significant F-statistic indicates that the regression model containing risk identification strategies provided a significantly better prediction of project sustainability than a model without the predictor.

Table 5: Regression Coefficients for Risk Identification Strategies and Project Sustainability

Predictor	Unstandardized B	Std. Error	Standardized Beta	t	Sig.
Constant	1.021	.212		4.816	.000
Risk Identification Strategies	.687	.071	.742	9.658	.000

Dependent Variable: Sustainability of Donor-Funded CHAK Projects

Source: Field Data (2026)

The regression coefficient indicates that risk identification strategies had a positive and statistically significant influence on project sustainability ($\beta = .742$, $t = 9.658$, $p < 0.001$). The unstandardized coefficient ($B = .687$) indicates that a one-unit increase in the effectiveness of risk identification strategies was associated with a 0.687-unit increase in project sustainability, holding the error term constant.

The positive coefficient demonstrates that improvements in risk identification were associated with improvements in the sustainability of donor-funded Christian Health Association of Kenya projects. This suggests that projects that systematically identify potential risks are better positioned to anticipate disruptions, strengthen preparedness, and maintain project activities and benefits.

The regression equation was therefore:

$$Y = 1.021 + 0.687X$$

Where:

Y = Sustainability of donor-funded Christian Health Association of Kenya projects

X = Risk identification strategies

1.021 = Constant

0.687 = Regression coefficient for risk identification strategies

Regression findings demonstrate that risk identification strategies were a significant predictor of the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County. The findings indicate that strengthening processes for identifying potential risks can contribute substantially to maintaining project activities and outcomes.

Hypothesis Testing

The study tested the null hypothesis that risk identification strategies have no statistically significant influence on the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County, Kenya.

Based on the regression results ($\beta = .742$, $t = 9.658$, $p < 0.001$), the null hypothesis was rejected because the p-value was less than the 0.05 significance level. The study therefore established that risk identification strategies had a statistically significant and positive influence on the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County. The finding implies that strengthening risk identification practices, including systematic risk assessment, stakeholder involvement, documentation of identified risks, and early-warning mechanisms, can enhance the

capacity of donor-funded Christian Health Association of Kenya projects to anticipate challenges and sustain project activities and benefits.

5. Conclusion and Recommendations

5.1 Conclusion

The study concludes that risk identification strategies significantly and positively enhanced the sustainability of donor-funded Christian Health Association of Kenya projects in Manyatta Sub-County, Kenya. The descriptive findings indicated a high level of effectiveness ($M = 3.96$, $SD = 1.00$), particularly through early risk identification during planning, continuous risk monitoring, frontline staff involvement, risk documentation, and early-warning mechanisms. Qualitative findings corroborated these results, showing that risk mapping, regular risk reviews, stakeholder participation, and documentation supported timely decision-making, contingency planning, and continuity of health services. However, relatively lower ratings on the availability and use of risk identification tools indicated gaps in staff capacity, resources, and facility-level support.

Inferential results confirmed a strong, positive, and statistically significant relationship between risk identification strategies and project sustainability ($r = .742$, $p < .01$). Regression analysis showed that risk identification strategies explained 55.1% of the variation in project sustainability ($R^2 = .551$), with the model being statistically significant, $F(1,76) = 93.273$, $p < .001$. The positive regression coefficient ($B = .687$, $\beta = .742$, $p < .001$) further confirmed the predictive effect of risk identification strategies. The null hypothesis was therefore rejected. Therefore, systematic risk identification strengthens project sustainability by enabling timely responses to potential disruptions.

5.2 Recommendations

Based on the findings of the study, the following recommendations are made:

1. **Strengthening risk assessment:** Christian Health Association of Kenya and project implementing partners should institutionalise systematic risk assessment at the planning stage and throughout project implementation. Regular risk reviews should be conducted to identify emerging financial, operational, staffing, clinical, procurement, and compliance risks and develop appropriate contingency measures.
2. **Enhancing stakeholder involvement:** Christian Health Association of Kenya should strengthen the participation of frontline health workers, facility managers, community representatives, government officials, and other relevant stakeholders in risk identification. Regular stakeholder consultation forums should be established to ensure that local knowledge and emerging risks are identified and communicated promptly.
3. **Improving risk documentation:** Project teams should strengthen the use and regular updating of risk registers and reporting mechanisms. Identified risks, their potential effects, responsible persons, and follow-up actions should be systematically documented and reviewed during project management meetings to enhance accountability and institutional learning.
4. **Strengthening early-warning mechanisms:** Christian Health Association of Kenya projects should establish and strengthen early-warning systems that enable project teams to detect emerging risks before they develop into major disruptions. Clear reporting channels, defined risk thresholds, and timely escalation procedures should be incorporated into project monitoring and implementation processes.
5. **Building staff capacity:** Christian Health Association of Kenya and implementing partners should provide regular training and technical support to project staff on risk assessment, risk documentation, stakeholder involvement, and the use of risk identification tools. Particular attention should be given to facilities with limited resources and capacity to promote consistent application of risk identification practices.

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