

Risk Management Practice and Sustainability of Community Policing Projects: A Case of Nyumba-Kumi Community-Policing Project in Kasarani Constituency in Nairobi County, Kenya

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ABSTRACT

Sustainability of projects is very important in promoting long-term gains to the beneficiaries. However, risks are ranked among the most constraining factors in attaining long-term impacts of projects focused on promoting peace and security in the community. The study investigated the influence of risk management practice on sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi County, Kenya. The objectives were to establish the influence of participatory risk assessment, risk planning, risk communication and risk monitoring on sustainability of community-policing project. Risk theory and sustainability theory anchored the study. Descriptive survey was adopted. The targeted population was 222 project coordinators. A sample size of 144 was obtained using Krejcie & Morgan formula and stratified random sampling. Structured questionnaires and interview guide were used to collect data. Split-half method was used in testing reliability at Cronbach's $\alpha \geq 0.7$. Quantitative data was analyzed using frequencies, mean, percentages, standard deviation, Pearson-Correlation method and regression analysis. The research model was tested using F-test at 95% confidence interval. Qualitative data was analyzed through content analysis. The results from inferential statistics showed that risk management practice has statistically significant effect on sustainability of Nyumba-Kumi community-policing project. The strength of influence decreased in the following order: risk monitoring ($r=0.72$), risk planning ($r=0.60$), participatory risk assessment ($r=0.47$) and risk communication ($r=0.39$). The accounted for 59% variation in the sustainability of Nyumba-Kumi community-policing project (for $R^2=0.59$). Thus, risk management practice was concluded to be an important factor for promoting sustainability of community-policing project.

Keywords: participatory risk assessment, risk planning, risk communication, risk monitoring, sustainability of community-policing project, Nyumba-Kumi community-policing project.

INTRODUCTION

Background

Globally, the community policing concept has fully been embraced in democratized states in Europe, USA and Canada. For example, in Canada the government implementing police reform agenda through programmed-based community policing model that has resulted into better and more effective security results (Breutigam and Fortier, 2019). According to the Global Project Against Transnational Organized Crime (GIATOC, 2020), the elusive and wide-spread violence in United States of America has forced the government to institute structural reforms in the security docket so as to integrate the community potentials in strengthening public security. Still, this trend is observable in European countries whereby the policing is taking a multi-stakeholder and multi-sectoral approach whereby the state security agents, policy makers, community, non-governmental organizations and other security players are jointly pooling together in the fight against crime (European Union EU, 2020). In Eastern-Asian countries like China and Japan, the governments have formulated the relevant community policing policies, instituted appropriate community policing institution and operation procedures in line with the good practices, norms and international standards for policing (Kocak, 2018). According to McCarthy (2018), Russia is executing police-reforms through community-oriented projects that seek to change public perception and embrace police service delivery and patriotism. Specifically, Russia is taking reforms in the self-control mechanism, modernization of security wares and involving the public in rationalization of policing activities.

In Africa, crime is very elusive owing to diverse values arising from cultural, ethnical, political and ideological differences. The crime index in Africa is 12.5 (ISCJ, 2020). The rising of insurgent groups like in Nigeria (Boko Haram), Somali (Al-Shabaab), Congo (Katanga) in Congo and ISIS in Libya is a clear indication of a serious security threat. It is a serious security breach when insurgency groups form to fight against the legitimate government security forces. Crime has adverse effect as it drives away business, erodes human and social capital, undermines development. In response to crime, many African countries are recognizing the importance of community integration in security decision making for effective crime fight (Manayiti, 2017). The national police reforms in Sub-Saharan Countries like Mozambique and South Africa are taking democratization route through community policing as indicated by the police-community collaborations, citizen inclusion and accountable state policing (Kyed, 2018; Diphoorn, 2016). This has resulted in to more efficient and effective police service delivery. In the East Africa, the six member states have developed the common standards for enhancing community policing which includes: public-police trust, police-community relationship, human rights and police working condition (APCOF, 2010). However, the implementation of community policing project has not rolled out yet in the individual member states (Ruteere, et al., 2017). This indicates a lapse in the coordination of the implementation of the community policing strategies in the region.

Traditionally, the fight against crime in Kenya has been inefficient and ineffective owing to retrospective policing practices (Brankamp, 2020; Community Policing Information Booklet, 2017). In attempt to transform, increase efficiency and effectiveness in the security sector, the Government of Kenya has embraced Nyumba-Kumi Project as a community policing strategy towards transformative policing. In line with the aspirations of Kenya's Vision 2030 to ensuring

that Kenya is secure, safe and peaceful, together with the national values in the Kenya's Constitution 2010, the Nyumba-Kumi project was conceptualized 2013 with an aim of allowing every 10 households to form a group and elect a representative for security watch within the neighborhood (ISS, 2015). This followed the widespread interethnic clashes and rising cases of terror that continued to pose serious security and safety threats to people and property (Gjelsvil, 2020; Ngigi, 2018). The model sought to enable the community members to get familiar with neighbours, share information relating to security threats and suspicious criminal elements in their areas (Government of Kenya, 2014).

The Nyumba Kumi project was envisaged to be the lasting solution to risks related to terrorism and criminal behavior as the locals were to be encouraged in making constant interactions, sharing and monitoring criminal and terror related activities with local administration and security organs. The specific approach towards risk management was community awareness, crime risk evaluation, planning for appropriate response mechanism, communication and collaboration with community stakeholders, monitoring and evaluation of the responses. This would not only promote responsibility and ownership in security provision but also help in deterring crime. However, the sustainability of the Nyumba-Kumi project in Kasarani Constituency in Nairobi County is questionable as far as meeting the envisaged goals are concerned. This is evidenced sustained trust gap between police and communities, politicization of security function, structural uncertainties that continue to hinder sustainable crime and terror prevention (Gjelsvil, 2020).

Statement of the Problem

Despite the government's effort to heighten the maintenance of peace and security through Nyumba-Kumi Project, the crime levels are persistently high in Kasarani Constituency in Nairobi County. OSAC (2020) weekly crime reports that robbery, rape, kidnapping, drug trafficking, carjacking, theft, violence, bribery, terrorism, civil unrest, money laundering and vandalism are still elusive in Kasarani Constituency in Nairobi. The effects of persistent crime have far reached detrimental consequences to the social and economic well-being of the Kasarani environ and most important the Capital city. For example, in Kasarani, crime index is 227 with top of list offences against other persons, stealing, drug trafficking, economic crimes and offences against morality (Office of the Chief Inspector, Kasarani Constituency, 2019). Crime has become an obstacle to public and property safety, security and city development especially in slum areas of Kasarani. Still in Kasarani, there have been incidences of public order disruption, impediment of peace, loss of trust in the people living in the area, tension and stress, health issues related to crime e.g., injuries, pain and suffering, economic costs related to crime especially in preventing, combating and clean-up environment after crime, the aftermath of criminal activity, loss of productivity and income among other impacts (Sitienei and Chumba, 2020). The concerns over the uncertainties on the implementation procedures, guidelines, lack of oversight, poor accountability mechanism and loss of control is still an issue with the implementation of Nyumba-Kumi project in Kasarani (Gjelsvil, 2020). In Kasarani, the implementation of Nyumba-Kumi project is hampered by poor police-public mistrust, politicization of security agencies and structural uncertainties, poor stakeholders' integration, budgeting constraints, ambiguous roles, sensitivity of policing tasks, mixed security vs administrative goals, and other management issues (Gjelsvil, 2020). While community policing is considered as an effective strategy for identifying and reporting crime planners for

appropriate deterrence action before crime is committed (Straub, 2020), questions arise as to why the Nyumba-Kumi community-policing project is not able to render effective and sustainable crime deterrence in Kasarani Constituency despite this implementation since the year 2005. This is because the law enforcement agents are community enshrined and thus would foster trust-worthy relationships with the community in preventing crime (Canter and Youngs, 2016).

An empirical study by Kiprono and Karungari (2016) on challenges of community policing in Kenya highlights the following as the hindrances towards effective community policing in Kenya: inadequate framework for sharing of sensitive information, poor communication between police and residents, fear that some police officers collude with criminals, low police patrol coverage, poor implementation practices and inadequate police equipment's. Amuya (2017) links poor delivery of community policing project to poor customer service procedures by police thus discouraging reporting crime by public; some public members belief that crime is a livelihood source, bad public image and mistrust between police and public, inadequate civic education, mismanagement of confidential information by police and public perceptions that community policing is not effective in fighting crime. The gaps can largely be addressed by strengthening the implementation of community policing with appropriate risk management strategies so as to mitigate the negative public perceptions. In filling the gaps, this study examined how risk management practice (participatory risk assessment, risk planning, risk communication, risk monitoring) influences sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency, Nairobi County in Kenya

Research Objectives

The study sought to achieve the following objectives:

- i. To examine how participatory risk assessment influences sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi City County, Kenya
- ii. To establish how risk planning influences sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi City County, Kenya
- iii. To determine how risk communication influences sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi City County, Kenya
- iv. To examine how risk monitoring influences sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi County, Kenya

Research Hypothesis

The null hypothesis (H_0) stated that there is no significance difference between risk management practice and sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi County, Kenya

LITERATURE REVIEW

Risk Management Practice and Sustainability of Community-Policing Project

Project sustainability is the capacity of project organization to continue delivering the envisaged and expected results and impacts even after its closure (PMI, 2017). Sustainability of project is anchored in the following pillars: organizational or management, financial and community sustainability (Fearnside, 2016). Thus, community policing projects must integrate sustainability elements into their design and management for them to be

successful. Some of the indicators of sustainable dimensions that ought to be incorporated in community policing projects includes community relationships, sharing information, peace building, conflict resolution, trust and confidence. By integrating sustainability concepts into community policing projects, managers take responsibility in their influence on project resources and activities in enhancing the desired outcomes of the project (Toljaga-Nikolić, 2020). Thus, commitment to sustainability decisions is a factor towards successful projects. Community policing projects or projects are delicate endeavors due to sensitivity of crime and security decisions. By recognizing the importance of integrating sustainability concept into the design component and project implementation is not only crucial for the realization of long-term impacts (Aarseth et al., 2017). Toljaga-Nikolić (2020) argues that application of sustainability elements into project management may lead to value creation, organization agility, operational efficiency and excellence performance. In community policing, sustainable project management leads to better operational performances, community trust, loyalty, positive organizational image and credibility (Michaelides et al., 2014). However, sustainability strategies must meet stakeholders' expectations

Sustainability of community policing is viewed as a strategy that focuses on efficient and effective crime control for better quality of life (Friedman, 2018). Police are able to interact and relate more with the communities in attempt to seek better, efficient and effective methods for controlling disorder and crime. This leads to greater sense of responsibility, ownership, trust, commitment and feelings of personal safety. Community policing therefore has three features namely: community-police partnership, problem-solving orientation and administrative decentralization of security (Munyao and Ngamga, 2017). Security has been viewed as unidirectional especially in autocratic states whereby policing is taken as state-centered and public as passive recipients. With the increased demands for democratization of the state arms, security function has refocused its practices to more people centered through community policing projects (Makin and Marenn, 2017). This trend is agitated by the desires to establish mutual trust and confidence between security agents and citizens through engagement networks that boost the fight against crime (Njagi, 2018). In this connection, community policing is taking deep root to local levels as evidenced by various community-based organizations and community groups who have developed and implemented their own community policing models so as to enhance security to the people (Munyao and Nganga, 2017). Over the world, the model of integrating communities in fighting crime is viewed as the most transformative and effective vehicle towards sustainable justice (Ruteere, 2017). Through this recognition, many countries have adopted community policing projects as the maiden models towards effective and sustainable realization of police reforms and security (Diphoorn and Stapele, 2020).

Risk assessment is the process of identifying and also analyzing of potential risk factors in terms of sources, nature, frequency occurrence and probability of occurrence (Mahmoud al-Mukahal, 2020). Risks can affect project cost, schedules, quality leading to serious consequences performance and sustainability of a project (Bridges, 2017). The argument is advanced by the findings from an empirical study by Mwanzia (2019) that stakeholder participation in the assessment of project resources reduces performance and sustainability risks of donor funded-food-security programmers' projects in Kenya. Therefore, participatory risk analysis is recommended since inadequate identification and evaluation

of risks lead to poor risk prioritization and responses thereby impeding project performance and sustainability in Ghana (Eshun and Tichaawa, 2020). But the finding by Eshun and Tichaawa (2020) were based on non-probability sampling method which lowered representativeness and generalization of the findings. The findings from related study by Hedelina et al. (2017) on revealed that participatory methods reduced risks of project sustainability in Sweden. However, the use of qualitative methodology lowered statistical inferencing of the findings.

Risk planning is the process of strategizing on risk responses or actions in order to reduce their negative impacts on the project deliverables (Manuele, 2016). The most common risk responses are to: (a) avoid events with large negative impacts, (b) reduce or mitigate occurrence of events with negative impacts, (c) transfer or ensure risks to third parties so as to reduce liability in case of occurrence and (d) accept the consequences of the risk occurrence (Rausand, 2013). Adequate risk planning helps to prioritize and addresses risks by allocating resources and activities into the project management, budget and schedules. The same argument is echoed by empirical establishment by Magana and Yusuf (2020) effective risk planning enhances performance of security-related-food projects in Kilifi, Kenya. Thus, risk management that is effective enhances the successful rate and sustainability of the projects (Rahmana and Adnana, 2020). Appropriate risk responses facilitate management in making effective decisions that determine the stability of the sustainability aspects of a project (Aduma and Kimutai, 2018). Lee (2018) carried out a study on the effects of safety risk planning on sustainable performance projects in South Korea whereby risk planning and control promoted sustainable impacts. But the study relied on non-probability sampling which lowered the external validity for generalizing the findings. The findings from another study by Mhirat and Irtemeh (2017) on the link between risk planning and project sustainability in Jordanian found that risk planning had significance influence on sustainable delivery of project. But the findings were based on quantitative data only which lowered internal validity.

Communication of risk decisions and outcomes is not only a good practice but also a recommendation by the ISO Guide 73 for risk management (2009). Stakeholders need to be continuously updated on the potential risks, their consequences and soliciting feedback, expectations and the best ways to resolving them. Risk communication is a prerequisite for successful risk management as it enhances understanding of management of risk decisions (Beggs, 2018). According to Maritim and Chelule (2018), any deficiency in risk communication was detrimental to the stakeholders support that necessary to successful and sustainable delivery of project endeavor. The findings from a study by Lolemtum et al. (2016) supports that communication and strengthening of early warning signs for disaster risk reduction increased food security in Baringo and West Pokot Counties of Kenya. But the generalization of the findings was contextually limited to Baringo and West Pokot settings. Another study by Mukta et al. (2019) established that efficient risk communication promoted sustainable performance of programmes in Malaysia. But the findings could not be generalized across all projects due to contextual limitations. Borner et al. (2017) did a study focusing on risk communication and community health programmes in Mexico whereby risk communication was found to enhance sustainability of community programmes.

Nevertheless, reliance on qualitative methodology lowered the validity for concluding and generalizing the findings.

Risk monitoring is the trailing and tracing risk factors and devising appropriate mitigation response mechanism (PMI, 2017). However, risk factors are quite dynamic and thus must be monitored well to ensure learning and better project outcomes (Kerzner, 2009). Continuous monitoring of risk helps to test inconsistencies in project path and other possible areas of project breakdowns for quicker responses so as to safeguard project sustainability (Schulte and Hallstedt, 2017). Kemei (2017) did a study to assess the effect of security threats on information resources in public institutions portfolios for the case of Kenya school of government and found that continuous tracking and response risk elements strengthened the stability of an organization to deliver on its mandates. But the findings were conceptually limited to project stability and ignored long-term impacts. Kiprop and Tenai (2017) did a study exploring on the role of monitoring on performance of projects in Kenya whereby risk monitoring was found to have a weak but positive relationship with performance. Conceptually, the study was contextualized to financial institutions thus limiting generalization of the findings. In Brazil, Crispim et al. (2019) examined the relationship between risk management practices and the organizational maturity whereby risk monitoring was found to enhance organizational maturity. But the use of non-parametric tests during correlation analysis limited statistical inferencing

Theoretical Framework

This study was built on two theoretical frameworks namely: risk theory and sustainability theory

Risk Theory:

Risk theory was developed in 1970s by Tversky Amos, Slovic Paul and Kahneman Daniel when they were investigating how decisions are made under uncertain circumstances. The trio concluded that risk related decisions are not rationally done due to dynamism of future events. Thus, risk theory was developed as a guide towards effective risk mitigation by developing control mechanisms that recognize uncertainties in which organization exists (Roeser et al., 2012). Therefore, risk theory states that people are faced by uncertainties when making important decisions must be able to predict the frequency and magnitude of risk impacts in order to device the most appropriate and effective risk mitigation measures to succeed. It implies that future decisions face some degree of uncertainty and therefore managers must be able to predict the expected value of risk decisions. Risk theory is anchored on the principle of value creation, integration of processes, continuous learning and improvement, participatory approaches and informed decision making (Wildavsky and Dake, 1990). Projects just like ordinary organizations face some elements of risks like scope risks, schedule risks, cost risks, stakeholder risks, political risks, legal risks among others. For managers to effectively overcome the risks and uncertainties, risk theory is essential in providing framework for decision making. Risk theory been used in past to explain risk decision making in diverse organization including education institutions, administrative organizations, project organizations and even business organizations (Bialostok, 2015). In this study, risk theory was used to explain how various aspects of risk management (participation assessment, risk

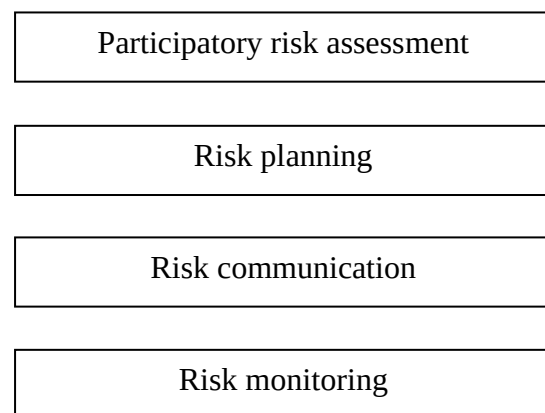
planning, risk communication, risk monitoring) relates to the sustainability of Nyumba-Kumi project community-policing project in Kasarani Constituency in Nairobi County.

Sustainability Theory:

Sustainability theory was advanced in 2009 by Felix Ekardt to provide framework for managers in creating everlasting positive impacts to the society they live in. According to Ekardt (2014), sustainability theory advocates for practices that are positioned towards stability and adaptability of economics, justice, life and environment. Sustainability theory is premised on the notion of creating a healthy interdependency of needs between now and future life through justifiable and bearable practices that protect life and ecosystem. Thus, sustainability theory is founded on the principles of bearable development whereby informed decisions are claimed to the cornerstone to life sustenance (Enders and Remig, 2015). As the dependent variable, sustainability of Nyumba-Kumi project community-policing project was predicted by risk management decisions or practices namely: risk assessment, risk planning, risk communication and risk monitoring

Conceptual Framework

Independent Variable
(Risk Management Practice)



Dependent Variable
Sustainability of Community-policing Project

Sustainability of Nyumba-Kumi project community-policing project

- Meeting the needs
- Public perception about police
- Police-public relationship
- Public trust on police
- Public dispute resolution
- Community policing

RESEARCH METHODOLOGY

Descriptive survey was used in the inquiry to help understand the problem being investigated. The target population was 222 project coordinators of Nyumba-Kumi project community-policing project in Kasarani Constituency in Kenya. A sample size of 144 was obtained using Krejcie & Morgan formula and stratified random sampling method. Structured questionnaires and interview guide were used during data collection. Split-half method was used in testing reliability subject to Cronbach's alpha test (at $\alpha \geq 0.7$). Qualitative data was analyzed through content analysis which involved coding, theme generation and summaries. Quantitative data was analyzed using descriptive statistics namely: frequencies, mean, percentages, standard deviation and also inferential statistics such as Pearson-Correlation method and regression analysis. The following research model was tested:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Whereby,

Y= Sustainability of Nyumba-kumi Community-policing project

X₁= Participatory risk assessment

X₂= Risk planning

X₃= Risk communicating

X₄= Risk monitoring

β₀= Constant, β₁, β₂, β₃, β₄ are coefficients of determination for X₁, X₂, X₃, X₄ accordingly, and ε is an error term.

FINDINGS AND DISCUSSIONS

Findings for Correlational Analysis

Table 1: Relationship between risk management practice and sustainability of Nyumba-Kumi Community-policing Project in Kasarani Constituency in Kenya

		Sustainability of Nyumba-Kumi Community-policing project	Risk assessment	Risk planning	Risk communication	Risk monitoring
Sustainability of Nyumba-Kumi Community-policing project	1					
	119					
Participatory risk assessment	0.47**	1				
	0.00					
	119	119				
Risk planning	0.60**	0.64**				
	0.00	0.00	1			
	119	119	119			
Risk communication	0.39**	0.44**	0.69**	1		
	0.00	0.00	0.00			
	119	119	119	119		
Risk monitoring	0.72**	0.63**	0.80**	0.75**	1	1
	0.00	0.00	0.00	0.10		
	119	119	119	119	119	194
**. Correlations are significant at 0.01 level (2-tailed).						

Table 1 shows that risk monitoring had the strongest relationship with sustainability of Nyumba-Kumi Community-policing project (r=0.72) followed by risk planning (r=0.64), then participatory risk assessment (r=0.47) and lastly risk communication (r=0.39).

Findings for Regression Analysis

Table 2: Regression of risk management practice and sustainability of Nyumba-Kumi Community-policing Project

Model Summary									
Model	R	R ²	Adjusted R ²	Std. Error of the Estimate	Change Statistics		Sign Change		
					R ² Change	F Change	df1	df2	
1	0.0.77 ^a	0.59	0.57	0.16	0.59	40	4	114	0.00
a. Predictors:(Constant), communication, participatory, empowerment and motivation									

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sign
1	Regression	4.08	4	1.02	40	0.00 ^b
	Residual	2.89	114	0.02		
	Total	6.97	118			
a. Dependent Variable: Sustainability of Nyumba-Kumi Community-policing project						
b. Predictors: (Constant), participatory risk assessment, risk planning, risk communication, risk monitoring						

Coefficients ^a						
Model		Unstandardized-Coefficients		Standardized-Coefficients	t	Sign
		B	Std. Error	Beta		
1	(Constant)	1.93	0.23		8.44	0.00
	Communication	-0.02	0.06	-0.03	-0.39	0.70
	Participatory	0.15	0.10	0.17	1.56	0.12
	Empowerment	-0.29	0.07	-0.39	-4.08	0.00
	Motivation	0.71	0.09	0.90	7.60	0.00
a. Dependent Variable: Sustainability of Nyumba-Kumi Community-policing project						

The model summary shows that for $R = 0.77$, the null hypothesis was rejected and concluded that risk management practice has statistically significance relationship with sustainability of Nyumba-Kumi Community-policing Project in Kasarani Constituency in Nairobi County, Kenya. For the $R^2 = 0.59$, the model predicted 59% in the variation sustainability of Nyumba-Kumi Community-policing Project. The rest (41%) variation was attributed to other factors outside the model.

The ANOVA data shows that for $p = 0.000 < 0.05$, $F = 40$ which confirms that the model was fit in predicting the sustainability of Nyumba-Kumi Community-policing Project given the risk management practice

The coefficient data shows that sustainability of Nyumba-Kumi Community-policing Project would not change at 1.93 when risk management practice not factored in the model. One-unit increase in participatory risk assessment, risk planning, risk communication, risk monitoring

would alter sustainability of Nyumba-Kumi Community-policing project -0.03, 0.17, -0.39 and 0.90 respectively. The finding concurs with those of Eshun and Tichaawa (2020), Lee (2018), Mukta et al. (2019) and Crispim et al. (2019) on contribution of risk management practice of projects.

The model is $Y = 1.93 - 0.03X_1 + 0.17X_2 - 0.39X_3 + 0.90X_4 + \varepsilon$ whereby, Y= sustainability of Nyumba-Kumi Community-policing project in Kasarani Constituency in Nairobi County, Kenya, X_1 = participatory risk assessment, X_2 = risk planning, X_3 = risk communication, X_4 = risk monitoring, β_0 is a constant term, while $\beta_1, \beta_2, \beta_3, \beta_4$ are coefficients of determination for X_1, X_2, X_3, X_4 respectively and error term ε .

Discussion of the Findings

From the inferential data showed that participatory risk assessment increases with increase in sustainability of Nyumba-Kumi community-policing project. This finding is supported by empirical establishment by Hedelina et al. (2017) and Eshun and Tichaawa (2020) that participatory methods reduce risks of project sustainability. Further, risk theory emphasizes inclusive and systematic approaches when arriving to risk decisions for effective mitigation results (Roeser et al., 2012). This is what sustainability theory refers to as everlasting positive impacts i.e., improved security. Involvement of stakeholders in risk assessment is one step towards shared responsibility which promotes ownership and commitment in mitigating insecurity (Eshun and Tichaawa, 2020). In order to realize sustainable impacts, project managers must integrate stakeholders in risk management through information sharing, consultations, collaborations and empowerment (PMI, 2013). Consequently, participatory risk assessment is a critical factor towards sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi County, Kenya.

Risk planning positively increased with an increased in sustainability of Nyumba-Kumi community-policing project. This finding is supported by Lee (2018) and Mhirat and Irtemeh (2017) that risk planning has significance influence on performance and sustainable delivery of project. Risk theory supports that project are most sustainable when robust risk mitigation measures are put in place (Roeser et al., 2012). Development of robust plans for risk management is not only useful in reducing costs of project operations but also helps to maintain project in a stable state throughout the operations (Abuhasirah and Shahrour, 2019). This is attributed to the preparedness in terms of resources, procedures and budgets in avoiding, minimizing and coping up with the risk elements thus safeguarding the project results (PMI, 2017). The ability of project coordinators and managers to understand and therefore set up appropriate control risk measures builds confidence in project decisions. Consequently, risk planning is a critical factor towards sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi County, Kenya.

Based on the inferential data, increase in risk communication resulted into an increase in the sustainability of Nyumba-Kumi community-policing project. From the analyses of qualitative, risk communication ensured that everybody understood and owned risk decisions which promoted sustainably. This finding is supported by empirical establishment by Mukta et al. (2019) that use of efficient risk communication strategies promotes sustainable performance of projects. In support, risk theory encourages accurate sharing of risk information in order to

generate higher tolerance levels for greater project outcomes (Roeser et al., 2012). Effective communication of risk leads to responsive feedbacks, decisions and more sustainable risks mitigation actions. The more the communication of risks, the greater the awareness and understanding of the project status and the better the projections of project outcomes (Adelekan and Asiyanbi, 2016). Integration of risk communication to the project risk management strategies is a step towards achieving sustainable results. Consequently, risk planning is a critical factor towards sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi County, Kenya.

Increase in risk monitoring led to increase in sustainability of Nyumba-Kumi community-policing project. This finding contradicted Kiprop and Tenai (2017) that risk monitoring has a weak but positive relationship with performance of financial related programmes. However, Crispim et al. (2019) supports that risk monitoring is among the project management practices which influence sustainability and maturity of an organization. Literature supports that effective monitoring of risk increases chances of project success and sustainability (Metheny, 2017). Risk monitoring allows for corrective action and re-planning project within safety boundaries and contributing to project stability (Johnson, 2020). Consequently, risk monitoring is a critical factor towards sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi City County, Kenya.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on the findings, it is concluded that risk management practice has statistically significant influence on the sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi County, Kenya. Risk monitoring had the strongest influence on the sustainability of Nyumba-Kumi Community-policing project followed by risk planning, participatory risk assessment and risk communication. Therefore, risk management practice is critical factor to consider when planning and making sustainability decisions.

Recommendations

Planners and designers need to establish effective risk management systems and processes through involvement of stakeholder in risk assessment, planning, communication and monitoring. This may facilitate timely control of risk elements that may threaten the sustainability of projects. Policy makers including the Governments need to establish or review their existing policies with regard in order to provide the necessary guidance and support framework in risk management for greater stability and delivery of projects. Specifically, stakeholders need be integrated into the risk assessment processes while strengthening risk planning, communication and monitoring with project operations so as to maximize the utility of the available capacities in propelling the project to sustainable heights. This study relied on the responses from the coordinators and representatives of the community in examining how risk management influences sustainability of Nyumba-Kumi community-policing project in Kasarani Constituency in Nairobi County, Kenya. Future methodologies should collect data from all stakeholders involved in project implementation in order to increase the internal validity.

Areas of Furthering the Study

Future studies can advance the finding from this study by exploring on how participatory risk management practices affects sustainability of community projects. Another area of study can be moderation effects of contextual factors on risk management and sustainability of projects.

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