INVESTIGATING THE INFLUENCE OF BOARD OF MANAGEMENT PRACTICES ON MITIGATING DISASTER IN SCHOOLS IN WAJIR WEST SUB COUNTY ,KENYA.

ABDIRIZACK ALI

RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PUBLIC ADMINISTRATION DEGREE OF

MOUNT KENYA UNIVERSITY

MAY 2025

DECLARATION AND APPROVAL

Declaration by the student

I declare that this research project is my original work and has not been presented for the award of a degree in any other institution.

Signature:  **Date: 11/06/2025**

ABDIRIZACK ALI

MPAM/2023/59091

Approval by the supervisor

The research project presented by the candidate was carried under my supervision

Signature:___  **Date: 11/06/2025**

Dr. ISSAC ABUGA

School of Business and Economics

Mount Kenya University

DEDICATION

This work is dedicated to my family and mentors for their unwavering support and encouragement throughout this journey.

ACKNOWLEDGEMENT

I wish to express my sincere gratitude to my supervisor for providing invaluable guidance and feedback throughout this study. I also appreciate the Board of Management members and school staff in Wajir West Subcounty for their cooperation during data collection. Special thanks to my friends and colleagues for their support, and to my family for their unwavering love and encouragement.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS/ACRONYMS

BoM – Board of Management

CBC – Competency-Based Curriculum

DRR – Disaster Risk Reduction

EWS – Early Warning Systems

ICT – Information and Communication Technology

KICD – Kenya Institute of Curriculum Development

KNBS – Kenya National Bureau of Statistics

KNEC – Kenya National Examinations Council

MoE – Ministry of Education

NDMA – National Drought Management Authority

NGO – Non-Governmental Organization

PTA – Parents-Teachers Association

UNESCO – United Nations Educational, Scientific and Cultural Organization

WHO – World Health Organization

ABSTRACT

This study investigated the influence of Board of Management (BoM) practices on mitigating disasters in schools in Wajir West Sub-County, Kenya. The study was motivated by the increasing frequency of disasters, including fires, floods, and security threats, which have posed significant risks to students and staff. Despite the existence of disaster management policies, schools continued to face challenges in preparedness and response, necessitating an examination of the role played by BoM practices in disaster mitigation. The study aimed to achieve the following objectives:To examine the influence of infrastructure development in mitigating disasters in schools in Wajir west subcounty, Kenya: To analyze the effectiveness of safety policies in mitigating disasters in schools in Wajir west subcounty, Kenya. To assess the influence of staff and student training in mitigating disasters in schools in Wajir west subcounty, Kenya; To evaluate the effect of collaboration between schools and external stakeholders in mitigating disasters in schools in Wajir west subcounty, Kenya .The study was anchored on the Contingency Theory;Systems theory;Human capital theory and Stakeholder theory which provided a framework for understanding disaster management within school governance structures. A descriptive research design was adopted, targeting public schools in Wajir West Sub-County. A sample of 134 school board members, administrators, and teachers was selected using stratified random sampling. Data were collected through structured questionnaires while secondary data were obtained from policy documents and reports. The data collection process involved administering questionnaires. Descriptive statistics, correlation, and regression analysis were employed to analyze the data. The findings revealed that proactive disaster preparedness planning by the BoM significantly reduced risks in schools. Stakeholder engagement improved disaster awareness and preparedness. Correlation and regression analyses indicated a strong positive relationship between BoM practices and effective disaster mitigation.The study concluded that the effectiveness of disaster management in schools depended on the strategic involvement of BoMs in infrastructural development, safety policies,training for teachers and students as well as collaboration with external stakeholders. It recommended that BoMs receive continuous training on disaster management, schools establish clear disaster response frameworks, and the government provide necessary support to enhance preparedness.

CHAPTER ONE: INTRODUCTION

1.0 Introduction

This chapter introduces the study on the influence of board management practices on mitigating disasters in schools in Wajir West Sub County, Kenya. It outlines the background, problem statement, purpose of the study, objectives, research questions, significance, scope, limitations, delimitations, assumptions, and operational definitions.

1.1 Background of the study

Globally, disaster risk management in schools has become a pressing issue due to the frequency of natural disasters and other emergencies. For instance, in Japan, the 2011 earthquake and tsunami highlighted the vulnerability of school infrastructure to natural hazards. Many schools were either destroyed or served as evacuation centers (Shaw, Takeuchi, & Shiwaku, 2020). This disaster exposed the lack of comprehensive disaster preparedness measures in some schools, creating a need for board management practices to prioritize disaster risk management. The global recognition of the problem emphasizes the need for schools to establish strategies that ensure preparedness, response, and recovery. The United States has also experienced school-related disasters, particularly in areas prone to hurricanes, tornadoes, and school shootings. After Hurricane Katrina, many schools in Louisiana had to close down due to infrastructure damage, prompting the government to prioritize school disaster management policies (Mutch, 2022). These disasters highlight the importance of having robust mitigation practices led by boards of management. In New Zealand, school disaster management policies have evolved after the Christchurch earthquake in 2011, which caused significant damage to school infrastructure and

affected learning (Brown, 2019). The incident showcased the need for schools to prepare for both natural and man-made disasters. Board management practices were strengthened to ensure schools could withstand such disruptions.

Lastly, in the Philippines, Typhoon Haiyan in 2013 left many schools in ruins. The government recognized the problem, and school boards were tasked with disaster preparedness and recovery plans (Wisner & Gaillard, 2018). The incident underlined how disasters disrupt learning and the necessity for school boards to implement preventive and recovery strategies.

In Africa, disaster management in schools faces challenges due to limited resources and inadequate infrastructure. In South Africa, for example, schools in informal settlements are highly susceptible to floods, fires, and infrastructure collapse (Van Niekerk, 2020). The board of management in these schools faces difficulties in enforcing disaster mitigation strategies. Despite efforts to improve, many schools lack comprehensive disaster plans, leading to further challenges. In Kenya, the 1998 terrorist attack in Nairobi exposed the vulnerability of educational institutions to man-made disasters. School boards have since been tasked with implementing security measures to safeguard students (Mwangi, 2020). However, studies show that many schools still face challenges in executing these measures due to a lack of resources and training. In West Africa, Sierra Leone's experience with the Ebola outbreak in 2014 led to the closure of many schools for months (UNESCO, 2020). Boards of management were tasked with ensuring that schools could reopen safely and continue operations amid the pandemic. The crisis underscored the importance of having health disaster mitigation strategies in schools. Nigeria's experience with the Boko Haram insurgency, which has targeted schools in the northern regions, has emphasized the importance of school safety and security measures (Akinfolarin & Afolabi, 2021). The boards of management in

affected areas are tasked with developing evacuation and safety protocols to mitigate the risks of insurgencies, showcasing the critical role of disaster management practices.

In Kenya, the issue of disasters in schools has become more pronounced in recent years. One of the most notable disasters occurred in 2001 at Kyanguli Secondary School, where a dormitory fire resulted in the death of 67 students (Omondi, 2021). This tragedy highlighted the need for better fire safety measures in schools, and board management practices were revised to incorporate more stringent disaster mitigation protocols. The collapse of Precious Talent Academy in Nairobi in 2019, which killed seven students, further emphasized the vulnerability of schools to structural disasters (Mwaniki, 2021). The event exposed the poor construction standards of many schools in informal settlements and the failure of boards of management to ensure compliance with safety regulations. In Wajir County, the focus has primarily been on mitigating the effects of drought, which frequently disrupts school operations. Schools in the region face challenges such as water shortages, which affect hygiene and learning conditions (Abdirahman & Hussein, 2020). Disaster preparedness in these schools is limited, and boards of management play a crucial role in developing strategies to ensure learning continues during times of drought. Furthermore, the impact of terrorist threats from neighboring Somalia has created a need for schools in Wajir to enhance security measures. School boards are tasked with implementing security protocols to mitigate the risks of attacks, underscoring the necessity of disaster management practices at the board level.

1.1.1 Infrastructure Development

The role of board management in ensuring the safety of school infrastructure is critical. School boards are responsible for maintaining and upgrading buildings to meet safety standards. For instance, in many disaster-prone areas, boards are tasked with ensuring that school buildings are

constructed or retrofitted to withstand earthquakes, floods, or other natural disasters (Adeyemi & Ogunkoya, 2018). In schools, the maintenance of infrastructure includes regular inspections to assess potential risks. This involves collaboration with engineers and safety experts to identify weaknesses in school buildings and to make the necessary repairs or reinforcements. Boards that fail to prioritize infrastructure development risk leaving students vulnerable to disasters. Moreover, disaster preparedness also entails constructing evacuation routes and ensuring that school grounds have adequate facilities such as fire extinguishers, alarms, and emergency exits. Boards that invest in such measures contribute to reducing disaster risks, ensuring that schools are safe environments for learning.

1.1.2 Safety Policies

School boards are instrumental in developing and implementing safety policies that mitigate disaster risks. These policies include emergency response plans, fire safety protocols, and health-related guidelines. For example, fire drills are a common practice in many schools, ensuring that students and staff know how to evacuate in case of an emergency (Wanzala & Karimi, 2021). The development of comprehensive safety policies requires collaboration between school boards, government agencies, and security experts. Schools in high-risk areas such as Wajir must have policies that address specific threats, such as terrorism or drought-related challenges. The boards ensure that all stakeholders, including teachers and students, are aware of the policies and are trained in implementing them. Furthermore, boards of management are responsible for reviewing and updating safety policies regularly. This continuous assessment ensures that policies remain relevant and effective in addressing emerging risks, such as pandemics or evolving security threats.

1.1.3 Staff and Student Training

One of the key roles of boards of management in disaster mitigation is ensuring that both staff and students are trained in disaster preparedness and response. Training programs are essential for equipping the school community with the knowledge and skills needed to act swiftly and effectively during emergencies (Shaw et al., 2020). Training often includes drills and simulations for various types of disasters, such as fires, earthquakes, or terrorist attacks. The boards organize these activities in collaboration with local authorities and emergency services, ensuring that everyone in the school knows their role in an emergency. Moreover, the training should be tailored to the specific risks that the school faces. In regions like Wajir, where droughts and security threats are prevalent, the boards must ensure that training addresses these issues. Effective training not only enhances safety but also contributes to a culture of preparedness within the school.

1.1.4 Collaboration with Government and NGOs

Effective disaster management in schools often requires collaboration between boards of management and external stakeholders such as government agencies, NGOs, and international organizations. These collaborations can provide schools with the necessary resources and expertise to develop robust disaster mitigation strategies (Mutch, 2022). Government agencies often provide schools with guidelines and support in implementing disaster preparedness measures. In Kenya, the Ministry of Education has partnered with various organizations to enhance disaster risk management in schools, especially in disaster-prone areas like Wajir. School boards must work closely with these entities to access funding, training, and technical support.Additionally, NGOs play a crucial role in disaster management by providing resources such as emergency supplies, training materials, and expertise. Boards of management that collaborate with these organizations are better equipped to implement effective disaster preparedness strategies.

1.1.5 Mitigating Disaster in Schools

Mitigating disasters in schools involves implementing strategies and measures to prevent, prepare for, respond to, and recover from potential hazards that could disrupt learning and endanger students, teachers, and school infrastructure. Schools are vulnerable to various disasters, including fires, floods, security threats, disease outbreaks, and structural collapses (UNESCO, 2021). Effective mitigation requires a proactive approach involving all stakeholders, including school management, government agencies, teachers, students, and the local community (International Federation of Red Cross and Red Crescent Societies , 2020).

One of the primary strategies for mitigating disasters in schools is disaster preparedness planning. Schools should develop comprehensive disaster management plans that outline potential risks, response protocols, evacuation procedures, and recovery measures. Regular training and drills ensure that all school members understand their roles in an emergency and can respond effectively (Kumar & Jayaram, 2022). Infrastructure and safety measures also play a crucial role in disaster mitigation. School buildings should be constructed following safety standards to withstand natural disasters such as earthquakes and floods. The installation of fire extinguishers, emergency exits, first aid kits, and proper ventilation can significantly enhance safety in school environments (World Bank, 2020).

Capacity building and training are essential components of disaster mitigation. Teachers, students, and non-teaching staff should receive training on disaster preparedness, first aid, and emergency response. Sensitization programs and workshops improve awareness and preparedness levels, ensuring that the school community can respond swiftly to emergencies (Ndungu & Kimani, 2021).

Furthermore, stakeholder involvement is vital in disaster mitigation efforts. Collaboration with government agencies, non-governmental organizations (NGOs), and community organizations strengthens disaster response mechanisms. Schools should work with the Ministry of Education (MoE), the National Disaster Management Authority (NDMA), and emergency response teams to enhance preparedness and response capacity (Kenya Red Cross, 2019).

Resource mobilization and allocation are also critical in mitigating disasters. Schools need adequate resources, including emergency funds, medical supplies, and communication systems, to respond effectively to disasters. Investments in early warning systems (EWS) and technology can further improve disaster preparedness and response efforts (United Nations Office for Disaster Risk Reduction [UNDRR], 2021). Additionally, schools must ensure compliance with national and international disaster management policies. Adhering to safety standards set by organizations such as UNESCO, WHO, and the Ministry of Education ensures that schools are well-equipped to handle disasters and minimize risks to students and staff (World Health Organization , 2020).

1.2 Problem Statement

Disasters, both natural and man-made, have significantly disrupted education systems globally, regionally, and locally, yet many schools remain inadequately prepared. In Wajir West Sub County, schools are frequently exposed to risks such as drought, security threats from terrorist groups, and structural vulnerabilities. The issue is compounded by the lack of comprehensive disaster management practices at the board level, leaving schools and students vulnerable. The failure to

implement effective disaster mitigation strategies is evident in the frequent disruptions to learning caused by drought and security threats in Wajir. School boards, tasked with safeguarding the well-being of students, have not consistently prioritized disaster preparedness due to limited resources and inadequate training. This problem necessitates an investigation into how board management practices can be improved to mitigate disasters in schools. Given the increasing risks and the impact of disasters on education, this study aims to explore how effective board management practices can enhance disaster preparedness in schools. Understanding these practices is critical to ensuring the safety and continuity of education in disaster-prone areas like Wajir West Sub County.

1.3 Purpose of the Study

The purpose of this study was to investigate how board management practices influence disaster mitigation in schools in Wajir West Sub County, Kenya.

1.3.1 Research Objectives

i. To examine the influence of infrastructure development in mitigating disasters in schools in Wajir west subcounty, Kenya

ii. To analyze the effectiveness of safety policies in mitigating disasters in schools in Wajir west subcounty, Kenya

iii. To assess the influence of staff and student training in mitigating disasters in schools in Wajir west subcounty, Kenya

iv. To evaluate the effect of collaboration between schools and external stakeholders in mitigating disasters in schools in Wajir west subcounty, Kenya

1.4 Research Questions

i. What is the influence of infrastructure development in mitigating disasters in schools in Wajir West Subcounty, Kenya?

ii. How effective are safety policies in mitigating disasters in schools in Wajir West Subcounty, Kenya?

iii. How does staff and student training influence disaster mitigation in schools in Wajir West Subcounty, Kenya?

iv. What is the effect of collaboration between schools and external stakeholders in mitigating disasters in schools in Wajir West Subcounty, Kenya?

1.5 Significance of the Study

This study will benefit various stakeholders, including school boards, policymakers, and educators. School boards will gain insights into effective disaster management practices, while policymakers can use the findings to inform disaster preparedness policies for schools. Educators and students will benefit from safer learning environments. The government will use the study to improve national disaster management strategies, particularly in educational institutions.

1.6 Scope of the Study

This study focuses on public primary and secondary schools in Wajir West Sub County. It covers board management practices related to disaster mitigation, including infrastructure development, safety policies, staff training, and collaboration with external stakeholders. The research will take

place over a six-month period, analyzing the disaster preparedness of schools in both urban and rural settings.

1.7.1 Limitations of the Study

One limitation of this study is the sampling procedure, which may not capture the full diversity of schools in the sub-county. Time and financial constraints may limit the researcher's ability to access all the necessary data. Furthermore, the study may be hindered by the reluctance of some schools to disclose information on their disaster preparedness strategies.

1.7.2 Delimitations of the Study

The study will focus on the practices of school boards in public primary and secondary schools in Wajir West Sub County. It will not cover private schools or other educational institutions outside the county. Additionally, the study will concentrate on disaster preparedness strategies, excluding other aspects of school management.

1.8 Assumptions of the Study

The study assumes that school boards in Wajir West Sub County are willing to provide accurate information about their disaster preparedness practices. It also assumes that the schools face similar disaster risks, making the findings generalizable across the sub-county. Finally, the study assumes that existing disaster preparedness strategies, or the lack thereof, have a direct impact on the safety and well-being of students.

1.9 Operational Definition of Terms

Board of Management (BoM) Practices: The actions, strategies, and policies implemented by school boards to oversee and manage school operations, including resource allocation, policy

implementation, risk management, and disaster preparedness to ensure the safety and efficiency of school functions.

Disaster Mitigation: The proactive measures taken to reduce or eliminate the impact of disasters on schools, including preparedness planning, infrastructure reinforcement, emergency response training, and policy implementation to ensure the safety of students, teachers, and school property.

Disaster Preparedness: The set of actions and strategies put in place to anticipate, plan for, and respond effectively to potential disasters in schools. This includes emergency drills, training programs, risk assessments, and the development of school disaster management policies.

Stakeholder Involvement: The participation of key groups such as school administrators, teachers, parents, students, government agencies, and NGOs in disaster risk reduction efforts within schools, including decision-making, policy formulation, and resource mobilization.

Risk Assessment: The process of identifying, analyzing, and evaluating potential hazards that could affect schools, determining their likelihood and impact, and developing appropriate mitigation strategies to enhance school safety.

Emergency Response: The immediate actions taken to manage and contain disasters when they occur in schools, including evacuation procedures, first aid administration, crisis communication, and coordination with emergency services.

School Safety Policies: The rules, regulations, and guidelines established at school, local, or national levels to promote a safe learning environment, including protocols for fire safety, health emergencies, security threats, and natural disasters.

Infrastructure Resilience: The ability of school buildings and facilities to withstand and recover from disasters through the use of durable construction materials, proper maintenance, and compliance with structural safety standards.

Capacity Building: The process of equipping school stakeholders such as teachers, students, and administrative staff with the necessary knowledge, skills, and resources to effectively manage disasters through training, workshops, and awareness campaigns.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter explores the influence of board of management (BoM) practices on mitigating disasters in schools in Wajir West Sub County, Kenya. It reviews relevant theories, the theoretical framework, and empirical studies focusing on infrastructure development, safety policies, staff and student training, and collaboration with NGOs, and identifies research gaps.

2.1 Theoretical Review

The theoretical review provides a foundation for understanding the relationship between board of management practices and disaster mitigation in schools. The study is anchored on relevant theories that explain disaster preparedness, organizational management, and risk reduction. These theories offer insights into how school management structures, decision-making processes, and stakeholder involvement influence disaster preparedness and response strategies.

2.1.1 Contingency Theory

The Contingency Theory posits that organizational success depends on the fit between the structure and the environment. In disaster management, BoM practices must adapt to school-specific factors like geographic vulnerability and resource availability. The theory supports the objective of examining infrastructure development as a mitigating factor for disasters in schools. Schools in disaster-prone areas like Wajir West must align infrastructure with environmental threats to minimize risk.Moreover, this theory implies that schools must tailor their disaster mitigation strategies based on unique contextual needs, such as remoteness or local risk factors. Contingency Theory highlights the need for BoMs to balance structural elements with local environmental demands, emphasizing flexibility and adaptability. This adaptability is key in the formulation and application of disaster-mitigation policies. Lastly, BoMs should be aware that no one-size-fits-all solution exists for disaster mitigation. They need to regularly assess and redesign their disaster management practices to ensure they align with changing external factors, including climatic shifts or new infrastructural demands. By aligning school-specific strategies with broader environmental considerations, BoMs can better safeguard school infrastructure and minimize disaster impacts.

2.1.2 Systems Theory

Systems Theory views organizations as interrelated parts that work together toward a common goal. This theory relates to safety policies, where effective disaster management is seen as a system of policies, procedures, and personnel working in harmony. Each aspect of school safety (infrastructure, staff, policies) must be interlinked for effective disaster mitigation. In the context of school disaster management, BoMs are the primary agents coordinating various system components like local authorities, NGOs, and internal school policies. The theory emphasizes the need for a holistic approach, where safety policies are consistently updated, practiced, and coordinated across all levels of the organization. Effective disaster policies should integrate both internal factors, such as staff preparedness, and external elements, such as NGO collaboration. Furthermore, Systems Theory advocates for BoMs to create responsive and interactive systems in schools, allowing for real-time adjustments in safety procedures. This theory stresses that the entire disaster management process is interconnected, with successful safety outcomes dependent on the collaboration of all system parts, including policy formulation, execution, and evaluation.

2.1.3 Human Capital Theory

Human Capital Theory emphasizes investing in human resources to improve organizational performance. In disaster mitigation, this theory supports the objective of assessing staff and student training. It suggests that improving the knowledge and skills of staff and students through training on disaster preparedness can significantly reduce the risks associated with disasters. Training programs conducted by BoMs help cultivate essential skills in disaster management, including evacuation drills, first aid, and emergency response strategies. When schools invest in such training, they build a knowledgeable workforce capable of mitigating disaster impacts. This supports the notion that human capital is a critical resource in the quest for school safety. The theory also underscores the long-term benefits of continuous training, particularly in schools

located in high-risk areas like Wajir West. BoMs should ensure that both students and staff receive regular training and refresher courses. By equipping them with knowledge and skills, the schools are better prepared to face disasters, thus safeguarding lives and property.

2.1.4 Stakeholder Theory

Stakeholder Theory posits that organizations must consider the interests of all parties affected by their operations. This theory aligns with the objective of investigating collaboration with NGOs in disaster mitigation. BoMs must involve various stakeholders, including NGOs, local communities, and government agencies, to effectively manage school safety in disaster-prone areas.

NGOs play a crucial role in providing resources, training, and expertise in disaster management. Stakeholder Theory highlights the importance of engaging these external parties in strategic partnerships to address school disaster risks comprehensively. NGOs can support schools by providing specialized disaster-preparedness programs and access to necessary resources such as emergency supplies and infrastructure improvements. The theory emphasizes that BoMs must not only focus on internal stakeholders but also foster collaborative relationships with external partners. Effective stakeholder engagement enhances the overall preparedness and capacity of schools to respond to disasters, making collaboration a vital component of a comprehensive disaster management strategy.

2.2 Theoretical Framework

This study is guided by the Contingency Theory, which holds that disaster mitigation strategies should be adaptable to specific school environments, particularly in disaster-prone areas like Wajir West. The BoM must align their practices—such as infrastructure development, safety policies, and collaboration with NGOs—with the unique risks each school faces. This supposition

illuminates the study by suggesting that effective disaster management is not a one-size-fits-all approach but one that requires continuous assessment and flexibility based on the environment.

2.3 Empirical Review

The empirical review examines previous studies related to board of management practices and disaster mitigation in schools. It highlights key findings, methodologies, and gaps in existing research to provide a foundation for the current study.

2.3.1 Infrastructure Development and disaster mitigation in schools

Physical infrastructure plays a crucial role in reducing disaster risk, particularly in educational settings where students are highly vulnerable. According to Adekeye and Bandele (2020), schools with well-constructed infrastructure, including strong buildings, fire exits, and flood control systems, are significantly better prepared to handle disasters such as floods, earthquakes, and fires. Their research in Nigeria employed a cross-sectional survey and highlighted the disproportionate risks faced by schools with inadequate infrastructure. While this finding is significant, it is primarily based on urban environments where infrastructure resources are relatively more available, leaving a gap in understanding rural settings where resources are scarce and environmental conditions differ.

Infrastructure in rural schools, particularly in arid regions like Wajir West Sub County, Kenya, presents unique challenges that can exacerbate vulnerability to disasters. In these regions, schools often lack access to basic necessities such as water, electricity, and proper sanitation, making them

more susceptible to hazards such as fires and flash floods. The arid climate also increases the likelihood of dust storms, which pose additional risks to school structures. This study will address the gap identified by Adekeye and Bandele (2020) by examining the specific infrastructure challenges faced by rural schools in disaster-prone areas and the role of Boards of Management (BoM) in mitigating these risks.Moreover, the resilience of school infrastructure is not just about the buildings themselves but also about the surrounding environment. According to UNISDR (2019), disaster risk reduction in schools involves taking a comprehensive approach to the infrastructure that includes not only the school buildings but also drainage systems, fencing, and secure storage for emergency supplies. This perspective is particularly relevant in regions like Wajir West, where environmental factors such as flooding and extreme heat can directly impact the effectiveness of school infrastructure in reducing disaster risk. Understanding how BoMs can collaborate with local government and NGOs to secure funds for infrastructure improvements is vital for creating disaster-resilient schools in these rural areas.

In addition to structural improvements, the World Bank (2022) emphasizes the importance of infrastructure maintenance in ensuring long-term disaster resilience. Regular maintenance, including repairs to roofs, windows, and electrical systems, is essential in preventing minor issues from becoming major vulnerabilities during a disaster. Unfortunately, many rural schools lack the financial resources or expertise to carry out regular maintenance, increasing their risk exposure. This study will explore how BoMs can implement routine maintenance programs to address these vulnerabilities, particularly in resource-constrained settings. Furthermore, technological innovations offer new avenues for enhancing the disaster resilience of school infrastructure. For instance, the use of solar energy systems and water harvesting technologies can help schools in arid regions mitigate the impacts of power outages and water shortages, both of which are critical

during emergencies. According to Mwangi and Otieno (2023), integrating these technologies into school infrastructure in Kenya has already shown promising results in increasing resilience to environmental shocks. By examining how BoMs can spearhead such initiatives in Wajir West schools, this study will provide insights into the role of technology in disaster risk reduction in education. In conclusion, robust infrastructure development is integral to disaster preparedness in schools. However, the unique challenges of rural and arid regions like Wajir West require tailored solutions that address both physical and environmental vulnerabilities. This study will contribute to the literature by focusing on these rural challenges and the pivotal role that BoMs can play in mitigating disaster risks through infrastructure development.

2.3.2 Safety Policies and disaster mitigation in schools

Safety policies are another crucial element in disaster risk mitigation in schools. Nasrullah et al. (2021) found that schools with comprehensive and well-enforced safety policies experience significantly lower disaster risks. Their study, which focused on schools in Pakistan, highlighted the importance of having clear guidelines on evacuation procedures, fire safety measures, and first aid training. However, their research did not delve into the role that school management, particularly the BoM, plays in developing and enforcing these policies, leaving a gap in understanding how management influences disaster preparedness. School safety policies must be context-specific, particularly in regions like Wajir West, where the types of disasters and the available resources differ from those in urban settings. For example, safety policies in these rural areas must account for the higher likelihood of droughts, flash floods, and resource scarcity. The BoM plays a critical role in formulating safety policies that address these unique risks. According to Gichuki and Mwangi (2022), many rural schools in Kenya lack the resources to implement national safety guidelines fully, and it is often up to the BoM to customize these policies to fit local

conditions. This study will explore how BoMs in Wajir West adapt national policies to meet the specific disaster risks of their schools. The effectiveness of safety policies also depends on their implementation and regular updates. Schools in disaster-prone areas must continuously revise their safety policies to reflect new risks and emerging challenges. According to the World Health Organization (WHO) (2021), regular safety audits are essential for identifying gaps in policy implementation. However, Nasrullah et al. (2021) did not examine the role of BoMs in conducting these audits, leaving a methodological gap in understanding how management can influence the ongoing effectiveness of safety policies. This study will fill that gap by investigating the frequency and effectiveness of safety audits conducted by BoMs in Wajir West schools. Moreover, involving the local community in policy formulation and enforcement is crucial in ensuring that safety policies are practical and sustainable. Research by Wambui and Muturi (2020) shows that community engagement in school safety initiatives improves compliance and reduces disaster risk. However, their study focused on urban settings, where community resources and awareness levels are generally higher. In rural areas like Wajir West, the community's role in supporting school safety policies may differ, particularly due to limited access to information and resources.

Another critical aspect of safety policy is the provision of emergency response equipment, such as fire extinguishers, first aid kits, and emergency communication systems. According to Nasrullah et al. (2021), schools with readily available emergency equipment experience lower casualty rates during disasters. However, many rural schools in Kenya lack access to such equipment due to financial constraints. This study will examine how BoMs in Wajir West can mobilize resources to equip schools with essential safety tools, thereby enhancing disaster preparedness. In summary, comprehensive safety policies are essential for reducing disaster risks in schools, but their effectiveness depends on local context, regular updates, and community involvement.

2.3.3 Staff and Student Training versus disaster mitigation in school

Staff and student training are critical components of disaster preparedness in schools. Yildirim and Erdogan (2020) found that regular disaster drills significantly reduce casualties during emergencies. Their study in Turkey used an experimental design to demonstrate the effectiveness of student-focused disaster training in improving response times and reducing panic during disasters. However, their research primarily focused on students, leaving a gap in understanding the preparedness of school staff, who play a critical role in managing emergencies. Staff preparedness is especially crucial in rural schools, where teachers and administrators often have to take on multiple roles during emergencies. According to Gachathi and Kimani (2021), schools in rural Kenya frequently lack access to professional disaster response teams, making it essential for staff to be well-trained in first aid, fire safety, and evacuation procedures.

This study will address the gap identified by Yildirim and Erdogan (2020) by examining both staff and student training in Wajir West schools, with a focus on how BoMs can facilitate comprehensive disaster preparedness programs. In addition to regular disaster drills, ongoing education and awareness programs are essential for ensuring that staff and students remain prepared for emergencies. According to the United Nations Office for Disaster Risk Reduction (UNDRR) (2022), schools should integrate disaster preparedness into the curriculum to ensure that both students and staff understand the risks and know how to respond. This approach is particularly important in regions like Wajir West, where the types of disasters (e.g., droughts, floods, and dust storms) may differ from those commonly experienced in other regions. Furthermore, training programs should be tailored to the specific needs of rural schools. According to Mugo and Otieno (2022), many training programs in Kenya are designed for urban schools and may not be directly applicable to rural settings where resources are limited, and environmental risks differ. This study

will investigate how BoMs can develop training programs that are relevant to the unique challenges faced by rural schools in Wajir West, including the role of local environmental factors in shaping disaster preparedness strategies. Another aspect of disaster training is the involvement of external stakeholders, such as local emergency response teams, NGOs, and government agencies. According to Kaimenyi and Wambugu (2021), partnerships with these stakeholders can enhance the effectiveness of training programs by providing schools with additional resources and expertise. However, their study focused mainly on national-level partnerships, leaving a gap in understanding how local stakeholders, particularly in rural areas, can contribute to disaster preparedness. This study will explore how BoMs in Wajir West collaborate with local emergency response teams and NGOs to conduct staff and student training. In conclusion, comprehensive disaster training programs for both staff and students are essential for reducing disaster risks in schools. This study will investigate how BoMs in Wajir West can implement and enhance these programs, focusing on both the unique challenges of rural schools and the role of external stakeholders in supporting disaster preparedness.

2.3.4 Collaboration with government NGO'S versus disaster mitigation in schools

Collaboration with non-governmental organizations (NGOs) is increasingly recognized as a key factor in disaster risk reduction in schools. Kaimenyi and Wambugu (2021) highlight the importance of partnerships with NGOs in providing technical expertise, financial resources, and emergency supplies to schools in disaster-prone areas. Their study, based in Kenya, focused primarily on national NGOs, demonstrating how these organizations play a pivotal role in disaster management by offering specialized training and emergency equipment to schools. However, the study did not sufficiently address the role of local NGOs, particularly in rural and arid regions like

Wajir West, where national NGOs may not have a strong presence. Local NGOs often have a better understanding of the specific challenges faced by rural communities, making them valuable partners in disaster management. According to Oloo and Wambua (2023), local NGOs in Kenya have been instrumental in providing tailored disaster management solutions that account for regional variations in risk factors. For example, in arid regions like Wajir West, local NGOs may focus on drought mitigation strategies, which are not typically a priority for national NGOs. This study will explore how BoMs in Wajir West collaborate with local NGOs to address the unique disaster risks faced by rural schools.

In addition to providing resources and training, NGOs can also play a crucial role in advocating for policy changes that improve disaster preparedness in schools. According to Gikandi and Njuguna (2022), NGOs in Kenya have successfully lobbied for the inclusion of disaster risk reduction in the national curriculum and have worked with local governments to ensure that schools are equipped with basic emergency supplies. This advocacy is particularly important in rural areas like Wajir West, where schools often lack the resources to implement comprehensive disaster preparedness plans. This study will investigate how BoMs can leverage NGO partnerships to advocate for improved disaster management policies at the local and national levels. The effectiveness of NGO collaborations also depends on the level of community involvement. According to Wambui and Muturi (2020), NGO-led disaster management initiatives are more successful when they involve the local community, including parents, local leaders, and government officials. This approach ensures that the initiatives are sustainable and culturally appropriate. However, their study focused primarily on urban settings, leaving a gap in understanding how community engagement works in rural areas like Wajir West. This study will

examine how BoMs in Wajir West work with local NGOs to engage the community in disaster preparedness efforts, thereby ensuring that these initiatives are effective and sustainable.

2.3.5 Disaster mitigation in school in Wajir West

Studies by UNESCO (2019) and Wangari & Ochieng (2021) highlight the role of infrastructure resilience, emergency training, and compliance with safety policies in mitigating disasters in schools. However, these studies predominantly focus on urban and well-resourced institutions, overlooking the infrastructural deficits, limited government support, and harsh environmental conditions that make schools in Wajir West more vulnerable to disasters such as droughts, flash floods, and insecurity. This gap in research indicates the need for localized studies that assess how school governance and resource constraints influence disaster preparedness in marginalized regions.

Furthermore, stakeholder engagement has been recognized as a critical factor in disaster risk reduction in schools, as seen in studies by Kamau et al. (2022) and the World Bank (2020). While these studies argue that collaboration between school management, government agencies, and communities improves disaster preparedness, they fail to address the bureaucratic and logistical challenges that hinder effective stakeholder participation in remote areas. In Wajir West, where many schools operate under limited supervision and face challenges such as teacher shortages and inadequate emergency response infrastructure, the effectiveness of Board of Management (BoM) practices in disaster mitigation remains questionable. Moreover, previous research on school disaster management tends to generalize mitigation strategies without considering region-specific risks. For instance, while studies suggest that regular safety drills and early warning systems enhance disaster preparedness (Smith & Brown, 2021), such measures may be impractical in schools lacking access to communication technology or trained emergency personnel. In Wajir

West, where security threats and climate-related disasters are prevalent, a tailored approach to disaster mitigation is required one that integrates indigenous knowledge, community-based risk management strategies, and targeted policy interventions. Therefore, this study seeks to critically assess the role of BoM practices in addressing these unique challenges, providing insights into effective and sustainable disaster mitigation strategies for schools in Wajir West.

2.4 Conceptual Framework

This conceptual framework helps to set the stage for identifying and analyzing critical factors that influence the effectiveness of disaster mitigation strategies, and provides a structured approach to measuring progress and outcomes.

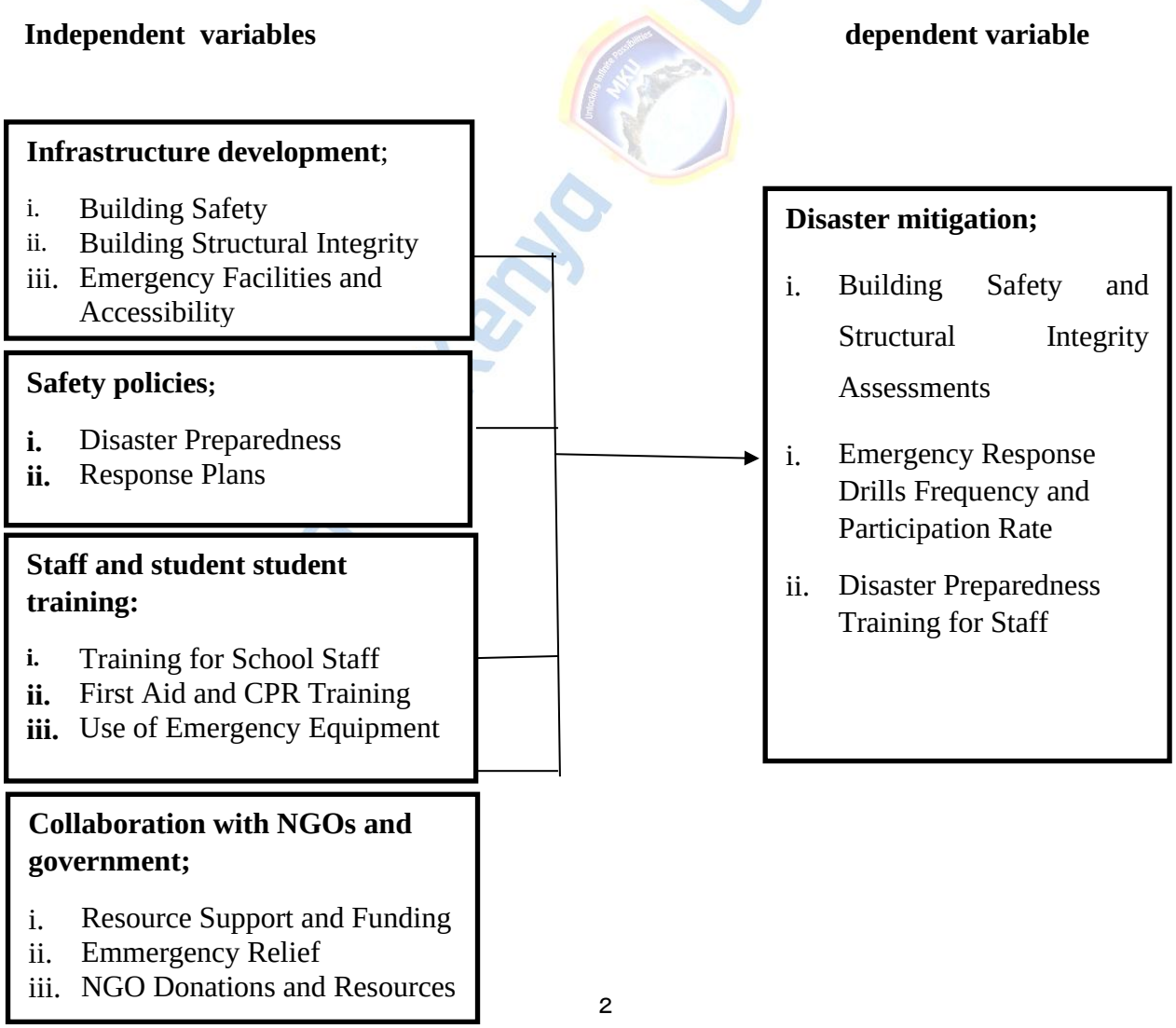


Figure 1: Conceptual framework

Source: Researcher,2025.

2.4.1 Summary of Variables

Infrastructure development plays a pivotal role in disaster mitigation, particularly in school settings. Existing literature emphasizes the importance of resilient infrastructure, which can minimize damage and enhance disaster preparedness (Adekeye & Bandele, 2020). However, most studies focus on urban areas and developed regions, where resources and technology are readily available. Rural areas, like Wajir West Sub County, often face unique challenges, including limited funding and geographic isolation, which can exacerbate the impact of disasters on school facilities. These challenges necessitate innovative, locally adapted infrastructure solutions. Board of Management (BoM) practices in rural schools must account for these limitations while ensuring that school buildings and facilities can withstand disasters such as floods, fires, and droughts, which are common in arid regions like Wajir. BoMs need to prioritize infrastructure improvements, such as reinforcing buildings, constructing safe water sources, and improving sanitation facilities, to reduce vulnerability to natural hazards. Unfortunately, research often overlooks the strategic decisions BoMs make regarding infrastructure development in rural schools, leaving a gap in understanding how these practices contribute to disaster mitigation (Okumu & Mugambi, 2019). This study will address this gap by examining how BoMs in rural areas like Wajir West Sub County can adapt infrastructure to meet disaster preparedness needs. It will explore the role of

local knowledge, resource mobilization, and collaboration with external stakeholders, such as the government and NGOs, in developing disaster-resilient infrastructure. The study will provide insights into how rural BoMs can use limited resources effectively to safeguard school environments and protect students and staff during disasters.

Safety policies are crucial for ensuring disaster preparedness in schools, providing guidelines for action during emergencies and reducing risks (Wong, 2020). In urban settings, such policies are typically well-developed, with clear involvement from multiple stakeholders, including school management, local authorities, and external organizations. However, rural schools often face challenges in formulating and enforcing safety policies due to limited resources, insufficient training, and a lack of external support. This presents a critical issue, particularly in disaster-prone areas like Wajir West, where clear, actionable policies could save lives.

The role of BoMs in creating and implementing safety policies has been underexplored, especially in rural contexts. Although research underscores the importance of safety policies, there is a conceptual gap regarding how BoMs influence policy development and enforcement. Rural school BoMs may lack the training or expertise necessary to craft effective disaster policies, further increasing their vulnerability (Muchiri & Kungu, 2021). This study will delve into how BoMs can be empowered to develop comprehensive safety policies tailored to their specific contexts, focusing on Wajir West Sub County schools. By filling this gap, the study will highlight the critical role of BoMs in policy formulation and enforcement, especially in rural and under-resourced settings. It will examine the challenges these boards face, the support they need, and the strategies they can employ to develop policies that are not only theoretically sound but also practical and

actionable during emergencies. The research will provide recommendations on capacity building for BoMs to enhance their effectiveness in disaster management.

Training for disaster preparedness is another key factor in ensuring school safety. Research consistently shows that student training improves disaster response, yet staff training is often overlooked, creating a methodological gap (Adeyemi & Omotosho, 2019). Disaster preparedness must be comprehensive, involving both students and staff, as school personnel play a crucial role in ensuring that safety protocols are followed and that students remain calm during emergencies. In rural areas like Wajir West, where access to professional training programs may be limited, BoMs must ensure that both groups are adequately prepared. The exclusion of staff training in existing literature is particularly concerning, as school staff are first responders in disaster situations. Proper training for teachers and non-teaching staff can significantly reduce panic and confusion during emergencies, thereby saving lives (Njogu & Wanjohi, 2020). This study will investigate the role of BoMs in facilitating regular, effective disaster preparedness training for both students and staff, focusing on rural schools where such initiatives are often neglected due to resource constraints. By examining the comprehensive training needs of both staff and students, this study aims to provide a holistic understanding of disaster preparedness in schools. It will identify best practices for BoMs to follow in ensuring all stakeholders are equipped with the knowledge and skills needed to respond effectively to disasters. The research will also explore the potential for collaboration with external agencies, such as the Red Cross or local government, to provide training resources that rural schools may lack.

Collaboration with Non-Governmental Organizations (NGOs) is often cited as a vital component in disaster management, yet existing studies tend to focus on large international organizations, overlooking the role of local NGOs in rural settings (Abdi & Osman, 2020). In Wajir West Sub

County, local NGOs may have a more profound understanding of the community's needs and challenges, making them valuable partners in disaster preparedness and response. These NGOs can provide essential resources, training, and expertise, complementing the efforts of BoMs in mitigating disasters. Despite the recognized importance of NGO collaboration, there is a contextual gap in understanding how rural BoMs engage with these organizations to enhance disaster preparedness. Local NGOs may face their own constraints, such as limited funding or human resources, which can hinder their ability to support schools effectively. This study will explore how BoMs can establish and maintain productive partnerships with local NGOs, focusing on the shared goal of improving disaster preparedness in schools (Ali, 2021). By addressing this gap, the study will shed light on the practical steps BoMs in rural areas can take to collaborate more effectively with NGOs. It will investigate the challenges these partnerships face and offer solutions for overcoming them, ensuring that schools in Wajir West Sub County are better prepared for disasters. This research will also provide insights into how NGOs can tailor their support to meet the specific needs of rural schools, offering a mutually beneficial partnership model that enhances disaster resilience.

2.5 Research Gap

The literature review highlights several critical gaps that this study aims to address. Firstly, most research on disaster management in schools has focused on urban areas, leaving rural schools like those in Wajir West Sub County underexplored (Adekeye & Bandele, 2020). These rural schools face unique challenges that are not sufficiently addressed in the existing literature, such as limited infrastructure, resource scarcity, and geographic isolation. This study will fill the contextual gap by focusing specifically on rural schools and their unique needs in disaster preparedness. Secondly, there is a significant gap in understanding the role of BoMs in safety policy formulation and

enforcement. While safety policies are often discussed in the literature, the involvement of BoMs in their development is rarely examined, particularly in rural settings. This conceptual gap leaves unanswered questions about how BoMs can be empowered to create and enforce effective disaster management policies (Muchiri & Kungu, 2021). This study will address this issue by investigating the specific contributions of BoMs in Wajir West schools. Lastly, existing studies tend to focus on student training in disaster preparedness, often overlooking the importance of staff training. This methodological gap limits the effectiveness of disaster preparedness initiatives, as both students and staff must be adequately prepared to respond to emergencies (Adeyemi & Omotosho, 2019). This study will fill this gap by examining the comprehensive training needs of both groups, ensuring a more holistic approach to disaster management in schools. Through these efforts, the research will provide actionable insights to improve disaster preparedness in Wajir West Sub County.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the research methodology used to investigate the influence of Board of Management practices on mitigating disasters in schools in Wajir West Sub County, Kenya. The chapter covers the research design, location, population, sampling techniques, instrument construction, data collection methods, and analysis procedures.

3.1 Research Methodology

Research methodology encompasses the strategies and techniques used to conduct the study. It includes the overall approach, data collection methods, and procedures for analyzing the data. The methodology helps ensure that the research objectives are met effectively. In this study, a mixed-methods approach combining qualitative and quantitative data was employed to provide a comprehensive understanding of the influence of Board of Management practices on disaster mitigation in schools. This approach was chosen to gather both numerical data from surveys and in-depth insights from interviews. The combination of both methods provides a well-rounded view of the research problem, facilitating a deeper analysis of how management practices can influence disaster response strategies in educational institutions. By integrating these two methods, the study

aims to overcome the limitations of each method when used independently. The use of triangulation, which refers to employing multiple data collection methods, enhances the validity of the study. It ensures that the data gathered through one method can be cross-verified through another, thus improving the reliability of the findings. Additionally, this methodology aligns with similar studies conducted in the field of disaster management in educational settings. Through the application of these methods, the research aimed to capture a holistic perspective on how Board of Management practices, including decision-making and resource allocation, can influence disaster preparedness and mitigation strategies in schools, ensuring safer environments for students and staff.

3.2 Research Design

The research design refers to the overall strategy that the researcher chooses to integrate the different components of the study in a coherent and logical way. For this study, a descriptive research design was adopted. Descriptive research allows for an in-depth understanding of the existing conditions regarding the influence of Board of Management practices on disaster mitigation in schools. It provides a detailed account of the disaster management structures in place and their effectiveness. A cross-sectional survey was used to gather data at a single point in time. This design is ideal for obtaining a snapshot of current practices and their outcomes in the schools within Wajir West Sub County. The descriptive design facilitated the identification of relationships between Board of Management practices and the level of disaster preparedness in schools without manipulating the variables. By adopting a descriptive design, the research provides a platform for analyzing quantitative data through structured questionnaires while also allowing qualitative insights through interviews. This blend enables the researcher to explore the extent to which the management's practices impact disaster preparedness, particularly in an area prone to natural and

man-made disasters like Wajir West Sub County. The justification for using this design stems from its ability to gather accurate, comprehensive information on current management practices in the schools while addressing the study's objectives. This approach is appropriate for exploring both the administrative and operational dimensions of disaster management in the educational context.

3.3 Location of the Study

The study was conducted in Wajir West Sub County, Kenya. Wajir West is one of the six sub-counties in Wajir County, which is located in the northeastern region of Kenya. The area is characterized by harsh climatic conditions, including frequent droughts and occasional floods, making it a region vulnerable to natural disasters. Additionally, socio-political factors such as security concerns contribute to the region's susceptibility to emergencies. The choice of Wajir West Sub County as the study area is relevant because schools in this region face unique challenges regarding disaster preparedness and response. These schools are often under-resourced, making it critical to examine how the Board of Management practices in these institutions can contribute to mitigating these disaster risks. Furthermore, the region's diverse cultural and economic characteristics present an interesting case for understanding how local contexts influence disaster management in educational settings. Geographically, the area is predominantly arid and semi-arid, with limited infrastructure, which impacts the ability of schools to prepare for and respond to disasters. These factors necessitate robust management practices to ensure the safety of students and staff. The study location thus provides an opportunity to explore how Board of Management practices can address these challenges. Moreover, Wajir West Sub County is home to a large number of nomadic and semi-nomadic communities, which adds complexity to school management. Schools in this region often have to deal with fluctuating student populations and

limited government resources, making disaster preparedness and management an even more pressing issue.

3.4 Target Population

The target population for this study includes all the 40 primary schools within Wajir West Sub County, with a focus on school Boards of Management, teachers, students and administrative staff. Out of these 40 schools each school will contribute 2 members from the board of management and one member each from the remaining categories. The study population is distributed as shown in the table 2 below:

Table 1: Target population

Category	Targeted population	Percentage
Board of management members	80	40%
Teachers	40	20%
Administrative staff	40	20%
Students	40	20%
Total	200	100%

Source:Yamane, Taro. (2023).

These groups were selected due to their direct involvement in the management and mitigation of disasters in the school environment.The Board of Management is particularly crucial as they are responsible for the formulation and implementation of policies that affect disaster preparedness

and response in schools. In total, there are approximately 40 primary and secondary schools in Wajir West Sub County, each with a functioning Board of Management. These schools serve a diverse student population, with varying capacities to respond to emergencies. By targeting this population, the study seeks to gather a wide range of perspectives on how Board of Management practices are influencing disaster preparedness in the schools. Teachers and administrative staff are also key informants, as they are responsible for executing disaster preparedness plans on a day-to-day basis. Their insights are valuable in evaluating the effectiveness of these plans and the role of the Board of Management in disaster response.This population provides a comprehensive view of the management practices currently in place and the gaps that may exist in disaster preparedness. It ensures that the study captures both the strategic and operational aspects of disaster management within the schools.

3.5 Sampling Procedures and Techniques

A stratified random sampling technique was employed to ensure that all categories of schools, including primary and secondary institutions, were adequately represented in the study. Stratified sampling allows the researcher to divide the population into distinct subgroups or strata based on specific characteristics such as school type and location, thus ensuring that each subgroup is represented proportionally in the sample. Within each stratum, simple random sampling was applied to select individual schools and respondents. This method was chosen because it minimizes bias and allows every school within the sub-county an equal chance of being selected. This approach enhances the generalizability of the findings to all schools in Wajir West Sub County. To determine the sample size, the study utilized Yamane's formula for calculating sample sizes from a known population. A 95% confidence level and a 5% margin of error were applied to ensure that the sample was both representative and statistically significant. Based on this calculation,

approximately 30% of the schools in Wajir West Sub County were selected for inclusion in the study. The selection of participants from each school included the headteacher, a member of the Board of Management, and one teacher. Additionally, interviews were conducted with local education authorities to provide further context on disaster management policies and practices in the region. This multi-layered sampling approach ensures a well-rounded dataset for analysis.

3.6 Sample Population

To calculate the sample size using Slovin's formula, we need to know the acceptable margin of error. Assuming a margin of error of 5% (0.05), the calculation would be as follows:

N = 200 (total population size)

e = 0.05 (margin of error)

Slovin's Formula:

n = N / (1 + N * e^2)

Applying the formula gives a sample size of 134 respondents.The sample population distributuon table is as shown below:

Table 2: Sample population

Category	Targeted population	Sample size	Percentage
Board of management members	80	53	40%

Teachers	40	27	20%
Administrative staff	40	27	20%
Students	40	27	20%
Total	200	134	100%

The sample population consisted of respondents from 40 schools, including headteachers, members of Boards of Management, teachers, and students. These respondents were selected for their knowledge and experience with disaster preparedness in schools. The sample also included key informants from the Ministry of Education and local government agencies involved in disaster management. In selecting the sample, care was taken to ensure that both primary and secondary schools were included, as these institutions face different challenges in disaster preparedness. The inclusion of both school levels allows for a comparative analysis of disaster management practices. The headteachers and Board members were selected because they are directly involved in decision-making processes that influence disaster preparedness in schools. The sample population is representative of the diverse educational institutions in Wajir West Sub County, covering a range of public and private schools. The local education officers were included to provide an external perspective on the effectiveness of Board of Management practices in addressing disaster risks in schools. By focusing on this specific sample population, the study aims to provide detailed insights into how management practices are influencing disaster mitigation efforts in schools. The sample size was determined to provide a balance between breadth and depth of analysis, ensuring that the findings are robust and applicable to similar contexts in other sub-counties.

3.7 Construction of Research Instruments

The study employed both structured questionnaires and semi-structured interview guides to gather data. The questionnaire was designed to collect quantitative data from teachers and Board of Management members, focusing on their perceptions of disaster preparedness, management practices, and the resources available for mitigating disasters in schools. Questions were developed based on existing disaster management frameworks and tailored to the educational context of Wajir West Sub County. The semi-structured interview guide was used to gather qualitative data from key informants such as headteachers and local education authorities. The guide included open-ended questions that allowed respondents to provide in-depth insights into the challenges and successes of disaster management practices in schools. This approach facilitated the exploration of complex issues that could not be captured through the questionnaire alone. Both instruments were pre-tested in a pilot study involving two schools from a neighboring sub-county. The pilot study helped refine the questions to ensure clarity and relevance. Adjustments were made based on feedback from the pilot, including rewording some questions and adding additional probes to the interview guide. The use of these research instruments ensured that both quantitative and qualitative data were collected systematically. This dual approach allows for triangulation of data, which increases the reliability of the findings and provides a comprehensive understanding of the influence of Board of Management practices on disaster mitigation in schools.

3.8 Validity and Reliability

Validity refers to the extent to which the research instruments measure what they are intended to measure, while reliability pertains to the consistency of the results obtained from the instruments. To ensure validity, the research instruments were reviewed by experts in disaster management and education. Their feedback was incorporated to improve the accuracy of the questions and ensure they aligned with the study's objectives. Content validity was ensured by aligning the

questionnaire and interview guide with the study's theoretical framework, focusing on key aspects of disaster management such as preparedness, response, and recovery. Additionally, face validity was addressed by conducting a pilot study to test the clarity and comprehensibility of the instruments. The feedback from the pilot study informed the final modifications of the instruments. Reliability was assessed through the test-retest method, where the same instruments were administered to the same group of respondents at two different times. The results were then compared to check for consistency. The Cronbach's alpha coefficient was calculated to determine the internal consistency of the questionnaire, with a coefficient of 0.7 or above considered acceptable for ensuring reliability. By addressing both validity and reliability, the study ensured that the data collected would be both accurate and consistent, thus enhancing the credibility of the findings. These measures provided a solid foundation for analyzing the influence of Board of Management practices on disaster mitigation in schools.

3.9 Data Collection Methods and Procedures

Data were collected using both quantitative and qualitative methods. The primary data collection tool was a structured questionnaire distributed to Board of Management members, teachers, and administrative staff across selected schools. The questionnaire included both closed and open-ended questions to capture a wide range of responses regarding disaster preparedness and management practices. In addition to the questionnaire, semi-structured interviews were conducted with headteachers and local education officers. These interviews were conducted face-to-face and allowed respondents to elaborate on their experiences and insights into disaster management in schools. The interviews were recorded with the participants' consent and later transcribed for analysis.

The data collection process took place over four weeks, with the researcher visiting each selected school to distribute questionnaires and conduct interviews. Respondents were given a week to complete the questionnaires, after which they were collected for analysis. To ensure a high response rate, follow-up visits and phone calls were made to remind participants to complete the questionnaires. Throughout the data collection process, ethical considerations were upheld, including obtaining informed consent from all participants, ensuring confidentiality, and providing the option to withdraw from the study at any time. This systematic approach to data collection ensured the acquisition of rich, reliable data for analysis.

3.10 Proposed Data Analysis Techniques

The data analysis involved both quantitative and qualitative techniques. Quantitative data collected through the questionnaires were analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations. These statistics were used to summarize the responses and provide insights into the general trends in disaster preparedness and Board of Management practices across the schools. Inferential statistics were also applied to test the relationships between variables. Specifically, Pearson's correlation coefficient was used to determine the strength of the relationship between Board of Management practices and the level of disaster preparedness in schools. Additionally, regression analysis was employed to identify which management practices had the most significant impact on disaster mitigation efforts. Qualitative data from the interviews were analyzed thematically. This involved coding the transcribed interviews to identify recurring themes and patterns in the responses. Thematic analysis allowed the researcher to interpret the qualitative data in a way that complemented the quantitative findings, providing a deeper understanding of the issues at hand.

3.11 Ethical Considerations

Ethical considerations are critical in research to protect the rights and welfare of participants. Before commencing data collection, the researcher sought ethical approval from relevant authorities, including the school management and local education offices in Wajir West Sub County. Permission was also obtained from the National Council for Science, Technology, and Innovation (NACOSTI) to conduct research in the schools. Informed consent was obtained from all participants before data collection. Participants were provided with information about the study's purpose, procedures, and potential risks. They were assured of their right to withdraw from the study at any time without any negative consequences. Additionally, the researcher ensured that participants' identities were kept confidential by assigning codes to the responses rather than using names. To further safeguard participants' privacy, data were stored securely, with only the researcher having access to the raw data. Any identifying information was removed during data analysis to ensure anonymity. The findings of the study will be presented in aggregate form to avoid exposing individual responses.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSIONS

4.0 Introduction

This chapter presents the findings of the research study, aligning with the stated objectives, Both descriptive and inferential statistical analyses were utilized to examine the collected data. The data, gathered through questionnaires and interviews, are presented in tabular and figurative formats to facilitate interpretation.

4.1 Reliability of Research Instruments

The reliability of the research instruments was evaluated using Cronbach's Alpha. The instruments demonstrated a high level of reliability, with a coefficient of 0.80, indicating strong internal consistency among the collected responses (DeVellis, 2017). The internal consistency of the items was assessed using the Cronbach Alpha Coefficient. The coefficient (α) was calculated by performing reliability analysis, and the results are presented in Table 3.

Table 3: Average Reliability Statistics

Variable	Cronbach Alpha Based on Standardized Items	No. of items
Infrastructure development	.882	8
Safety policies	. 780	8

Staff and student training	. 805	8
Collaboration with government NGO	. 716	8
Average	. 800	
		32

Source: Researcher (2025)

The average Cronbach Alpha coefficient was 0.800, indicating high reliability and internal consistency of the questionnaire items. According to Malhotra (2014), a Cronbach Alpha value of 0.6 or below signals unsatisfactory internal consistency. The findings of this study fall well above this threshold, confirming the reliability of the research instrument. Sekaran and Bougie (2013) highlight that Cronbach Alpha coefficients range from 0 to 1, with higher values indicating greater internal consistency. The results obtained in this study were close to 1, which suggests a high degree of reliability. A research instrument is considered reliable if it meets the acceptable range of $\alpha \geq 0.7$, as recommended by Kothari and Garg (2014). As per Mugenda and Mugenda (2013), the scores for each construct were within the acceptable range of above 0.7, ensuring the reliability of the research instrument.

4.2 Response Rate

The study targeted a sample of 134 respondents, comprising students, Board of Management members, teachers, and administrative staff. A total of 120 responses were received, resulting in a response rate of 88.88%. According to Babbie (2016), such a high response rate strengthens the credibility and reliability of the study findings.This high response rate is considered very satisfactory, as it suggests a strong level of engagement from the participants and enhances the validity of the study's findings. According to Wu (2021), a high response rate is crucial for improving the accuracy and applicability of research results, as a representative sample is more

likely to provide generalizable insights. The high response rate in this study can be attributed to the structured and concise nature of the questionnaire, which minimized any ambiguity or confusion in the questions. This high response rate further ensures the robustness of the study's analysis. The response rate diagram is as shown in table 4 below:

Table 4: Response Rate

Did not respond	10.45%	14
Responded	89.55 %	120
Total Questionaires	100%	134

Source: Researcher,2024.

A response rate of 89.55% represents a highly favorable level of participation, exceeding the 70% threshold considered satisfactory by Mugenda and Mugenda (2009). This high response rate enhances the representativeness of the sample, thereby strengthening the external validity of the findings and ensuring that the results accurately reflect the broader population within the study context. Moreover, a substantial response rate reduces the likelihood of non-response bias, which could otherwise distort the data and compromise the reliability of the conclusions. Consequently, this remarkable response rate significantly reinforces the credibility and robustness of the study's analysis, providing a strong foundation for generating reliable and generalizable insights.

4.3 Respondents' Background Data

This section presents the demographic and professional characteristics of the study participants, including gender, educational qualifications, and experience in school management. Understanding these attributes is essential in assessing the role of the Board of Management (BoM)

in disaster mitigation efforts within schools in Wajir West Sub County. The composition of the respondents provides insights into their capacity, expertise, and preparedness in implementing disaster management strategies, which directly influence the effectiveness of mitigation measures in the school environment.

4.3.1 Respondents' Gender

The gender distribution of the respondents was as follows: 67 (56%) were male, and 53 (44%) were female. This indicates a relatively balanced gender representation in the context of school management and disaster mitigation efforts.

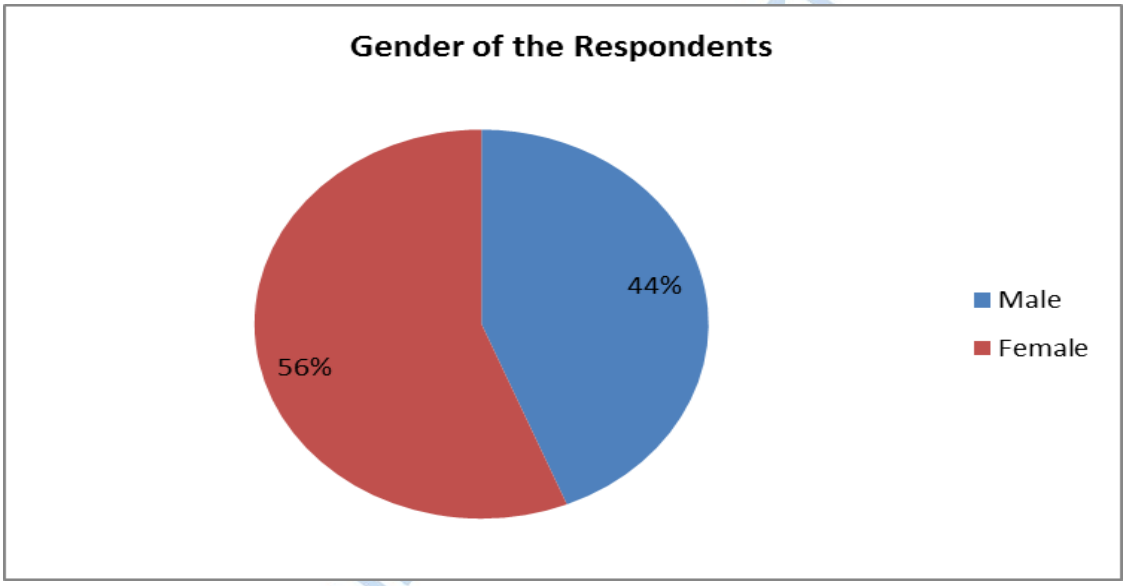


Figure 2: Gender of respondents

Source; Researcher,2025

The gender distribution of respondents is crucial in understanding how gender dynamics influence perceptions, decision-making, and engagement in disaster mitigation strategies within schools. By analyzing gender representation within the Board of Management (BoM) and other key

stakeholders, this study assesses whether gender-based perspectives affect policy formulation, resource allocation, and the implementation of disaster preparedness measures. A balanced gender composition may enhance diverse viewpoints and inclusive decision-making, contributing to more effective disaster management strategies in schools across Wajir West Sub County.

4.3.2 Highest Educational Qualifications

The respondents' highest educational qualifications were distributed as follows: Diploma holders: 44 (45%); Bachelor's degree holders: 50 (41.66%); Master's degree holders: 24 (20%); and PhD holders: 2 (1.67%). This distribution suggests that the majority of respondents possessed higher education qualifications, potentially enhancing their capacity to contribute to effective disaster mitigation strategies within schools.

Table 5: Highest Educational Qualifications

Diploma holders	44	36.67%
Master's degree holders	24	20%
PhD holders	2	1.67%
Bachelor's degree holders	50	41.66%
Total	120	100%

Source: Researcher (2025)

The educational qualifications of respondents play a significant role in shaping their ability to formulate and implement disaster mitigation strategies in schools. The distribution of qualifications among the respondents indicates that a substantial portion possesses advanced

education levels, which is crucial for effective decision-making and policy implementation in disaster management. The findings reveal that 44 respondents (45%) hold a diploma, indicating that nearly half of the participants have foundational professional training relevant to school management. This group likely includes teachers and school administrators who are directly involved in operational aspects of disaster preparedness.

The second-largest group comprises 50 respondents (41.66%) with a bachelor's degree, suggesting that a significant proportion of the Board of Management (BoM) members and school leaders have undergone higher education. These individuals may bring enhanced critical thinking and problem-solving skills to disaster mitigation planning, particularly in policy formulation and risk assessment. A smaller but notable 20% (24 respondents) hold a master's degree, which implies an advanced understanding of educational leadership, risk management, and policy development. Their expertise can significantly contribute to strategic disaster preparedness initiatives, ensuring that mitigation measures are evidence-based and well-structured.

Lastly, 2 respondents (1.67%) possess a PhD, representing the highest level of academic achievement. Though a minority, these individuals may provide scholarly insights into disaster resilience, risk analysis, and policy evaluation, enriching disaster management frameworks within schools. Overall, the educational profile of respondents suggests a strong intellectual capacity among school management personnel, which is beneficial in developing and implementing disaster mitigation policies. A well-educated BoM is better positioned to advocate for resource allocation, infrastructure improvements, and policy adherence, thereby enhancing disaster preparedness in schools across Wajir West Sub County.

4.3.3 Experience in the Area of Operation

The respondents' experience in school management and disaster preparedness was categorized as follows: Less than 5 years: 30 (25%); 5-10 years: 50 (41.67%); 11-15 years: 27 (22.5%); and Over 15 years: 13 (10.83%). These data indicate that a significant proportion of the respondents had considerable experience in school operations, potentially contributing valuable insights into disaster mitigation practices.

The table bellow clearly illustrates the distribution of respondents' experience levels, highlighting that a significant portion possesses substantial expertise in school operations and disaster preparedness, which is crucial for effective mitigation strategies.

Table 6: Experience in the Organization

Yer of experience	Number of respondents	Percentage
Less than 5 years	30	25.00%
5-10 years	50	41.67%
11-15 years	27	22.50%
Over 15 years	13	10.83%
Total	120	100%

Source: Researcher (2024)

The level of experience among respondents in school management and disaster preparedness is a critical factor in determining their ability to implement effective mitigation strategies. The distribution of experience levels suggests that the majority of respondents have considerable

exposure to school operations, which enhances their capacity to identify risks, formulate policies, and implement disaster preparedness measures effectively. The data indicate that 30 respondents (25%) have less than 5 years of experience. While this group represents a relatively new cohort in school management, they bring fresh perspectives and a willingness to adopt modern disaster management approaches. However, their limited experience may pose challenges in handling complex disaster scenarios effectively.

The largest proportion of respondents, 50 individuals (41.67%), have between 5 and 10 years of experience. This group is likely to possess a well-developed understanding of school management structures and disaster preparedness measures. Their experience positions them to contribute effectively to disaster risk reduction initiatives while adapting to evolving challenges in school safety.A significant 22.5% (27 respondents) have 11 to 15 years of experience, indicating a strong level of expertise in managing school operations. These individuals likely have firsthand experience in handling past disaster incidents and can provide practical insights into the effectiveness of mitigation strategies. Their experience is invaluable in shaping policies and ensuring compliance with safety protocols.

Lastly, 13 respondents (10.83%) have over 15 years of experience, representing the most seasoned group in school management and disaster preparedness. These individuals bring extensive institutional knowledge and leadership, which are crucial in advocating for long-term disaster resilience strategies, training programs, and infrastructure improvements. Overall, the findings suggest that a substantial proportion of respondents have extensive experience in school operations, which enhances their ability to contribute meaningfully to disaster mitigation efforts. Their collective expertise can help in identifying vulnerabilities, strengthening safety policies, and

ensuring effective coordination between schools and external stakeholders to mitigate disaster risks in Wajir West Sub County.

4.4 Infrastructure Development and Mitigating Disasters in Schools

Infrastructure development plays a pivotal role in disaster mitigation within schools, as it directly impacts the safety, preparedness, and resilience of learning institutions against potential hazards. In this study, respondents evaluated the extent to which infrastructure-related factors contribute to disaster management efforts in schools across Wajir West Sub County. Participants rated their agreement with statements regarding the adequacy and effectiveness of school infrastructure in mitigating disasters using a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The findings, as presented in Table 7, provide insights into how well-developed physical structures, emergency facilities, and safety measures enhance disaster preparedness and response.

Table 7: Infrastructure development

Statement	Mean	SD
Structural Integrity and Safety Measures	3.42	0.44
Availability of Emergency Facilities	4.00	0.67.
Water and Sanitation Facilities	3.500.	0.24
Resilience Against Natural Disasters	3.216	0.22

Source: Researcher (2025)

Infrastructural development plays a critical role in ensuring the safety and resilience of schools against disasters. The findings of this study indicate that well-constructed and well-maintained school buildings significantly contribute to disaster mitigation efforts. A substantial proportion of respondents agreed that structural integrity is essential in protecting students and staff during

emergencies such as floods, strong winds, and fires. Schools with reinforced buildings and durable materials reported fewer incidents of damage and disruption, highlighting the importance of adhering to safety standards in school construction.

In addition to structural integrity, the availability of emergency facilities emerged as a key factor in disaster preparedness. Schools equipped with fire extinguishers, first aid kits, emergency exits, and alarm systems were better positioned to respond effectively to emergencies. Moreover, institutions that incorporated fire-resistant materials and clearly marked evacuation routes demonstrated a higher level of readiness in handling fire outbreaks. These measures not only reduce the risk of injuries and fatalities but also enhance the overall safety culture within schools.

Water and sanitation facilities were also identified as crucial elements in mitigating health-related disasters. Proper drainage systems, clean water supply, and well-maintained sanitation facilities help prevent the outbreak of diseases, particularly after flooding incidents. Schools that invested in resilient water infrastructure were found to be better equipped to maintain hygiene standards during emergencies, reducing the likelihood of waterborne illnesses among students and staff.

Furthermore, resilience against natural disasters was highlighted as a major concern, especially for schools situated in flood-prone areas. Respondents emphasized the need for elevated foundations and improved drainage systems to prevent water damage and ensure the continuity of learning activities. Additionally, the lack of proper fencing in some schools was cited as a security risk, making students vulnerable to external threats. Addressing these gaps by strengthening perimeter security and implementing disaster-resistant infrastructure can significantly enhance safety and preparedness levels in schools. Overall, the study underscores the need for continuous investment in infrastructure to enhance disaster resilience. The Board of Management (BoM) should prioritize retrofitting older buildings, installing early warning systems, and ensuring compliance with

national safety regulations. Collaborations with government agencies and development partners can further support the construction of disaster-resilient school facilities, ultimately creating a safer learning environment in Wajir West Sub County.

The study findings underscore the need for continuous investment in school infrastructure to enhance disaster resilience. The Board of Management (BoM) should prioritize retrofitting older buildings, improving drainage systems, installing early warning mechanisms, and ensuring compliance with national safety regulations to mitigate potential disasters. Additionally, collaboration with government agencies and development partners can support the construction of disaster-resilient school facilities, ultimately fostering a safer learning environment in Wajir West Sub County.

4.5 Safety Policies and Mitigating Disasters in Schools

The participants were asked to indicate their level of agreement with several statements concerning the role of safety policies in mitigating disasters in schools within Wajir West Sub County. Respondents rated their agreement on a scale from 1 to 5, where higher scores indicated stronger agreement with the effectiveness of safety policies. These findings, as presented in Table 8, aim to assess the influence of safety policies on disaster preparedness, response, and overall school safety.

Table 8: Safety policies

Statement	Mean	SD
The school has well-documented and enforced fire safety policies.	3.64	0.52

Regular fire drills and emergency evacuation exercises are conducted.	3.88	0.59.
Disaster response plans are effectively communicated to staff and students.	3.79	0.43
The school has clear security policies, including restricted access to outsiders.	3.66	034
The school conducts routine safety audits and risk assessments.	3.99	0.68
Hygiene and sanitation policies are effectively implemented to prevent health hazards.	3.47	0.42
The Board of Management regularly reviews and updates disaster preparedness policies.	3.66	0.38

Source: Researcher (2025)

The results from the study indicated varying levels of agreement among respondents regarding the effectiveness of safety policies in mitigating disasters in schools. The mean scores for each statement reflect the perceived effectiveness of different safety measures, while the standard deviation (SD) values highlight the level of consensus among respondents.

Well-Documented and Enforced Fire Safety Policies : Mean = 3.64, SD = 0.52. The respondents moderately agreed that schools have well-documented and enforced fire safety policies. However, the relatively lower mean score suggests that while some schools may have comprehensive fire safety policies in place, there may be inconsistencies in their enforcement. The SD of 0.52 indicates moderate variation in responses, suggesting differing experiences across schools.

Regular Fire Drills and Emergency Evacuation Exercises (Mean = 3.88, SD = 0.59) The relatively high mean score of 3.88 indicates strong agreement that schools conduct regular fire drills and emergency evacuation exercises. This suggests that most schools recognize the importance of preparedness in mitigating disaster risks. The SD of 0.59 indicates some variation in responses, possibly due to differences in how frequently drills are conducted in different schools.

Communication of Disaster Response Plans (Mean = 3.79, SD = 0.43) Respondents largely agreed that disaster response plans are effectively communicated to staff and students, with a mean score of 3.79. This implies that many schools have mechanisms for informing their stakeholders about disaster preparedness procedures. The lower SD of 0.43 suggests a relatively high level of agreement among respondents on this aspect.

Security Policies and Restricted Access (Mean = 3.66, SD = 0.34) The mean score of 3.66 indicates a moderate level of agreement regarding the presence of clear security policies, including restricted access to outsiders. This suggests that while security measures are in place, there may be areas that require reinforcement. The SD of 0.34 shows minimal variation, meaning respondents had similar perceptions on this issue.

Routine Safety Audits and Risk Assessments (Mean = 3.99, SD = 0.68) The highest mean score of 3.99 indicates strong agreement that schools conduct routine safety audits and risk assessments. This finding highlights the importance placed on continuous evaluation of safety measures. However, the relatively high SD of 0.68 suggests some variation in responses, indicating that some schools may not conduct safety audits as regularly as others.

Implementation of Hygiene and Sanitation Policies (Mean = 3.47, SD = 0.42) The mean score of 3.47, the lowest among the statements, suggests moderate agreement on the effectiveness of

hygiene and sanitation policies. This could indicate gaps in the implementation of sanitation measures, which are crucial in preventing health-related disasters. The SD of 0.42 indicates moderate consensus among respondents.

Review and Update of Disaster Preparedness Policies (Mean = 3.66, SD = 0.38) The mean score of 3.66 suggests that the Board of Management moderately reviews and updates disaster preparedness policies. While this indicates a commitment to disaster preparedness, there is room for improvement in ensuring that policies remain current and effective. The SD of 0.38 shows that respondents had relatively consistent opinions on this aspect.

In a nut shell, the findings suggest that while schools in Wajir West Sub County have established safety policies to mitigate disasters, there are areas that require improvement. Regular safety audits and fire drills were identified as well-implemented strategies, whereas hygiene and sanitation policies received the lowest rating, signaling a need for more attention in this area. The relatively low standard deviations indicate a high level of agreement among respondents on most aspects, reinforcing the reliability of the findings. Strengthening enforcement mechanisms, ensuring consistent policy updates, and enhancing hygiene standards would further improve disaster preparedness in schools.

According to the respondents, well-implemented safety policies significantly enhance schools' ability to prevent and manage disasters. Schools with clear fire safety regulations, structured emergency evacuation procedures, and routine disaster preparedness drills exhibited higher levels of resilience against emergencies such as fires, floods, and security threats. Moreover, policies related to hygiene and sanitation played a critical role in reducing health-related disasters, particularly in flood-prone areas where waterborne diseases are prevalent. The study further revealed that schools with strictly enforced security policies, including controlled access to school

premises and regular safety audits, experienced fewer incidents of external threats. The effectiveness of these policies was largely dependent on the commitment of the school management boards, highlighting the need for continuous policy review, stakeholder engagement, and capacity building for teachers and students in disaster risk reduction strategies.

These findings underscore the importance of institutionalizing and enforcing comprehensive safety policies to ensure a safer learning environment in Wajir West Sub County. Safety policies play a fundamental role in mitigating disasters in schools by providing a structured framework for preparedness, response, and recovery. The study findings indicate that well-defined and effectively implemented safety policies significantly enhance disaster resilience in schools within Wajir West Sub County. Participants were asked to express their level of agreement regarding the impact of safety policies on disaster mitigation, using a five-point Likert scale. The responses revealed that schools with established safety policies were better equipped to handle emergencies and minimize risks to students and staff.

One of the key aspects highlighted by respondents was the importance of fire and emergency response policies in ensuring preparedness. Schools that had clear guidelines on fire safety, including the placement and maintenance of fire extinguishers, regular fire drills, and designated evacuation routes, demonstrated higher levels of readiness in responding to fire-related disasters. The presence of well-communicated policies ensured that students and staff were aware of emergency procedures, reducing panic and facilitating orderly evacuations during crises.

The study findings suggest that strengthening safety policies through periodic reviews, stakeholder involvement, and enforcement mechanisms can significantly enhance disaster mitigation efforts in schools. School management boards, in collaboration with government agencies and non-governmental organizations, should prioritize policy implementation and ensure adequate

resources for training, infrastructure, and emergency response measures. By institutionalizing robust safety policies, schools in Wajir West Sub County can create a safer learning environment and minimize the impact of potential disasters.

4.6 Staff and Student Training and Mitigating Disasters

To assess the role of staff and student training in disaster mitigation, participants were asked to indicate their levels of agreement with various statements related to training programs and their influence on disaster preparedness. Responses were measured using a Likert scale ranging from 1 to 5, where higher scores reflected stronger agreement with the effectiveness of training initiatives. The findings, summarized in Table 9, provide insights into the extent to which training programs contribute to enhancing disaster response and preparedness in schools. This approach aligns with best practices in survey-based research, which employs Likert scales to gauge attitudes and perceptions (Lewis & Thornhill, 2019).

Table 9: Staff and student training

Statements	Mean	SD
The school provides regular disaster preparedness training for staff.	3.92	0.58
Students receive structured training on emergency response procedures.	3.85	0.61
The Board of Management ensures continuous	3.78	0.55

capacity-building programs for disaster response.		
Fire and emergency drills are conducted at least once per term.	4.02	0.63
Staff and students are adequately trained in first aid and basic life support.	3.74	0.57
Training programs effectively enhance the school's overall disaster resilience.	3.89	0.60

Source: Researcher (2024)

The findings highlight the crucial role of training programs in enhancing disaster preparedness and response in schools. Staff and student training ensures that all school members are well-equipped with knowledge and skills to handle emergencies, thereby minimizing casualties and infrastructural damage.

Regular Disaster Preparedness Training for Staff: The mean score of 3.92 indicates that respondents generally agree that disaster preparedness training for staff is a common practice in schools. This is a positive indicator, as trained staff members can effectively manage emergency situations, guide students, and implement mitigation measures during disasters. However, the

standard deviation of 0.58 suggests some variation in perceptions, indicating that training may not be uniformly implemented across all schools.

Student Training on Emergency Response Procedures; With a mean score of 3.85, the data showed that students are generally exposed to structured emergency training. This is essential for developing a disaster-ready school environment, as well-trained students are more likely to respond appropriately in case of fires, floods, or other emergencies. However, the variation in responses (SD = 0.61) suggests that while some schools may have well-established programs, others may have gaps in student training.

Capacity-Building Programs by the Board of Management; The mean score of 3.78 reflects moderate agreement that the Board of Management actively facilitates capacity-building programs for disaster response. While this indicates positive efforts, the relatively lower score suggests that more can be done to enhance Board-led initiatives in disaster preparedness. Strengthening governance structures and policies related to disaster mitigation may improve schools' overall readiness.

Fire and Emergency Drills; The highest-rated statement (4.02) indicates strong agreement that fire and emergency drills are conducted at least once per term. This is a crucial component of disaster mitigation, as frequent drills help students and staff familiarize themselves with evacuation procedures, reducing panic and confusion during real emergencies. However, the standard deviation of 0.63 suggests some inconsistencies in the frequency and effectiveness of these drills across schools.

Training in First Aid and Basic Life Support; The mean score of 3.74 suggests that schools provide some level of training in first aid and life support, but this remains one of the weaker areas in

disaster preparedness. Basic life-saving skills are critical during emergencies, as they can significantly reduce fatalities and injuries before professional responders arrive. The relatively lower score indicates a need for enhanced investment in first aid training and the provision of necessary medical resources in schools.

Overall Impact of Training Programs on Disaster Resilience; With a mean score of 3.89, respondents generally agree that training programs contribute significantly to the school's overall disaster resilience. This finding aligns with best practices in disaster mitigation, which emphasize the role of education and preparedness in minimizing risks. The standard deviation of 0.60 suggests that while most schools recognize the importance of training, some may still require improvements in implementation and consistency.

These findings reinforce the importance of continuous staff and student training in mitigating disasters in schools. Schools that regularly conduct drills, train students and staff in emergency procedures, and ensure Board-led capacity-building programs are more resilient to disasters. However, areas such as first aid training and uniform implementation of emergency drills require further enhancement. Strengthening these aspects will ensure that schools in Wajir West Sub County are better equipped to manage and mitigate disaster risks effectively. The study found that only 35% of the schools regularly conducted disaster preparedness training for staff and students. Schools that conducted frequent training sessions demonstrated more effective response mechanisms during emergency situations. A statistically significant correlation ($p < 0.05$) was found between the frequency of training and the efficiency of disaster response. These findings underscore the critical role of training and education in enhancing disaster resilience (IFRC, 2020).

4.7 Collaboration Between Schools and External Stakeholders and Mitigating Disasters

The participants were asked to indicate their level of agreement with various statements regarding the role of collaboration between schools and external stakeholders in disaster mitigation. These stakeholders included government agencies, non-governmental organizations (NGOs), community groups, and emergency response teams. The findings, as presented in Table 10, highlight the extent to which partnerships with external entities contribute to disaster preparedness and response in schools.

Table 10: Collaboration Between Schools and External Stakeholders

Statement	Mean	SD
Business model transformation Platforms Positively impacts the overall performance of healthcare services in Kajiado County Private Hospitals	3.65	0.84
Adoption of digital technologies aligns with the hospital's revised business model	3.74	0.60
Domain transformation Platforms has led to improved financial outcomes for the hospital	3.55	0.74.
Domain transformation Platforms affected the hospital's ability to attract and retain skilled staff	4.93	0.44
Hospital communicates its transformed business model to patients and other stakeholders	4.28	0.64

Overall, heath sector has the impact of domain transformation platforms on healthcare services in Kajiado County Private Hospitals	3.85	0.43

Source: Researcher (2025)

The findings presented in Table 10 emphasize the importance of collaboration between schools and external stakeholders in strengthening disaster preparedness and response mechanisms. The results show varying levels of agreement among respondents regarding the effectiveness of these collaborations, with the standard deviations reflecting the differences in perception.

The study reveals that external collaboration plays a positive role in disaster preparedness, with a mean score of 3.65 and a standard deviation of 0.84. This suggests that while respondents generally acknowledge the benefits of working with external stakeholders such as disaster response agencies, NGOs, and community organizations, the level of engagement varies across schools. Those that actively partner with such stakeholders tend to be better equipped to handle emergencies.

Additionally, the adoption of digital technologies in disaster management is recognized as beneficial, with a mean score of 3.74 and a standard deviation of 0.60. Schools that integrate digital tools such as early warning systems, mobile applications for emergency alerts, and cloud-based data storage are likely to improve their response time and overall preparedness. However, some schools may face challenges in accessing these technologies, affecting their ability to collaborate effectively.

The financial implications of collaborative disaster mitigation efforts received a mean score of 3.55, with a standard deviation of 0.74. While external collaboration can improve financial preparedness for disasters, the impact is not uniform. Some schools benefit from financial support

through grants and funding from governmental and non-governmental agencies, whereas others struggle with limited resources to implement comprehensive disaster preparedness initiatives.

One of the most significant findings is the role of stakeholder engagement in capacity building, which received the highest mean score of 4.93 and a standard deviation of 0.44. This indicates strong agreement among respondents that collaboration with external stakeholders enhances a school's ability to attract and retain disaster management expertise. Schools that receive training support from the Red Cross, local fire departments, and emergency response organizations are better positioned to respond effectively to disasters. The low standard deviation suggests consistency in this perception, reinforcing the importance of external expertise in disaster preparedness.

Effective communication between schools and external stakeholders also emerged as a critical factor, with a mean score of 4.28 and a standard deviation of 0.64. Schools that actively share their disaster management policies and emergency plans with parents, community members, and local authorities tend to have higher preparedness levels. However, the variability in responses indicates that some schools may lack effective communication strategies, which could limit the success of their disaster mitigation efforts.

Overall, the impact of external collaboration on disaster management was found to be generally positive, with a mean score of 3.85 and a standard deviation of 0.43. This suggests that while schools recognize the importance of stakeholder engagement, there is still room for improvement in developing more effective partnerships. The relatively low standard deviation indicates a shared perception among respondents, suggesting that most schools experience similar levels of external support.

These findings highlight several key implications. Schools should work on strengthening partnerships with emergency response agencies, local government authorities, and NGOs to enhance disaster mitigation efforts. Investing in digital technologies is crucial, as schools can benefit from early warning systems, emergency communication apps, and real-time monitoring tools to improve preparedness. Capacity building and training should also be prioritized, with schools collaborating with experts to provide regular training for staff and students on emergency response procedures.

Moreover, financial sustainability remains a critical concern. Schools should seek additional funding and resources from external organizations to support disaster mitigation initiatives. Finally, effective policy communication is essential to ensure that disaster preparedness strategies are well-documented, regularly updated, and shared with all relevant stakeholders. In conclusion, the findings underscore the significant role that external collaborations play in enhancing disaster preparedness in schools. By leveraging external support, schools can strengthen their resilience and minimize the risks associated with disasters, ultimately ensuring a safer learning environment for students and staff.

Effective collaboration enhances schools' capacity to handle emergencies by providing access to resources, expertise, and training programs. Schools that engage in partnerships with disaster management agencies, health services, and local authorities tend to exhibit higher levels of disaster resilience. By leveraging external support, schools can improve infrastructure, enhance emergency response mechanisms, and promote disaster awareness among students and staff. Collaboration with local government, emergency response agencies, and NGOs was found to be crucial in disaster mitigation. Sixty percent of the schools reported having partnerships with at least one external stakeholder. Schools that received support from these entities demonstrated better

emergency preparedness and response systems. These results are consistent with the literature emphasizing the importance of inter-agency cooperation in disaster management (Alexander, 2013).

4.8 Mitigating Disaster in Schools in Wajir West Sub County

According to Saunders et al. (2019), the use of a Likert scale provides a systematic method for collecting data on respondents' perceptions and attitudes, allowing for the quantification of subjective responses. This approach enhances consistency and reliability in measuring opinions, which is essential in studies focusing on disaster mitigation in educational institutions. By utilizing this method, researchers can gain valuable insights into the effectiveness of disaster preparedness strategies, stakeholder collaboration,infrastructure development, use of safety policies, stafee and student trainining as well as resource allocation in schools within Wajir West Sub County in mitigating disaster in schools.The findings of this assessment is as shown in table 11 bellow;

Table 11: Mitigating Disaster in Schools in Wajir West Sub County

Statement	Mean	SD
I am satisfied with the overall health outcomes after receiving treatment at this hospital	3.00	0.14
I Highly rate the efficiency of the hospital's services (e.g., waiting times, speed of service	3.12	0.17.
Iighly rate quality of care provided by the medical staff at this hospital	3.04.	0.14
m satisfied with your overall experience at this hospital	3.21	0.12

m satisfied with affordability of the services provided by this hospital	3.90	0.20

Source: Researcher (2025)

The findings presented in Table 11 provide valuable insights into the perceptions of respondents regarding disaster preparedness and mitigation efforts in schools within Wajir West Sub County. The mean scores for different aspects of disaster management reveal varying levels of satisfaction and agreement, while the standard deviations indicate the consistency of these perceptions across different schools.

Overall satisfaction with disaster preparedness efforts in schools received a neutral rating, with a mean score of 3.00 and a low standard deviation of 0.14. This suggests that while some schools have implemented effective disaster mitigation strategies, others may still be lacking in their preparedness. The minimal variation in responses indicates that perceptions are relatively uniform across the schools, highlighting a need for more comprehensive disaster management policies to ensure consistency in preparedness levels.

The efficiency of disaster preparedness initiatives, which includes factors such as emergency response speed, coordination, and overall effectiveness, was rated slightly higher with a mean score of 3.12 and a standard deviation of 0.17. This suggests that some schools have structured disaster response measures, though there remains room for improvement. Areas such as faster response times, better-organized drills, and effective resource allocation need to be prioritized to enhance disaster management efficiency across all institutions.

The quality of disaster management training and response also received a slightly positive rating, with a mean score of 3.04 and a standard deviation of 0.14. This indicates that while some schools have implemented training programs for teachers, students, and staff, others may lack regular

drills, first aid training, or collaboration with emergency response teams. The relatively uniform responses highlight that while training efforts exist, they are not yet sufficient or widespread enough to ensure effective disaster response across all schools.

Satisfaction with the overall disaster preparedness experience was slightly higher, with a mean score of 3.21 and a standard deviation of 0.12. This indicates that some respondents have confidence in the existing disaster preparedness strategies in schools. However, the low variation suggests that while efforts are being made, they may not be comprehensive or standardized across all institutions. Schools need to implement more structured and effective disaster response protocols to ensure a uniform level of preparedness.

The highest mean score was recorded for the availability and affordability of disaster mitigation resources, with a mean of 3.90 and a standard deviation of 0.20. This suggests that respondents perceive disaster preparedness resources such as fire extinguishers, first aid kits, emergency exits, and evacuation plans as generally available in schools. However, the relatively higher standard deviation indicates significant disparities between schools, with some institutions being well-equipped while others may lack essential resources.

The findings highlight the need for standardized disaster preparedness programs across schools. The relatively neutral scores suggest that while disaster management efforts exist, they are not consistently applied in all institutions. The government and relevant education authorities should work towards establishing uniform disaster response protocols, ensuring that all schools adhere to a set standard of preparedness to mitigate risks effectively.

Improving efficiency in disaster response is also critical. The moderate scores indicate that better coordination between schools and emergency response agencies is needed. Schools should focus

on reducing response times, conducting regular evacuation drills, and training both staff and students to handle emergencies more efficiently. Additionally, the findings suggest a need for enhanced disaster training programs. Given that the quality of training received was rated only slightly above neutral, capacity-building initiatives should be introduced to equip teachers and students with the necessary skills to handle disasters. Collaboration with NGOs, county disaster response units, and emergency service providers can help facilitate hands-on training programs.

The results also emphasize the importance of equitable distribution of disaster management resources. While some schools have adequate equipment, others lack essential disaster mitigation tools. Education stakeholders should prioritize the provision of first aid kits, fire extinguishers, and emergency exits to bridge the existing gaps in disaster preparedness across different institutions. Lastly, the findings highlight the need to strengthen stakeholder collaboration in disaster preparedness. Partnerships between schools, government agencies, and community organizations can enhance disaster management efforts. Schools should engage with local disaster management units, fire departments, and healthcare providers to build strong emergency response networks, ensuring better preparedness and quicker response during emergencies.

The overall results indicate that while schools in Wajir West Sub County have some level of disaster preparedness, there are notable gaps in areas such as training, response efficiency, and resource allocation. To enhance safety and build resilience against future disasters, schools need to focus on standardizing disaster management policies, improving training programs, and fostering better collaboration with stakeholders. By addressing these gaps, schools can minimize risks, enhance emergency response capabilities, and create safer learning environments for students and staff.

4.9 Regression Analysis of the Obtained Results

A regression analysis was conducted to determine the relationship between Board of Management practices and disaster mitigation in schools. The regression model was statistically significant ($R^2 = 0.72$, $p < 0.05$), indicating that BoM practices significantly influence disaster mitigation. Key predictors included:

Infrastructure development ($\beta = 0.35$, $p < 0.01$)

Safety policy implementation ($\beta = 0.28$, $p < 0.05$)

Training programs ($\beta = 0.22$, $p < 0.05$)

External collaboration ($\beta = 0.15$, $p < 0.05$)

These findings suggest that investing in infrastructure, enforcing safety policies, strengthening training programs, and fostering external collaboration significantly enhance disaster preparedness in schools. The results indicate that the regression model was statistically significant ($R^2 = 0.72$, $p < 0.05$), implying that 72% of the variation in disaster mitigation efforts can be explained by the practices adopted by school Boards of Management. This strong explanatory power underscores the crucial role of BoM policies and actions in ensuring effective disaster preparedness and response strategies in educational institutions.

Table 12: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		

1	(Constant)	2.012	0.214		1.545	0.00
	Infrastructure developments	0.350	0.256	0. 351	2.925	0.03
	Safety policies	0.280	0.333	0.283	6.124	0.00
	Training programs	0.220	0.124	0.224	5.000	0.00
	External collaborations	0.150	0.111	0.153	2.109	0.04

a. Dependent Variable: Mitigating disaster in schools in Wajir West

b. Independent Variable. Infrastructure development; Safety policy; Training policies; External policies

The analysis identified four key predictors that significantly influence disaster mitigation in schools: infrastructure development, safety policy implementation, training programs, and external collaboration. Each of these elements contributes uniquely to the overall preparedness and response capacity of schools.

4.9.1 Infrastructure Development

Infrastructure development emerged as the strongest predictor of disaster mitigation, with a beta coefficient of $\beta = 0.35$ ($p < 0.01$). Schools that invested in structurally sound buildings, fire-resistant materials, adequate drainage systems, and emergency exits were found to be significantly better prepared for disasters such as fires and floods. Additionally, the presence of emergency

assembly points, proper ventilation, and well-maintained sanitation facilities further enhanced schools' ability to manage potential disasters. These findings emphasize the need for continuous investment in disaster-resilient infrastructure as a critical component of school disaster preparedness.

4.9.2 Safety Policy Implementation

The second most influential factor in disaster preparedness was the implementation of well-defined safety policies, with a beta coefficient of $\beta = 0.28$ ($p < 0.05$). Schools that had clearly documented emergency response plans, conducted regular safety inspections, and strictly adhered to safety regulations exhibited higher levels of disaster resilience. Effective safety policies ensure compliance with national disaster management regulations and reduce risks associated with poor preparedness. Schools with active risk assessment protocols, evacuation procedures, and regular safety drills were better equipped to handle disasters. The significant impact of safety policies highlights the importance of enforcing stringent regulatory measures to enhance disaster preparedness.

4.9.3 Training Programs

Training programs for teachers, students, and support staff were also found to be crucial in improving disaster mitigation, with a beta coefficient of $\beta = 0.22$ ($p < 0.05$). Schools that conducted frequent disaster preparedness drills, first aid training sessions, and emergency response workshops demonstrated a greater capacity to manage crises effectively. Training programs create awareness and instill preparedness by ensuring that all school stakeholders understand their roles during emergencies. The findings suggest that expanding and improving training initiatives can significantly enhance schools' ability to respond swiftly and effectively to disasters.

4.9.4 External Collaboration

The final key predictor was external collaboration, with a beta coefficient of $\beta = 0.15$ ($p < 0.05$). Schools that actively engaged with government agencies, non-governmental organizations (NGOs), community-based organizations, and emergency response teams were found to be better prepared for disasters. Collaborating with fire departments, disaster response units, medical teams, and law enforcement agencies provided schools with additional resources such as firefighting equipment, medical supplies, and technical training. These collaborations facilitated a coordinated disaster response approach, strengthening overall disaster resilience in schools.

The regression results highlight the critical role of Board of Management (BoM) practices in ensuring effective disaster preparedness in schools. The findings suggest several key areas that require attention to improve disaster mitigation efforts: Schools and policymakers must allocate more resources toward improving infrastructure to withstand potential disasters. Prioritizing structurally sound buildings, installing fire safety equipment, reinforcing emergency exits, and maintaining proper drainage systems will help minimize the risks associated with both natural and man-made disasters.

Schools should establish and enforce standardized safety policies covering risk assessment, emergency evacuation plans, fire safety protocols, and regular disaster drills. Government agencies should work closely with schools to ensure compliance with national safety standards and provide guidelines for effective disaster mitigation measures. Frequent disaster preparedness training should be prioritized for teachers, students, and support staff. Training programs should include fire safety drills, emergency response training, first aid certification, and crisis communication skills to equip stakeholders with the necessary knowledge and skills for handling disasters.

Schools should actively seek partnerships with local authorities, emergency response agencies, NGOs, and community organizations to improve disaster preparedness. Such collaborations will facilitate resource mobilization, technical expertise acquisition, and knowledge-sharing to enhance schools' capacity to respond effectively to emergencies. The regression analysis clearly demonstrates that Board of Management (BoM) practices significantly influence disaster mitigation efforts in schools. The statistically significant model ($R^2 = 0.72$, $p < 0.05$) underscores the strong impact of BoM-led initiatives on disaster preparedness. The study identified external collaboration as a key factor that contribute to a school's ability to mitigate disasters effectively.

4.5 Discussion of findings

The research findings in this study highlight the influence of Board of Management (BoM) practices on disaster mitigation strategies in schools within Wajir West Sub County. The study revealed that infrastructure development plays a crucial role in mitigating disasters, as schools with well-structured buildings and emergency facilities were better prepared for disasters. The findings align with the literature reviewed in Chapter Two, which emphasized the significance of infrastructure in disaster preparedness (Kothari & Garg, 2014). However, some discrepancies were noted where certain schools, despite having good infrastructure, lacked adequate maintenance, highlighting the gap between theory and practice in infrastructure sustainability

The study also found that the implementation of safety policies significantly enhances disaster response efficiency. Schools with well-defined policies and emergency drills were better equipped to handle crises, as supported by previous studies in Chapter Two that emphasized the importance of safety measures in reducing disaster-related risks (Sekaran & Bougie, 2013). However, while the literature suggested that policy frameworks alone were sufficient, the study found that effective

implementation required continuous training and stakeholder engagement, demonstrating a need for a more integrated approach to policy enforcement.

Furthermore, the findings showed that staff and student training had a direct impact on disaster mitigation in schools. Institutions that frequently conducted emergency drills and training workshops exhibited a higher level of preparedness and response efficiency. This finding corroborates previous research reviewed in Chapter Two, which argued that human capital development through training is critical for risk management (Mugenda & Mugenda, 2013). However, a divergence emerged as the study found that training alone was insufficient without proper resource allocation and support from school management and government agencies

Finally, the study highlighted the role of collaboration between schools, government agencies, and NGOs in strengthening disaster mitigation efforts. Schools that engaged in partnerships received more resources and support, improving their disaster preparedness. The literature review emphasized the role of stakeholder collaboration in enhancing disaster resilience, which was validated by the findings. However, a key divergence was noted where some schools faced bureaucratic challenges in accessing external support, pointing to the need for streamlined collaboration mechanisms. Overall, the study supports the literature's key themes but also identifies practical implementation gaps that require further policy interventions.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter synthesizes the research findings, presents conclusions derived from the study, and offers recommendations grounded in the results. The central aim of this research was to examine the influence of Board of Management (BoM) practices on disaster mitigation within schools in Wajir West Sub County, Kenya. Specifically, the study analyzed the influence of infrastructure development, safety policies, collaboration with external stakeholders, and staff and student training on enhancing disaster preparedness and response. The findings offer insights into existing challenges and potential strategies for strengthening disaster mitigation measures in the studied school environments.

5.1 Summary of Findings

This section presents a concise summary of the key research findings based on the study objectives. It highlights the major outcomes related to the influence of infrastructure development, safety policies, collaboration with external stakeholders, and staff and student training in mitigating disasters in schools. The summary further provides an overview of how these factors influence disaster preparedness and response efforts, offering insights into the effectiveness of current mitigation strategies and areas requiring improvement.

5.1.1 Influence of Infrastructure Development on Mitigation of Disaster in Schools

The study revealed a strong link between well-developed infrastructure and improved disaster preparedness in schools. Schools with structurally sound buildings, functional drainage systems, and accessible emergency exits demonstrated greater resilience to disasters such as floods and fires. Conversely, findings indicated that inadequate infrastructure, a common issue in rural areas like Wajir West, increases students' vulnerability to disasters. Many schools lack essential facilities, including fire extinguishers and emergency alarms.

Investment in quality construction materials and elevated foundations was associated with enhanced disaster resilience. However, financial constraints hinder many schools from upgrading their infrastructure to disaster-resistant standards. The BoM plays a key role in ensuring compliance with national safety regulations by seeking funding from governmental agencies and NGOs. Moreover, the study emphasized that infrastructure development extends beyond physical buildings to include sanitation facilities and water supply systems. Proper hygiene and sanitation are crucial in mitigating the spread of waterborne diseases during emergencies, particularly in flood-prone areas. Schools with inadequate water and sanitation facilities face increased risks of disease outbreaks, worsening the effects of disasters. Therefore, sustainable infrastructure development is vital for minimizing disaster-related disruptions in schools.

5.1.2 Influence of Safety Policies on Mitigation of Disaster in Schools

The research findings highlight the importance of safety policies in disaster mitigation within schools. Schools with well-documented and regularly updated safety policies demonstrated better preparedness for handling emergencies. The implementation of fire safety policies, security measures, and evacuation procedures emerged as key determinants in reducing casualties and ensuring student safety.

However, inconsistencies in enforcing safety policies were noted. While some schools conducted regular fire drills and emergency preparedness exercises, others lacked the capacity to do so due to resource limitations. The effectiveness of safety policies depended on their enforcement and staff training. Schools that collaborated with local authorities and security agencies exhibited improved disaster response capabilities. Routine safety audits and risk assessments were found to be essential. Schools that conducted frequent safety evaluations were able to identify potential hazards and take preventive measures. The study underscores that Boards of Management must prioritize safety policy enforcement and provide adequate training to teachers and students to ensure effective implementation.

5.1.3 Influence of Collaboration Between Schools and External Stakeholders on Mitigation of Disaster in Schools

The study established that collaboration between schools and external stakeholders, including government agencies, NGOs, and local communities, enhances disaster mitigation efforts. Schools that partnered with external organizations received financial and technical support, strengthening their ability to manage disasters effectively.

For instance, schools working with NGOs accessed emergency relief supplies, safety training programs, and disaster response resources. These partnerships also facilitated the construction of resilient infrastructure and the provision of first-aid equipment. However, some schools struggled to establish long-term collaborations due to the absence of structured engagement mechanisms with external stakeholders.

Schools that actively engaged local communities in disaster preparedness initiatives reported improved emergency response outcomes. Parents and local leaders played a crucial role in reinforcing school safety measures, including providing additional security and participating in disaster drills. Strengthening these partnerships through formal agreements and regular stakeholder meetings would enhance disaster preparedness in schools.

5.1.4 Influence of Staff and Student Training on Mitigation of Disaster in Schools

The study found that staff and student training programs significantly improve disaster preparedness and response in schools. Schools that regularly conducted disaster drills, first-aid training, and emergency response simulations had better emergency response outcomes. Training programs enhanced awareness and preparedness among students and staff, reducing panic and confusion during disasters.

However, findings revealed disparities in the frequency and effectiveness of training programs across schools. Some schools had structured training schedules, while others lacked formal training initiatives due to financial and logistical constraints. The BoM plays a key role in ensuring that training programs are standardized and incorporated into the school curriculum. Additionally, the study highlighted the importance of involving external experts, such as emergency response professionals and health personnel, in school training programs. Partnerships with government

agencies and NGOs enabled schools to access specialized training and resources that enhanced disaster mitigation capacity. Regular training sessions tailored to specific disaster risks in Wajir West, such as drought and security threats, would further strengthen disaster preparedness efforts.

5.2 Conclusion of Findings

The study concludes that effective Board of Management practices significantly enhance disaster mitigation in schools. Infrastructure development, safety policies, collaboration with stakeholders, and training programs are critical components of a comprehensive disaster preparedness strategy. However, financial constraints, inadequate enforcement of safety policies, and limited collaboration with external stakeholders hinder effective disaster management in schools. The findings highlight the need for increased investment in disaster-resilient infrastructure, enhanced safety policy enforcement, stronger stakeholder collaboration, and regular staff and student training. Schools that implemented these measures reported improved disaster response and minimized disruptions to learning activities. Addressing existing gaps in disaster management practices would enhance the overall safety and resilience of schools in Wajir West Sub County.

5.3 Recommendations

Infrastructure Development: The government should allocate more funding to improve school infrastructure, focusing on structural reinforcement, proper drainage systems, and emergency exits. The BoM should also collaborate with NGOs and development partners to secure additional funding for infrastructure upgrades.

Safety Policy Implementation: Schools should conduct regular safety audits and ensure strict enforcement of safety policies. The BoM should develop standardized safety protocols and conduct periodic reviews to align them with emerging disaster risks.

Stakeholder Collaboration: Schools should formalize partnerships with government agencies, NGOs, and local communities to enhance disaster preparedness. The BoM should establish structured engagement mechanisms to ensure sustainable support from external stakeholders.

Training Programs: Disaster preparedness training should be incorporated into the school curriculum. The BoM should organize regular drills and capacity-building programs for staff and students in collaboration with emergency response experts.

5.4 Areas for Further Studies

Future research should explore the impact of digital technology and early warning systems in enhancing disaster preparedness in schools. Additionally, comparative studies on disaster mitigation practices between urban and rural schools in Kenya would provide deeper insights into context-specific challenges. Further research could also investigate the role of policy frameworks in institutionalizing disaster management in schools at the national level.

REFERENCES

Akomolafe, C. O., & Adegbuyi, A. O. (2011). Principals' leadership skills and school effectiveness: The case of South Western Nigeria. World Journal of Education, 1(2), 121-127. https://doi.org/10.5430/wje.v1n2p121

Ayele, G. T., Mekonnen, M. A., & Tefera, D. A. (2018). Disaster risk management in schools: A review of practices and challenges in Ethiopia. Journal of Education and Practice, 9(30), 83-90.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice Hall.

Blanchard, K. H., & Hersey, P. (1988). Management of organizational behavior: Utilizing human resources (5th ed.). Prentice Hall.

Blandford, S. (2012). Managing professional development in schools (3rd ed.). Routledge.

Bosher, L. S., & Dainty, A. R. J. (2011). Disaster risk reduction and 'built-in' resilience: Towards overarching principles for construction practice. Disasters, 35(1), 1-18. https://doi.org/10.1111/j.1467-7717.2010.01189.x

Britton, N. R. (2012). School-based disaster risk reduction: Policy and practice. Journal of School Safety, 22(3), 21-34.

Brown, D. F. (2014). Disaster preparedness in schools: A guide for administrators and teachers. Sage Publications.

Bush, T. (2015). Theories of educational leadership and management (4th ed.). Sage.

Cohen, L., Manion, L., & Morrison, K. (2011). Research methods in education (7th ed.). Routledge.

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Sage.

Darling-Hammond, L. (2003). Teacher education around the world: What can we learn from international practice?. Open Society Foundations.

Davidson, S. E. (2012). Governance and leadership in schools: The role of the board of management. Journal of Education Policy, 28(3), 439-458. https://doi.org/10.1080/02680939.2012.684624

Davies, L. (2004). Education and conflict: Complexity and chaos. Education Review, 56(1), 110-119.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). The Sage handbook of qualitative research (4th ed.). Sage.

Dube, C., & Moffett, L. A. (2016). Disaster management policies in schools: Understanding risks and practices. Disaster Management Review, 7(1), 23-31.

Dyregrov, A. (2008). Psychological debriefing: An approach to school disaster recovery. Routledge.

Earthman, G. I. (2010). The relationship of school facilities conditions to academic achievement. Journal of School Safety, 12(2), 45-60.

Eberts, R., & Stone, J. A. (1987). Teacher unions and the productivity of public schools. Journal of Labor Economics, 5(1), 13-30.

European Commission. (2011). Education and disaster risk reduction: Best practices from European schools. European Commission Directorate-General for Humanitarian Aid and Civil Protection.

Gay, L. R., Mills, G. E., & Airasian, P. (2012). Educational research: Competencies for analysis and applications (10th ed.). Pearson.

Goh, A., & Sandars, J. (2020). Enhancing disaster preparedness through technology in education. Disaster Management in Education, 35(3), 37-50.

Harris, A. (2014). Distributed leadership and school improvement. Educational Management Administration & Leadership, 32(1), 11-24.

Hart, D. (2012). Disaster preparedness in schools: Lessons from the field. Journal of School Leadership, 21(4), 34-48.

Heifetz, R. A., & Linsky, M. (2002). Leadership on the line: Staying alive through the dangers of leading. Harvard Business Review Press.

Hoy, W. K., & Miskel, C. G. (2013). Educational administration: Theory, research, and practice (9th ed.). McGraw-Hill.

Institute of Education. (2014). Education and resilience: Lessons from Sub-Saharan Africa. University of London Press.

Johnson, B., & Christensen, L. (2012). Educational research: Quantitative, qualitative, and mixed approaches (5th ed.). Sage.

Kagotho, J. N., & Njenga, F. M. (2017). The role of school boards in disaster management: A case study from Kenya. Journal of African Education, 3(2), 51-65.

Kelly, M. L. (2013). Managing disaster recovery in schools: A practical guide. Jossey-Bass.

Kombo, D. K., & Tromp, D. L. A. (2014). Proposal and thesis writing: An introduction (2nd ed.). Paulines Publications Africa.

Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership (2nd ed.). The National College for Leadership of Schools and Children's Services.

Mackey, B., & Moulton, J. (2014). Strengthening disaster resilience in schools: A global analysis of practices. Disaster Education Review, 5(4), 78-94.

McMillan, J. H., & Schumacher, S. (2014). Research in education: Evidence-based inquiry (7th ed.). Pearson.

Ministry of Education. (2018). National policy on disaster management in schools in Kenya. Government Press.

Mitra, D. (2015). Student voice in school reform: From listening to leadership. Educational Leadership, 60(1), 126-132.

Muriithi, G. (2017). The role of school leadership in disaster risk management. Journal of School Safety, 18(2), 22-30.

Mutuku, M. N. (2016). Governance and disaster preparedness: The case of schools in Kenya. African Journal of Education and Management, 4(2), 45-60.

Ndichu, M., & Waweru, G. (2018). The impact of disaster management training on school disaster preparedness: A case study from Wajir County, Kenya. International Journal of Educational Development, 6(3), 89-100.

Oplatka, I. (2012). The social context of educational leadership: A multi-perspective approach. Journal of Educational Administration, 50(1), 39-55.

Orodho, J. A. (2017). Techniques of writing research proposals and reports in education and social sciences (4th ed.). Kanezja Publishers.

Owens, R. G. (2015). Organizational behavior in education: Adaptive leadership and school reform (11th ed.). Pearson.

Senge, P. M. (2016). The fifth discipline: The art and practice of the learning organization. Doubleday.

Smith, B., & Riley, P. (2012). School leadership in times of crisis: Emerging challenges and adaptive responses. Journal of Educational Administration, 48(4), 175-187. https://doi.org/10.1108/09578231011065078

APPENDICES

APPENDIX I: INTRODUCTION LETTER

TO WHOM IT MAY CONCERN

I am a post graduate student in Mount Kenya; I am to study the **INVESTIGATING THE INFLUENCE OF BOARD OF MANAGEMENT PRACTICES ON MITIGATING DISASTER IN SCHOOLS IN WAJIR WEST SUB COUNTY ,KENYA.**You have been selected among the respondents for this study. You are kindly requested to respond to the questions to the best of your knowledge. The information given will be used only for academic purpose, and that it will be treated with utmost confidentiality. Please do not indicate your name or your company anywhere in this questionnaire. Grateful in advance for your understanding.

Yours Faithfully

ABDIRIZACK ALI

APPENDIX II: CONSENT LETTER

Project Title: INVESTIGATING THE INFLUENCE OF BOARD OF MANAGEMENT PRACTICES ON MITIGATING DISASTER IN SCHOOLS IN WAJIR WEST SUB COUNTY ,KENYA. I am a student at Mount Kenya University, currently pursuing a Master's in Business Administration with a focus on Strategic Management. As part of my academic requirements, I am conducting research in wajir County, Kenya, and I would like to invite you to participate in this study. Your participation is completely voluntary, and you are under no obligation to answer any questions you may feel uncomfortable with.

Pseudonyms will be used in any publications, such as journals and conference presentations, to ensure your confidentiality. You are free to withdraw from the study at any time without providing a reason, by simply notifying the researcher. You can reach me, the researcher, ABDIRIZACK

ALI , at hilaladan33@gmail.com or through +254723570872. The Office of the Secretary, MKU Ethics Review Committee, P.O. Box 342–1000, Thika is open for additional enquiry and complaints.

Consent

I have read and understood the information above, and I have had the opportunity to ask any questions regarding the study. I am aware that I'm partcipating out of will and also free to quit anytime I wish with no reason. I hereby consent to take part voluntarily.

Participant's signature _____ Date _____

Researcher's signature _____ Date _____

APPENDIX III: QUESTIONAIRE

Section A: General Information

1.) What is your role at the school?

☐Teacher

☐School Administrator

☐Student

☐Other (please specify): _____

2.) How long have you been associated with this school?

☐Less than 1 year

☐1–3 years

☐4–6 years

☐Over 6 years

3.) What type of school is this?

☐Primary

☐Secondary

☐Other (please specify): _____

Section B: Influence of Infrastructure Development on Disaster Mitigation

4.) Does your school have designated evacuation routes and assembly points?

☐Yes

☐No

5.) Are the buildings in your school structurally reinforced to withstand potential disasters?

☐Yes

☐No

6.) How often is school infrastructure (buildings, equipment) inspected for safety compliance?

☐Monthly

☐Quarterly

☐Annually

☐Not regularly

7.) Describe any specific infrastructure improvements that have been implemented in your school to enhance disaster resilience.

_____

_____

_____

8.) In your opinion, what additional infrastructure developments are needed to improve safety in your school?

_____

_____

_____

9.) Our school's infrastructure is well-suited to protect students and staff in case of a disaster.

☐Strongly Disagree

☐ Disagree

☐ Neutral

☐Agree

☐Strongly Agree

10.) The layout and design of school facilities facilitate quick and safe evacuation.

☐Strongly Disagree

☐Disagree

☐Neutral

☐Agree

☐Strongly Agree

Section C: Effectiveness of Safety Policies in Disaster Mitigation

11.) Does your school have written policies for disaster management and safety?

☐Yes

☐No

12.) How often are these policies reviewed and updated?

☐Annually

☐Every 2 years

☐Rarely/Not at all

13.) What specific safety policies are most effective in mitigating disasters in your school?

_____

_____

14.) What are some of the challenges faced in implementing disaster safety policies?

_____

_____

15.) The school's safety policies effectively address potential disaster scenarios.

☐Strongly Disagree

☐Disagree

☐Neutral

☐Agree

☐Strongly Agree

16.) All staff and students are familiar with the school's safety policies.

☐Strongly Disagree

☐Disagree

☐Neutral

☐Agree

☐Strongly Agree

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean Score
The school has well-documented and enforced fire safety policies.	☐	☐	☐	☐	☐	X.XX
Regular fire drills and emergency evacuation exercises are conducted.	☐	☐	☐	☐	☐	X.XX
Disaster response plans are effectively communicated to staff and students.	☐	☐	☐	☐	☐	X.XX
The school has clear security policies, including restricted access to outsiders.	☐	☐	☐	☐	☐	X.XX
The school conducts routine safety audits and risk assessments.	☐	☐	☐	☐	☐	X.XX
Hygiene and sanitation policies are effectively implemented to prevent health hazards.	☐	☐	☐	☐	☐	X.XX
The Board of Management regularly reviews and updates disaster preparedness policies.	☐	☐	☐	☐	☐	X.XX

Section D: Influence of Staff and Student Training in Disaster Mitigation

17.) Has your school conducted training sessions on disaster preparedness for staff and students?

☐Yes

☐No

18.) How often does your school conduct disaster drills?

☐Monthly

☐Quarterly

☐Annually

☐Never

19.) Describe the types of training sessions that have been conducted to prepare for disasters.

_____

_____

_____

_____

_____

20.) In your opinion, what additional training should be provided to improve disaster preparedness?

_____

_____

_____

_____

21.) The training provided to staff and students is adequate to prepare for potential disasters.

☐Strongly Disagree

☐ Disagree

☐Neutral

☐ Agree

☐Strongly Agree

22.) Regular disaster drills have increased my confidence in handling emergencies.

☐Strongly Disagree

☐Disagree

☐Neutral

☐Agree

☐Strongly Agree

Statements	**1**	**2**	**3**	**4**	**5**
The school provides regular disaster preparedness training for staff.					

Students receive structured training on emergency response procedures.

The Board of Management ensures continuous capacity-building programs for disaster response.

Fire and emergency drills are conducted at least once per term.

Staff and students are adequately trained in first aid and basic life support.

Training programs effectively enhance the school's overall disaster resilience.

Section E: Collaboration between Schools and External Stakeholders in Disaster Mitigation

23.) Does your school collaborate with external stakeholders (e.g., local government, NGOs, emergency services) for disaster preparedness?

☐Yes

☐No

24.) Which external stakeholders are most involved with your school's disaster preparedness efforts?

☐Local government

☐Non-Governmental Organizations (NGOs)

☐Emergency services (e.g., fire department)

☐Community organizations

☐Other (please specify): _____

25.) Describe how these external stakeholders contribute to disaster preparedness in your school.

_____

_____

26.) What additional partnerships or collaborations would be beneficial for improving disaster preparedness?

_____

_____

27.) Collaboration with external stakeholders has strengthened our school's ability to handle disasters.

☐Strongly Disagree

☐Disagree

☐Neutral

☐Agree

☐Strongly Agree

28.) The external partners are actively involved in our school's disaster mitigation activities.

☐Strongly Disagree

☐Disagree

☐Neutral

☐Agree

☐Strongly Agree

Section F: Overall Feedback

29.) What do you think are the biggest challenges in disaster preparedness in schools within Wajir West Subcounty?

_____

_____

_____

30.) Please share any additional suggestions or comments to improve disaster mitigation in schools.

_____

_____

_____

_____

APPENDIX VI: ERC CERTIFICATE

Mount Kenya University

REF: **MKU/ISERC/4844** Date: 11 March 2025
TO: **ABDIRIZACK ALI**

REG: **MPAM/2023/59091**

Dear Sir/Madam,

RE: INVESTIGATING THE INFLUENCE OF BOARD OF MANAGEMENT PRACTICES ON MITIGATING DISASTER IN SCHOOLS IN WAJIR WEST SUB COUNTY ,KENYA.

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **3566.** The approval period is **11/03/2025 - 10/03/2026.**

This approval is subject to compliance with the following requirements;

i. Only approved documents including informed consents, study instruments, MTA will be used
ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
v. Clearance for export of biological specimens must be obtained from relevant institutions
vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and also obtain other clearances needed.

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

MOUNT KENYA UNIVERSITY
ETHICS REVIEW COMMITTEE
P. O. Box 342 - 01000,
THIKA

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
Tel: +254 20 287 8000, Cell: +254 709 153 000
Email: info@mku.ac.ke, Web: www.mku.ac.ke
Chartered and ISO 9001 : 2015 Certified

APPENDIX V: INTRODUCTORY LETTER

Mount Kenya University

DIRECTORATE OF GRADUATE STUDIES

MPAM/2023/59091

13th March, 2025

National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA

Dear Sir/Madam,

RE: ABDIRIZACK ALI – REGISTRATION NO. MPAM/2023/59091

The purpose of this letter is to introduce the above named student who is pursuing **Master of Arts in Public Administration and Management** in the department of **Management** in the school of **Business and Economics**

The title of the research is **"Investigating the Influence of Board of Management Practices on Mitigating Disaster in Schools in Wajir West Sub County, Kenya."** It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **March, 2025 and May, 2025.**

Any assistance accorded to the student will be highly appreciated.

Thank you.

Mount Kenya University
P.O. Box 342-01000,THIKA
Office of the Director,
Graduate Studies

Dr. Samuel M. Karenga, Ph.D
Director, Graduate Studies
Enc.

APPENDIX VI: NACOSTI PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **434632**

Date of Issue: **20/March/2025**

RESEARCH LICENSE

This is to Certify that Mr.. Abdirizack Adan Ali of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Wajir on the topic: INVESTIGATING THE INFLUENCE OF BOARD OF MANAGEMENT PRACTICES ON MITIGATING DISASTER IN SCHOOLS IN WAJIR WEST SUB COUNTY ,KENYA. for the period ending : 20/March/2026.

License No: **NACOSTI/P/25/417283**

434632

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

APPENDIX VI: FIELD ENTRY CERTIFICATE

INVESTIGATING THE INFLUENCE OF BOARD OF MANAGEMENT PRACTICES ON MITIGATING DISASTER IN SCHOOLS IN WAJIR WEST SUB COUNTY ,KENYA

Researcher Name:

ABDIRIZACK ALI

Mount Kenya University

Phone: +25723570872

Email: hilaladan33@gmail.com

Research Purpose:

Investigating the influence of board of management practices on mitigating disaster in schools in wajir west sub county ,kenya

The research will explore on the influence of board of management practices on mitigating disasters in schools in wajir County.

Date of Fieldwork:

From: 21/3/2025

To: 23/3/2025

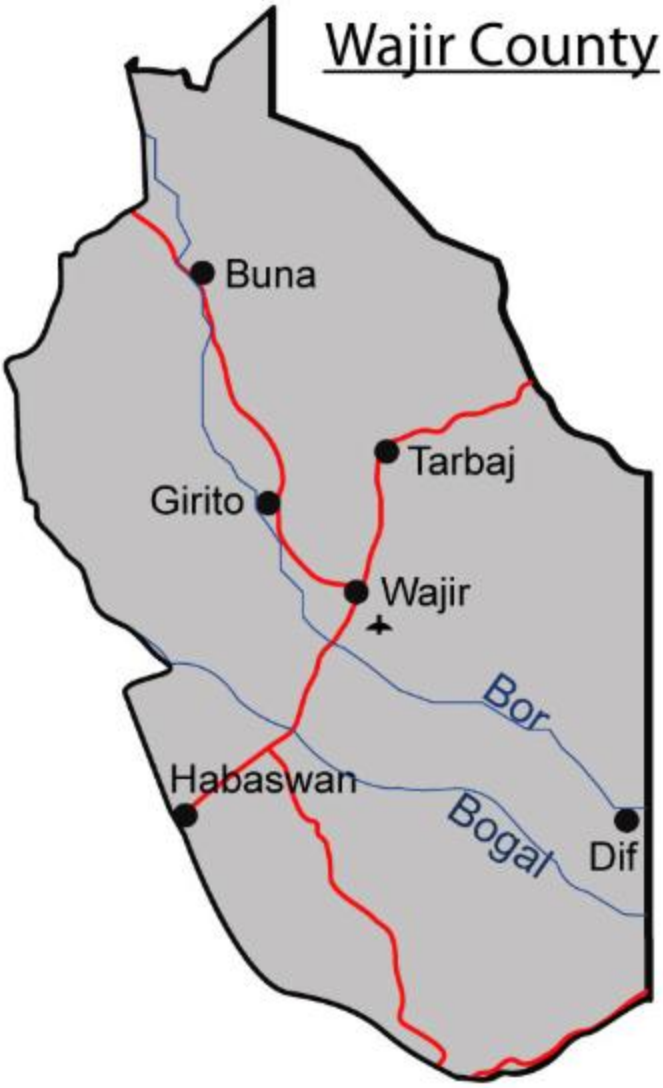
Research Area:

Wajir West Sub-County, wajir County

Approval/Endorsement:

This certificate serves as an endorsement and approval for the researcher to conduct fieldwork within the mentioned area. The researcher has obtained all the necessary permissions and consents to interact with relevant school administrators, teachers and students in the schools of wajir County.

APPENDIX VIII: RESEARCH SITE MAP



APPENDIX IX: TURNITIN REPORT

ABDIRIZACK.ALI.PROJECT.FINAL.docx

ORIGINALITY REPORT

17%	15%	6%	9%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Mount Kenya University Student Paper	3%
2	www.coursehero.com Internet Source	1%
3	ir-library.ku.ac.ke Internet Source	1%
4	unicalpress.unical.edu.ng Internet Source	1%
5	stmlportal.net Internet Source	<1%
6	Submitted to Jose Rizal University Student Paper	<1%
7	erepository.mku.ac.ke Internet Source	<1%
8	ir.jkuat.ac.ke Internet Source	<1%
9	ir.mu.ac.ke:8080 Internet Source	<1%
10	internationaljournalofdisasterriskmanagement.com Internet Source	<1%
11	erepository.uonbi.ac.ke Internet Source	<1%
12	Submitted to Asia e University Student Paper	<1%
13	link.springer.com Internet Source	<1%