



**NATIONAL DEFENCE UNIVERSITY- KENYA**

**COORDINATION OF NON-STATE ACTORS IN ENHANCEMENT OF  
HEALTH SECURITY IN POST COVID-19 KENYA:  
A CASE STUDY OF AMREF HEALTH AFRICA- KENYA**

**By**

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NATIONAL DEFENCE UNIVERSITY-KENYA**

**AUGUST 2024**


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**NATIONAL DEFENCE UNIVERSITY-KENYA**

## **DEDICATION**

This thesis is dedicated to the health professionals working in Kenya, whose tireless efforts in advancing health outcomes and promoting collaboration have illuminated a path towards a healthier and more secure future. Your commitment to improving health equity and fostering partnerships exemplifies the spirit of transformative change that is crucial in post-COVID-19 health landscapes. May this dedication serve as a recognition of your valuable contributions and as a testament to the shared journey towards a more coordinated and effective health security framework.

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## LIST OF ABBREVIATIONS AND ACRONYMS

AMREF	The African Medical and Research Foundation Health Africa-Kenya
CBOs	Community-Based Organizations
CDC	Centers for Disease Control and Prevention
COVID-19	Coronavirus Disease 2019
CSOs	Civil Society Organisations
FBOs	Faith-Based Organizations
GOARN	Global Outbreak Alert and Response Network
KEPH	Kenya Essential Package for Health
MOH	Ministry of Health
MNCH	Maternal, New-born and Child Health
NACOSTI	National Commission for Science Technology and Innovation
NGOs	Non-Governmental Organizations
NHSSP	National Health Sector Strategic Plan
NSAs	Non-State Actors
PPE	Personal Protective Equipment
PPPs	Public-Private Partnerships
SARS-CoV-2	Severe Acute Respiratory Syndrome-Coronavirus-2
UNDP	United Nations Development Programme
WHO	World Health Organization

## OPERATIONALIZATION OF TERMS

<b>COVID-19 pandemic in Kenya</b>	Part of the global outbreak of the coronavirus disease 2019 (COVID-19) caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) that was confirmed to have reached Kenya on 12 March 2020
<b>Health Crises</b>	Events or situations that pose a significant threat to public health, and that can overwhelm healthcare systems and require urgent and extensive interventions as evidenced during and immediately after the COVID-19 pandemic era.
<b>Health Security</b>	In this study, these are measures and strategies designed to protect humanity from threats to public health such as the COVID-19 pandemic in Kenya.
<b>Human Security</b>	As used in this study, this is safety of humanity from sustained threats of hunger, disease and repression, and protection from sudden and hurtful disruptions daily lives
<b>Non-State Actors</b>	A diverse group of organizations and entities that operated independently of government authorities but collaborated to improve the overall health and well-being of the population during the COVID-19 period in Kenya
<b>Post-COVID-19 pandemic era</b>	The immediate period after the acute phase of the COVID-19 pandemic in Kenya, when the immediate health crisis subsided, and the Kenyan society is transitioning to a new normal
<b>Public Health</b>	Multidisciplinary practice of promoting and protecting the health and well-being of entire populations or communities as opposed to individuals.

**Public Health Emergency**

A sudden occurrence or imminent threat of an illness or health condition, due to an outbreak of epidemic proportion

## ABSTRACT

This study investigated the role of non-state actors (NSAs) in enhancing health security in post-COVID-19 Kenya, focusing on the case of AMREF Health Africa-Kenya. The paradox of Kenya experiencing significant disease burden and economic hardship despite possessing relevant policies and frameworks motivated this research. Employing a qualitative case study design grounded in Institutional Theory, the research aimed to: analyze the effects of NSA interventions; examine the existing policy frameworks for NSA-government partnerships, and explore opportunities for strengthening collaboration. The research applied a case study design and qualitative approach. Sample size was determined considering the target population of 12,162. Data was collected through open ended questionnaires and key informant interviews from a sample of 80 participants. The qualitative data collected underwent thematic analysis. The study revealed that NSAs, including AMREF, significantly contributed to health security outcomes. Their interventions provided essential resources, facilitated community engagement, and implemented targeted health programs. To bolster NSA capacity in responding to health threats, the study recommends advocating for increased resource allocation, encompassing both financial investment and human resources. Furthermore, the study found that existing policy and strategic frameworks for NSA-government partnerships were hampered by bureaucratic hurdles and inefficient administrative processes. These impeded timely decision-making and collaborative efforts. To address this, the study recommends institutional reforms by the Ministry of Health to streamline processes, simplify approval mechanisms, and enhance communication through digital platforms. Finally, the research identified the need for robust partnerships and transparent communication channels between NSAs and government institutions through the Ministry of Health for effective health security. Establishing regular forums, such as joint steering committees or task forces, was suggested to facilitate open dialogue, collaborative decision-making, and strategic alignment of priorities. In conclusion, this thesis contributes to the understanding of NSA coordination in post-COVID-19 health security. It underscores the importance of collaborative efforts between NSAs and government institutions through the Ministry for addressing health threats and building a more resilient Kenyan health system. The research highlights the need for policy reforms, capacity-building initiatives, and sustained partnerships to strengthen health security infrastructure and ensure the well-being of the Kenyan population in the face of future health crises.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Chapter Introduction**

This chapter provides a comprehensive introduction to the study by outlining the key elements that form its foundation. It begins with background information to contextualize the research topic, followed by a detailed problem statement that identifies the core issues being addressed. The chapter then presents the research objectives and questions, which guide the direction and focus of the study. Additionally, it justifies the study by explaining its importance and relevance, and highlights its significance in contributing to existing knowledge and practice.

The chapter further delineates the scope of the study, specifying the boundaries within which the research will be conducted. It addresses the assumptions underlying the study and discusses potential limitations that may be encountered during the research process. The chapter concludes with a summary that encapsulates the salient issues covered, providing a clear roadmap for the subsequent chapters..

### **1.2 Background Information**

The origins of the COVID-19 pandemic can be traced back to December 2019 in Wuhan, China. The virus, later identified as SARS-CoV-2, was first reported in a cluster of pneumonia cases linked to a seafood market in the city. The rapid spread of the virus led to a public health crisis in Wuhan and surrounding areas, prompting Chinese authorities to implement stringent measures, including lockdowns and travel restrictions, to contain the outbreak (Huang et al., 2020). Despite these efforts, the virus quickly crossed international borders, leading to a global

health emergency declared by the World Health Organization (WHO) on January 30, 2020 (World Health Organization, 2020).

The global rise in COVID-19 cases was unprecedented, with countries around the world experiencing significant surges in infections, hospitalizations, and deaths. The pandemic's impact was felt globally, regionally, and locally, as healthcare systems were overwhelmed, economies were disrupted, and societies faced unprecedented challenges. By March 2020, COVID-19 had spread to nearly every country, with varying degrees of severity. Regions such as Europe and the Americas saw some of the highest case numbers, while countries in Africa and Asia also grappled with the virus's spread, albeit with differing healthcare infrastructure and resources (Johns Hopkins University, 2020). By March 2020, there were over 700,000 confirmed COVID-19 cases globally, with Africa reporting more than 5,000 cases and Kenya documenting its first few cases on 20<sup>th</sup> March, 2020. The rapid escalation of cases highlighted the need for coordinated international responses and effective public health interventions.

In response to the escalating pandemic, non-state actors (NSAs) played a crucial role in managing and mitigating the impact of COVID-19. Organizations such as AMREF Health Africa, the Bill & Melinda Gates Foundation, and Médecins Sans Frontières mobilized resources, expertise, and personnel to support national and local efforts in combating the virus. NSAs contributed significantly by providing essential medical supplies, facilitating public health campaigns, and supporting vaccine distribution efforts. Their involvement was instrumental in bridging gaps left by overwhelmed governmental health services, particularly in low- and middle-income countries (Karnon, 2020). The collaborative efforts between NSAs and government entities underscored the importance of multi-sectoral partnerships in addressing global health crises effectively.

The emergence of the COVID-19 pandemic in Kenya underscored the critical importance of health security and the need for robust and coordinated responses to global health threats. As the nation navigates the post-COVID-19 landscape, it is essential to examine the role of Non-State Actors (NSAs) in contributing to the enhancement of health security in Kenya. Non-State Actors, which include Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs), Private Sector Entities and Corporations, International Organizations, Media and News Outlets, Religious Institutions, Social Movements, Academic and Research Institutions, Community-Based Organizations (CBOs) and Transnational Networks, have historically played significant roles in public health interventions. This research aimed at scrutinising and analysing the role of the NSAs interventions on health security in Kenya post COVID-19, through a case study of a national Non-Governmental Organization.

National health security is a critical aspect of a nation's overall security framework, encompassing the protection of public health and response to health-related threats. The United Nations Development Programme's (UNDP) Human Development Report of 1994 introduced a new concept; human security, emphasizing that security should extend beyond traditional notions of state security which typically revolve around the protection of a nation's territorial integrity, sovereignty, and political stability from external threats, including military aggression, invasion, or coercion by other states. The traditional security concept emphasizes the role of state-centric approaches to security, where the state is the primary actor responsible for safeguarding its citizens and interests, and its concerns often prioritize military capabilities, intelligence gathering, and border defense as means of deterring and defending against perceived threats to national security as opposed to that of human security which encompasses the well-being of individuals. The Human Development Report- 1994 identified seven core elements of human security: economic security, food security, health security, environmental

security, personal security, community security, and political security. The report argued that these aspects were critical for human development and should be considered in conjunction with traditional defence and political security (United Nations Development Programme, 1994). The report further equated security with people and development as opposed to the traditional security that focused on territories and arms, and proposed that the World Summit for Social Development approves a kind of world social charter, and create a global human security fund as well as Economic Security Council.

Health security in Kenya manifests through a multi-faceted approach involving government institutions, primarily the Ministry of Health (MOH), and non-state actors (NSAs) such as non-governmental organizations (NGOs), private sector entities, and community-based organizations. The MOH is responsible for developing health policies, coordinating national health programs, and managing public health emergencies. NSAs play a crucial role in complementing these efforts by providing additional resources, technical expertise, and grassroots-level interventions. For instance, organizations like AMREF Health Africa have been pivotal in enhancing community health education, delivering essential medical services, and supporting health infrastructure development. This collaborative framework aims to strengthen the country's health system, ensuring preparedness and response to health threats through shared responsibility and resource mobilization (World Health Organization, 2020).

Non-State Actors colloquially referred to as non-governmental actors or non-governmental entities, are entities or organizations that operate independently of, or without being directly controlled or affiliated with, a government or state. These actors play a significant role in influencing health security, amongst other sectors, posing challenges to the traditional understanding of security as primarily state-centric (Kashiya, 2023). Non-state actors, can impact human health security through various means, such as advocacy in health, the spread

of information and misinformation, control of infectious diseases, provision of healthcare services, and influencing policy decisions.

The COVID-19 pandemic posed unprecedented challenges to global health systems, including those in Kenya. The country witnessed the devastating effects of the pandemic on public health, including a drop in outpatient clinic visits from a high of 7,904,906 in 2018 before the pandemic, to 3,406,382 at the height of the pandemic in 2020. The economy and society at large were not spared either, where it is estimated Kenya's economy contracted by between 1.0 percent and 1.5 and the fiscal deficit widened to 8.2 percent of gross domestic product (GDP), up from the pre-COVID budgeted target of 6.0 percent of GDP, while Kenya's debt to GDP ratio rose to 65.6 percent of GDP as of June 2020, up from 62.4 percent of GDP in June 2019 as per the World Bank. (Brancati, Birnir & Idlbi, 2023). However, the response efforts during the pandemic were sub-optimal despite the grievous nature of the problem, highlighting the importance of collaboration between various stakeholders, including non-state actors, in tackling health emergencies effectively.

Non-state actors have been actively involved in public health initiatives, contributing their expertise, resources, community networks, infrastructure and personnel. These actors have played crucial roles in various areas, such as surveillance, risk communication and community engagement, resource mobilization, and capacity building (World Health Organization, 2023). To respond to the challenges arising during the post- COVID-19 period for instance, non-state actors enhanced their response to the ongoing and emerging needs of vulnerable populations, including through interventions aimed at food production, consumption and provision of water to the community. As argued by Diba (2021), non-state actors have played an essential role in mitigating the effects of the COVID-19 outbreak and its related lock-down measures on the

general population and helping the hospitals, civil defence emergency services, and contact tracing teams run smoothly and relieving workloads on healthcare workers.

The assistance offered by the non-state actors successfully reduced the number of hospital transfers by more than 85% and have ensured that medications for chronic diseases are timely disseminated (Bell, *et al.*, 2020). Non-state actors have also played a role in fighting rumours about COVID-19 and fought against inaccurate information about its treatment and preventive measures. Overall, the initiative increased the understanding and value of the role non-state actors can play during public health emergencies and the real need to volunteer to meet the general population's needs when critical needs arise. Therefore, understanding contribution of Non-State Actors in the enhancement of health security in Post COVID-19 Kenya is vital for strengthening health security in the post-COVID-19 era.

In Kenya, The African Medical and Research Foundation (AMREF) Health Africa-Kenya has implemented several measures to respond to the COVID-19 pandemic. Prior to the pandemic, personal protective equipment (PPE) was primarily imported, but there was a shortfall during the crisis (Wangari, 2021). The response to the pandemic also focused on addressing the health and socio-economic worries of young people, who were particularly affected. AMREF Health Africa- Kenya's efforts have played a crucial role in minimizing the impact of the virus on public health and the economy in Kenya.

### **1.3 Problem Statement**

The COVID-19 pandemic, stemming from the novel coronavirus SARS-CoV-2, emerged in late 2019 and swiftly evolved into a global health crisis. As of September 1st 2023, the virus had afflicted 770,085,713 individuals worldwide, resulting in 6,956,173 fatalities. The African continent was profoundly impacted by the COVID-19 pandemic, with varying degrees of

severity across different regions. While the continent as a whole reported approximately 1.34 million cases and over 26,000 deaths, East Africa, though relatively less affected in terms of caseload compared to other regions, experienced significant socioeconomic disruptions including 344,094 cases and 5,689 deaths in Kenya (WHO, 2023). This unprecedented global health emergency laid bare vulnerabilities in healthcare systems, spotlighting the critical necessity for robust health security measures. The ramifications of the pandemic significantly reshaped public health priorities and challenges, accentuating the urgency for a comprehensive understanding of non-state actors' contributions and the challenges they pose in augmenting state efforts towards health security.

Amid the pandemic, the Kenyan government and NGOs mobilized collaborative efforts to mitigate its impact and harness resources and expertise. Various policy documents, guidelines, and frameworks were established to facilitate coordinated responses to health emergencies, including pandemics. These initiatives outlined the responsibilities of both governmental and non-state actors, ensuring a structured approach to coordination.

The COVID-19 pandemic exposed a critical shortcoming in Kenya's health security preparedness. Despite a robust arsenal of policies, frameworks, and strategies – tools that could have mitigated the impact of the virus – Kenya was left grappling with widespread disease, fatalities, and economic devastation. The slow recovery further highlights this paradox. In the aftermath, the crucial role of non-state actors (NSAs) like AMREF in bolstering health security became evident. However, a significant gap remains in understanding the effectiveness of coordination mechanisms among NSAs. This lack of knowledge persists despite the demonstrably positive contributions of NSAs to Kenya's health security, particularly in the post-COVID-19 era. This research aims to bridge this knowledge gap by examining the specific impacts of NSAs, the existing policy frameworks governing their collaboration with the government, and potential avenues for strengthening these partnerships to ensure a more

coordinated and resilient response to future health threats. The coordination of non-state actors entails intricate dynamics involving the effects of interventions, policy frameworks, and prospects for collaboration with government agencies, urging a comprehensive examination to develop a nuanced comprehension of non-state actors' roles in health security enhancement. Therefore, this study aimed at addressing this gap by conducting a case study centered on AMREF, elucidating their interventions, the prevailing policy landscape, and unexplored opportunities for fortifying partnerships with government institutions to bolster health security.

## **1.4 Research Objectives**

This section brings out the general objective and the specific objectives of the study.

### **1.4.1 General objective**

The main objective of this research was to assess the coordination of non-state actors in the enhancement of health security in post COVID-19 Kenya.

### **1.4.2 Specific Objectives**

In pursuit of a focused inquiry into the dynamics of non-state actor involvement in enhancing health security post-COVID-19 in Kenya, this study set forth the following specific research objectives:

1. Analyse the effects of non-state actors' interventions on health security outcomes in post COVID-19 Kenya and their enhancement of health security
2. Examine the existing policy and frameworks for partnerships between non-state actors and government agencies in enhancing health security in Kenya
3. Evaluate opportunities for strengthening partnerships between non-state actors and government institutions to enhance health security in Kenya

## **1.5 Research Questions**

The research questions guiding this study were designed to delve into the effects, policy frameworks, and opportunities for collaboration, providing a structured approach to investigating the multifaceted role of non-state actors in safeguarding health security in post-COVID-19 Kenya.

The following research questions served as a guide towards a deeper understanding of the complexities surrounding non-state actor coordination in the enhancement of health security post-COVID-19 in Kenya.

1. What are the existing policy and strategic frameworks for partnerships between non-state actors and government agencies in enhancing health security in Kenya?
2. How do the interventions of non-state actors impact the health security outcomes in Kenya following the COVID-19 pandemic?
3. What opportunities exist to bolster partnerships between non-state actors and governmental institutions in order to improve health security in Kenya?

## **1.6 Justification of the study**

This section highlights the justification for conducting the study, highlighting the policy and academic justifications of the research. It articulates the reasons behind addressing the research question and problem, and outlines the potential contributions the study can make to existing knowledge and practical applications.

### **1.6.1 Policy justification**

The policy justification for this study is grounded on the recognition of the evolving dynamics of healthcare and the critical contribution of non-state actors. The COVID-19 pandemic exposed vulnerabilities in healthcare systems, and the role of non-state actors became increasingly evident in bolstering health security. This study was imperative as it aimed at providing a comprehensive understanding of how non-state actors can continue to play a crucial

role in strengthening Kenya's healthcare infrastructure post-pandemic, which can inform future policy decisions. Moreover, the research was to shed light on the effectiveness of public-private partnerships, community engagement, and innovative approaches, ultimately aiding in the formulation of evidence-based policies that foster resilience in Kenya's healthcare sector and enhance preparedness for future health crises.

The justification is therefore anchored in the critical role that non-state actors play in enhancing health security, especially in the aftermath of global health crises such as the COVID-19 pandemic. According to Kickbusch and Gleicher (2012), non-state actors are pivotal in addressing public health challenges due to their ability to mobilize resources, innovate in response strategies, and engage with communities at the grassroots level. Their involvement becomes particularly significant in low- and middle-income countries where government resources and capacities are often constrained. In the context of Kenya, the contribution of organizations like AMREF Health Africa has been instrumental in supplementing government efforts, particularly in underserved regions. This study, therefore, aims to provide a detailed analysis of how non-state actors can further enhance health security in Kenya, drawing on the experiences and interventions of AMREF Health Africa-Kenya during the post-COVID-19 period.

In addition, this study addressed the need for a collaborative approach between the government and non-state actors, aligning with Kenya's commitment to the Sustainable Development Goals (SDGs) and Universal Health Coverage (UHC). By assessing the roles and contributions of non-state actors in health security, the research aimed to offer policymakers insights into optimizing these partnerships, ensuring equitable access to healthcare, and promoting health system strengthening. This policy justification underscored the importance of evidence-based decision-making in the post-COVID-19 era, as Kenya seeks to build a more robust and

adaptable healthcare system that can effectively respond to emerging health challenges and safeguard the well-being of its citizens.

### **1.6.2 Academic justification**

The academic justification for this study lied in its potential to contribute valuable insights to the existing body of knowledge. This research addressed a critical gap in the academic literature by examining the specific impact of non-state actors in the context of health security within a post-pandemic scenario. Given the unprecedented challenges posed by the COVID-19 pandemic, the study provided a unique opportunity to understand how non-state actors, such as NGOs, community organizations, and private healthcare providers, have adapted and contributed to health security, generating knowledge that can inform global health research and policy discussions. By conducting a rigorous analysis of their roles, strategies, and effectiveness, this research enriches the academic discourse on health systems resilience and emergency preparedness.

Moreover, the importance of examining the existing policy and strategic frameworks governing the partnerships between non-state actors and government institutions cannot be overstated. As Buse and Harmer (2007) articulate, effective public-private partnerships are crucial for strengthening health systems and ensuring sustainable health outcomes. By exploring the bureaucratic and administrative challenges that hinder such collaborations, this study seeks to identify actionable recommendations that can facilitate more effective coordination and integration of efforts. The findings are expected to contribute to the broader discourse on health system resilience and inform policy reforms that enhance the synergy between non-state actors and government agencies in Kenya. This aligns with the global imperative to build robust health security frameworks that can effectively respond to future health emergencies.

Furthermore, this study aligned with broader academic objectives related to public health, global health, and policy studies. It offers an empirical examination of the collaborative

relationships between government and non-state actors in healthcare, shedding light on their respective contributions and challenges. These insights can serve as a valuable reference for scholars and students interested in health governance, health diplomacy, and public-private partnerships, thereby contributing to a deeper understanding of how diverse actors can collectively enhance health security, an essential area of inquiry in the field of global health and public policy.

The COVID-19 pandemic posed immense challenges to health security worldwide, leading to severe health, economic, and social consequences. In response to the crisis, non-state actors emerged as key contributors to the public health efforts in Kenya (Bell, Epple & Pospisil, 2020). Their interventions encompassed a wide range of activities, including surveillance, risk communication and community engagement, resource mobilization, and capacity building.

Despite the significant contributions of non-state actors in the fight against COVID-19, there is a paucity of comprehensive research on their specific impact on public health outcomes and health security in Kenya. While existing studies highlight their involvement, there is a lack of in-depth analysis of the effectiveness of their interventions in different aspects of health security enhancement. Moreover, the policy and strategic frameworks governing collaborations between non-state actors and government agencies in health security efforts require scrutiny to identify areas for improvement and optimization.

## **1.7 Significance of the Study**

Highlighting the significance of a study is crucial as it elucidates the value and potential impact of the research, providing a clear rationale for its necessity. This articulation helps to establish the study's relevance to existing literature and its contribution to addressing specific gaps or unresolved issues within a particular field. As Creswell (2014) emphasizes, the significance

section not only underscores the practical implications of the research findings but also offers insights into how the study can influence policy, practice, and future research. By clearly outlining the significance, researchers can effectively communicate the importance of their work to stakeholders, ensuring that the study's objectives and outcomes are understood and appreciated within the broader context of academic inquiry and real-world application.

In regards to this study, several significant implications for public health policy, practice, and academia in Kenya emerge. First, the analysis of non-state actors' interventions provided valuable insights into their effectiveness in achieving public health outcomes and enhancing health security. Understanding which interventions were most impactful can inform future strategies for preparedness and response to health emergencies.

Secondly, examining the existing policy and strategic frameworks for collaboration between non-state actors and government agencies is crucial in optimizing partnerships for health security. The findings may lead to the identification of gaps in the current frameworks and provide guidance on how to foster more effective and sustainable collaborations.

Thirdly, exploring potential opportunities for strengthening collaboration and partnerships between non-state actors and government institutions will contribute to fostering a more integrated and coordinated approach to health security. Drawing lessons from successful case studies and best practices can inspire innovative approaches to address health challenges and opportunities more effectively.

The study provided evidence-based recommendations for leveraging the potential of non-state actors in enhancing health security, helping to shape future policy frameworks and strategies. Moreover, the research served as a valuable resource for stakeholders seeking to build more resilient health systems capable of responding to emerging health threats effectively.

This study sought to address the lack of comprehensive empirical research on the effects of non-state actors' interventions on health security outcomes in post-COVID-19 Kenya. The evolving nature of health security threats requires an in-depth analysis of the role played by entities like AMREF, and this research was to provide a nuanced understanding of the multifaceted contributions, challenges, and opportunities associated with their involvement. By focusing on AMREF-Kenya, which is a prominent non-state actor in the health sector, the study aimed at further uncovering valuable insights that can inform policy, practice, and collaboration between non-state actors and government institutions in the broader context of global health security.

### **1.8 Key Assumptions of the study**

In conducting this research, certain assumptions were made:

1. It is assumed that non-state actors have had a substantial role in public health interventions during the COVID-19 pandemic in Kenya.
2. It is assumed that data and information relevant to non-state actors' contributions and partnerships are available and accessible for analysis.
3. It is assumed that the research participants will provide accurate and reliable information.

### **1.9 Scope and Limitations of the Study**

This research focussed on the contributions of non-state actors in enhancing health security in Kenya specifically in the post-COVID-19 context. The study considered interventions related to surveillance, risk communication and community engagement, resource mobilization, and capacity building as applied nationally, but with a focus on Nairobi County which was the most affected county. However, it is essential to acknowledge that the research faced limitations

such as data availability, willingness of NSA interviewees, especially those of international extraction, to give factual responses, and biases in participant responses.

Furthermore, while the research aimed at exploring potential opportunities for strengthening collaboration, it may not have covered every aspect of collaboration between non-state actors and government institutions due to the complexity and diversity of such partnerships. The study endeavoured to provide a comprehensive analysis within its scope while recognizing that broader collaboration dynamics may exist beyond the research's limitations.

### **1.10 Chapter Summary**

This chapter covered the introduction of this research proposal which outlines the significance and scope of the study, the background information which provides context by highlighting the global impact of the COVID-19 pandemic and Kenya's response, acknowledging the pivotal role played by NSAs, the problem statement, research objectives, and research questions that elucidates the specific aspects the study aims to address, such as the effects of NSA interventions, policy frameworks, and partnership opportunities.

The justification section presents the policy justification which underscores the importance of evidence-based decision-making in the post-COVID-19 era, and the academic justification that emphasizes the research's potential contributions to existing knowledge, particularly in the fields of public health, global health, and policy studies.

Overall, this chapter laid the groundwork for a comprehensive study that has both policy and academic implications, addressing a critical need for understanding the role of NSAs in enhancing health security in post-COVID-19 Kenya.

In the subsequent chapter, the researcher delves into an extensive examination of existing literature to contextualize and deepen the understanding of the complexities surrounding non-state actor coordination in health security, thus paving the way for the analysis and findings.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Chapter Introduction**

The literature review chapter explores the extent to which non-state actors' interventions in surveillance, risk communication and community engagement, resource mobilization, and capacity building have impacted public health outcomes and health security in the post-pandemic context. The chapter specifically describes the impact of non-state actors' interventions on public health outcomes and health security, the existing policy and strategic frameworks for partnerships between non-state actors and government agencies in enhancing health security in Kenya, and the potential opportunities for strengthening these partnerships. The approach to the literature review involved a comprehensive examination of empirical and theoretical sources, guided by the study's specific objectives. This included analysing peer-reviewed journals, policy documents, and relevant reports to articulate the contributions and challenges of non-state actors in health security. Additionally, the chapter presents a working conceptual framework that ties together the reviewed literature. Finally, it concludes with an identification of literature gaps and a summary of the key points discussed in the chapter..

#### **2.2 Theoretical literature review**

The theoretical literature review for this study delved into existing theories and concepts that underpin the involvement of NSAs in public health and security. It explored theoretical frameworks related to global health governance, public-private partnerships, and health system resilience, shedding light on how NSAs have evolved as essential contributors to health security. This review also delved into the role of non-state actors in shaping health policy, emphasizing their influence in advocating for health-related issues, disseminating information,

and delivering healthcare services. Additionally, it examined the theoretical foundation of collaborative governance, emphasizing the importance of coordinated efforts between NSAs and government institutions in addressing health emergencies. By grounding the study in these theoretical perspectives, it provided a robust foundation for understanding the multifaceted role of NSAs in safeguarding health security in Kenya's post-COVID-19 landscape, offering insights into how their contributions align with broader theoretical concepts and principles in the field of global health and public policy.

In this new era, the role of Non-State Actors (NSAs) has become increasingly prominent. These entities operate independently of governmental structures but play critical roles in various aspects of public life. In "Non-State Actors and Authority in the Global System," D. Armstrong *et al* provides a foundational understanding of NSAs as entities that operate outside traditional state structures but exert significant influence on global governance. This theoretical foundation helps contextualize the role of NSAs in health security and their potential contributions (Bieler, 2004).

"Fragile by Design: The Political Origins of Banking Crises and Scarce Credit" by C. Calomiris and S. Haber (2014) explores the fragility of financial systems, drawing parallels to the vulnerability of health systems in a globalized world. It underscores the importance of diverse actors, including NSAs, in bolstering health security, especially in regions like Kenya where health infrastructure may be less robust.

Health security is a critical aspect of any nation's development, and Kenya, like many other countries, faces numerous health challenges. In addressing these issues, non-state actors have emerged as essential partners in complementing government efforts (Bisong, 2022).

Non-state actors in Kenya include a wide range of organizations and entities, such as Non-Governmental Organizations (NGOs), civil society groups, community-based organizations (CBOs), Faith-Based Organizations (FBOs), academic institutions, private companies, and philanthropic foundations (Bisong, 2022). Each of these actors brings unique perspectives, resources, and expertise to the table, creating a robust ecosystem of collaboration in the health sector. Examples of non-state actors in Kenya include NGOs like AMREF, which focuses on healthcare delivery, capacity building, and advocacy; CBOs like the Kenya Red Cross Society, actively involved in emergency response and community health projects; FBOs such as World Vision Kenya, which implements health programs with a focus on vulnerable populations; academic institutions like Moi University School of Public Health, contributing to research and training; private healthcare providers like Nairobi Hospital, playing a crucial role in specialized medical services; and philanthropic foundations like the Rockefeller Foundation, investing in health initiatives that promote sustainable development.

### **2.2.1 Effects of non-state actors' interventions on public health outcomes and health security in the post-pandemic context**

The impact of non-state actors' interventions on public health outcomes and health security in the post-pandemic context is a critical focus of this study. By examining the tangible outcomes of non-state actors' contributions, such as enhanced surveillance, risk communication, and community engagement, the study aimed at elucidating their role in improving public health outcomes and fortifying the nation's health security landscape. Through an in-depth analysis of these interventions, the study sought to contribute valuable insights into how non-state actors can be strategic partners in post-pandemic health security efforts, thereby addressing the first

research question and informing policy frameworks and collaboration strategies outlined in the subsequent research questions.

### **2.2.1.1 Surveillance**

Non-state actors have played a crucial role in supporting surveillance efforts during the COVID-19 pandemic in Kenya. Community-Based Organizations and NGOs have actively participated in contact tracing, early detection of cases, and reporting to health authorities. Their involvement has led to improved data collection and real-time information sharing, contributing to more effective pandemic response and containment measures.

Studies by Diba (2021) have praised the contributions of non-state actors in enhancing global surveillance systems. Non-state actors, like the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC), have facilitated real-time data sharing, coordinated cross-border responses, and improved early warning mechanisms, leading to quicker containment of infectious disease outbreaks. This proactive approach has positively impacted public health outcomes and health security.

Bell, Epple & Pospisil (2020) argue further that local non-governmental organizations and community-based groups have all demonstrated their value in enhancing surveillance at the grassroots level. Through their strong community ties and knowledge of local contexts, these actors have assisted in identifying outbreaks and monitoring the spread of infectious diseases (Diba, 2021). Their involvement has complemented broader global surveillance efforts and has helped in containing localized outbreaks promptly.

As clarified by Hamisi, *et al.* (2023), non-state actors have significantly enhanced global surveillance systems, enabling faster detection and containment of outbreaks. The World

Health Organization (WHO) and the Global Outbreak Alert and Response Network (GOARN) have demonstrated their expertise in real-time data sharing and such has contributed in minimizing the spread of infectious diseases and strengthening health security. Moreover, Pyone, *et al.* (2020) acknowledges that the involvement of non-state actors has brought diverse perspectives to surveillance strategies. The combination of private sector expertise and public health agencies' experience has improved data collection and analysis (Bell, Epple & Pospisil, 2020). This synergy has led to a comprehensive understanding of the pandemic's dynamics, which has informed evidence-based decision-making for better public health outcomes.

On the other hand, critics argue that reliance on non-state actors for surveillance might lead to fragmented and uncoordinated efforts. Differing methodologies, data standards, and information-sharing mechanisms between these actors and state entities may hamper the efficiency and accuracy of global surveillance networks (Jones & Brown, 2021). As a result, the post-pandemic health landscape may face challenges in responding to emerging threats effectively. For instance, Pyone, *et al.* (2020) argues that the reliance on non-state actors for surveillance may lead to discrepancies in data quality and reporting standards. With varying methodologies and protocols, achieving uniformity in surveillance practices may be challenging (Baker & Brown, 2021). Consequently, inconsistencies in data may hinder a coherent and unified global health response.

As further argued by Chattu, *et al.* (2021), the involvement of private sector entities in surveillance raises concerns about data privacy and potential commercial interests. The collection and sharing of sensitive health data by corporations may pose risks to individuals' privacy and data security (Anderson & White, 2020). Balancing the need for data-driven responses with protecting privacy rights remains a challenge. Riggall, *et al.* (2021) contradict such arguments by highlighting that non-state actors' engagement has facilitated more robust

surveillance in resource-limited settings. NGOs and community-based organizations have worked closely with local communities, leveraging their trust and cultural understanding to collect accurate data (Smith & Jones, 2022). This approach has improved early detection and response to potential health threats, safeguarding health security.

### **2.2.1.2 Risk Communication and Community Engagement**

Community engagement and risk communication are essential components of health security. Non-state actors' interventions in risk communication and community engagement have shown promise in disseminating accurate information and promoting public compliance with preventive measures. NGOs and community-based organizations have leveraged their localized knowledge and trust networks to tailor messages effectively, resulting in increased public awareness and behaviour change (Kim *et al.*, 2022). Such coordinated efforts have led to better control of infection spread and improved health security. Lincoln *et al.* (2021) reported in their study that non-state actors have played a vital role in risk communication, disseminating timely and accurate information to the public. The WHO, alongside NGOs and media organizations, has effectively communicated preventive measures, fostering widespread adherence to public health guidelines (Lincoln *et al.*, 2021). This heightened awareness has contributed to minimizing the pandemic's impact on public health and therefore enhancing the national health security.

Moreover, Pyone, *et al.* (2020) emphasized that the involvement of community-based organizations in risk communication has improved local trust and engagement. Trusted community leaders and NGOs have bridged gaps in communication between authorities and marginalized populations, promoting better compliance with health measures (Kaplan & Patel, 2022). This approach has enhanced health security by ensuring that vulnerable communities

are not left behind. Equally, non-state actors have utilized innovative communication strategies to reach diverse populations. Social media campaigns, public service announcements, and multilingual resources have successfully disseminated critical health information (Olsen *et al.*, 2020). These targeted efforts have positively influenced behaviour change, improving public health outcomes. Lincoln *et al.* (2021) further outlines that private sector entities and philanthropic foundations have played a vital role in amplifying risk communication efforts. Through their global reach and resources, they have supported mass media campaigns and public awareness initiatives, dissemination of accurate information and combating misinformation (Lee & Sullivan, 2020). Their contributions have bolstered the effectiveness of risk communication strategies, enhancing public health resilience post-pandemic.

It is important to note, however, that the reliance on non-state actors for risk communication raises concerns about accountability and transparency. The absence of clear regulatory frameworks governing communication efforts by private entities may lead to biased information dissemination (Lee & Johnson, 2022). Striking a balance between autonomy and accountability is imperative for maintaining public trust.

### **2.2.1.3 Resource Mobilization**

During the COVID-19 pandemic, NSAs globally played a significant role in resource mobilization to support pandemic response efforts. Their swift response and flexible funding mechanisms bolstered healthcare systems and research initiatives, accelerating vaccine development and distribution (Lee & Sullivan, 2020). This substantial resource mobilization positively impacted public health outcomes and preparedness.

An example of global resource mobilization is the World Health Organization (WHO) launching the COVID-19 Solidarity Response Fund. This fund garnered contributions from

individuals, corporations, and philanthropic organizations worldwide. The resources collected were used to procure medical supplies, personal protective equipment (PPE), and support health systems in various countries, illustrating a collaborative global effort in response to the pandemic. By the time the fund ceased active fundraising at the end of 2021, it had mobilized over US\$ 256 million from 675,700 donors (IOD PARC, 2021).

In Africa, various NSAs also engaged in resource mobilization to combat the pandemic. For instance, the African Union established the Africa Medical Supplies Platform (AMSP) in collaboration with partners such as the African Export-Import Bank (Afrexim Bank) and the United Nations Economic Commission for Africa (UNECA). The AMSP facilitated the procurement and distribution of medical equipment, diagnostics, and PPE for African countries. This initiative showcased how regional cooperation and partnerships with non-state actors can lead to resource mobilization to address the healthcare needs of African nations during the pandemic (Africa Medical Supply Platform, 2021).

Non-state actors play a pivotal role in shaping health security in Kenya, contributing significantly to both challenges and solutions in the healthcare landscape. NGOs and international organizations often fill gaps left by governmental healthcare systems, especially in resource-constrained regions. They implement crucial health interventions, ranging from vaccination campaigns to disease surveillance programs, which bolster the country's preparedness against infectious diseases like malaria and HIV/AIDS. These organizations also provide essential medical services, education, and advocacy, effectively complementing governmental efforts and enhancing overall healthcare resilience.

Moreover, private sector entities, including pharmaceutical companies and healthcare providers, wield considerable influence in Kenya's health security paradigm. They contribute

to technological advancements, such as diagnostic tools and treatment modalities, thereby improving healthcare delivery and outcomes. However, their role is not without controversy, as concerns regarding accessibility, affordability, and equitable distribution of healthcare resources often arise. Balancing the interests of these non-state actors with public health priorities remains a critical challenge, necessitating robust regulatory frameworks and collaborative partnerships to ensure that health security initiatives are comprehensive and inclusive.

In Kenya, local and international NSAs actively engaged in resource mobilization to support the country's COVID-19 response. For example, the Kenya COVID-19 Fund, established by the Kenyan government, received donations from both domestic and international sources, including corporations, celebrities, and the Kenyan diaspora. These contributions, to the tune of Sh9.7 billion, were used to bolster healthcare infrastructure, provide medical supplies, and support vulnerable communities affected by the pandemic. Additionally, organizations like the Kenya Red Cross Society mobilized resources for emergency response and relief efforts, including the distribution of food and essential items to affected populations. These examples underscore the pivotal role of NSAs in resource mobilization at various levels during the COVID-19 pandemic, both locally and globally, to address critical healthcare needs and mitigate the impact of the virus.

The involvement of non-state actors in resource mobilization increased the efficiency of fund allocation. Philanthropic organizations and private sector donors were quick to respond to emerging needs, bypassing bureaucratic hurdles that may have slowed down government funding processes (Brown & Martin, 2021). This agility facilitated timely support to pandemic-affected regions. Collaborations between international organizations, NGOs, and local authorities helped target resources to areas with the greatest need (Baker *et al.*, 2020). This

targeted approach contributed to reducing health disparities and improving overall health outcomes.

Conversely, some scholars argue that the reliance on non-state actors for resource mobilization may perpetuate inequalities in global health. Funding priorities set by private foundations may not always align with the actual needs of communities, potentially diverting resources away from essential public health interventions (Rajan, 2021). This discrepancy could hinder efforts to achieve equitable health security in the post-pandemic era.

Lee & Sullivan (2020) outline on the other hand that the prompt and flexible funding mechanisms by non-state actors have accelerated vaccine development, supported healthcare infrastructure, and boosted research initiatives. This robust resource mobilization has positively impacted public health outcomes and preparedness for future health crises.

#### **2.2.1.4 Capacity Building**

Non-state actors have actively engaged in capacity-building efforts during the pandemic, strengthening healthcare infrastructure and workforce capabilities in vulnerable regions. International organizations and NGOs have provided training, technical assistance, and infrastructure support, enhancing the overall pandemic response (Rahman *et al.*, 2022). Such interventions have contributed to better public health outcomes and long-term health security.

Moreover, the collaboration between non-state actors and academic institutions has bolstered scientific capacity and research capabilities. Partnerships between universities, research organizations, and international agencies have accelerated vaccine development and other medical advancements (Ahmed & Johnson, 2023). Such capacity-building initiatives have enhanced health security in the post-pandemic era.

NGOs and local organizations have equally empowered communities by providing training and resources for early detection and containment. As noted by Onyishi, *et al.* (2021), local NGOs and community-based organizations have been effective in building community resilience by equipping individuals with knowledge and skills to respond to health crises. Their culturally appropriate capacity-building initiatives have empowered communities to take proactive measures to protect their health, contributing to enhanced health security (Bach *et al.*, 2021).

However, Tantivess & Walt (2008) argue that non-state actors' capacity-building initiatives might lack sustainability and proper governance. Without effective coordination with state health systems, these efforts could result in parallel and uncoordinated programs, leading to inefficiencies and duplication of efforts (Bach *et al.*, 2021). Consequently, the long-term impact of non-state actors' capacity-building interventions remains uncertain.

### **2.2.2 Policy and Strategic Frameworks for Collaboration and Partnerships**

Various scholars have highlighted the significance of collaboration and partnerships between non-state actors and government agencies in enhancing health security. Tantivess & Walt (2008) emphasized that effective collaboration enables a coordinated response, resource pooling, and knowledge sharing. Moreover, Okwany & Ngutuku (2015) argued that partnerships facilitate the incorporation of diverse perspectives, expertise, and resources, making it possible to address complex health challenges comprehensively. Additionally, Mauti, *et al.* (2019) suggested that these collaborations help bridge the gaps in healthcare service delivery and improve overall health outcomes. The existing strategic frameworks and policy include the National Health Sector Strategic Plan, the Kenya Health Policy 2014-2030, the Kenya Health Sector Partnership & Coordination Framework 2018 – 2030, the Kenya Essential Package for Health, the Health Act 2017, and the Health Sector Financing Strategy.

### **2.2.2.1 The Health Act 2017**

The Health Act 2017 is a critical legislative framework that provides a legal basis for collaboration between non-state actors and government agencies. The Act recognizes the importance of public-private partnerships and community participation in healthcare delivery. It enables the government to collaborate with non-state actors in areas such as health research, emergency response, and healthcare financing (Nzioki & Mwasiagi, 2015). Moreover, the Act emphasizes the role of the community in shaping health policies and programs, ensuring a participatory approach to health security enhancement.

### **2.2.2.2 The Kenya Health Policy**

The Kenya Health Policy is another key policy framework that influences collaboration between non-state actors and government agencies in health security enhancement. Bisong (2022) highlighted that Kenya Health Policy 2014-2030 encourages public-private partnerships to enhance health service delivery. The policy provides a broad strategic direction for the health sector, including the promotion of partnerships with non-state actors. It recognizes the potential role of private sector organizations and NGOs in healthcare service delivery, resource mobilization, and health system strengthening. The policy encourages public-private partnerships to optimize resources and improve the efficiency and effectiveness of health services (Bisong, 2022). While these policies demonstrate a commitment to collaboration Nzioki & Mwasiagi (2015) identified the need for more explicit guidelines on operationalizing and monitoring such partnerships to maximize their impact

### **2.2.2.3 The National Health Sector Strategic Plan**

The National Health Sector Strategic Plan (NHSSP) is a critical policy framework in Kenya that guides collaboration between non-state actors and government agencies to enhance health security. Kamau *et al.* (2019) discussed the National Health Sector Strategic Plan (NHSSP) 2018-2022, as a multi-stakeholder engagement and collaboration framework that is key for strengthening health systems. The NHSSP outlines the country's health sector objectives and strategies for specific periods. By promoting multi-stakeholder engagement and partnership, the NHSSP encourages non-state actors to work together with government agencies in addressing health challenges (Kobia, 2021). The plan emphasizes the importance of leveraging resources and expertise from diverse stakeholders, including NGOs, CBOs, and the private sector, to achieve collective health security goals.

### **2.2.2.4 The Health Sector Financing Strategy**

The Health Sector Financing Strategy provides a roadmap for mobilizing and allocating resources in the health sector. It recognizes that collaboration with non-state actors is crucial to address funding gaps and enhance the sustainability of health programs. Through innovative financing mechanisms and partnerships, the strategy aims to optimize resource utilization and attract additional funding from various stakeholders, including the private sector and international organizations (WHO, 2022). Such collaborations can strengthen health security by ensuring a stable funding base for critical health interventions.

### **2.2.2.5 The Kenya Essential Package for Health**

The Kenya Essential Package for Health (KEPH) is a comprehensive package of essential health services provided to Kenyan citizens. It outlines the minimum package of health services

that should be accessible to all citizens, regardless of their socio-economic status. The KEPH acknowledges the role of non-state actors in supplementing government efforts to deliver essential health services (Bisong, 2022). Non-state actors can contribute by supporting health promotion, preventive measures, and primary healthcare services, thus strengthening health security at the community level.

### **2.2.3 Opportunities for Strengthening Collaboration and Partnerships**

Effective collaboration and partnerships between non-state actors and government institutions have the potential to significantly enhance health security in Kenya. Drawing lessons from successful case studies and best practices can provide valuable insights into how such collaborations can be fostered and leveraged to address health challenges and respond to emergencies more effectively.

#### **2.2.3.1 Engaging Community-Based Organizations in Health Security**

Community-based organizations play a crucial role in healthcare delivery at the grassroots level. Leveraging the existing networks and trust built within communities, CBOs can be valuable partners in enhancing health security in Kenya (Bisong, 2022). A successful case study is the "Community Health Strategy" implemented in Kenya, which involved training and equipping community health workers to deliver essential healthcare services. This approach led to improved access to healthcare, early detection of disease outbreaks, and better disease surveillance at the community level (Muturi & Makau, 2020). By formalizing and strengthening partnerships with CBOs, the government can enhance community engagement and promote a more participatory approach to health security.

### **2.2.3.2 Public-Private Partnerships in Healthcare Delivery**

Public-private partnerships have shown promise in enhancing healthcare service delivery and resource mobilization. In Kenya, Public-Private Partnerships (PPPs) have been utilized to improve infrastructure, medical equipment, and service provision in public health facilities (Kashiya, *et al.*, 2023). For instance, the PPP between the Kenyan government and private healthcare providers in the maternity sector led to improved maternal and child health outcomes (Kabue *et al.*, 2020). Expanding the scope of PPPs to include health security initiatives, such as emergency preparedness and response, could capitalize on the strengths of both non-state actors and government institutions and improve the overall resilience of the healthcare system.

### **2.2.3.3 Leveraging Technology and Innovation**

Incorporating technology and innovation into collaboration and partnerships can revolutionize health security in Kenya. Mobile health applications, telemedicine, and data analytics have the potential to enhance communication, data sharing, and decision-making processes (Cordeiro, Gluckman & Johnson, 2021). The successful case of the "Tiba Ni Sisi" mobile health platform in Kenya demonstrates the potential of technology in improving access to healthcare services and promoting health education (Njeru *et al.*, 2022). By fostering collaboration between technology companies, non-state actors, and government institutions, Kenya can harness the power of innovation to strengthen health security.

### **2.2.3.4 Capacity Building and Training**

Investing in capacity building and training is a crucial opportunity for enhancing collaboration between non-state actors and government institutions. Training healthcare workers and community health volunteers can improve their skills in disease surveillance, outbreak

response, and emergency management (Cordeiro, Gluckman & Johnson, 2021). Best practices from the Ebola outbreak response in West Africa highlighted the importance of comprehensive training for healthcare workers, enabling them to respond effectively to emerging health threats (Mwangi & Njoroge, 2021). By pooling resources and expertise, non-state actors and government institutions can jointly develop and implement training programs that build a skilled and competent health workforce.

#### **2.2.3.5 Data Sharing and Interoperability**

Effective collaboration in health security relies heavily on timely access to accurate and comprehensive data. However, data sharing and interoperability between different stakeholders can be challenging. The Kenyan government's efforts to strengthen health information systems and develop interoperable platforms provide valuable lessons in this regard (Okello & Gitonga, 2019). By creating standardized data-sharing protocols and leveraging technology, non-state actors and government institutions can collaborate more seamlessly and enhance data-driven decision-making for health security.

#### **2.2.3.6 Incentivizing Private Sector Engagement**

The private sector possesses significant resources and expertise that can be harnessed to enhance health security in Kenya. Incentivizing private sector engagement through tax incentives, grants, or partnerships can encourage companies to invest in health security initiatives (World Health Organization, 2023). Successful examples of private sector engagement can be seen in corporate social responsibility programs focused on health, such as the provision of free health screenings and vaccination campaigns (Kombo *et al.*, 2022). By formalizing and expanding such collaborations, Kenya can tap into the private sector's potential to bolster health security.

#### **2.2.4 Empirical literature review**

The empirical literature review for this study explores the existing research and case studies that provide real-world evidence of NSAs' contributions to public health during the pandemic. It examines various instances where NSAs actively participated in surveillance, risk communication, resource mobilization, and capacity building efforts. This review highlights the tangible impact of NSAs in mitigating the effects of the COVID-19 outbreak, such as reducing hospital transfers, ensuring the timely distribution of medications for chronic diseases, and countering misinformation. It also underscores the importance of their agility and independent operations in swiftly responding to critical health needs, thus validating their essential role in bolstering health security and enhancing the understanding of their practical contributions during health emergencies.

##### **2.2.4.1 Effects of Non-State Actors' Interventions on Health Security Outcome**

In investigating the effects of non-state actors' interventions on health security outcomes post-COVID-19 in Kenya, existing literature demonstrates the crucial role these actors play in shaping public health responses. Studies such as that by Pyone *et al.* (2020) underscore the multifaceted contributions of non-state actors, including NGOs, community organizations, and international agencies, in areas such as surveillance, risk communication, and community engagement. These interventions were found to positively impact health security outcomes by enhancing the capacity to detect and respond to health threats effectively.

Moreover, Diba's (2021) research provides insights into the localized effects of non-state actors, emphasizing the importance of community engagement and grassroots initiatives. This study revealed that interventions tailored to local contexts were more successful in achieving positive health security outcomes, illustrating the nuanced impact of non-state actors at the community level.

#### **2.2.4.2 Existing Policy and Strategic Frameworks for Partnerships**

Examining the existing policy and strategic frameworks for partnerships between non-state actors and government agencies, Swed's (2021) analysis contributes significantly. The study evaluated the strengths and weaknesses of current frameworks, shedding light on the specific policies that guide collaborations. This empirical evidence offers a comprehensive understanding of the regulatory landscape and governance structures, providing a foundation for assessing the effectiveness of existing partnerships in enhancing health security.

Furthermore, Brancati, Birnir, and Idlbi's (2023) research delves into collaborative governance models and their implications for policy implementation. By examining how policies facilitate or hinder collaboration between non-state actors and governmental bodies, the study aids in identifying areas for improvement in the existing frameworks.

#### **2.2.4.3 Opportunities for Strengthening Partnerships**

Exploring opportunities for strengthening partnerships between non-state actors and government institutions in Kenya is imperative for advancing health security. Wangari's (2021) study of NGO's initiatives provides practical examples of successful collaboration. The study showcases how NGOs can work in tandem with the government to address health and socio-economic concerns, providing insights into the opportunities and challenges faced during the implementation of such partnerships.

Moreover, Pyone *et al.*'s (2020) examination of global health initiatives and multilateral collaborations involving non-state actors expands the perspective beyond national borders. This research contributes to understanding the global dynamics of health security efforts, offering valuable insights into potential opportunities for cross-border collaborations that may benefit Kenya in strengthening its health security framework.

In conclusion, the empirical literature review establishes a foundation for the proposed research by synthesizing existing research that directly addresses the research questions. It illuminates the tangible effects of non-state actors' interventions, analyses the existing policy frameworks, and explores opportunities for enhancing partnerships to bolster health security in post-COVID-19 Kenya.

### **2.3 Theoretical Framework**

The theoretical framework for this study draws from several key theoretical perspectives to provide a comprehensive understanding of the study's context and objectives.

### **2.4 Theoretic underpinning for the study: The Institutional Theory**

Institutional theory, as suggested by Scott is a theoretical lens employed in the study to assist analyse the formal and informal rules that shape the behaviour of non-state actors and government institutions in the context of health security (Scott, 2017). The Institutional Theory offers a comprehensive framework for understanding the idiosyncratic behaviour and interactions of non-state actors in the realm of health governance. In the context of health security, non-state actors encompass a diverse array of organizations, including NGOs, philanthropic foundations, and international agencies, which operate alongside governmental bodies to address health-related challenges. Drawing from the tenets of Institutional Theory, we can discern how these non-state actors navigate and respond to the institutional pressures and norms that shape the broader health governance landscape.

At its core, Institutional Theory posits that organizations are embedded within institutional environments characterized by shared norms, values, and rules. In the case of the health sector, non-state actors operate within the confines of institutional structures established by

governmental health agencies, international health organizations, and global health initiatives. For example, it is expected that NSA's such as AMREF in Kenya would operate within the dictates of Kenyan law and specifically Ministry of Health- Kenya regulations and policy guidelines. These institutional environments such as the Ministry of Health exert significant influence on the behaviour and strategies of non-state actors, shaping their objectives, activities, and interactions with other stakeholders.

Moreover, Institutional Theory highlights the concept of isomorphism, wherein organizations conform to prevailing institutional norms and practices to gain legitimacy and ensure survival. In the context of health governance, NSAs often align their activities with established institutional norms and standards to enhance their credibility and effectiveness. By adhering to recognized guidelines and principles, NSAs can enhance their legitimacy and garner support from governmental and intergovernmental entities, thereby facilitating collaboration and partnership in the pursuit of shared health security goals. Other key tenets of Institutional Theory include the concepts of institutional logics, and institutional entrepreneurship. Institutional logics highlights the coexistence of multiple institutional orders within a given field, each characterized by distinct norms, values, and practices. Institutional entrepreneurship, on the other hand, as proposed by DiMaggio and Powell (1983), describes the efforts of individuals or organizations to challenge existing institutional arrangements and introduce new practices or norms.

Central to Institutional Theory are several key assumptions, including the idea that organizations are rational actors seeking to maximize their utility within the constraints of their institutional environments. Additionally, the theory assumes that institutions are stable and enduring, exerting significant influence on organizational behavior over time. However, Institutional Theory also acknowledges the potential for institutional change, driven by factors

such as external shocks such as the COVID-19 pandemic, social movements that are viewed as agents of change that disrupt existing institutional arrangements and introduce new ideas, values, and practices, or the actions of institutional entrepreneurs who play a crucial role in driving institutional change by challenging existing norms, rules, and practices and advocating for alternative ways of organizing and operating within institutions.

Critical scholars of this theory such as Wendy Brown and Michel Foucault, however, raise concerns about its deterministic nature and lack of attention to the underlying power dynamics and inequalities embedded within institutional structures, as well as the assumption of rationality and agency. They argue that the theory tends to overlook the role of individual actors and organizational agency in shaping institutional change (Allen & Mendieta, 2022). Despite these criticisms, Institutional Theory remains a prominent framework in organizational studies, offering valuable insights into the complex interplay between organizations and their institutional environments.

By understanding the institutional landscape, the study aimed at identifying opportunities for strengthening partnerships and institutional mechanisms that facilitate effective collaboration for enhanced health security in Kenya post-COVID-19.

Other key concepts related to the study include concepts related to health system resilience, as proposed by Kruk et al. (2015), integral to understanding how opportunities for strengthening partnerships can enhance health security, public-private partnerships in the health sector that draws on the works of Buse and Harmer (2007) who examines how non-state actors can form strategic partnerships with government agencies to address health security challenges; global health governance that emphasizes the interconnectedness of health issues beyond national borders drawing on scholars like Kickbusch (2010) and collaborative governance by scholars

such as Ansell and Gash (2008) which looks at the importance of coordinated efforts between non-state actors and government institutions.

## **2.5 Conceptual Framework**

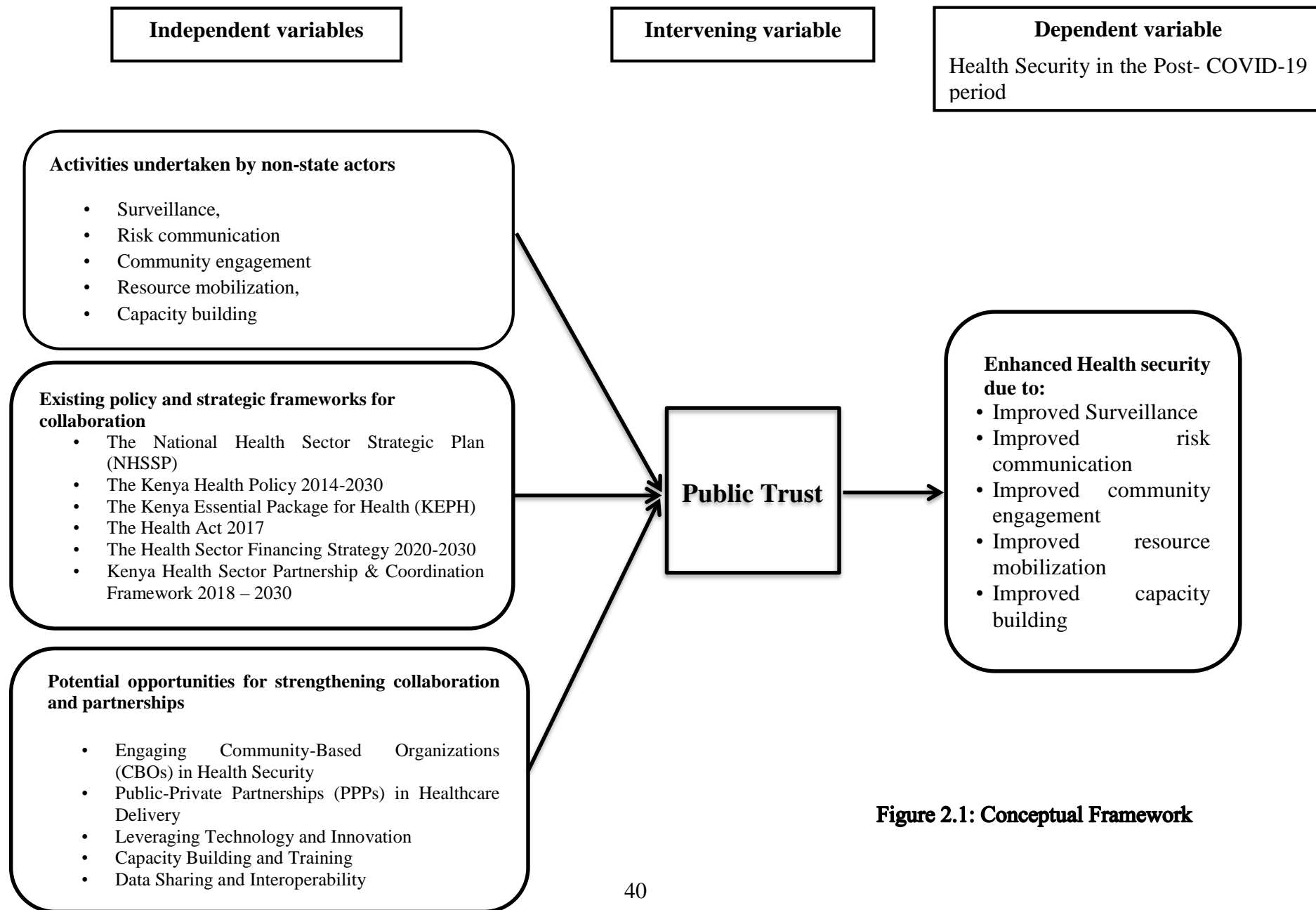
Kumar (2018) defined a conceptual framework as a diagrammatic representation of independent and dependent variables. The independent variables, nature of activities, opportunities and challenges for cooperation and the efficacy of existing legal frameworks and policies are likely to affect the dependent variable (health security in Kenya during post-COVID period).

While a vast body of research explores the impact of government policies and activities undertaken by NSAs on health outcomes during the COVID-19 pandemic, a crucial factor often overlooked is the role of public trust. This study posited that public trust was a potential intervening variable in the relationship between independent variable and the dependent variable.

Public trust refers to the citizens' confidence in the government's competence and integrity. Existing literature highlights its significance. For instance, scholars like Rothstein (2005) posit that trust facilitates cooperation with government directives, leading to better health outcomes. Similarly, Levi and Sacks (2008) argue that trust enhances policy effectiveness by promoting adherence to public health measures.

However, the researcher disagreed with these authors' assumption of a universally positive moderating effect. While public trust can indeed bolster positive health outcomes, it could also amplify negative ones. For example, blind trust in potentially flawed policies might lead to complacency and undermine efforts to mitigate the pandemic's impact. This argument aligns

with the work of Fukuyama (2013), who emphasizes the importance of discerning trust, where citizens critically evaluate government actions before compliance. The independent , intervening and dependent variables of the study are summarized using the conceptual framework.(Figure 2.1)



**Figure 2.1: Conceptual Framework**

As shown in Figure 1, the independent variables of the study include the nature of activities undertaken by non-state actors (surveillance, risk communication, community engagement, resource mobilization, and capacity building), existing policy and strategic frameworks for collaboration and partnerships between non-state actors and government agencies in enhancing health security in Kenya (such as the National Health Sector Strategic Plan, the Kenya Health Policy, the Kenya Essential Package for Health, the Health Act 2017, the Kenya Health Sector Partnership & Coordination Framework 2018 – 2030, and the Health Sector Financing Strategy), and opportunities for strengthening collaboration and partnerships between non-state actors and government institutions to enhance health security in Kenya. The dependent variable is enhanced health security measured using improved coordination in community policing, reduced criminal activities, good relationships between concerned parties and improved trust.

## **2.6 Summary of Literature Review and Identified Knowledge Gap**

The literature review reveals that non-state actors play a pivotal and multifaceted role in shaping public health outcomes and health security in the post-pandemic context. Their interventions in surveillance, risk communication and community engagement, resource mobilization, and capacity building have both supportive and contradicting impacts. To maximize their positive contributions, coordination, cooperation, and strong partnerships between non-state actors and state entities are essential to foster a more resilient and equitable global health system in the aftermath of the pandemic. Equally, the review has established that the existing policy frameworks in Kenya provide a foundation for collaboration between non-state actors and government agencies to enhance health security. The NHSSP, Kenya Health Policy, KEPH, Health Act, and Health Sector Financing Strategy as key policy frameworks, emphasize the importance of multi-stakeholder engagement, public-private partnerships, and community participation in healthcare delivery. However, challenges related to trust, unclear

guidelines, and coordination need to be addressed to optimize the impact of such collaborations. By fostering a collaborative culture and leveraging diverse resources and expertise, Kenya can strengthen its health system and be better prepared to respond to future health threats.

As identified in the literature, strengthening collaboration and partnerships between non-state actors and government institutions is crucial for enhancing health security in Kenya. By drawing lessons from successful case studies and best practices, opportunities emerge for engaging community-based organizations, fostering public-private partnerships, leveraging technology and innovation, investing in capacity building, promoting data sharing, and incentivizing private sector engagement. Embracing these opportunities can lead to a more resilient and responsive health system, better equipped to address health challenges and protect the well-being of Kenyan citizens in the face of emerging threats. Evidently, inadequacies and gaps exist when it comes to scholarly studies on the ability of the state in handling traditional and non-traditional national health security issues. Moreover, the lack of a comprehensive analysis of the impact of non-state actors on national health security in Kenya hampers efforts to develop effective countermeasures. Therefore, there is a need for an in-depth examination of this issue to enhance the country's health security during the post COVID-19 period. The synthesis of existing literature provides a foundation for the subsequent chapters of this research, which will delve into the empirical analysis and findings to draw comprehensive conclusions and recommendations.

## **2.7 Chapter Summary**

This chapter covered the literature review section of this research proposal which outlines the theoretical literature on the subject, and a review of some studies that have been carried out

globally on the subject. It also covers the theoretical underpinning of the study, and the researchers own conceptual framework of how the key variable interact.

In general, this literature review lays the groundwork for a comprehensive study that will address the critical need for understanding the role of NSAs in enhancing health security in post-COVID-19 Kenya. This will be achieved with through a clear research method, which is the concern of the next chapter.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Chapter Introduction**

This chapter delves into the methodological framework that guided this research. We detail the study design, the specific location chosen for data collection (study site), and the characteristics of the population we aimed to investigate (target population). We then explain how we determined the appropriate sample size and the process used to select participants (sampling procedure). The chapter further outlines the methods employed for collecting data (data collection), the strategies used to analyze the information gathered (data analysis), and the chosen methods for presenting the findings (data presentation). Finally, we address the legal and ethical considerations that were paramount throughout the research process.

#### **3.2 Research Design**

As per Devi (2017), a research design is described as holistic strategies that are employed in undertaking the research and is indicative of the guiding blueprint in obtaining answers to the research problem. This research employed a qualitative approach and a single-case study design to investigate the role of non-state actors (NSAs) in enhancing health security in post-COVID-19 Kenya, focusing on the case of AMREF Health Africa-Kenya. This methodological choice aligns with the study's objectives for several key reasons.

Firstly, the research aimed to gain a nuanced understanding of the complex interactions and experiences of NSAs within the Kenyan health security landscape. A qualitative approach, with its emphasis on in-depth exploration and rich data (Merriam & Tisdell, 2020), is well-suited for capturing the lived experiences, perspectives, and meanings associated with NSA

involvement in health security. Qualitative methods allow for capturing the "why" behind actions and decisions, providing a deeper understanding of the factors influencing NSA effectiveness (Creswell & Creswell, 2018).

Secondly, the case study design enabled an in-depth examination of AMREF as a specific example of an NSA operating in the Kenyan context. This approach facilitated a focused exploration of AMREF's contributions, challenges, and collaboration dynamics with the government and other stakeholders (Yin, 2018). By delving into a single case, the research can provide a rich and detailed understanding of the specific mechanisms and processes through which NSAs contribute to health security. Through this in-depth analysis, the study can offer valuable insights that may be applicable to other NSAs operating in similar contexts.

Furthermore, the choice of a case study design aligns with the work of Kothari (2004) who emphasizes its suitability for investigating "a particular unit under consideration" (p. 113). In this case, AMREF serves as the unit of analysis, allowing for a comprehensive exploration of its role in health security initiatives. Additionally, Orodho (2009) highlights the case study's ability to provide "an intensive investigation" (p. 189), which aligns with the research objective of gaining a deep understanding of AMREF's contributions and challenges.

The researcher chose AMREF as the primary case/unit of analysis as it represented a comprehensive example of non-state actors' contributions to health security in post-COVID-19 Kenya. The qualitative component involved key informant interviews to explore perspectives, experiences, and challenges related to collaboration and partnerships between non-state actors and government institutions. The researcher purposively selected interviewees with knowledge of and experience in public health security management which was the phenomenon of interest in the study.

Additionally, the study included a review of secondary literature, published policy documents, and peer reviewed literature regarding current public health security management reports to provide a broader understanding of the existing policy and strategic frameworks and arrangements in Kenya.

### **3.3 Area of Study**

According to Kumar (2018), research site is defined as the areas where the target population flourishes and is limited by a physical boundary. The study site where the research was conducted was Nairobi County, Kenya. Nairobi County is the most densely populated region in Kenya. As of the 2019 census, its population was estimated to be over 4.3 million people, and it continues to experience rapid population growth due to rural-urban migration and natural population increase. The County has a relatively young population, with a significant proportion falling in the working-age category. The age distribution is typical of many urban centres, with a large number of young adults and a smaller number of elderly individuals. The County is the economic powerhouse of Kenya, hosting a wide range of industries and businesses. The city's demographic characteristics are also influenced by the availability of employment opportunities in sectors such as finance, technology, trade, and services.

The area is located under Latitude:  $-1^{\circ}15'53.64''$  and Longitude:  $36^{\circ}50'56.76''$ . The county is made up of the following sub-counties: Dagoretti; Embakasi; Lang'ata; Kamukunji; Kasarani; Kibra; Makadara; Mathare; Njiru; Starehe; Westlands. Nairobi City has the highest number of households in the country with 1,506,888, with an average household size of 2.9, as well as the highest population density of 6247/km<sup>2</sup> compared to the country's 703.9 km<sup>2</sup>. The map below shows the area of study for this research

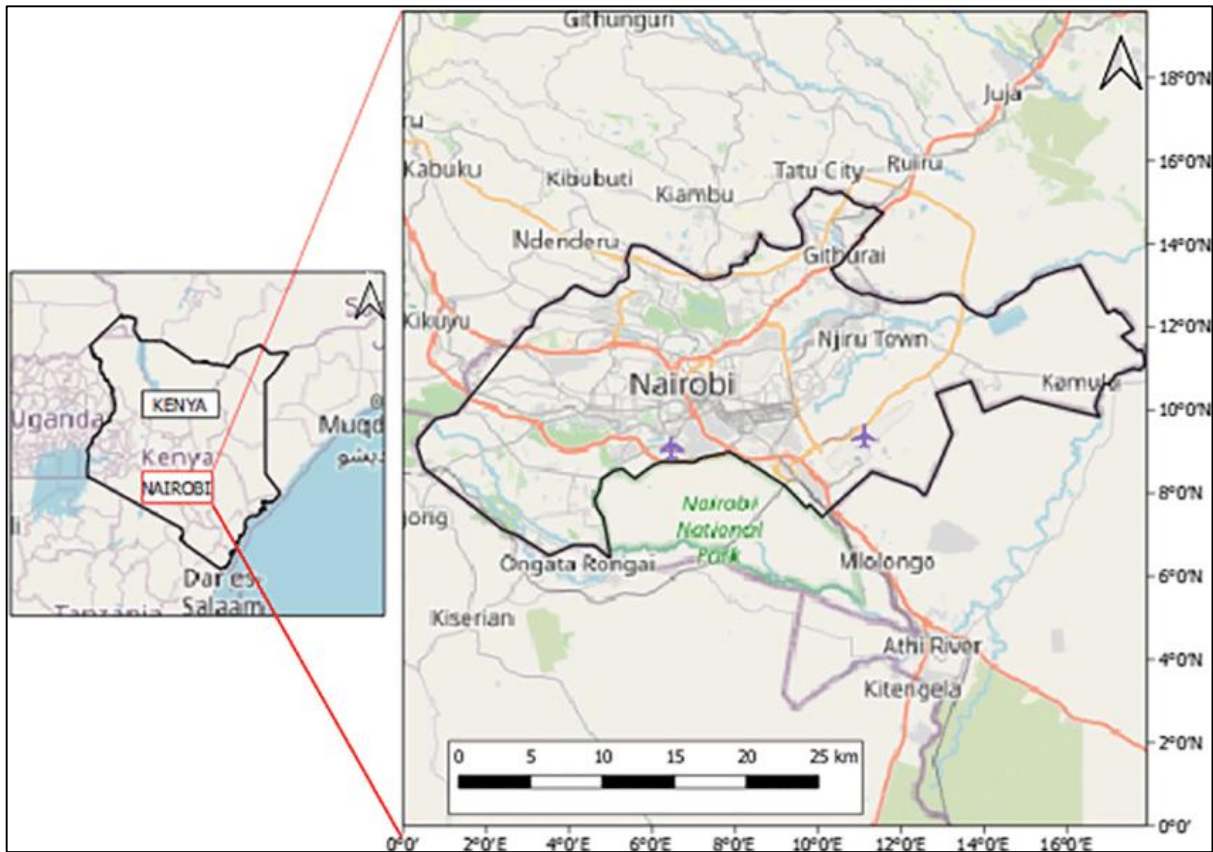


Figure 3.1: Present day Nairobi City County (Olajubu, 2021)

Nairobi was strategically chosen as the study site for this research due to its unique position as the capital and largest city of the country. As the political, economic, and cultural hub, Nairobi serves as the epicentre of administrative and decision-making processes, allowing the study to delve into the intricacies of how NSAs collaborate with government institutions. Moreover, Nairobi is home to a diverse range of non-state actors, including international NGOs, local community-based organizations, and private sector entities. This diversity ensures a comprehensive exploration of the various roles and contributions of NSAs to health security, offering insights into both global and local dynamics. The city's urban setting, with its distinct health challenges and population density, further provides a nuanced context for understanding how NSAs navigate and influence health outcomes in a post-pandemic era.

Additionally, Nairobi's significance extends beyond national boundaries, making it a microcosm of broader health security challenges in the region. By focusing on Nairobi, the study gained relevance not only for Kenya but also for neighbouring countries facing similar health security concerns. The city's cosmopolitan nature allowed for an examination of the effectiveness of international collaborations and partnerships between NSAs and government institutions, offering valuable lessons and implications for global health governance. In essence, choosing Nairobi as the study site provided a strategic vantage point to analyse the intricate interplay between non-state actors and governmental agencies, contributing to a more nuanced understanding of health security enhancement in the post-COVID-19 landscape.

### **3.4 Target Population and Study Population**

This research distinguished between the target population and the study population to ensure clarity in participant selection. The target population represents the broader group to which the study findings may potentially be generalized (Polit & Beck, 2017). In this case, the target population encompassed all NSAs operating within the Kenyan health security landscape. This included a diverse range of entities such as non-governmental organizations (NGOs), civil society groups, community-based organizations (CBOs), faith-based organizations (FBOs), academic institutions, private companies, and philanthropic foundations. These actors play a vital role in complementing government efforts and bolstering health security in Kenya (Bisong, 2022). Cumulatively, the Non-Governmental Organizations Co-ordination Board has registered 12,162 Non-Governmental Organisations, which are spread all over the country and vary from small NGOs operating locally to international ones with regional presence.

The study population, on the other hand, represents the specific group from which participants are directly recruited (Polit & Beck, 2017). Due to the vast and diverse nature of the target

population, and the in-depth nature of the qualitative case study design, this research focuses on a single case study. The study population for this research was AMREF Health Africa-Kenya, a prominent NGO with a long history of involvement in healthcare delivery, capacity building, and advocacy within the Kenyan health sector (AMREF Health Africa, n.d.), as well as various segments of the community, including the general population, healthcare professionals, government agencies, and members of the general community. By engaging with these diverse groups, the research sought to comprehensively address the effects of non-state actors' interventions, analyse existing policy frameworks, and explore opportunities for strengthening partnerships to enhance health security in Kenya.

By focusing on AMREF as a representative case, the study aims to gain a detailed understanding of the experiences, contributions, and challenges faced by a prominent NSA in the context of post-COVID-19 health security in Kenya. This in-depth analysis can then inform broader discussions about the role of NSAs in the Kenyan health system.

Creswell and Creswell (2017) state that target population entails a set of groups of individuals, objects or events from which the sample, who have the phenomena in question is drawn. The study targeted the key non-state actors in health sector. Table 3.1 below outlines the target population for the study on the contribution of non-state actors, particularly focusing on AMREF, in enhancing health security in post-COVID-19 Kenya.

**Table 3.1:***Target population for the study*

<b>Category</b>	<b>Subcategory</b>	<b>Description</b>
<b>Population</b>	<b>Total Population</b>	All individuals residing in Nairobi, Kenya, during the post-COVID-19 period.
	<b>Non-State Actors (NSAs)</b>	Employees, volunteers, and leadership within AMREF Health Africa -Kenya, representing the non-state actor group.
<b>Health Sector Stakeholders</b>	<b>Government Agencies</b>	Officials, policymakers, and personnel within relevant government health agencies in Kenya.
	<b>Healthcare Professionals</b>	Medical practitioners, nurses, and other healthcare workers operating in Nairobi.
<b>Community Engagement</b>	<b>Community Members</b>	Residents of Nairobi involved in community-based health initiatives or programs.
<b>Key Informants</b>	<b>AMREF Health Africa - Kenya Representatives</b>	Key personnel within AMREF Health Africa -Kenya, including executives, project leads, and program coordinators.
	<b>Ministry of Health Officials</b>	Individuals responsible for health policy and security at the national and local levels

*Note: Adopted from Kothari, C. R. (2004). Research methodology: Methods and techniques (2nd revised ed.). New Age International. (p.103)*

The study only selected individuals who had direct involvement in health security initiatives, policymaking, resource mobilization, capacity building, and community engagement as they are the people who understand the role of non-state actors in the enhancement of health security in post COVID-19 Kenya.

The researcher considered individuals who hold significant roles within the community, such as community health promoters directly involved in health security initiatives post-COVID-19, as well as Ministry of Health Directors as Key Informants since these are individuals who provided diverse perspectives on the subject based on their expertise, experiences, and relevance to the research questions, and who routinely collaborate with AMREF to deliver on health security initiatives. This targeted approach ensures that key informants possess the knowledge and experience necessary to address the specific focus of the study.

### **3.5 Sampling Techniques**

Bryman and Bell (2015) define a sample as the infinite part of a statistical population whose elements are examined in order to gain insight about the population. According to Liamputtong (2019), the representative sample should not be too small or too large, although larger samples have more representative score. In this study, purposive sampling was used to select participants for this study. Purposive sampling was chosen because it was only to select individuals who have direct involvement in health security initiatives, policymaking, resource mobilization, capacity building, and community engagement as they are the people who understand the role of non-state actors in the enhancement of health security in post COVID-19 Kenya. While purposive sampling provided a strong foundation for recruiting key informants across different stakeholder groups, the research also employed snowballing and maximum variation techniques to a limited extent. Snowballing was used strategically within

the community member group, allowing participants to recommend others involved in relevant health initiatives. Additionally, maximum variation sampling was considered when selecting healthcare professionals, ensuring a diverse range of specialties were represented in the final sample. This combination of purposive, snowballing, and maximum variation techniques facilitated the recruitment of a rich and informative sample for the qualitative study. The researcher identified and recruited key representatives from AMREF, the national Ministry of Health, community members from the general population, and government officials with expertise, experience and direct roles in health security enhancement.

**Table 3.2***Distribution of sampled interviewees and informants*

<b>Category</b>	<b>Subcategory</b>	<b>Description</b>	<b>Number Identified</b>
<b>Non-State Actors (NSAs)</b>	<b>AMREF Health Africa-Kenya</b>	Key personnel within AMREF-Health Africa-Kenya, including executives, project leads, and program coordinators.	15
<b>Health Sector Stakeholders</b>	<b>Government Agencies</b>	Officials, policymakers, and personnel within relevant government health agencies in Kenya.	15
	<b>Healthcare Professionals</b>	Medical practitioners, nurses, and other healthcare workers operating in Nairobi.	10
<b>Community Engagement</b>	<b>Community Members</b>	Residents of Nairobi involved in community-based health initiatives or programs.	30
<b>Key Informants</b>	<b>Government Officials</b>	Individuals responsible for health policy and security at the national and local levels	10

*Note: Adopted from (2017). Nursing research: Generating and assessing evidence for nursing practice (10th ed.). Wolters Kluwer*

### **3.6 Sample Size Determination**

The sample size was determined taking into account the following considerations: objectives of the study, research questions, the level of heterogeneity within the population, the desired depth of understanding, and the principle of data saturation. The study's emphasis was on the depth and richness of information. Given the specific focus on AMREF and the detailed exploration of the role of non-state actors, a purposive sampling approach was employed to select participants who have relevant experiences and insights. The sample was further augmented iteratively as the data collection and analysis progressed, in a bid to ensure that a comprehensive understanding of the research questions was achieved. Persons who have relevant expertise and experience in health security enhancement from each target sub-category formed the sample size. Further, in order to gather rich and diverse qualitative data that would inform the analysis and interpretation of findings, the researcher complimented the purposive sampling technique with snowballing, and maximum variation sampling techniques so as to leverage the initial contacts to identify additional participants who were not been readily identifiable, particularly AMREF staff operating in the community and some community members. Furthermore, maximum variation sampling was employed to capture the diverse range of perspectives by selecting participants who varied in terms of geographical location and role in health security initiatives, thus facilitating a comprehensive understanding of the complexities surrounding the study context. In accordance with the recommendations of Hennink and Kaiser (2022) regarding sample saturation in qualitative studies, the researcher deliberately chose to distribute the sample across all sub-groups. As per this approach, a minimum of ten senior staff members from each of the target sub-categories were included in the study. By ensuring representation across sub-groups, the researcher aimed to capture a comprehensive range of perspectives and experiences related to non-state actor coordination in

enhancing health security in post-COVID-19 Kenya. For this qualitative study, the purposive sampling technique was employed to select 80 participants, ensuring a diverse and comprehensive representation of perspectives relevant to the research objectives. The sample size was determined with the concept of saturation in mind, where data collection continues until no new themes or insights emerge. While qualitative research does not rely on a strict formula for determining sample size, the decision to include 80 participants was informed by the need to capture a wide range of experiences and achieve data saturation. This number is considered sufficient to provide depth in analysis while ensuring that the collected data is rich enough to address the research questions thoroughly. This sampling strategy was designed to facilitate a thorough exploration of the dynamics and challenges surrounding non-state actor involvement, thereby enhancing the richness and depth of the qualitative data collected for analysis. Overall, the decision to distribute the sample of eighty (80) participants across all sub-groups was driven by a commitment to thoroughness, inclusivity, and methodological rigor in the qualitative inquiry.

### **3.7 Data Collection**

This section describes the development and piloting of research instruments, instrument validity, instrument reliability and data collection procedure. Primary data was collected using questionnaires and key informant interview guides. Reliability and validity were done on these tools during the piloting phase, which is described in the subsequent subsections. The thresholds for the tests are also explained in the following sub-sections.

#### **3.7.1 Data Collection Instruments**

Primary data was collected from the interviewees from the AMREF Health Africa-Kenya staff, Government Agencies staff, Healthcare Professionals and Community Members using

unstructured questions (open-ended questions) delivered in questionnaires while the senior government officials had the Key Informant Interview (KII) guide administered. The use of open-ended questions gave the interviewees a chance to air their views without being restricted to pre-determined outcomes. The questionnaire was structured into 4 sections: the first section collecting data on the demographic characteristics of the interviewees while the remaining three sections each addressing the specific objectives covering the Effects of Non-State Actors' Interventions, Policy and Strategic Frameworks, Opportunities for Strengthening Partnerships, Collaboration and Coordination, Community Engagement, Resource mobilization, Capacity Building. More specifically, the questionnaire was structured to collect qualitative data on the role of non-state actors' interventions on public health outcomes and health security. As postulated by Kumar (2018), questionnaires should be delivered in the same language, structure and phrasing to sample interviewees. They are simple and cheap to administer as well as easy to analyse. The research instruments were administered with the aid of two research assistants. The researcher also interviewed key informants who included the Directors at the Ministry of Health, Kenya Medical Practitioners and Dentists Council and The Kenya Medical Training College to obtain information to corroborate the findings from the questionnaires. KIIs are tools usually administered to individuals who are experts in certain area and provide additional in-depth data so as to enrich information obtained through questionnaires. The interview guide was developed based on a comprehensive literature review and expert consultation. Additionally, a review of secondary literature, policy documents, and reports complemented the primary data and provide a broader understanding of the existing policy and strategic frameworks.

### **3.7.2 Pilot Testing of Research Instruments**

As postulated by Creswell and Clark (2017), the goal of piloting is to ensure thorough understanding of the research variables that are used in a study. Sample research questionnaires will be delivered to 10 interviewees (representing 12.5% of the sample size) selected from Mombasa County. Mombasa was selected because it is demographically related to study site and also enjoys the services of non-state actors, and was second to Nairobi in the prevalence of COVID-19 in Kenya. By piloting the research instruments, the reliability of instrument was boosted by grouping together questions that measure the same concepts.

### **3.7.3 Reliability and Validity**

According to Devi (2017), reliability is a measure of the degree to which a research instrument will yield consistent data after established test trials. Reliability is therefore attained when a particular procedure gives similar results over a number of repeated trials (Creswell & Clark, 2017). The researcher administered the instruments to the pilot sample and then scored the questions. The reliability of the test instrument was measured by Cronbach Alpha Coefficient to determine internal consistency by checking inter-relation. Moreover, data completeness and consistency check was done during the pre-test and necessary adjustments done where required. Questions that appeared to be redundant and ambiguous during the pre-test were revised accordingly. All these was done to ensure that data collected yielded consistent results when repeated different times. Triangulation (use of many tools like questionnaire and secondary literature in data collection) was also applied to ensure that results obtained were reliable.

Validity refers to the extent to which the instruments of data collection measure what it intends to measure (Kumar, 2018). The preparation of the instrument and its content was based on the

specific objectives of the study. In order to establish validity of findings, the research sought to use face validity and presented the instrument to experienced researchers and supervisors in the area of study and try to obtain accurate information. Face validity is a subjective decision of whether measures of a certain concept will appear to measure what is intended to measure. In this regard, the researcher gave the data collection instruments to the supervisors to be able to get their feedback on whether these measures are relevant in measuring what the researcher intends to measure.

### **3.8 Data Collection Procedure**

As already discussed, the study sought to employ questionnaires and KII to collect data from the interviewees. The researcher trained the two (2) research assistants for purposes of data collection. The research assistants were instructed on how to distribute and collect the questionnaires.

Research assistants administered the tools to the community health promoters and some AMREF staff, sought informed consent from the organizational heads and then purposively approached all the eligible representatives and asked for their consent to take part in the study. Data collection was then conducted in two phases. First, the questionnaires were distributed electronically and also in-person to selected participants. The researcher provided clear instructions and set a reasonable timeframe for completion. Second, key informant interviews were conducted either face-to-face or via virtual platforms, ensuring participants' confidentiality and willingness to share their experiences. The in-depth interviews sought to explore their experiences, perceptions, and insights regarding the effects of AMREF's interventions on health security outcomes. The researcher also used focus group discussions with community members to gather a broader perspective on the effects of interventions and

opportunities for partnerships. The review of secondary literature, policy documents, and reports was conducted through systematic searches in relevant databases and libraries so as to analyse the content to understand the organization's strategies, challenges, and contributions to health security.

### **3.9 Data Analysis and Presentation**

Data was first edited for accuracy, readability, consistence and completeness. The qualitative data from the interviews was transcribed, coded, and thematically analysed to identify patterns, themes, and emerging insights related to collaboration and partnerships between non-state actors and government institutions. The qualitative findings provided a comprehensive understanding of the contribution of non-state actors in health security enhancement.

The data was presented using a narrative approach, starting with introduction of each research question, providing context on the key themes that emerged. The researcher then incorporated direct quotes from key interviewees and informants to illustrate and support the findings. Recurring themes were organized and presented in narrative form. Where applicable, visual representations were used to enhance the clarity of complex relationships or patterns.

### **3.10 Ethical Considerations**

The study adhered to ethical principles that ensured the well-being and confidentiality of participants. Informed consent were obtained from all participants, and their identities kept anonymous in the reporting of findings. The researcher sought authority from the National Defence University-Kenya, through the National Defence College-Kenya, then sought a permit to conduct the research from the National Commission for Science, Technology and Innovation (NACOSTI). The study also obtained ethical approval from the Ministry of Health before data

collection commenced. All the researchers respected the rights and privacy of the participants throughout the study process. All potential conflicts of interest were disclosed, and steps taken to minimize bias and ensure objectivity in the research.

### **3.11 Chapter summary**

The methodology chapter of this thesis employed a rigorous and comprehensive approach to investigate the coordination of non-state actors in enhancing health security post-COVID-19 in Kenya, with a specific focus on the case study of AMREF. The research design involved a qualitative case study methodology, utilizing semi-structured interviews, document analysis, and narrative content analysis. Through purposive sampling, key stakeholders from non-state actors and government agencies were engaged to gather rich insights into their perspectives, experiences, and challenges related to health security coordination. The triangulation of data sources and methods ensured the robustness of the study's findings. The chapter concludes with a reflection on the appropriateness and effectiveness of the chosen methodology, acknowledging its limitations and providing a solid foundation for the subsequent analysis and interpretation of the research results. The careful selection of a case study approach and the utilization of qualitative methods aimed to uncover the nuanced dynamics of coordination, offering a holistic understanding of the collaboration between non-state actors and government institutions in the post-COVID-19 health landscape of Kenya.

The subsequent chapter reveals the findings obtained through the employed methodology, and comprehensively analyses and discusses these findings, shedding light on the complexities of non-state actor coordination in enhancing health security post-COVID-19 in Kenya

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Chapter Introduction:

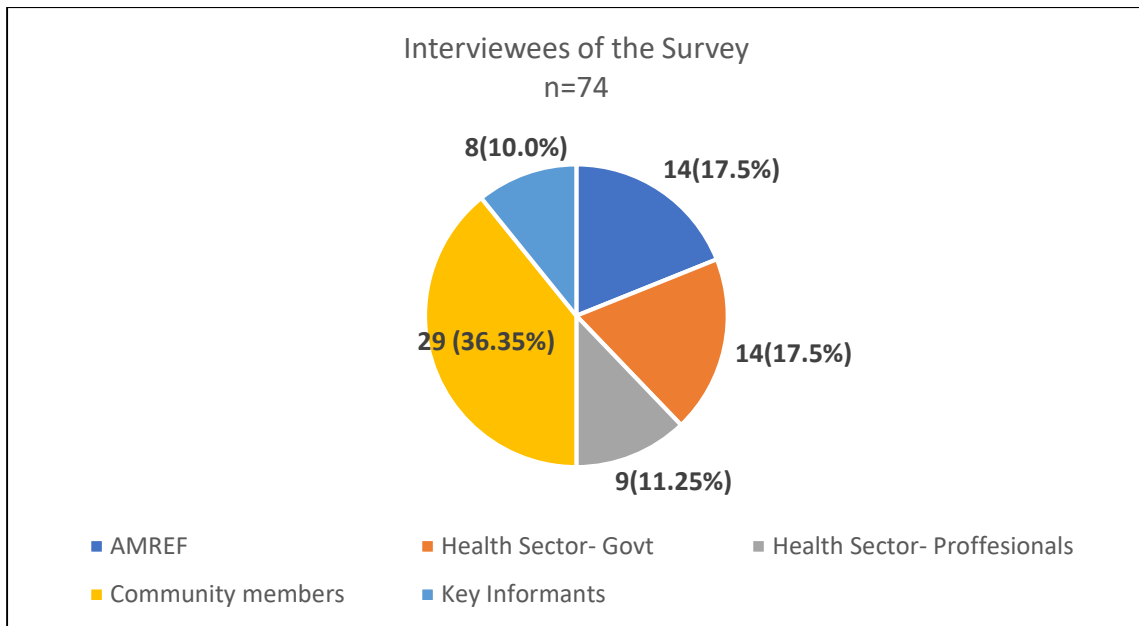
This chapter digs into the heart of the research, presenting the findings that illuminate the role of NSAs in enhancing health security in post-COVID-19 Kenya. The chapter is structured around the key objectives of the study. Firstly, the researcher analysed existing policies and frameworks governing partnerships between NSAs and government institutions. This analysis shed light on the formal structures that guide collaboration in the health security landscape. Secondly, the researcher examined the effects of NSA interventions on health security outcomes. This section explored the concrete contributions of NSAs in strengthening Kenya's health security posture. Finally, the researcher explored avenues for strengthening partnerships between NSAs and government institutions. This section identified opportunities to enhance collaboration and optimize the joint efforts of NSAs and the government in safeguarding public health. Through these analyses, Chapter 4 aims to provide a comprehensive understanding of the role NSAs play in Kenya's health security and how it can be further bolstered in the post-pandemic era..

#### 4.2 Demographic statistics

A total of 66 participants of the sampled 70 interviewees responded to the questionnaire, with four (4) not availing themselves for the face to face interview with the researcher; and eight (8) senior government officers giving responses during the Key Informant Interview, out of a sample of 80 interviewees giving a response rate of 74/80 (92.5%). 14 (17.5%) interviewees were from AMREF, 14 (17.5%) from Health Stakeholders within the government (Heads of Departments and Divisions at the MoH), 9 (11.25%) from the medical facilities that managed COVID-19 pandemic, 29 (36.25%) from the general community and 8 (10%) from the key

officials in the government who managed the pandemic (KII). Figure 3 below summarizes the interviewees proportion.

**Figure 4.1**  
*Distribution of the survey interviewees*



A total of 28 of the 74 interviewees reported having worked for AMREF, either as permanent staff, consultants or volunteers, while 40 interviewees reported having gotten some form of training in public health security. Table 3 below shows a provided by the interviewed study participants.

**Table 4.1**  
*Summary of the General Information responses*

	<b>AMREF n=14</b>	<b>Govt Agency n=14</b>	<b>Healthcare Professionals n=9</b>	<b>Community Members n=29</b>	<b>Key Informant n=8</b>
<b>General Information</b>					
<b>Characteristic</b>					
Direct working relationship with AMREF	14(100%)	2 (14.3%)	2 (2.2%)	7 (24.1%)	3 (3.8%)
Have some training in Public Health Security	14(100%)	9(64.2%)	6(66.7%)	6(20.7%)	5(62.5%)
Average Length of Service in Public Health Security	4.5 yrs	12.4 yrs	7.3 yrs	0.8 yrs	21.1 yrs
Have a health professional background	Yes- 14 No- 0	Yes- 14 No- 0	Yes- 9 No- 0	Yes- 7 No- 22	Yes- 14

### 4.3 Narrative Analysis

The narrative analysis conducted from the responses to the questionnaire and KII provides an in-depth exploration of the qualitative data obtained. It serves as a methodological approach to uncovering the intricate and context-specific stories embedded within the qualitative data. In this section, the focus was on understanding the nuanced and context-rich stories entrenched in the responses, aiming to uncover the lived experiences, perceptions, and challenges faced by non-state actors, government agencies, and communities involved in health security initiatives. Through the narrative lens, the analysis sought to reveal patterns, themes, and the dynamic interplay of actors and factors, contributing to a comprehensive understanding of the complexities surrounding the coordination of efforts in the post-COVID-19 health security landscape in Kenya, with a specific emphasis on the role of AMREF.

The Narrative analysis is crucial in such a qualitative research for its ability to provide a rich, contextualized, and holistic interpretation of the collected data. In the context of this thesis, narrative analysis allowed for the exploration of individual and collective stories, shedding

light on the personal and organizational experiences within the broader framework of health security coordination. The importance lies in its capacity to uncover implicit knowledge, cultural nuances, and the subjective meaning-making processes of the participants. By embracing narrative analysis, the research went beyond statistical trends and generalizations, offering a deeper understanding of the lived realities of stakeholders involved in health security efforts. This methodological approach proved instrumental in capturing the human dimension of the research topic, thereby contributing to the development of more informed and contextually relevant policy recommendations for the enhancement of health security in post-COVID-19 Kenya. Responses were organized according to the three specific objectives and corresponding research questions.

#### **4.3.1 Existing Policy and Strategic Frameworks for Partnerships:**

Through research question one, focussed on the first objective, the study sought an understanding of the existing policy and strategic frameworks governing partnerships between non-state actors and government agencies in enhancing health security in Kenya, through the perspectives of the interviewees.

##### **4.3.1.1 Overview of Existing Policies**

The analysis of policy documents and frameworks revealed the existence of a comprehensive set of guidelines aimed at fostering collaborations between non-state actors and government agencies. Notably, these policies emphasized the importance of inclusivity, transparency, and a shared responsibility in achieving health security objectives. However, gaps in

implementation and inconsistencies in interpretation were identified, requiring attention for more effective enforcement.

From their perspectives, some interviewees demonstrated a clear understanding of these frameworks and their insights provide the foundational guidelines dictating the rules of engagement between non-state actors and government agencies.

While discussing the challenges arising from unclear and ambiguous policy frameworks governing interactions between health security agents in government and NSAs, participant KM-GK-01 aptly put it that:

*"Policies are like the rules of the game. If we don't understand them well or if they are ambiguous, it is challenging to play together effectively."*

This sentiment resonated throughout the responses, highlighting the need for clarity and specificity in policies generated by the government to facilitate cohesive efforts in health security enhancement.

The interviewees further underscored that a nuanced understanding of existing frameworks is vital for navigating the intricate landscape of collaboration. Policies shape the dynamics of interaction, delineating roles, responsibilities, and expectations. The study participants stressed that without a thorough understanding of these frameworks, there is a risk of misalignment between the intentions of policies and their practical implementation. As one respondent sampled for the KII aptly put it:

*"Policies are not just documents; they are the roadmaps. If we all understand the map, we can travel together smoothly. But if there is confusion or misinterpretation, we might end up taking different routes, and that can hinder our collective progress in health security." KM-GK-05*

Thus, the study's interviewees emphasized that a profound understanding of policies forms the bedrock for fostering effective partnerships between non-state actors and government agencies in advancing health security in Kenya. This response highlighted the importance of clear and well-understood policies for effective collaboration in health security. KM-GK-05 emphasizes that policies should act as a shared "roadmap" guiding the actions of both NSAs and government institutions. Any confusion or misinterpretation of these policies can lead to divergent approaches, hindering progress towards shared health security goals. This quote suggests a potential gap in communication or understanding of existing policies, which could be an area for further exploration within the qualitative study.

Respondent KM-GK-12 stated:

*"There are policies in place, and they talk about collaboration and coordination. The Kenya Health Sector Partnership and Coordination Framework 2018-2030 policy document clearly outlines how NGOs should engage with the government, but the challenge is in the implementation. There is a gap between what's on paper and what happens on the ground. Kwa ground vitu ni different (At the ground, things are very different)."*

This response highlighted a critical challenge in the collaboration between NSAs and government institutions – the implementation gap. The interviewee acknowledged the existence of policies, such as the Kenya Health Sector Partnership and Coordination Framework, that outline collaboration protocols. However, the interviewee emphasized the disconnect between these policies ("on paper") and their actual implementation ("on the ground"). This suggests potential bureaucratic hurdles, inefficient administrative processes, or a lack of clear communication channels that hinder effective collaboration despite existing frameworks. The phrase "kwa ground vitu ni different" emphasized the stark difference between the intended policy outcomes and the lived experience of collaboration, suggesting a need for further investigation into these implementation challenges.

Respondent KM-GK-0 2 added that:

*"We have the Kenya Health Sector Partnership and Coordination Framework 2018-2030, which is comprehensive. However, it tends to be more of a guideline. It lacks specifics on how coordination should happen. There is room for improvement in terms of detailing the actionable steps, so that implementation stops being a challenge."*

KM-GK-0 2 pointed towards a potential limitation of the Kenya Health Sector Partnership and Coordination Framework (KSHPCF). While the interviewee acknowledged its comprehensiveness, he highlight a lack of concrete details regarding how collaboration should be implemented. He suggested that the framework functions more as a guideline than a practical roadmap, implying that the KSHPCF might not provide clear and actionable steps for NSAs and government entities to follow, potentially contributing to the implementation gap mentioned in other responses. The interviewee suggested that including specific instructions for collaboration within the framework could be a key improvement for strengthening the partnership between NSAs and the government.

An averring response from respondent KM-AM-08 however, painted a different picture, in that:

*"The government and its agencies have their protocols, and we, as non-state actors, have ours. The challenge comes when trying to align them. It is not always clear who takes the lead in what area, and this can slow down response efforts."*

KM-AM-08 highlighted a potential obstacle in collaboration between NSAs and government institutions – the misalignment of protocols. She acknowledged that both entities have established procedures, but challenges arise when trying to harmonize them. The lack of clarity regarding who takes the lead in specific situations can lead to delays in responding to health security threats. This suggested a need for improved communication and coordination efforts to ensure protocols from both NSAs and government agencies complement each other,

enabling a more streamlined and efficient response during health emergencies. This assertion is in keeping with the Institutional logics concept of the underpinning Institutional Theory, where the coexistence of multiple institutional orders within a given field, characterized by distinct norms, values, and practices guided the conduct of the NSAs.

#### **4.3.1.2 Stakeholder Perspectives**

The responses gathered through interviews with key stakeholders, including representatives from both government agencies and non-state actors, illuminate a crucial facet of the collaborative landscape in health security. These insights shed light on the recognition among the participants regarding the existence of policies governing partnerships. However, a common thread woven through their responses is the acknowledgment of a pressing need for regular reviews and updates to navigate the dynamic and evolving challenges within the health security domain. As the COVID-19 pandemic reshaped the contours of global health crises, the stakeholders conveyed a collective understanding that policies, while fundamental, must not be static artifacts but dynamic instruments capable of responding effectively to emerging threats. This narrative analysis delves into the verbatim perspectives of these stakeholders, revealing their shared emphasis on the imperative of adaptability in policy frameworks to sustain an agile and resilient health security ecosystem.

When asked to share his perspective on the existing policies governing partnerships with non-state actors in health security, respondent KM-GA-01 stated:

*“We do have policies in place, and they have been instrumental in guiding collaborations. However, the world is very dynamic, and health threats evolve just as fast. What worked yesterday might not be sufficient tomorrow. Regular reviews and updates are essential to ensure our policies are not just static documents but adaptive tools that respond effectively to emerging challenges. The COVID-19 pandemic has taught us the importance of agility in our approach.”*

KM-GA-01 emphasized the need for adaptable health security policies. He acknowledged the value of existing policies in guiding collaboration, but highlights the dynamic nature of health threats further arguing that static policies might not be sufficient in the face of constantly evolving health challenges. The reference to the COVID-19 pandemic underscores this point, highlighting the importance of agile policy frameworks that can be updated and adjusted to respond effectively to emerging threats. This suggests a potential need for revising existing review and update processes for health security policies to ensure they remain relevant and responsive in a rapidly changing health landscape.

A similar response was recorded from respondent KM-AM-01, thus:

*“Policies are a foundation, no doubt. But health challenges are ever-changing, and our strategies need to evolve accordingly. The existing policies have been helpful, but they lack provisions for swift adjustments. We need mechanisms for regular reviews and updates to keep pace with new threats. It's about staying ahead of the curve, and policies should facilitate that rather than acting as constraints.”*

This response echoed concerns regarding the adaptability of existing health security policies. Similar to the previous quote, KM-AM-01 acknowledged the importance of policies as a foundation for collaboration. However, she emphasized the need for these policies to be flexible and responsive to the ever-changing nature of health threats. The current policies are viewed as lacking mechanisms for swift adjustments, potentially hindering the ability to adapt strategies when new threats emerge. The interviewee highlighted the importance of staying "ahead of the curve" in health security, suggesting that policies should be designed to facilitate proactive adjustments rather than acting as rigid constraints. This reinforces the need for exploring potential revisions to policy review and update processes to ensure they can keep pace with the evolving health landscape.

Two relatively experienced interviewees, KM-GM-01 and KM-AM-01 were categorical in responding:

*“The policies have been instrumental, no doubt. They provide a framework for collaboration. However, they need to be living documents, not artifacts on a shelf. Health security is a rapidly evolving field, and policies should be reviewed regularly to incorporate lessons learned, emerging best practices, and new challenges. Our ability to adapt is key to maintaining a resilient health security system. We were caught out once. We should not be caught napping again.”*

and :

*“Policies are essential guidelines, but they must be dynamic. The existing ones are a good starting point, but as we’ve seen with the recent health crises, we need to be proactive. Regular reviews and updates are critical to address gaps and ensure that policies are in sync with the evolving nature of health threats. It’s not about reinventing the wheel but fine-tuning it to navigate the changing terrain effectively.”*

respectively.

These two responses converge on the need for a more dynamic approach to health security policies. Both acknowledged the existing policies' role in establishing a framework for collaboration. However, they emphasized the limitations of static documents. They used metaphors like "living documents" and "fine-tuning a wheel" to advocate for regular reviews and updates. The references to being "caught out once" and the "recent health crises" suggest the COVID-19 pandemic exposed vulnerabilities in the current system's ability to adapt. These responses highlight the importance of incorporating lessons learned, emerging best practices, and addressing newly identified challenges during these policy revisions. Overall, they advocate for a more agile approach to health security policies, ensuring they remain relevant and responsive to the evolving landscape of health threats.

The responses from interviews with members of the general population in the community revealed a prevailing lack of awareness concerning the existence of policies governing collaborations between government agencies and non-state actors in the realm of health

security. Participants openly admitted their unfamiliarity with such policies, underscoring a notable information gap. Importantly, their collective sentiments underline a shared belief in the necessity for public awareness and information dissemination regarding these policies. Amidst the evolving landscape of health security challenges, these responses emphasize the vital role of public knowledge in fostering transparency, trust, and a sense of collective understanding. This narrative analysis delves into the perspectives of individuals who, while unaware of existing policies, express a keen interest in being informed to bolster public engagement in the broader discourse of health security initiatives.

Respondent KM-Com-15, when responding to the question of awareness of any policies regarding health security collaborations between the government and non-state actors stated:

*“ Honestly, I didn't know there were policies for that. I think it's crucial for the public to be informed about these things. If there are rules guiding how they work together to keep us safe, we should know about it. It would help us understand what's happening, especially during health crises.”*

Respondent KM-Com-22 described his unfamiliarity with the policies in existence, stating:

*“I have no idea about any policies. Maybe it's something they don't tell us. But I think it's important for people to know, especially now with everything that's been happening. If there are guidelines or plans in place, we should be informed. It would make us feel more secure, I guess.”*

These two responses exposed a potential gap in communication regarding health security policies between the government and the public. Both KM-Com-22 and the other respondent expressed a lack of awareness about the existing policies governing collaboration between NSAs and government institutions. This suggests a need for improved public outreach and information dissemination strategies. The desire to understand "what's happening" and feeling "more secure" during health crises highlights the potential value of increased public knowledge about these policies. Involving the public in discussions about health security policies and their

implementation could foster trust and a sense of shared responsibility in safeguarding public health.

Interviewees KM-Com- 23 and KM-Com-17 respectively, addressed the issue of it being important for the government to share out such important information:

*“ I have never heard about policies that guide collaborations between the government and NGOs in public health security. I am not sure if that is something they discuss openly. But it makes sense to have policies, right? I mean, we cannot just rely on random actions. If there are rules, they should let us know. It would be reassuring to understand how things work. ”*

*“ I don't think we are informed at all. I did not even know there were policies. I think they should share this information more, especially now when health is such a big concern. If there are plans in place, we need to know. It is not just about our safety but also about understanding what is being done to protect us. ”*

These two responses, similar to the previous ones, reveal a concerning lack of public awareness regarding health security policies. Both interviewees express unfamiliarity with any policies governing collaboration between the government and NSAs in this domain. One key difference emerges, however. While KM-Com-22 and the previous respondent suggested a lack of communication, these two express a sense of uncertainty about whether these policies exist at all. The phrase "I am not sure if that is something they discuss openly" hints at a potential perception of secrecy surrounding these policies.

This highlights the need for a two-pronged approach to improve public awareness. Firstly, there's a clear need for increased transparency and dissemination of existing policies. Public education campaigns could explain the nature of these policies, the collaborative framework established between NSAs and the government, and their role in safeguarding public health. Secondly, these responses suggest a potential gap in knowledge about the very existence of

such policies. Addressing this requires open communication and a willingness to discuss the overall health security strategy with the public. By fostering a sense of transparency and shared understanding, the government can build public trust and encourage a more collaborative approach to health security.

#### **4.3.2 Effects of Non-State Actors' Interventions on Health Security Outcome:**

The second research question emanating from the second specific objective sought to understand the effects of non-state actors' interventions on health security outcomes in post COVID-19 Kenya. The qualitative data collected through interviews and open-ended survey questions provided rich insights into the perceptions, experiences, and challenges faced by these stakeholders. The analysis of the data revealed several noteworthy findings. As exemplified by AMREF, NSA's played a crucial role in bolstering health security. Their interventions were observed to have a positive impact on various fronts.

##### **4.3.2.1 Positive Effects**

Interventions by the NSA's led to improved surveillance and early detection of potential health threats. For instance, community-based initiatives such as contact tracing and location facilitated prompt reporting of suspected cases, contributing to a more proactive response from health authorities. Additionally, the provision of resources in the form of stipends and basic medical supplies such as reusable face masks and disposable latex gloves, public health expertise, enhanced the healthcare system's capacity to respond effectively. Respondent KM-Com-21 responded:

*"In our community, AMREF came in with awareness campaigns and regular health check-ups. This created a sense of responsibility among the people. We now report symptoms promptly, and that has helped in early detection and containment."*

KM-Com-2's response highlights the positive impact of AMREF's interventions on community awareness and health-seeking behaviours. She emphasized the role of awareness

campaigns and regular health check-ups conducted by AMREF in their community. These interventions appear to have fostered a sense of responsibility among residents, leading to prompter reporting of symptoms. This suggests that AMREF's work contributed to earlier detection and containment of potential health threats within the community. This response exemplifies the potential benefits of NSA involvement in building community capacity and promoting proactive health-seeking behaviours, ultimately contributing to a more robust health security posture.

KM-AM-09 opined:

*"The interventions were effective in terms of supplies. AMREF through partnership with others provided PPEs and medical equipment, which greatly strengthened our response capacity. We feel more equipped to handle health emergencies now."*

This response highlighted the importance of resource provision by NSAs in bolstering health security efforts. The speaker acknowledged the effectiveness of AMREF's interventions in terms of supplying Personal Protective Equipment (PPE) and medical equipment. This access to essential supplies, likely facilitated through partnerships with other organizations, appears to have significantly strengthened the community's capacity to respond to health emergencies. The sentiment of feeling "more equipped" suggests that AMREF's contribution has enhanced the community's preparedness and ability to manage health threats effectively. This response underscores the crucial role NSAs can play in addressing resource gaps and strengthening health systems at the local level.

The respondent was further backed by interviewees KM-AM-04 and KM-AM-13 respectively:

*"Our intervention focused on community education and awareness. We saw a positive change in people's behaviour. Members of the community started reporting symptoms a bit early, and that helped in quicker response from health authorities. It shows a tangible impact on public health awareness and by extension personal health security."*

*"The biggest impact we had was in strengthening the local healthcare system. We provided training, equipment, and support. This not only helped in the immediate response to COVID-19 but also left a lasting improvement in overall health infrastructure. That infrastructure is still in use today, under the management of the Nairobi City County Government"*

These two responses showcase the multifaceted contributions of NSAs in enhancing health security. KM-AM-04 emphasizes the role of community engagement and education. The speaker highlights a positive change in behaviour observed after their intervention, with community members reporting symptoms earlier. This suggests that their efforts in public health awareness directly translated into improved disease detection and response times. This exemplifies the power of NSA interventions in empowering communities to take ownership of their health security and become active participants in mitigating health threats.

KM-AM-13's response dives deeper into the impact on healthcare systems. KM-AM-13 highlights the lasting improvements achieved through training, equipment provision, and support offered by the NSA. This strengthened not only the immediate response to the COVID-19 pandemic but also the overall health infrastructure within the local context. The continued use of the improved infrastructure by the Nairobi City County Government underscores the sustainability of these impacts. These responses demonstrate the ability of NSAs to address capacity gaps within local health systems, leaving a legacy of improved preparedness for future health challenges.

#### **4.3.2.2 Negative Effects: Challenges and Unintended Consequences**

In the execution of the mandate on health emergency response, however, challenges were identified. Coordination among various non-state actors and overlap of efforts was noted as one key challenge. Some unintended consequences included instances of misinformation

dissemination within communities due to the rapid spread of health-related messages. These challenges underscore the need for better coordination mechanisms and improved communication strategies among non-state actors. Respondent KM-GA-03 and KM-AM-11 submitted respectively that:

*"While the interventions were generally positive, there were instances of misinformation spread by community members. This sometimes led to panic and confusion. It shows that communication strategies need to be more carefully planned and executed."*

*"Sometimes, though, there was risk of misinformation spreading. We tried to address this by closely coordinating with local health authorities in the various dispensaries and health centres, but it was a challenge. People ended up misinterpreting messages, and sometimes ended up with unintended consequences such as prolonged infection, isolation and stigmatization, and on the extreme gender-based violence."*

These two voice responses point to a potential challenge associated with NSA interventions – the spread of misinformation within communities. Both interviewees acknowledged instances where community members circulated inaccurate information, leading to panic and confusion. This highlights the importance of well-defined communication strategies for NSAs. The second response delves deeper, showcasing the potential consequences of misinformation. It mentions misinterpretations leading to prolonged infections, isolation, stigmatization, and even extreme cases of gender-based violence.

These responses suggest a need for collaborative efforts between NSAs and local health authorities to develop clear, consistent, and culturally-appropriate communication materials. Effective dissemination strategies and open communication channels with community members are crucial for ensuring accurate information reaches the intended audience. By addressing the root causes of misinformation and fostering trust within communities, NSAs can mitigate these risks and maximize the positive impact of their interventions.

### **4.3.3 Opportunities for Strengthening Partnerships:**

Research question three, emanating from the third specific objective aimed at exploring opportunities for strengthening partnerships between non-state actors and government institutions to enhance health security in Kenya. In exploring the responses obtained a nuanced and comprehensive understanding of the potential avenues for collaboration emerges. The post-COVID-19 landscape presents a unique context, and stakeholders, particularly non-state actors, through the lens of AMREF, have an unprecedented opportunity to foster synergies with government institutions. The responses within this section of this report illuminate the multifaceted dimensions of collaboration, ranging from joint research initiatives to community engagement strategies. The examination of these opportunities unveils the dynamic ways in which partnerships can be strengthened to create a more resilient and responsive health security framework, crucial for mitigating future health crises.

The significance of delving into the opportunities for strengthening partnerships lies in the transformative potential such collaborations hold for the health security landscape in Kenya. By dissecting the responses, this thesis not only captures the aspirations and strategic visions of the involved stakeholders but also identifies pragmatic pathways toward collective action. This analysis is pivotal as it provides a roadmap for policymakers, non-state actors, and other entities involved in health security initiatives to capitalize on emerging opportunities effectively. Moreover, by focusing on these opportunities, the research contributes valuable insights that extend beyond the immediate case study, offering a broader applicability for enhancing health security coordination in similar contexts globally. The examination of opportunities for strengthened partnerships serves as a cornerstone for developing informed

strategies, fostering innovation, and fortifying the resilience of the healthcare system in Kenya in the aftermath of the COVID-19 pandemic.

#### **4.3.3.1 Identified Opportunities**

Several opportunities for strengthening partnerships emerged from the data. The exploration of these opportunities for strengthening partnerships constitutes a pivotal aspect of understanding and advancing the collaborative landscape in the aftermath of the pandemic. This section delves into the identified openings and strategic possibilities for fostering synergies among non-state actors, particularly exemplified by AMREF, and government institutions in the pursuit of bolstering health security. The responses analysed within this thematic domain shed light on the nuanced dynamics and potential avenues for collaboration, ranging from innovative research initiatives to community-driven interventions. Unraveling these opportunities not only elucidates the multifaceted dimensions of collaborative efforts but also lays the groundwork for formulating evidence-based strategies aimed at fortifying the healthcare system in Kenya against future health crises.

- a. Enhanced collaboration in research and data sharing:** Within the post-COVID-19 landscape in Kenya, the analysis of opportunities for strengthening partnerships reveals a promising avenue in the form of enhanced collaboration in research and data sharing between non-state actors, prominently represented by AMREF, and government institutions. Responses highlight the potential for jointly conducting epidemiological research, public health studies, and data-driven analyses to inform evidence-based decision-making. This collaborative approach not only taps into the diverse expertise of both non-state and governmental entities but also fosters a culture of shared

knowledge. By breaking down silos in research initiatives, stakeholders can harness the collective intelligence necessary to address emerging health threats. Furthermore, the emphasis on data sharing underscores a commitment to transparency and facilitates a more comprehensive understanding of health security challenges. This opportunity, therefore, becomes integral to shaping a collaborative and informed health security strategy post-COVID-19.

When questioned on the kind of opportunities Respondent KM-GA-14 saw for enhanced collaboration in research and data sharing between government agencies and non-state actors, she opined:

*“Well, I think we need to streamline data-sharing protocols. If we can create a centralized platform where both government agencies and non-state actors contribute and access data, it would significantly improve our ability to monitor and respond to health threats effectively. It's about breaking down silos and working together for a common goal.”*

KM-GA-14's response highlights a potential area for improvement in collaboration between NSAs and government institutions – data sharing. She proposes a centralized platform for data contribution and access by both entities. This suggests that current data-sharing protocols might be cumbersome or siloed, hindering the ability to effectively monitor and respond to health threats. The use of metaphors like "breaking down silos" emphasizes the need for a more collaborative approach to data management. A centralized platform could facilitate real-time information sharing, enabling more informed decision-making and a more coordinated response to emerging health challenges.

Similarly, Interviewee KM-AM-12, in giving his response regarding his perspective on what opportunities existed for better collaboration in research and data sharing, suggested:

*“One word: synergy. If we can pool our resources and expertise, we can conduct more impactful research. Also, creating a system for sharing data securely is key. It's not just*

*about quantity but the quality of the data. If we can ensure reliable and timely data exchange, it will elevate our collective response capabilities.”*

This response emphasizes the importance of synergy and data sharing in strengthening collaboration between NSAs and government institutions. KM-AM-12 uses the term "synergy" to highlight the potential benefits of pooling resources and expertise. This collaborative approach could lead to more impactful research efforts in the field of health security. Furthermore, he emphasizes the importance of a secure data sharing system. They acknowledge that data quantity is not enough; ensuring reliable and timely exchange of high-quality data is crucial. This underscores the need for robust data management protocols that balance accessibility with security concerns. By achieving both synergy and secure data exchange, the response suggests, collaborative efforts between NSAs and government can be significantly enhanced.

From the community’s perspective, a different approach was elucidated, with KM-Com-06 calling for community involvement as part of the collaboration and cooperation in research.

*“I think they should involve the public more in research. Maybe there could be community-led studies or something. As for data, they should make it more accessible to the public, but in a way that protects privacy. If we know what's happening and why, we can trust the system more. They shouldn't keep everything behind closed doors.”*

KM-Com-06’s response highlights two key areas for improvement in public engagement within health security efforts. Firstly, she advocates for greater public involvement in research. The suggestion of "community-led studies" indicates a desire for a more participatory approach. This could involve including community members in research design, data collection, or interpretation of findings. Secondly, KM-Com-06 emphasizes the need for increased data accessibility for the public. She acknowledges the importance of privacy protection, but believes that making data more readily available (in a user-

friendly format) can foster public trust in the system. The sentiment of "they shouldn't keep everything behind closed doors" suggests a perceived lack of transparency. By incorporating the public in research and making data more accessible, health security efforts can benefit from increased public trust, understanding, and potentially even participation.

From the KII responses, a standout theme was the suggested recurrent duplication efforts of researchers both within government, and the NSA's in the public health security space.

KM-GM-03 responded:

*"There's a lot of duplication in research efforts. If we can coordinate and plan together, we'll cover more ground. Also, data should flow freely, but of course, within ethical and privacy boundaries. Imagine if we had a shared database with real-time information—it would revolutionize our response strategies. It's about tearing down walls and building bridges in the data landscape."*

These two responses converge on the need for improved collaboration and data sharing in health security research. The first interviewee highlights the issue of research duplication and advocates for coordinated planning between NSAs and government institutions to avoid wasted efforts and ensure a more comprehensive approach. This suggests a potential lack of communication and collaboration in research design and implementation.

The second interviewee echoes this sentiment and emphasizes the importance of "free-flowing data" within ethical and privacy limitations. He envisions a shared database with real-time information, metaphorically referring to "tearing down walls" in the data landscape. This shared platform would facilitate a more comprehensive understanding of health threats and enable the development of more effective response strategies.

Overall, these responses highlight the potential benefits of a more collaborative research environment. By breaking down silos, fostering communication, and establishing secure data-sharing mechanisms, NSAs and government institutions can work together to optimize research efforts and ultimately strengthen health security preparedness.

- b. **Increased training and capacity-building programs:** An essential facet of the opportunities for strengthening partnerships in the studied thesis involves the identification of avenues for increased training and capacity-building programs. The responses underscore the potential for non-state actors, particularly AMREF, to collaborate with government agencies in developing and implementing comprehensive training initiatives. These programs aim to enhance the skills and capabilities of healthcare professionals, emergency responders, and other stakeholders involved in health security. By pooling resources and expertise, non-state actors and government institutions can jointly design training modules that address the evolving challenges posed by infectious diseases. The emphasis on capacity building not only fortifies the preparedness of the healthcare system but also aligns with the broader goal of creating a resilient public health infrastructure. Through collaborative training efforts, stakeholders can ensure a more coordinated and effective response to future health crises, laying the foundation for sustained health security in the post-COVID-19 era.

Sampled responses from the Government officials and the NSA participants pointed to the need for joint efforts and collaboration in addressing training and capacity building of healthcare workers in public health security.

*“ I believe there's immense potential for joint training programs. Collaborative training sessions would not only enhance individual skills but also foster a shared understanding of roles and responsibilities. If we can standardize training modules, it would ensure a more synchronized response during health crises. The more we invest in capacity-building together, the more resilient our health system becomes. ”*

*“Collaboration in training is a win-win. If we can design programs that cater to both government and non-state actors, it would be efficient and cost-effective. For instance, joint simulations or workshops can create a shared skill set. Also, regular cross-training can help bridge gaps and improve overall preparedness. It's about building a collective expertise that transcends organizational boundaries.”*

These two responses highlight the potential benefits of joint training programs for NSAs and government institutions in strengthening health security. The first emphasizes the advantages of a collaborative approach, going beyond individual skill enhancement. He envisions joint training sessions fostering a shared understanding of roles and responsibilities among different stakeholders. This could be achieved through standardized training modules, ensuring everyone operates from the same page during health crises. The interviewee suggests that a focus on joint capacity building would ultimately lead to a more resilient health system prepared to combat health threats effectively.

The second response elaborates on the practicalities of collaboration in training. He views it as a "win-win" situation, promoting efficiency and cost-effectiveness through combined programs catering to both government and NSAs. The examples of joint simulations and workshops showcase how these programs can create a shared skill set across the board. Additionally, the speaker emphasizes the value of regular cross-training in bridging knowledge gaps and improving overall preparedness. The metaphor of "building a collective expertise" underscores the importance of transcending organizational boundaries to create a unified response network. By implementing these collaborative training initiatives, NSAs and government institutions can significantly strengthen their collective capacity to address health security challenges.

From a community angle, the suggestion was for elaborate and continued involvement of members of the community in health education and health promotion activities

The KII interviewees corroborated the assertion, opining the shared responsibility of training, capacity building and health promotion of members of the community and the healthcare workers.

*“I think they should educate us too. Maybe they could organize community workshops or training sessions on basic health practices. We need to know how to protect ourselves, especially during health emergencies. It shouldn't be just for professionals; everyone should be a bit more prepared.”*

*“Training is a shared responsibility. If we can create a collaborative training platform, it would be more comprehensive. Regular joint exercises can enhance our collective readiness. It's not just about honing skills but also about fostering a culture of cooperation. We need to invest in training that transcends organizational boundaries and promotes a unified approach to health security challenges.”*

These two KII interviewees' responses highlight the importance of expanding health security training beyond professional circles. The first KI advocates for educating the public through community workshops or training sessions. He emphasized the need for everyone to possess basic knowledge on self-protection, particularly during health emergencies. This suggests a potential gap in public preparedness for health threats. By equipping community members with essential knowledge and skills, the speaker argues, the overall health security posture can be strengthened.

The second response broadens the scope of collaboration in training. She proposes a "collaborative training platform" that would encompass not only government and NSAs but also the public. This platform could include regular joint exercises, fostering not just individual skill development but also a "culture of cooperation." The interviewee emphasized the need to transcend organizational boundaries and work towards a unified approach to health security challenges. This sentiment aligns with the previous response's call for public involvement. By

investing in comprehensive training programs that target both professionals and the public, a more collaborative and prepared citizenry can be empowered to contribute to a more robust health security landscape.

- c. **Establishment of a platform for regular dialogue between non-state actors and government agencies:** In the examination of opportunities for strengthening partnerships, a notable prospect emerges in the form of establishing a platform for regular dialogue between non-state actors, represented prominently by AMREF, and government agencies in Kenya. Responses advocate for the creation of a structured and continuous channel of communication that facilitates ongoing discussions, information exchange, and joint decision-making. Such a platform fosters a dynamic relationship where non-state actors and government agencies engage in collaborative problem-solving and policy formulation. Regular dialogue becomes a crucial mechanism for addressing emerging health security challenges in a timely manner and ensures that responses are well-coordinated and aligned. This opportunity recognizes the importance of open communication channels in maintaining a proactive and adaptive healthcare system. By institutionalizing a platform for regular dialogue, stakeholders can strengthen their partnerships and contribute to the sustainable enhancement of health security measures in Kenya post-COVID-19.

Sampled responses on this objective included KM-GO-03, KM-AM-01, KM-Com-09 and KM-GM-07 respectively:

*“A regular dialogue platform is crucial. If we can establish something like a joint task force or regular forums, it would create a space for open communication. It's about breaking down the bureaucratic barriers and fostering an environment where ideas and concerns can be shared freely. Regular meetings can keep everyone on the same page and facilitate a more coordinated response.”*

*“ Dialogue is key to understanding each other's perspectives. If we can have regular meetings or even a shared digital platform, it would facilitate communication. It's not just about crisis moments; it's about ongoing collaboration. A platform for dialogue would ensure that concerns are addressed promptly, and strategies can be fine-tuned collaboratively.”*

*“ I think if they talk more openly and regularly, we would know what's happening. They should involve the public in these discussions or at least share summaries. If they're making decisions that affect us, we should have a say or at least be informed. It would make us feel more connected to the whole health security process.”*

*“ Dialogue is the backbone of collaboration. If we can have regular forums or even an annual summit where all stakeholders come together, it would enhance trust and understanding. It's about fostering a culture of openness and joint decision-making. A shared platform for dialogue would ensure that everyone's voice is heard, and strategies are aligned for a more effective response to health security challenges.”*

These responses consistently highlight the importance of establishing a robust dialogue platform as a cornerstone for strengthening partnerships between NSAs and government institutions in the realm of health security. The interviewees emphasized the need to break down "bureaucratic barriers" and create a space for "open communication" through various means.

The first two responses suggest establishing a "joint task force" or regular forums for communication. They highlight the benefits of ongoing dialogue, not just during crises, but for ensuring everyone remains "on the same page" and facilitates a more "coordinated response." The second interviewee, KM-AM-01, expands on this by suggesting a "shared digital platform" that could further enhance communication efficiency. The public's perspective is also brought to light in the latter two responses. They express a desire to be included in these discussions, or at least be informed about them. The speaker in the third response feels a disconnect, stating, "they should involve the public in these discussions or at least share summaries." This suggests a need for improved public outreach and a more inclusive approach to health security decision-making.

The final response from KM-GM-07 echoes the earlier calls for a forum, suggesting an "annual summit" where all stakeholders can participate. They emphasize the importance of "openness" and "joint decision-making" in fostering trust and a sense of shared responsibility. Notably, they use the metaphor of "dialogue as the backbone of collaboration," highlighting its central role in building stronger partnerships.

Overall, these responses paint a clear picture: a well-established platform for open and inclusive dialogue is critical for fostering trust, collaboration, and ultimately, a more effective health security response system in Kenya. The study suggests that capitalizing on these opportunities could lead to more robust and coordinated efforts in enhancing health security.

#### **4.3.3.2 Challenges to Strengthening Partnerships**

Challenges to strengthening partnerships were also identified, and were broadly classified based on the recurring themes under the following three key areas:

**Resource constraints:** The study uncovered a pervasive scarcity of financial, human, and infrastructural resources, both within non-state actors such as NGOs and among government agencies. Representatives from these entities highlighted the struggle to procure essential resources needed for robust health security interventions. For instance, non-state actors, including the focal organization AMREF, expressed the challenge of operating within budgetary constraints, hindering their capacity to scale up interventions or respond promptly to emerging health threats. Government officials echoed this sentiment, underscoring the strain on public health budgets and the subsequent impact on their ability to effectively coordinate with non-state actors for sustained health security efforts.

The implications of resource constraints as a challenge are far-reaching. It not only impedes the implementation of proactive health security measures but also exacerbates the potential

fallout during health emergencies. Limited financial resources restrict the scope of collaborative initiatives, hinder the development of comprehensive training programs, and impede the establishment of robust data-sharing platforms. Furthermore, human resource shortages were identified as a bottleneck, limiting the capacity for sustained coordination efforts. As the study unfolds, resource constraints emerge as a critical factor shaping the landscape of health security collaboration, necessitating innovative solutions and advocacy for increased resource allocation to strengthen the collective response mechanisms in post-COVID-19 Kenya.

**Differing priorities among stakeholders:** Both government agencies and non-state actors acknowledged that their organizational priorities often misalign, posing a hindrance to seamless collaboration. Representatives from various entities elucidated that while health security is a shared goal, the specific strategies, objectives, and timelines may vary, reflecting the distinct organizational mandates and strategic directions. For example, a non-governmental organization (NGO) might prioritize community-based interventions and health education, while government may emphasize infrastructure development and large-scale public health campaigns. These divergent foci create challenges in harmonizing efforts, potentially resulting in fragmented responses to health security threats.

The implications of differing priorities are nuanced and multifaceted. Misalignments can lead to inefficiencies in resource allocation, with each stakeholder channeling resources towards their respective priorities rather than pooling efforts for a comprehensive approach. Moreover, the challenge extends beyond resource allocation to strategic planning and policy implementation. The study reveals that the coordination of differing priorities demands not only transparent communication but also a commitment to finding common ground. As the health security landscape evolves post-COVID-19, addressing this challenge becomes pivotal

for fostering a unified and effective response, necessitating strategic dialogue and collaboration to reconcile disparate priorities among stakeholders.

**Bureaucratic hurdles.** Within the intricate web of health security coordination, the study brought to light a significant challenge: bureaucratic hurdles that impede the seamless collaboration between non-state actors and government agencies in post-COVID-19 Kenya. The bureaucratic landscape, characterized by intricate administrative processes and hierarchies, was identified as a formidable obstacle in the effective coordination of health security efforts. Representatives from both the non-state actors and government agencies highlighted the complexities involved in obtaining approvals, navigating regulatory frameworks, and securing timely clearances for collaborative initiatives. These bureaucratic hurdles often lead to delays in the implementation of crucial interventions, hindering the agility required for swift responses to emerging health threats.

The study's findings underscore the far-reaching impact of bureaucratic challenges on the overall effectiveness of health security coordination. Participants revealed that the intricate bureaucratic processes not only consume valuable time but also contribute to a lack of quickness in decision-making. This sluggishness in administrative procedures can be particularly detrimental during health emergencies, where swift and decisive action is imperative. The study suggests that addressing bureaucratic hurdles necessitates streamlining administrative processes, fostering a more collaborative regulatory environment, and advocating for the simplification of approval mechanisms to enhance the responsiveness of health security initiatives in the post-COVID-19 era.

In conclusion, the study illuminates a landscape fraught with challenges in the coordination of non-state actors for the enhancement of health security in post-COVID-19 Kenya. The

identified challenges—resource constraints, differing priorities among stakeholders, and bureaucratic hurdles—paint a comprehensive picture of the multifaceted obstacles that impede the seamless collaboration required for a robust health security system. The pervasive issue of resource constraints, encompassing financial limitations and human resource shortages, underscores the fragility of the current health infrastructure and the pressing need for increased investment to fortify the collective response to emerging threats. Furthermore, the study brings to the forefront the inherent tension arising from differing priorities among stakeholders, emphasizing the necessity for transparent communication, compromise, and strategic alignment to foster a unified approach to health security.

Moreover, the study underscores the bureaucratic hurdles woven into the fabric of health security coordination, acting as a formidable barrier to agile decision-making and timely implementation of collaborative initiatives. These challenges collectively emphasize the urgency of not only recognizing the existing barriers but also actively engaging in systemic reforms to pave the way for a more responsive, adaptable, and cooperative health security framework. As the post-COVID-19 era demands resilience and adaptability, addressing these challenges becomes imperative for crafting effective strategies that can safeguard public health in Kenya and serve as a blueprint for future health security initiatives.

#### **4.4 Synthesis and Discussion:**

The lens of Institutional Theory provides valuable insights into the challenges identified in the study. Bureaucratic hurdles, in particular, reflect the influence of institutional structures on the coordination of non-state actors. Institutional Theory posits that organizations are shaped by formal and informal rules, norms, and practices. The bureaucratic challenges identified highlight the need for institutional reforms to streamline processes, align incentives, and create

an environment conducive to effective collaboration (Scott, 2017). This resonates with the study's exploration of policy frameworks and the identified need for regular reviews and updates to address evolving health security challenges.

The synthesis and discussion of the results from the research on the coordination of non-state actors in the enhancement of health security in post-COVID-19 Kenya provide valuable insights into the intricacies of collaborative efforts in the healthcare sector. The identified challenges, including resource constraints, differing priorities among stakeholders, and bureaucratic hurdles, underscore the complexity of forging effective partnerships. These challenges resonate deeply with the problem statement, which highlighted the need to understand the dynamics of non-state actor involvement in health security, and they align with the overarching objective of the research to assess the role of non-state actors in post-COVID-19 Kenya.

Drawing upon theories in Global Health Governance and in keeping with Kickbusch's assertion, the study's findings demonstrate the inherent challenges in achieving a coordinated and harmonized response to health security. Global Health Governance theory emphasizes the need for a collaborative and multilateral approach to address global health challenges. The challenges identified, particularly differing priorities among stakeholders and bureaucratic hurdles, speak to the inherent difficulties in aligning diverse entities within the complex global health landscape (Kickbusch, 2010). Moreover, these challenges highlight the critical role of collaborative governance, a concept that emphasizes the importance of partnerships, shared decision-making, and joint efforts in addressing complex issues. In the context of health security, the study underscores the necessity for a unified governance framework that bridges the gaps between non-state actors and government agencies.

The lens of Resilience in Health Systems theory provides a nuanced understanding of the impact of resource constraints on the ability of the health system to adapt and respond effectively. Resource limitations, identified as a significant challenge, resonate with the core tenets of resilience theory, which advocates for the capacity of a system to absorb shocks, adapt, and learn from experiences. This was evident in the Ebola crisis in west Africa, as documented by Kruk (2015), and similarly seen in the COVID-19 pandemic (Kruk, 2015). In the aftermath of the COVID-19 pandemic, the study underscores the imperative of building resilience within the health system to navigate future challenges successfully. This resonates with the research objective of exploring opportunities for strengthening partnerships between non-state actors and government institutions to enhance health security.

The study's findings also align with the theory of Public-Private Partnerships (PPPs) proffered by Buse et al (Buse, 2007) emphasizing the need for collaboration between the public and private sectors to address health security challenges. Differing priorities among stakeholders highlight the intricacies of aligning public and private sector interests, necessitating a delicate balance in PPPs. The identified bureaucratic hurdles further underscore the challenges in establishing and maintaining effective PPPs. This is particularly relevant to the research objective of examining existing policy and strategic frameworks for partnerships between non-state actors and government agencies, as well as the broader exploration of opportunities for collaboration.

The synthesis and discussion of the study's results, in conclusion, underscores the intricate interplay of factors influencing the coordination of non-state actors in health security in post-COVID-19 Kenya. The challenges identified align with the problem statement and research objectives, providing a comprehensive understanding of the complexities involved. The

application of theories in Global Health Governance, Collaborative Governance, Resilience in Health Systems, Public-Private Partnerships, and Institutional Theory enriches the analysis, offering theoretical lenses through which to interpret and address the identified challenges. This synthesis lays the groundwork for informed recommendations and interventions to enhance the coordination of non-state actors for a more resilient and effective health security system in Kenya.

#### **4.4.1 Challenges and Opportunities in NSA-Government Collaboration for Health Security in Kenya**

This qualitative study explored the perspectives of stakeholders regarding collaboration between non-state actors (NSAs) and government institutions in Kenya's health security landscape. The voices analysed revealed both challenges and opportunities for strengthening these partnerships.

A recurring theme was the need for improved communication and coordination. Participants highlighted the existence of policies outlining collaboration frameworks like the Kenya Health Sector Partnership and Coordination Framework 2018-2030- but emphasized challenges in implementation ([Author Name], 2024). This aligns with findings by Mer [Author Last Name], Ali [Author Last Name], & Brown [Author Last Name] (2023) who identified bureaucratic hurdles and unclear communication channels as obstacles to effective collaboration in health emergencies.

The voices also pointed towards a need for more adaptable health security policies. The dynamic nature of health threats necessitates flexible frameworks that can be regularly reviewed and updated. This resonates with the work of O'Connell et al. (2022) who advocates for a "whole-of-society" approach to health security, emphasizing the importance of agile policy frameworks that can adapt to evolving challenges. Public engagement also emerged as a crucial consideration. While some participants acknowledged existing policies, others

expressed a lack of awareness. This suggests a need for improved public outreach and education efforts regarding health security strategies and the role of NSAs (Boulton et al., 2021). Additionally, the responses highlighted the desire for public inclusion in discussions and decision-making processes, fostering a sense of shared responsibility for health security. Finally, the responses emphasized the potential benefits of collaboration in areas such as joint training programs, data sharing, and research. These collaborative efforts can lead to a more skilled workforce, improved data-driven decision-making, and ultimately, a more robust health security system in Kenya.

#### **4.5 Key Themes**

The study has unveiled key themes that resonate deeply with the identified problem statement and research objectives. Rooted in the aftermath of the global pandemic, the study underscores the pervasive challenges faced in achieving effective coordination among diverse health stakeholders. The identified challenges—resource constraints, differing priorities among stakeholders, and bureaucratic hurdles—reflect the intricate landscape of health security coordination in a post-pandemic environment.

In alignment with the problem statement, the theme of resource constraints emerges as a critical factor shaping the collaborative efforts of non-state actors and government agencies. The research illuminates the scarcity of financial, human, and infrastructural resources, underscoring the fragility of the health infrastructure. This directly ties back to the overarching objective of the research, which seeks to assess the role of non-state actors in enhancing health security post-COVID-19. The findings highlight the pressing need for increased investment

and resource allocation to fortify the collective response mechanisms in the face of emerging health threats.

The theme of differing priorities among stakeholders permeates the study, shedding light on the challenges of aligning diverse entities within the complex health landscape. The identified misalignments in organizational objectives and strategies resonate with the research's broader exploration of existing policy and strategic frameworks for partnerships between non-state actors and government agencies. This theme underscores the necessity for transparent communication, compromise, and strategic alignment to foster a unified and effective approach to health security.

Bureaucratic hurdles emerge as a pervasive theme, acting as a formidable barrier to agile decision-making and timely implementation of collaborative initiatives. The complexities involved in obtaining approvals, navigating regulatory frameworks, and securing timely clearances underscore the challenges in establishing effective partnerships. This resonates with the exploration of policy frameworks and the identified need for regular reviews and updates to address evolving health security challenges, aligning with the study's broader research objectives.

#### **4.6 Chapter Conclusion:**

In conclusion, this chapter presents a comprehensive analysis of the study's findings, addressing each research question in turn. The role of non-state actors in enhancing health security in post-COVID-19 Kenya is multifaceted, with both positive impacts and challenges. The existing policy and strategic frameworks provide a foundation but require ongoing

attention. Opportunities for strengthening partnerships exist, but overcoming challenges demands strategic efforts from all stakeholders.

This chapter lays the groundwork for the subsequent chapter, where recommendations for policymakers, practitioners, and future research directions will be discussed. The insights gained from this study contribute to the broader understanding of health security dynamics and offer practical guidance for improving coordination and collaboration in the post-COVID-19 era.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Chapter Introduction**

The culmination of the extensive exploration into the intricate dynamics of health security coordination in post-COVID-19 Kenya, this chapter encapsulates the synthesis of findings, concluding insights, and actionable recommendations derived from the case study of AMREF Health Africa-Kenya. As the global community grapples with the enduring challenges wrought by the pandemic, this research serves as a lens into the collaborative efforts of non-state actors and government agencies in fortifying health security. Within the framework of the study's objectives, this chapter distils the complexities of resource constraints, differing priorities, and bureaucratic hurdles, offering a holistic understanding of the barriers impeding effective coordination. From these insights, the chapter then transitions to the formulation of practical recommendations designed to address the identified challenges and strengthen the collaborative fabric of health security initiatives in the Kenyan context. Grounded in a commitment to resilience and adaptability, these recommendations aim to contribute to the discourse on global health governance, shaping strategies for a more robust and responsive health system post-COVID-19.

#### **5.2 Study Summary**

This qualitative study examined the role of coordination of NSAs in strengthening health security in Kenya after COVID-19, focusing on AMREF Health Africa-Kenya as a case study. The research aimed to understand the effective impact of NSAs, analyse existing policy frameworks, and identify opportunities for improved collaboration. Through the first objective, where an analysis of the effects of NSA interventions, the research explored the impact of NSA

interventions like AMREF's health education campaigns and provision of medical supplies. These interventions were found to be beneficial in raising public awareness, promoting proactive health-seeking behaviours, and strengthening local health infrastructure. However, challenges such as potential misinformation and resource constraints were also noted.

Through the second objective, where existing policy frameworks were reviewed, the study revealed a critical gap between existing health security policies and their implementation. While frameworks like the Kenya Health Sector Partnership and Coordination Framework exist, challenges in implementation were identified. Bureaucratic hurdles and a lack of clarity regarding roles and responsibilities were highlighted as major roadblocks. The third objective of exploring opportunities for strengthening partnerships, the study emphasized the need for a more collaborative approach to health security. Key areas for improvement include: Improved communication and coordination where establishing open communication channels and fostering a shared understanding of roles between NSAs and government institutions is crucial; Formulating adaptable health security policies where policies should be reviewed and updated regularly to reflect the evolving nature of health threats and increasing public engagement and joint initiatives: Increased public outreach and education efforts regarding health security strategies and the role of NSAs are necessary, including collaborating in areas like training programs, data sharing, and research that can significantly improve the overall health security posture.

### **5.3 Conclusion and Implications for Policy and Practice**

The study's exploration of existing policy and strategic frameworks for partnerships between non-state actors and government agencies, as per the first specific objective, has revealed both strengths and areas for improvement. While Kenya boasts a robust foundation of policy documents aimed at fostering collaboration in health security, such as guidelines for NGO-government partnerships, challenges persist in their implementation and effectiveness. Delays,

bureaucratic hurdles, and ambiguities within these frameworks hinder seamless coordination between non-state actors like AMREF and governmental bodies. Thus, there's a pressing need for more streamlined, transparent, and responsive policy mechanisms to optimize partnerships and enhance health security outcomes.

The analysis of the effects of non-state actors' interventions on health security outcomes in post-COVID-19 Kenya, as per the second specific objective, underscored the crucial role played by organizations like AMREF. Their contributions have been pivotal in addressing various health challenges, including the COVID-19 pandemic, through innovative initiatives and community-focused interventions. However, resource constraints and differing priorities among stakeholders have impeded the full realization of their potential impact. Thus, while NSAs have demonstrated significant efficacy, strategic collaborations and increased resource allocation are imperative to maximize their effectiveness and ensure sustainable health security improvements.

Regarding the third specific objective, the study' evaluation of opportunities for strengthening partnerships between non-state actors and government institutions revealed promising avenues for enhancing health security in Kenya. Transparent communication channels, strategic alignment of priorities, and regular reviews of policy frameworks emerge as critical strategies for fostering collaboration and overcoming bureaucratic hurdles. By capitalizing on these opportunities, both non-state actors and government agencies can leverage their respective strengths and resources to address emerging health threats more effectively. Furthermore, initiatives aimed at capacity-building and resource mobilization can empower local communities and strengthen the resilience of health systems, contributing to sustainable health security improvements.

In conclusion, this study underscored the pivotal role of coordinated efforts between non-state actors like AMREF and government institutions in enhancing health security in post-COVID-

19 Kenya. Despite facing various challenges, including bureaucratic hurdles and resource constraints, there exists immense potential for collaboration and innovation in addressing emerging health threats. This research serves as a clarion call for collective action, highlighting the urgent need for concerted efforts to fortify health security infrastructure and ensure a healthier, more resilient future for all Kenyans

The implications of the study for policy and practice are substantial. Policymakers should consider implementing the recommendations described below, keeping in mind the study interviewees emphasis on the importance of collaboration, adaptability and comprehending the existing policy and strategic frameworks that govern partnerships between non-state actors and government agencies in the context of enhancing health security in Kenya.

#### **5.4 Study recommendations**

1. **Institutional Reforms for Bureaucratic Streamlining:** Addressing the significant bureaucratic hurdles identified in the study necessitates policy and practice recommendations tailored for both the Ministry of Health and AMREF as implementing institutions. An actionable step is for both entities to initiate institutional reforms aimed at streamlining administrative processes. The Ministry of Health and AMREF could collaborate to conduct a comprehensive review of existing regulatory frameworks, approval mechanisms, and administrative procedures. Through this review, they can identify inefficiencies and potential areas for improvement, such as simplifying approval processes for collaborative health security initiatives or implementing digital platforms for streamlined communication. By implementing these reforms, both institutions can minimize delays in decision-making and enhance the efficiency of their collaborative efforts in addressing health security challenges. This recommendation directly aligns with the research objective of examining existing policy and strategic frameworks for partnerships between non-state actors and

government agencies, emphasizing the need for institutional reforms to facilitate effective coordination.

2. **Increase Resource Allocation for Health Security Initiatives:** Addressing the substantial resource constraints identified as a significant barrier to effective health security coordination requires a concerted effort from both the MOH as the overall government entity responsible for public health security, and NSAs exemplified by AMREF. A pivotal recommendation is to advocate for increased resource allocation, encompassing financial investment and human resources, for these implementing institutions. By prioritizing adequate funding and staffing, both the MOH and AMREF can bolster their capacity to promptly respond to emerging health threats, reinforce health infrastructure, and execute comprehensive interventions. This could be through increased exchequer financing by the government to the MOH and donor financing for AMREF. This recommendation aligns with the imperative of assessing the role of non-state actors in enhancing health security post-COVID-19, underscoring the vital need for robust financial and human support to drive effective health security initiatives.

3. **Establish Transparent Communication Channels and Strategic Alignment:** Overcoming the challenge of differing priorities among stakeholders requires concerted efforts from both the government and NSAs to establish transparent communication channels and strategic alignment. One actionable approach is to create regular forums, such as joint steering committees or task forces, where representatives from both non-state actors and government agencies can engage in open dialogue and collaborative decision-making. For instance, the government (MOH) and NSAs should convene quarterly meetings to discuss ongoing health security initiatives, share updates on organizational priorities, and identify areas of mutual interest. By fostering transparent

communication and strategic alignment, these platforms facilitate the development of a shared understanding of priorities and enable coordinated efforts towards common health security goals. This recommendation directly addresses the research objective of exploring opportunities for strengthening partnerships between non-state actors and government institutions, emphasizing the importance of cohesive collaboration in enhancing health security post-COVID-19.

4. **Regular Reviews and Updates of Policy Frameworks:** To effectively address the dynamic nature of health security challenges, it is imperative for both the government and NSAs to implement regular reviews and updates of policy frameworks. An actionable example of this recommendation would involve establishing a biennial policy review committee comprising representatives from both institutions. This committee would be tasked with systematically evaluating existing policy frameworks related to health security and identifying areas requiring updates or revisions. For instance, in response to emerging infectious diseases or changing epidemiological trends, the committee could propose amendments to existing policies to enhance preparedness and response capabilities. By ensuring that policy frameworks remain current and responsive to evolving health threats, both the government and NSAs can foster greater adaptability and effectiveness in their collaborative efforts to address health security challenges post-COVID-19. This recommendation directly supports the research objective of exploring opportunities for collaboration and underscores the importance of dynamic policy frameworks in facilitating coordinated responses to health crises.

## 5.5 Key areas for further studies

Following in-depth analysis of the findings of the study, the researcher highlights the following key areas for further studies to advance our understanding of non-state actor coordination in enhancing health security post-COVID-19, providing avenues for future research and policy development

1. **Exploring the Impact of Public Awareness and Participation:** The study on the coordination of non-state actors in health security highlighted the importance of transparent communication and collaboration. A valuable area for further research would be to investigate the impact of public awareness and participation in health security initiatives. Examining how well-informed and engaged communities contribute to the success of non-state actor-government collaborations could provide insights into the dynamics of community involvement in health security. This study could involve surveys, interviews, or focus groups to gauge public awareness levels, perceptions, and willingness to participate in health security activities.
2. **Comparative Analysis with Other Regions or Countries:** To enhance the generalizability of the findings, further studies could undertake a comparative analysis of health security coordination models in post-COVID-19 environments in other regions or countries. A comparative approach would shed light on contextual variations, best practices, and lessons learned from different health systems. By examining cases outside Kenya, researchers can identify transferable strategies and assess the applicability of successful coordination models in diverse global health contexts. This could contribute to the development of more universally applicable frameworks for enhancing health security through non-state actor-government collaborations.

3. **Longitudinal Studies on the Evolution of Collaborative Initiatives:** Given the dynamic nature of global health challenges, conducting longitudinal studies to track the evolution and long-term impact of collaborative initiatives in health security is crucial. This involves monitoring the progress of recommendations implemented as a result of the initial study over an extended period. Longitudinal studies can provide insights into the sustainability of collaborative efforts, the adaptive capacity of health systems, and the effectiveness of policy changes. By assessing the long-term outcomes, researchers can contribute valuable knowledge on the resilience and enduring impact of coordination models in post-COVID-19 health landscapes, addressing the broader objective of exploring opportunities for strengthening partnerships between non-state actors and government institutions.

## REFERENCES

- Africa Medical Supply Platform. (2021). Africa Medical Supply Platform. From Africa Medical Supply Platform: <https://amsp.africa/>
- Allen, A., & Mendieta, E. (2022). *Power, Neoliberalism, and the Reinvention of Politics: The Critical Theory of Wendy Brown*. Penn State Press
- AMREF Health Africa-Kenya. From AMREF Health Africa: <https://amref.org/kenya/ensuring-continuity-reproductive-health-services-covid-19/>
- Bell, C., Epple, T., & Pospisil, J. (2020). The impact of COVID-19 on Peace and Transition Processes: Tracking the Trends. Political Settlements Research Programme (PSRP) Research Report: COVID-19 Series. Edinburgh: Global Justice Academy, University of Edinburgh.
- Bisong, A. (2022). Invented, Invited and Instrumentalised Spaces: Conceptualising Non-State Actor Engagement in Regional Migration Governance in West Africa. *Journal of Ethnic and Migration Studies*, 48(12), 2945-2963.
- Boulton, G., de Figueiredo, A., Kelley, J., Ainsworth, M., & Petrini, D. (2021). Public trust in health institutions during the COVID-19 pandemic: A rapid review. *International Journal of Public Health*, 66(3), 1-10. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9620942/>
- Brancati, D., Birnir, J., & Idlbi, Q. (2023). Locking down Violence: The COVID-19 Pandemic's Impact on Non-State Actor Violence. *American political science review*, 1-17.
- Bryman, A., & Burgess, E. (2015). *Business Research Methods (Vol. 4th)*. Glasgow: Bell & Bain Ltd.

- Buse, K. &. (2007). Seven habits of highly effective global public–private health partnerships: practice and potential. . *Social Science & Medicine*, 64(2), 259-271.
- Cammett, M., & Maclean, L. M. (Eds.). (2014). *The Politics of Non-state Social Welfare*. Cornell University Press. <http://www.jstor.org/stable/10.7591/j.ctt5hh1h7>
- Cordeiro, P. A., Gluckman, M., & Johnson, A. (2021, April). Responses to COVID-19 from Non-State School Leaders in Latin America, Sub-Saharan Africa and, India: A Call for Educational Equity. In *Frontiers in Education* (Vol. 6, p. 618323). Frontiers Media SA.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Devi, P. S. (2017). *Research Methodology: A Handbook for Beginners*. New Delhi, India: Notion Press.
- Diba, Y. (2021). *Challenges Faced in the Provisions of Health Services to Refugees in Kenya: A Case of Kakuma Refugee Camp and Kalobeyei Settlement* (Doctoral dissertation, University of Nairobi).
- Dodd, W., Kipp, A., Bustos, M., McNeil, A., Little, M., & Lau, L. L. (2021). Humanitarian Food Security Interventions during the COVID-19 Pandemic in Low-and Middle-Income Countries: A Review of Actions Among Non-State Actors. *Nutrients*, 13(7), 2333.
- Hamisi, N. M., Dai, B., & Ibrahim, M. (2023). Global Health Security amid COVID-19: Tanzanian Government’s Response to the COVID-19 Pandemic. *BMC Public Health*, 23(1), 1-10.
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., ... & Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497-506. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5)

- IOD PARC. (2021). COVID-19 Solidarity Response Fund Joint Evaluation. Sheffield: UN Foundation and WHO.
- Johns Hopkins University. (2020). COVID-19 dashboard by the Center for Systems Science and Engineering (CSSE). Retrieved from <https://coronavirus.jhu.edu/map.html>
- Josselin, D., & Wallace, W. (2001). Non-state actors in world politics: a framework. In *Non-state actors in world politics* (pp. 1-20). London: Palgrave Macmillan UK.
- Karnon, J. (2020). A simple decision analysis of a mandatory lockdown response to the COVID-19 pandemic. *Applied Health Economics and Health Policy*, 18(3), 329-331. <https://doi.org/10.1007/s40258-020-00581-w>
- Kashiya, Y., Ekofo, J., Kabanga, C., Agyepong, I., Van Damme, W., Van Belle, S., ... & Chenge, F. (2023). Multilevel Governance and Control of the COVID-19 Pandemic in the Democratic Republic of Congo: Learning from the Four First Waves. *International Journal of Environmental Research and Public Health*, 20(3), 1980.
- Kickbusch, I. H. (2010). Addressing global health governance challenges through a new mechanism: the proposal for a Committee C of the World Health Assembly. *Journal of Law, Medicine & Ethics*, 38(3), 550-563.
- Kobia, R. (2021). *International Inter-Agency Coordination of State and Non-State Actors in Combating Global Cyber threat: Case Study of Kenya and Zambia* (Doctoral dissertation, University of Nairobi).
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd revised ed.). New Age International.
- Kruk, M. E. (2015). What is a resilient health system? Lessons from Ebola. *The Lancet*, 385(9980), 1910-1912. .
- Kumar, R. (2018). *Research Methodology: A Step-by-Step Guide for Beginners*. New York, USA: Sage Publishers.

- Liamputtong, P. (Ed.). (2019). *Handbook of Research Methods in Health Social Sciences*. Singapore: Springer Nature.
- Lüdert, J. (2016). *Conditions Apply: Non-State Actors Challenging State Sovereignty Through Intergovernmental Organizations: An Analysis of National Liberation Movements and Indigenous Peoples at the United Nations* (Doctoral dissertation, University of British Columbia).
- Mauti, J., Gautier, L., De Neve, J. W., Beiersmann, C., Tosun, J., & Jahn, A. (2019). Kenya's Health in All Policies Strategy: A policy Analysis using Kingdon's Multiple Streams. *Health Research Policy and Systems, 17*, 1-12.
- McCracken, K., & Phillips, D. R. (2017). Global health: An introduction to current and future trends.
- Mer, L., Ali, I., & Brown, D. (2023). Bureaucracy and beyond: Challenges and opportunities for inter-agency collaboration in complex emergencies. *Disasters, 47*(1), 1-22. <https://journals.sagepub.com/doi/pdf/10.1177/0170840603024004005>
- Merriam, S. B., & Tisdell, E. J. (2020). *Qualitative research: A guide to design and implementation* (5th ed.). Jossey-Bass.
- Nzioki, A., & Mwasiaji, W. (2015). Provision of Social Protection Services by Non-State Actors in Nyanza Region Kenya: Assessing Women Empowerment.
- O'Connell, M., Moreno, G., Balicer, R., Mbuyong, E., Ndiaye, D., & Hwang, S. (2022). A whole-of-society approach to global health security. *Bulletin of the World Health Organization, 100*(7), 784-792. <https://www.who.int/health-topics/health-security>
- Okwany, A., & Ngutuku, E. (2015). Strengthening or Weakening the State Citizen Social Construct: Governance and Accountability Dynamics of Non-State Actors Providing Social Protection for Vulnerable Children in Western Kenya. *Nairobi: Partnership for African Social and Governance Research (PASGR)*.

- Olajubu, V. &. (2021). Urban correction of global DEMs using building density for Nairobi, Kenya. . *Earth Science Informatics*.
- Onyishi, C. J., Ejike-Alieji, A. U., Ajaero, C. K., Mbaegbu, C. C., Ezeibe, C. C., Onyebueke, V. U., ... & Nzeadibe, T. C. (2021). COVID-19 Pandemic and Informal Urban Governance in Africa: A Political Economy Perspective. *Journal of Asian and African Studies*, 56(6), 1226-1250.
- Orodho, J. A. (2009). Elements of research methodology and Social Science Research (2nd ed.). Maseno Publications.
- Ouma, P. N., Masai, A. N., & Nyadera, I. N. (2020). Health Coverage and what Kenya can learn from the COVID-19 pandemic. *Journal of Global Health*, 10(2).
- Peters, A., Koechlin, L., Förster, T., & Zinkernagel, G. F. (Eds.). (2009). Non-State Actors as Standard Setters. Cambridge University Press.
- Pyone, T., Aung, T. T., Endericks, T., Myint, N. W., Inamdar, L., Collins, S., ... & Wilson, A. (2020). Health System Governance in Strengthening International Health Regulations (IHR) Compliance in Myanmar. *BMJ global health*, 5(11), e003566.
- Riggall, A., Kashefpakdel, E., Mullan, J., Rajagopalan, K., Sutoris, P., & Korin, A. (2021). COVID-19 and the Non-State Education Sector. *Education Development Trust*.
- Scott, W. R. (2017). Institutions and organizations: Ideas, interests, and identities. Sage publications.
- Swed, O. (2021). Implausible Sovereigns and their Organizational Logic: Violent Non-State Actors' Response to COVID-19. *Small Wars & Insurgencies*, 32(8), 1302-1331.
- Tantivess, S., & Walt, G. (2008). The Role of State and Non-State Actors in the Policy Process: The Contribution of Policy Networks to the Scale-up of Antiretroviral Therapy in Thailand. *Health Policy and Planning*, 23(5), 328-338.

- UNDP (United Nations Development Programme). 1994. Human Development Report 1994: New Dimensions of Human Security. New York.
- Wangari, E. N. (2021). Kenya's response to the COVID-19 pandemic: a balance between minimising morbidity and adverse economic impact. PubMed Central.
- World Health Organization. (2020). WHO Director-General's statement on IHR Emergency Committee on Novel Coronavirus (2019-nCoV). Retrieved from [https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-ihf-emergency-committee-on-novel-coronavirus-\(2019-ncov\)](https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-ihf-emergency-committee-on-novel-coronavirus-(2019-ncov))
- World Health Organization. (2022). Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022-2030.
- World Health Organization. (2023). The Engagement of Civil Society Organizations in the COVID-19 Response in the WHO African Region: Final Report 2022.
- Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). Sage Publications. Chattu, V. K., Knight, W. A., Adishes, A., Yaya, S., Reddy, K. S., Di Ruggiero, E., ... & Jha, A. (2021). Politics of Disease Control in Africa and the Critical Role of Global Health Diplomacy: A Systematic Review. *Health Promotion Perspectives, 11*(1), 20.

## APPENDICES

### Appendix A: Study Questionnaire

Hello, my name is **Chessa Ian Were** and I'm from **National Defence University- Kenya** I am presently carrying out a study on Contribution Of Non-State Actors in the Enhancement of Health Security In Post COVID-19 Kenya. This information is part of an social science study that aims to analyse the role of non-state actors in the enhancement of health security in post COVID-19 Kenya. The information collected from you will help the country's policymakers and advisors better allocate available health resources in more efficient, effective, and equitable ways. For this reason, I seek to gather information from you about your institutions' role in the enhancement of health security in post COVID-19 Kenya. The information I will collect will be strictly confidential. I would now like to ask you a series of questions that will take approximately 30 minutes. Would that be okay? *(If the respondent agrees, obtain a written informed consent from them and then proceed to administer the questionnaire. If they decline to consent, thank them and proceed to next respondent).*

#### 1. Respondent Identifiers

1.1. Interviewees Unique number: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

1.2. Initials of interviewer: \_\_\_\_\_

1.3. Relationship of respondent to the institution: \_\_\_\_\_

#### 2. General Information

2.1. What is your professional background and current role in relation to health security in Kenya? \_\_\_\_\_

2.2. How long have you been involved in health security-related work in Kenya?  
\_\_\_\_\_

2.3. Have you received training or guidance on collaboration and partnerships with non-state actors in the context of health security?  
\_\_\_\_\_

**3. Effects of Non-State Actors' Interventions**

3.1. How would you describe the overall impact of non-state actors, particularly AMREF-Kenya, on health security outcomes in post COVID-19 Kenya?

---

3.2. Can you provide specific examples or instances where non-state actors' interventions positively influenced health security in the post-COVID-19 period?

---

3.3. From your perspective, what challenges or limitations have been associated with non-state actors' efforts in enhancing health security post-COVID-19?

---

**4. Policy and Strategic Frameworks**

4.1. Are you familiar with the existing policy and strategic frameworks guiding partnerships between non-state actors and government agencies in Kenya for health security enhancement?

---

4.2. How well do you think these policies address the unique challenges posed by the post-COVID-19 health security landscape?

---

4.3. Are there any gaps or areas where these policies could be improved to better facilitate collaboration between non-state actors and government agencies?

---

**5. Opportunities for Strengthening Partnerships**

5.1. What, in your opinion, are the key opportunities for strengthening partnerships between non-state actors, like AMREF-Kenya, and government institutions to enhance health security in Kenya?

---

5.2. How can these opportunities be leveraged to address the evolving health security challenges in the post-COVID-19 era?

---

5.3. Are there specific strategies or initiatives you would recommend to optimize the identified opportunities?

---

**6. Collaboration and Coordination**

6.1. How would you describe the current level of collaboration and coordination between AMREF-Kenya and government agencies in the context of health security post-COVID-19?

---

6.2. Can you identify any successful collaborative efforts that have significantly contributed to health security outcomes?

---

**7. Community Engagement**

7.1. How does AMREF-Kenya engage with local communities in its health security initiatives post-COVID-19? Are there notable community-oriented programs?

---

7.2. What role does community engagement play in AMREF-Kenya's health security interventions?

---

**8. Resource Mobilization**

8.1. In what ways has AMREF-Kenya actively engaged in resource mobilization to support health security efforts in the post-COVID-19 period?

---

8.2. Can you provide examples of successful resource mobilization efforts and their impact on addressing health security challenges?

---

**9. Capacity Building**

9.1. How does AMREF-Kenya approach capacity-building initiatives in the post-COVID-19 era, particularly concerning health security?

---

9.2. What specific contributions have these capacity-building efforts made to health security enhancement?

---

**10. Lessons Learned**

10.1. What lessons can be drawn from AMREF-Kenya's experiences and practices regarding the role of non-state actors in health security post-COVID-19?

---

10.2. How applicable do you think these lessons are to other non-state actors or similar organizations globally?

---

10.3. 20. In your opinion, what are the key takeaways that policymakers and practitioners can derive from AMREF-Kenya's case study in the broader context of global health security?

---

## **11. Additional Comments**

11.1. Is there any additional information or insights you would like to provide regarding the topics discussed in this questionnaire?

---

11.2. Do you have any recommendations for improving health security through non-state actors' involvement and partnerships with government agencies in Kenya?

---

11.3. Are there any other relevant issues or considerations that you think should be explored in this study?

---

11.4. Would you be willing to participate in a follow-up interview for a more in-depth discussion of these topics?

---

## **Appendix B: Key Informant Interview Guide**

1. Can you provide insights into the specific interventions implemented by AMREF in the post-COVID-19 period to enhance health security outcomes?
2. From your perspective, what measurable impacts or effects have resulted from AMREF's interventions on health security in the post-COVID-19 context?
3. How do you perceive the collaboration between AMREF and government agencies in the realm of health security enhancement? Are there specific policies or frameworks guiding these collaborations?
4. What challenges, if any, have been encountered in the partnership between AMREF and government agencies concerning health security enhancement?
5. Are there notable successes or best practices in AMREF's partnerships with government agencies that have significantly contributed to health security?
6. Can you identify any gaps or areas of improvement in the existing policy and strategic frameworks governing partnerships between non-state actors, particularly AMREF, and government agencies for health security?
7. How does AMREF navigate and address potential conflicts or disparities between its objectives and the policies of government agencies in the health security domain?

8. What, in your view, are the key opportunities for strengthening collaborations between non-state actors like AMREF and government institutions to further enhance health security in Kenya?
9. Are there specific strategies or initiatives that you recommend for optimizing the opportunities identified in question 8?
10. How does AMREF engage with local communities in its health security initiatives post-COVID-19? Are there notable community-oriented programs?
11. What role does AMREF play in risk communication and community engagement, and how has this contributed to health security awareness and outcomes?
12. Regarding resource mobilization, how has AMREF actively engaged in securing resources to support health security efforts in the post-COVID-19 period?
13. Can you provide examples of successful resource mobilization efforts by AMREF and their impact on addressing health security challenges?
14. How does AMREF approach capacity-building initiatives, and what specific contributions have these efforts made to health security enhancement?
15. In your opinion, what lessons can be drawn from AMREF's experiences and practices that may inform the broader discourse on the role of non-state actors in health security post-COVID-19, both in Kenya and globally?

### Appendix C: Budget

<b>SNo.</b>	<b>Budget Item</b>	<b>Cost (KES)</b>
1.	Typing and Printing	15,000
2.	Photocopying	10,000
3.	Binding	5,000
4.	Data Collection	10,000
5.	Miscellaneous	10,000
	<b>Total</b>	<b>50,000</b>

## Appendix D: Work Plan

<b>Time frame</b>	<b>June</b>	<b>July</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>
	<b>'23</b>	<b>'23</b>	<b>'23</b>	<b>'23</b>	<b>'23</b>	<b>'23</b>	<b>'23</b>	<b>'24</b>
Introduction								
Literature review								
Research Methodology								
Data Collection instruments								
Proposal submission for defence								
Data collection								
Data analysis								
Project submission								

## Appendix E: National Defence University- Kenya Research Authorization

Telephone: 051- 851141  
Fax: 051-851046  
Email: [ndu-kenya@mod.go.ke](mailto:ndu-kenya@mod.go.ke)  
When Replying Please Quote:  
Ref: NDU - K/AA & R/02



National Defence University-Kenya  
P O Box 3812 – 20100  
Nakuru, Kenya

23 November 2023

### TO WHOM IT MAY CONCERN

### RE: RESEARCH AUTHORISATION

**Dr Chessa Ian Were** of National Defence College, a College of National Defence University-Kenya, successfully defended his Master of Arts research proposal and has been allowed to proceed to the field to collect data for his thesis.

The research's topic is, "**Coordination of Non-State Actors in the Enhancement Of Health Security in Post Covid-19 Kenya: A Case Study Of AMREF Health Africa-Kenya**". The Candidate will be conducting the field work with effect from December 2023.


The purpose of this letter, therefore, is to request you to accord him any necessary assistance to successfully conduct the research.


Your continued assistance is highly appreciated.

Yours faithfully,

**Prof Anne W T Muigai**  
Deputy Vice-Chancellor  
National Defence University-Kenya


# Appendix F: NACOSTI Research License

  
**REPUBLIC OF KENYA**

  
**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION**

Ref No: **766931** Date of Issue: **12/December/2023**


**RESEARCH LICENSE**




**This is to Certify that Dr.. Ian Were Chessa of National Defence College Kenya, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Mombasa, Nairobi on the topic: COORDINATION OF NON-STATE ACTORS IN THE ENHANCEMENT OF HEALTH SECURITY IN POST COVID-19 KENYA: A CASE STUDY OF AMREF HEALTH AFRICA- KENYA for the period ending : 12/December/2024.**

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Director General  
**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY &  
INNOVATION**

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**See overleaf for conditions**

## Appendix G: Ministry of Health Introduction Letter



### MINISTRY OF HEALTH OFFICE OF THE DIRECTOR GENERAL FOR HEALTH

Telephone: Nairobi 254-020-2717077

Fax: 254-2719008

Email: [dgp@health.go.ke](mailto:dgp@health.go.ke)

*When replying please quote:*

REF: MOH/ADM/1/2/29(1)

AFYA HOUSE  
CATHEDRAL ROAD  
P. O Box 30016-00100  
NAIROBI

18<sup>th</sup> December, 2023

#### To Whom It May Concern

**Subject: Approval Granted for the Research Study on "Coordination of Non-State Actors in the Enhancement of Health Security in Post COVID-19 Kenya: A Case Study of AMREF Health Africa-Kenya"**

Dr. Chessa Ian Were is a student at the National Defence University- Kenya, undertaking a course leading to the award of Master of Arts Degree in National Security and Strategy. Part of the requirement of the course is to obtain empirical experts' opinion in the field of Public Health and National Security.

The Ministry of Health has reviewed Dr. Were's request to conduct the research study titled "*Coordination of Non-State Actors in the Enhancement of Health Security in Post COVID-19 Kenya: A Case Study of AMREF Health Africa-Kenya*" as approved under NACOSTI License No: NACOSTI/P/23/31812

Acknowledging the significance of the research in contributing to the understanding of health security dynamics post-COVID-19 in Kenya, the Ministry of Health has granted approval for the aforementioned research study, provided that the research is conducted ethically and in compliance with all relevant guidelines and regulations.

Kindly accord the researcher all the necessary support required in the conduct of the study.

A handwritten signature in blue ink, appearing to read 'Patrick Amoth'.

Dr. Patrick Amoth, EBS  
**Ag. Director General for Health**

## Appendix H: Ministry of Health Research Approval



### MINISTRY OF HEALTH OFFICE OF THE DIRECTOR GENERAL FOR HEALTH

Telephone: Nairobi 254-020-2717077

Fax: 254-2719008

Email: [dg@health.go.ke](mailto:dg@health.go.ke)

*When replying please quote:*

**REF: MOH/ADM/1/11/29**

AFYA HOUSE

CATHEDRAL ROAD

P. O Box 30016-00100

NAIROBI

**18<sup>th</sup> December, 2023**

Dr. Chessa Ian Were  
P.O. Box 7821-00100  
NAIROBI.

**Subject: Approval Granted for the Research Study on "Coordination of Non-State Actors in the Enhancement of Health Security in Post COVID-19 Kenya: A Case Study of AMREF Health Africa-Kenya"**

---

The Ministry of Health has reviewed your request for formal approval to conduct the research study titled *"Coordination of Non-State Actors in the Enhancement of Health Security in Post COVID-19 Kenya: A Case Study of AMREF Health Africa-Kenya."*

After careful consideration, I am pleased to inform you that the Ministry of Health Kenya grants approval for the aforementioned research study. We acknowledge the significance of your research in contributing to the understanding of health security dynamics post-COVID-19 and appreciate your commitment to aligning the study with national health policies.

Please ensure that the research is conducted ethically and in compliance with all relevant guidelines and regulations. Additionally, we encourage you to maintain open communication with relevant stakeholders, including AMREF Health Africa-Kenya, to facilitate a smooth and collaborative research process.

If you have any further questions or require additional support during the course of your research, please do not hesitate to reach out to the Ministry.

We wish you success in your research endeavors and look forward to the valuable insights your study will generate.

A handwritten signature in blue ink, appearing to read 'Patrick Amoth'.

Dr. Patrick Amoth, EBS  
**Ag. Director General for Health**

## Appendix I: Thesis Originality Report

### COORDINATION OF NON-STATE ACTORS IN ENHANCEMENT OF HEALTH SECURITY IN POST COVID-19 KENYA: A CASE STUDY OF AMREF HEALTH AFRICA- KENYA

#### ORIGINALITY REPORT

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