**International Peace Support Training Centre
Nairobi, Kenya**

An Assessment of Maritime Insecurity in the Kenya Maritime Domain

OCCASIONAL PAPER **SERIES 8, №1**

JOSEPH KIOI MBUGUA AND MAJOR SAID MWACHINALO

"Enhancing Strategies and Mechanisms of Countering Violent Extremism and Protection of Civilians".

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Foreword

The International Peace Support Training Centre (IPSTC) is a Peace Support Operations (PSO) research and training institution focusing on capacity building at the strategic, operational and tactical levels within the framework of the African Peace and Security Architecture (APSA). IPSTC has developed into the regional Center of excellence for the African Standby Force (ASF) in Eastern Africa. It addresses the complexities of contemporary United Nations (UN) and African Union (AU) integrated PSOs through analysis of the multi-dimensional nature of these operations. The research conducted covers a broad spectrum ranging from conflict prevention, conflict management to postconflict reconstruction.

The Center has made considerable contributions in training and research on peace support issues in Eastern Africa through design of training curriculum, field research and publication of *Occasional Papers and Issue Briefs*. The Occasional Papers are field based research products produced annually, while the Issues Briefs are secondary sources based products produced quarterly. These publications are an important contribution to the vision and mission of IPSTC.

The Peace and Security Research Department (PSRD) of the IPSTC presents one of the occasional papers produced this year titled: *An Assessment of Maritime Insecurity in the Kenya Maritime Domain.* The study provides the current picture of the state of security in the Kenya coastal maritime domain, the strategic response initiated by the government and international actors, challenges and an exploration of proposed actions that can improve performance and effectiveness of the sector.

This study has generated information necessary for policy and strategy development at the international, regional, national and county levels while at the same time informing training content. The research and publication of this Occasional Paper has been made possible by the support of the Embassy of Japan in Kenya through UNDP-Kenya.

Brigadier Patrick M. Nderitu
Director, IPSTC

Acknowledgment

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Acronyms & Abbreviations

AU   African Union

BMU   Beach Management Unit

CADSP   Common African Defence and Security Plan

CGPCS   Contact Group on Piracy off the Coast of Somalia

CIDP   County Integrated Development Programmes

CSO   Civil Society Organizations

EAC   East African Community

EASF   Eastern Africa Standby Force

EEZ   Exclusive Economic Zones

EU   European Union

FGD   Focused Group Discussion

HOA   Horn of Africa

IGAD   Inter-Governmental Authority and Development

IMB   International Maritime Bureau

IMO   International Maritime Organization

IOR   Indian Ocean Realm

IORA   Indian Ocean Rim Association

IOTC   Indian Ocean Tuna Commission

IPSTC   International Peace Support Training Centre

ISPS   International Ship and Port Facility Security

IUU   Illegal, Unreported and Unregulated

KDF   Kenya Defence Forces

KeFS   Kenya Fisheries Service

KII	Key Informant Interview
KMA	Kenya Maritime Authority
KMFRI	Kenya Marine and Fisheries Research Institute
KMPU	Kenya Maritime Police Unit
KNBS	Kenya National Bureau of Statistics
KPA	Kenya Ports Authority
KWS	Kenya Wildlife Service
LRIT	Long Range Information Tracking
LSC	Local Security Centre
MCS	Monitoring, Control and Surveillance
MDA	Maritime Domain Awareness
OBP	Oceans beyond Piracy
SLOC	Sea Lines of Communication
SOLAS	Safety of Life at Sea
UK	United Kingdom
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNDP	United Nations Development Programme
UNEP	United Nation Environmental Programme
UNODC	United Nations Office on Drugs and Crime
USA	United States of America

Definition of Key Terms and Concepts

Blue Economy

The balanced use of the resources at sea for wealth and job creation in a manner that guarantees the health of the ocean ecosystem. Blue economy includes ocean, green, coastal and marine economy.

Maritime Civil and Criminal Authority

Maritime Civil and Criminal Authority includes judicial process to support application of rule of law in the maritime domain. It includes legal regime and institutions for licensing, border security management, inspection and enforcement, trying offenders, determination of jurisdiction for crimes committed by foreigners or outside national territory such as piracy, handling of convicts in prisons, among others. These activities are aimed at prevention of maritime security hazards, preservation, protection, response, mitigation and restoration.

Maritime Defence

This responsibility involves protection of maritime environment from internal and external threats. It requires capability for effective detection, deterrence and interdiction of aggressive acts against state's sovereignty, assets and infrastructure within the domain. These activities are necessary to assist the work of civil and criminal authorities. Effective defense forces depend on the national security sector accountability systems, legitimacy as viewed by citizens and observation of human rights.

Maritime Domain

Refers to everything that makes up the ecosystem of the ocean and the inland seas and all that is adjacent and/or related to them. This includes the vessels, route ways, institutions, infrastructure, amongst others.

Maritime Domain Awareness

The comprehension of all that is in the maritime domain that could potentially influence safety, security, economy and environment. It includes situational awareness and potential threat awareness.

Maritime Governance

Maritime governance encompasses a wide range of public administrative duties for maritime agencies to help states improve quality of citizens' life. It involves enacting legislations, regulations, establishing institutions, putting in place monitoring and oversight mechanisms to improve maritime commercial operations, security, criminal justice systems, among others. From a broad perspective maritime security is covered within the national security and development plan, law and policy, institutional framework, foreign affairs and oversight system. These mechanisms operate from the global, regional and national level; therefore it includes enforcement of UN conventions and UNSC resolutions.

Maritime Security

This refers to good conditions in the sea to enable free sea based commerce, legitimate, optimal and sustainable use of ocean based resources by authorized actors, protection from environmental degradation and climatic change.

Maritime Terrorism

Maritime terrorism in this study refers to organized domestic or international politically motivated crime launched in the sea or along the shores (Bellamy, 2012). It is often perpetrated by state or non-state actors to cause fear due to its manner of execution (destruction of economy, infrastructure, supply chains and sometimes killing of non-combatants) in order to bring about the desired domestic or global political change (Hoffman, 2006). It includes attacks on vessels, fixed platforms at sea or in port, against passengers, against coastal facilities or personnel, tourist resorts and towns/cities (Hamad, 2016).

Piracy

This is defined as an act of boarding or attempting to board any ship with an intent to commit any crime with use or intention to use force to achieve that goal (IMB). This is specific enough to assist managing maritime insurance as opposed to UNCLOS definition that is difficult to apply in insurance cases.

Contents

Abstract

This study explores the dynamics of maritime insecurity in Kenya's coastal domain using an exploratory qualitative methodology. It brings out the nature of maritime security threats, domain vulnerabilities, institutional capacity, challenges and current academic and policy options for a more secure governance of the sector.

Kenya maritime domain has a great economic potential as recognized by the Blue Economy focused legislative and strategic initiatives. Despite this positive outcome, the sector management is yet to implement projects that integrate maritime security and the blue economy. Maritime security institutions and actors are also not well coordinated and lack policy and strategic guidelines. This study argues for development and implementation of comprehensive strategic framework that integrates maritime security and blue economy governance in order to improve security and sustainable exploitation of resources in the sector.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Maritime security uncertainty renders vulnerable the dominion of coastal States through criminal actors' perpetration of various crimes (Bueger, 2013). The Indian Ocean is a major conduit of organized crime transcending international borders and illegal commercial activities (United Nations Office on Drugs and Crime (UNODC), 2017). Security challenges such as: human trafficking, oil spillage, illegal fishing, arms trafficking, climate change have continued to take their toll on littoral states of Africa and as a result the continent has borne huge losses amounting to billions of United States of America (USA) dollars and human lives (AU, 2012). Crimes perpetrated at sea, spillover of Somalia's lawlessness to Kenyan waters and piracy threatens the Indian Ocean stretch from Gulf of Aden, Somalia, Kenya, Tanzania and Mozambique (Vrey, 2010; Mutunga (as cited in Mutoka, 2014); Hamad, 2016).

For a long time, maritime security was consigned to the peripheries of Africa's agenda as other issues took precedence (Bueger, 2013). Maritime security was first considered in African countries' agenda through the efforts of the International Maritime Organization (IMO) and the United Nation (UN) which were setting benchmarks for the sector and it consequently became the agenda of regional and continental bodies in 2005 (Engel, 2014). Today Africa still lacks the necessary political and institutional structures to combat maritime insecurity.

Kenya is geopolitically precariously placed as its maritime zone borders Somalia to the north. Fund for Peace (FfP) fragile states index, 2017 ranks Somalia number 2, out of 178 countries (FfP, 2017). Fragile states face various threats that threaten regional and international stability. Piracy incidents off the Coast of Somalia awakened the interest of African countries to design plans to secure the Indian Ocean waters. The problem is exacerbated by regular mutation of maritime security issues that get less conventional as a nexus between them is established (Feldt, Roell & Thiele, 2013).

Kenya's national security interests are to assure its dominion and the integrity of its territory, safety of the country, wealth creation and welfare of Kenyans and a good national esteem (GK, 2017). Maritime security provides a platform for sustainable sea resource exploitation to guarantee wealth and job creation. The fast economic

growth rates of countries like India and China can be attributed to the role played by the Indian Ocean (Singh, 2014). 90% of trade transacted in Africa passes through the Indian Ocean (AU, 2012; Macharia, 2016). Kenya transacts 92% of its trade through the Indian Ocean (Freight Logistics, 2016).

Given the significance of sea trade, Kenya places a high premium on the Blue economy as a new economic frontier to create employment and income for the country (Nyakera, 2016). The strategic nature of the Indian Ocean thus means that any form of insecurity at sea is bound to impede the growth of economies in Africa more so Kenya.

1.2 Maritime Security

There is a lack of universal definition of maritime security (Feldt et al, 2013; Rahman, 2009). Vrey (2010) defines maritime security as a multi-agency operation led by the military aimed at: stemming illegal activities at sea, assuring safe passage and the promotion of national and international concerns. The USA maritime strategy views maritime security as all efforts geared towards the interdiction of transnational maritime crimes to assure the world's stability and safe passage at sea for the benefit of all countries (Rahman, 2009).

Given the above approaches, national aspirations and interests of a country seem to be the guiding factor in defining maritime security. Kenya is a member of the Indian Ocean Region (IOR) whose aims are to assure the security of people and transactions in the Indian Ocean. IOR is increasingly acknowledging that security encompasses human, economic, maritime and environmental security, meaning that it can be viewed through human security lens which provides more enduring national and regional security (Woldeyes, 2015). The emergence of IOR is of geostrategic importance as it confers tremendous opportunities and challenges to the coastal states of the Indian Ocean. The Indian Ocean will be the focal point of security challenges in the 21st Century mainly posed by interest in hydrocarbons and their supply in the IOR (Bateman & Bergin, 2011).

Berlin (as cited in Woldeyes, 2015) attributes the increased militarization of the IOR by foreigners as an attempt to exploit these opportunities and mitigate the challenges faced by allies of USA, India, and Australia on one side; and China, Russia, Pakistan and Iran on the other. The projection of this military might is rationalized on the need to protect the IOR from terrorism, piracy and assure safety

of passage in the Indian Ocean. The European Union Naval Force (EU NAVFOR) was constituted to combat piracy perpetuated by non-state actors in Somalia (Woldeyes, 2015). The EU NAVFOR area of operation is the South Red Sea, the Gulf of Aden and all area south of Kenya to Seychelles.

1.3   Kenya's Indian Ocean Maritime Domain

The UN through its Convention on the Law of the Sea (UNCLOS, 1982) maps out specific maritime zones for the purposes of assigning sovereignty, jurisdiction and rights for resources control to littoral states. The UNCLOS divides maritime zones into; *Territorial waters, Contiguous zone, Exclusive Economic Zone (EEZ)* and *Continental shelf* and it delimits territorial waters as a zone within 12 nautical miles from the base line. The convention stipulates that a contagious zone is one within 24 nautical miles from the baseline wherein a state exercises its jurisdiction on; immigration, taxation and sanitation. The EEZ is an area extending from the baseline to 200 nautical miles. In the EEZ, States exercise sovereignty with regards to economic activities and any other object of interest. The continental shelf is an area extending from 200 nautical miles to a limit of 350 nautical miles from the baseline. Article 77 of the UNCLOS (1982) extends the dominion of a state to the continental shelf as regards prospecting and harvesting resources found within the said zone.

The extended continental shelf however is not a natural right to a littoral state. In article 76 (8) and (9), the UNCLOS (1982) requires littoral states to make application to the Commission on the Limit of the Continental Shelf for consideration to be awarded the continental shelf. The Commission in turn makes final and binding recommendation on the award or non-award of the continental shelf to the concerned littoral state. Kenya's application for the continental shelf was approved by the 24th session of the Commission on the Limit of the Continental Shelf on 11th September, 2009 (Bosire, 2009).

The acquisition of the continental shelf is of strategic importance to Kenya as it is believed to have highly valued minerals (such as gold and oil) and large schools of fish (such as cod and tuna), which have high commercial value (Bosire, 2009). Karigithu (as cited in Marete, 2016) contends that due to multiplicity of actors in the Kenyan maritime domain employing fragmented approaches the resources in the EEZ and continental shelf remain largely untapped. 300,000 Metric Tonnes of fish can be harvested in Kenyan waters annually if Kenya exploits its resources

effectively (Atieno, 2017). However the quantity of marine fish harvested declined by 10.6% in 2016 (KNBS, 2017).

Figure I. below shows a cross section of the Kenya's maritime zones delimitation from the baseline as outlined in Kenya's Maritime Zone Act (2012) and Kenya's Legal Notice, No. 82. Kenya has four distinct maritime zones with regard to: territorial waters, contagious zone, EEZ and continental shelf.

Figure I. Kenya's Maritime Zones according to UNCLOS (1982)
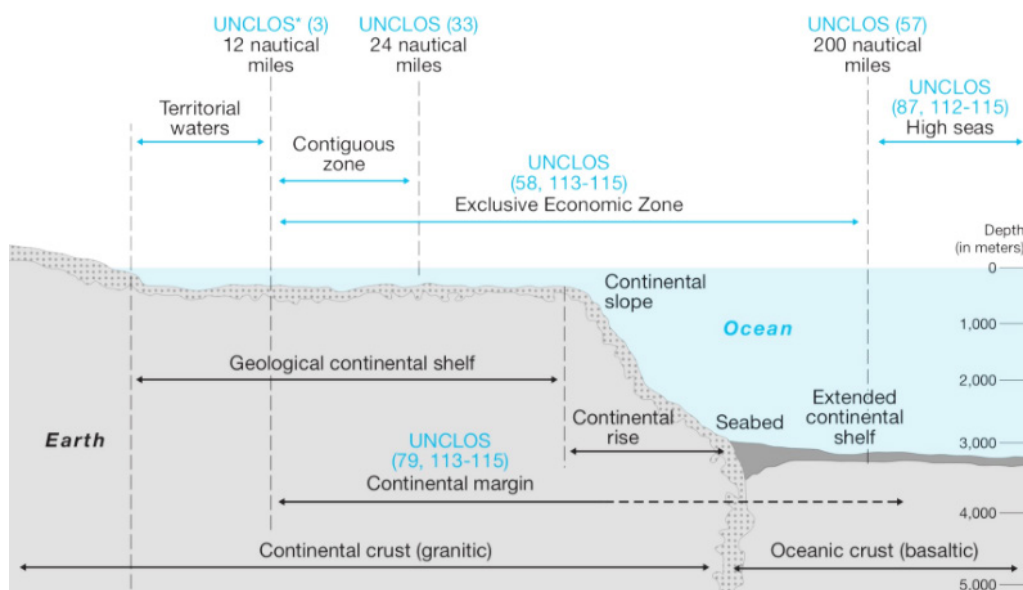
Source: Caron, 2011

Kenya's Indian Ocean route is of strategic importance to the world as it provides a cost effective route with low turn-around for shipping vessels (Wilson, 2009). A half of the globe's commercial activities are transacted through Indian Ocean (Pesjova, 2016). The Kenya's Indian Ocean domain occupies an area measuring 245,320 Km^2 made up of an EEZ of 142,000 Km^2 and an extended continental shelf of 103,320 Km^2 (Government of Kenya (GK), 2017). Geographically, Kenya has an expansive coastal ocean line of 536 Km in length (GK, 2017).

The upper most point of Kenya's coast line is *Diua Damasciaca* in the north while lower most point in the south is at *Mwamba Kitungwane* (GK, 2009; Kenya's Maritime Zones Act, 2012).

Figure II. below shows a map of Kenya's EEZ and extended continental shelf. The map is consistent with the stipulations of the UNCLOS (1982), Kenya's Maritime Zone Act (2012) and Kenya's Legal Notice No. 82.

Figure II. Kenya's Territorial Sea/ Exclusive Economic Zone/ Continental Shelf
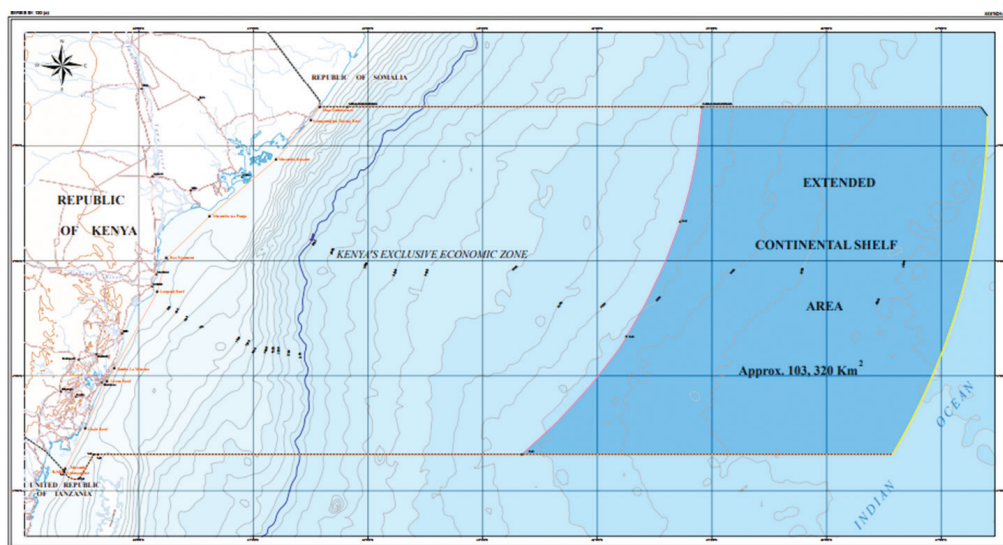
Source: GK, 2009

This study sought to advance a case for more coherent and systematic approach to maritime security, better inter agency cooperation and the need to develop innovative solutions to maritime insecurity facing Kenya. The study is organized into five chapters. Chapter 1 provides the introduction, chapter 2 analyses the relevant literature, Chapter 3 is the research methodology employed while chapter 4 provides field research findings and chapter 5 presents conclusion and recommendations.

1.4 Statement and Significance of the Problem

The East African countries bordering the Indian Ocean are vulnerable to sea-based threats and lacking in sustainable maritime security capacity. Their capacity in tackling the scourge of maritime insecurity is challenged by the magnitude of the area of responsibility and institutional weaknesses (UNODC, 2017; ISS, 2012). The region, to a great extent, depends on international maritime forces to tackle piracy in Somalia and other maritime security threats. According to Karigithu (as cited in KNA, 2016) the country experience loss of resources due to inadequate

policing and poor enforcement of laws. There is also no maritime security policy to guide sustainable utilization of maritime resources.

The East African Community (EAC) region is devoid of any functional maritime security plan and a Maritime Domain Awareness (MDA) program (Hamad, 2016). The areas of Lamu and Malindi in the northern coast of Kenya contend with terrorism coming from the sea (UNODC, 2017). With the growing nexus between piracy and terrorism as alluded to by security experts (Kriel & Duggan, 2017; Mukinda & Opiyo, 2014), the recent spike in piracy off the coast of Somalia is a concern for the country.

By 2010, maritime insecurity in eastern Africa had caused the global community equivalent of $18B, (Gilpin, 2016) and the cost to Kenya alone was between US$300 and 400 million (KMA, 2016), raising insurance cost with negative effects on regional economies. Kenya's tourism industry has dropped by 25% due to terrorism (KNBS, 2017).

Though a number of Kenya maritime security research studies have been done, they are inadequate, piece meal and not specific to the country's domain as seen in Long'iro, 2014; Schbley and Rosenau, 2013 and Thadeaus, 2013.

1.5 Justification of the Study

Maritime insecurity compound fiscal problems a country may face through leakages in terms of lost revenues occasioned by tax evasion and illicit trade (Bueger, 2013). KNBS Economic Survey 2017 shows little if at all emphasis on the blue economy. The survey lacks specific indicators for the blue economy as details are lost in aggregates. India and Seychelles have set the pace by situating the Indian Ocean at the center of their domestic and foreign policy (Pesjova, 2016).

Kenya's commitment to develop its blue economy and the development of the second port at Lamu will raise strategic value of the maritime domain (KMA, 2016). Without effective maritime security policy and strategic management, the investment will come to naught. Global discussions on piracy seldom seek to include opinions of citizens in the affected countries (OBP, 2017). Local insights are crucial for effective and efficient management of maritime security. The rise in sea value calls for enhanced evidence based policy making which makes research a vital component in the value chain.

1.6 Focus and Scope

The study covers the nature of maritime insecurity in East Africa and specifically Kenya's coastal maritime domain areas and remedial measures put in place by the government and other actors.

1.7 Research Questions

1.7.1 Main Research Question

What is the nature of maritime insecurity in Kenya's maritime domain and how can it be effectively addressed?

1.7.2 Specific Research Questions

The study sought to answer three research questions:

I.   What is the nature of insecurity in the Kenyan maritime domain?

II.   How effective are the interventions made by the government and other actors?

III. How can maritime security be enhanced in the country?

1.7.3 Research Objectives

The study endeavored to achieve the following objectives:

I.   To examine the nature and dynamics of maritime insecurity in the Kenyan maritime domain

II.   To assess the challenges for effective maritime security management in the country

III. To analyze options for effective maritime security interventions in the country

1.7.4 Hypothesis

Maritime security in Kenya is dependent on institutional reforms, effective interagency collaboration and community participation.

CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter highlights arguments on maritime security in secondary sources. It points out the salient issues with regard to the present global, regional situation and the Kenyan maritime domain. The chapter also analyses the theories underpinning assessment of this study and provides the conceptual framework on which the study is anchored.

2.1.1 Maritime Security Realm

Maritime security includes protection of maritime trade, resource utilization, environmental protection and jurisdiction of accountable authorities and actions performed by the military and other government agencies to counter illegal activities in the maritime environment (Vrey, 2013, quoting Till, 2009). Maritime security is also predicated on the concept of ocean governance where states accede to international agreements on secure exploitation of resources, protection of maritime environment and open access to international trade routes (UNCLOS, 1982). Literature on maritime security addresses causes, nature and impact of threats and institutional capacity issues.

2.2 Geostrategic Perspectives of Maritime Security

The impact of the 9/11 terrorist attack on the United States, attack on ships such as USS Cole in 2001, French Tanker in 2002, Filipino passenger ship in 2004 and increased piracy in the Horn of Africa between 2007 and 2012, heightened global theoretical interests in Maritime security focusing on counter terrorism in the sea (Germond, 2014; Hamad, 2016). Germond (2014) contends that despite this notable concern, the issue has not been well researched by scholars and practitioners. Some scholars have examined geostrategic maritime security of the Indian Ocean (Bueger, 2013; Vrey, 2010; Gilpin, 2016; Germond, 2014).

Geopolitics is concerned with how states seek to advance their national interests with respect to opportunities and challenges posed by geographic factors. Geostrategic security examines the security implication of the said environment (Germond, 2014). Maritime or marine spatial zone offers unique dispensation thus warranting special examination as a security field. This environment determines states choice of

foreign, security and environmental policies and strategies. Countries face different challenges such as influx of immigrants in Italy, terrorism and drug trafficking in Eastern Africa.

The given geographic factors in combination with state capacity and level of vulnerability determine the states choice of response (Germond, 2014; Bueger, 2013). Due to international trade, states have used maritime security to expand their security frontiers. Like in other security dimensions, weak states also score poorly in geostrategic maritime security.

Countries maritime strategies often display obvert and covert strategies masked in global politics and international relations (Germond, 2014).

2.3 Global Maritime Security Governance

2.3.1 United Nations (UN)

The UN has provided a leading legal framework for managing maritime security through a number of conventions. The main convention governing maritime security is the *United Nations Convention on the Law of the Sea (UNCLOS) of 1982* and the *UN Montego Bay Convention on the Law of the Sea* of 1982. However, the framework provided approaches that were too restrictive, weak and inappropriate in a changing environment (Ukeje & Mvomo Ela, 2013). Other UN related instruments are: *International Convention for the Prevention of Pollution of the Sea by Oil 1954, United Nations Framework Convention on Climate Change (UNCCC), 1992, Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA Convention), 1988 and its 2005 Protocol, Convention on Fishing and Conservation of the Living Resources of the High Sea (CFCLR), 1958, the International Convention on Safety of Life at Sea (SOLAS), 1974 and the International Ship and Port Security (ISPS) Code,* amongst others.

International Maritime Organization (IMO) mandate is to facilitate international cooperation and maintenance of standards in maritime security, safety, trade, maintenance of standards, ship transport and legal administration (IMO, 2017). IMO has provided assistance to Kenya in order to comply with international standards. The United Nations Security Council (UNSC) has put in place a number of resolutions to advance maritime security in Africa and to enhance thematic and region specific requirements. UNSC adapted Resolution 1816 to counter the threat of piracy. Though these measures have been put in place, maritime insecurity is still a threat in the region.

The international community's main concern is to achieve global energy security, free flows of maritime trade, global war on terror, check illegal human traffic, narcotics and small arms. With their undue influence on African maritime policy regime, there is a tendency to rely on military hardware as opposed to addressing human security and development issues as sustainable strategies for security (Ukeje & Mvomo Ela, 2013:26). International maritime laws have also followed this pattern.

2.3.2 Contact Group on Piracy off the Coast of Somalia (CGPCS)

This coalition of the willing group that brings together countries, organizations and industries was formed pursuant to UNSCR 1851 of 2009. It was established to coordinate anti-piracy efforts off the coast of Somalia. The contact group managed to stop piracy by 2012 through international navies, Private Military Companies (PMC) and prosecution (CGPCS, 2014). The United States, European Union, China, Japan, South Korea have also intervened in different ways to improve maritime security in the region.

2.3.3 African Union and Maritime Security Sector

Under the African Peace and Security Architecture (APSA) established in 2002 the African Union (AU) has been implementing a broad spectrum of initiatives to improve security management. In 2009, the AU spelt out its maritime security strategy within APSA framework through the Africa Integrated Maritime Strategy (AIMS). In 2011, the draft 2050 Africa Integrated Maritime Strategy (2050 – AIM Strategy) was adopted with the goal of spelling out a comprehensive African driven long term common vision towards maritime opportunities and challenges. It also set out mechanism for regional and global coordination towards that goal (Ukeje & Mvomo Ela, 2013).

The African Maritime Transport Charter and Action Plan of 2009 as well as resolution on maritime safety, security and protection of maritime domain, indicates growing sectoral concern. As recognition of the value and wealth in the maritime domain rises, there is bound to be increased maritime boundary disputes catalyzed by marine resources including oil & gas (Vrey, 2013:9).

Maritime boundaries in Africa are poorly delimited and this pose a threat as offshore resources are identified with increased technological capability (Ukeje & Mvomo Ela, 2013). Perceptions of economic marginalization are also coupled with political

exclusion of coastal communities who on average are poorer than upcountry communities and the state has often sided with multi-national companies in disputes with communities; giving more concern to property rights as opposed to social justice and human rights (Ukeje & Mvomo Ela, 2013:20).

The laws in the region are not updated or integrated to efficiently respond to the rising challenges. Even when the laws are there, they are hardly implemented effectively sometimes due to lack of independence of the judiciary among other governance challenges.

This national weakness is also manifested at the regional level amidst African reliance on donor funded maritime security programs leading to uncertainty and unsustainability of the sector operations (Ukeje & Mvomo Ela, 2013:36).

2.3.4   East African Maritime Security Scene

East African maritime domain stretches all the way from South Africa to the Gulf of Aden and the Red Sea (Vrey, 2013:10). By 2011, Kenya, Somalia, Tanzania and Mozambique had recorded some form of attacks in their maritime domain (Vrey, 2013). Al Shabaab and other international terrorists spread insecurity from sea to land attacking civilians and undermining transport routes.

A number of measures for effective response to Somali piracy were put in place by the AU, Inter Governmental Authority on Development (IGAD) and the government of Kenya. The IMO supported Djibouti Code of Conduct of 2009 is a framework for international cooperation among the 20 signatories with naval forces in the region, which aims to mitigate against the threat of piracy (Malaquias, 2017; Wambua, 2012). Despite this code and the Djibouti protocol, the collaboration between maritime authorities of Kenya and Tanzania can be adjudged as low and information sharing between the two countries maritime actors is nonexistent (Hamad, 2016).

2.4   Kenya Maritime Security Threats and Vulnerability

Given the size of Kenya's maritime domain and security capacity, the zone is hardly monitored and governed effectively (Mutoka, 2014). The problem is exacerbated by lack of a stable government in Somalia, armed conflict in some parts of the West Indian Coast and poverty (OBP, 2017; Mutoka, 2014).

Through article 2(6) of the Kenya Constitution 2010, Kenya domesticated all conventions and treaties that it has consented to and endorsed, this means that the country draws from international sources of law as advanced by the treaties and conventions to enforce maritime security, in addition to its local laws (Mutoka, 2014). In total, Kenya has ratified 315 maritime related conventions and 12 treaties, which form part of Kenyan Law (Kenya Law, n.d.). Some of the maritime security conventions that Kenya has ratified and thus have become part of Kenya Law include; *International Convention for the Prevention of Pollution of the Sea by Oil 1954, UNCLOS, 1982, UN Convention on Climate Change (UNCCC), 1992, Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA Convention), 1988, Convention on Fishing and Conservation of the Living Resources of the High Seas (CFCLR), 1958, International Convention for the Safety of Life at Sea (SOLAS, 1974/88), International Ship and Port Facility Security (ISPS) Code 2002,* amongst others (Mutoka, 2014; Wambua, 2012).

Karigithu (as cited in Marete, 2016) avers that about 26 international conventions have been domesticated to Kenyan maritime law. To ensure the sustainable exploitation of resources and the attainment of Vision 2030, the Kenya Government has enacted following legislations: *Climatic Change Act, 2016,* the *Forest Conservation and Management Act, 2016*, *Water Act, 2016* and the *Mining Act, 2016* (KNBS, 2017). To mitigate against crimes at sea, Kenya enacted the following legislations: *Anti-corruption and Economic Crimes Act, 2003*, and *Prevention of Organized Crime Act (POTA), 2010* (Wambua, 2012). Kenya's 2017 Defence White Paper assigns the Indian Ocean Strategic importance while in the same vein it recognizes that the zone face threats and vulnerabilities to security emanating from the sea (GK, 2017).

Some of the causes attributed to EEZ vulnerability in Kenya are: legal and jurisdiction weakness, geographical proximity to conflict neighbourhood in Somalia, inadequate security, insecure base areas, lack of maritime skills, ineffective leadership and inadequate state support (Hamad, 2016). Given evidence of Al Shabaab and Islamic State of Iraq and the Levant (ISIS) recruitment and radicalization in Mombasa county; possibilities of maritime terrorism cannot be ignored (Botha, 2014). Ports such as Mombasa are not only vulnerable to maritime attacks but also lack equipment and training needed to detect divers using port sensors and optic netting (Jones, 2013; Hamad, 2016).

Al Shabaab has managed to recruit non-Somali ethnic groups in Kenya making its operations more discreet and difficult to detect. There is no effective regional or national maritime security strategy and Maritime Domain Awareness (MDA) advocacy program (IMO, 2010). Though Kenya does police its EEZ, the sheer size of the domain and low capacity of enforcement agencies makes effective surveillance difficult (Hamad, 2016:5). The Navy performs both policing and warfare roles. To boost its capacity the Kenya Navy acquired a brand new Spanish-made destroyer in 2012. Though Kenya passed the anti-terrorism law in 2002 with subsequent amendments, there are no effective judicial deterrent convictions thereby leading to impunity of offenders and extra judicial methods employed by both security agents and terrorists (Jurist, 2015; Hamad, 2016).

The establishment of the international crimes division at the High Court in 2012 has enhanced determination of piracy crimes committed within and outside Kenya's jurisdiction, however Judiciary officers have no adequate training on international maritime law and other relevant laws and conventions (Mutoka, 2014). Kenya's judicial initiatives against piracy are not complemented by a comprehensive anti-piracy policy.

Pirates have increased in their sophistication over time by acquiring technologically advanced vessels and weapons to aid in their felony (Worall, 2000). This has increased the scope and area of operation in committing their illegal acts. The International Chamber of Commerce (ICC) and International Maritime Bureau (IMB) cites a total of 52 piracy cases for Somalia, Kenya and Tanzania in 2012 of which 49 cases were committed off the coast of Somalia. Two significant piracy incidents were reported in the year 2017; the hijacking of MT Aris-13 tanker and Asayr 2 in mid-March and April respectively off the coast of Somali (OBP, 2017).

Kenya is contending with the scourge of illicit small arms smuggled through its vast largely unmanned borders (Schbley & Rosenau, 2013). Mitz (as cited in Hamad, 2016) contends that Al Qaeda owns 15 ships that ply the Indian Ocean that it uses to traffic arms.

The Indian Ocean Tuna Commission (IOTC) has been ineffective in curbing illegal, unreported and unregulated fishing (IUU), (Bateman & Bergin, 2011). IUU fishing catch is half of total yearly harvest in the Indian Ocean with the most targeted fish being the Tuna because of its high value (Schbley & Rosenau, 2013).

Kenya is increasingly becoming an epicenter for the trafficking of cannabis, cocaine and heroin (Schbley & Rosenau, 2013). In 2011, six people were arrested in the Indian Ocean and charged in Kenyan Law Courts for offloading 102 kilos of heroin from small boats (Schbley & Rosenau, 2013).

2.4.1   Maritime Border Dispute

Pending maritime border delimitation is a potential source of conflict in Africa for state and non-state actors as more exploration and discoveries of mineral oil deposits are made (Vrey, 2010). Anderson (as cited in Rateng', 2008) contends that marking out maritime boundaries is delicate as it assigns coastal countries legal authority, dominion and inalienable rights to resources within their maritime delimitation.

The maritime boundary dispute between Kenya and Somalia is an example of maritime border sensitivity as alluded to by Anderson (as cited in Rateng', 2008). In the year 2014, the Federal Government of Somalia lodged a case at the International Court of Justice (ICJ) to arbitrate a maritime border delimitation dispute between itself and Kenya citing failed diplomatic efforts. The genesis of the dispute is based on Kenya's decision of awarding oil and gas prospecting license to Total and Eni Companies in areas that Somalia lays claim to (Rateng', 2008). While this dispute is before the ICJ, left unresolved, it has the potential of upsetting the socio-economic balance situation of the two countries.

2.4.2   Empirical Case Studies

Thadeus (2013) examining the effects of Somali piracy on Kenya's maritime sector in the period 2007 to 2011, found that piracy off the coast of Somali had the impact of increasing the cost of doing business, reduced the number of tourist visiting the Kenyan Coast and contributed to insecurity in the Kenyan maritime domain. The study, however, failed to capture contributions of key security agencies such as the Kenya Defence Forces (KDF), Kenya National Police Service (KNPS) and National Intelligence Service (NIS). The current study improves its findings through expansion of the sampling frame to include security agents amongst others.

Schbley and Rosenau (2013) study on piracy, illegal fishing, and maritime insecurity in Somalia, Kenya and Tanzania did not find a linkage between piracy and IUU fishing. The study found out that most of the former pirates were not fishermen *per se*. However, it fails to adequately address IUU as a legitimate Somalia's concern that

can breed piracy. Jones (2014) study on maritime piracy and the cost of world trade found there was lack of sufficient and reliable data and could not draw conclusive deductions. The study however found a positive correlation between incidents of piracy and increased cost of transactions in commerce.

Long'iro (2014) study on maritime security in East Africa: the role of international and regional instruments found that conflicting interest amongst the different countries in East Africa coupled with weak authority and control over the East African maritime space contributes to insecurity. This study while contributing to knowledge offers generic solution to East African countries while every country is unique with its own dynamics. The study relied heavily on secondary data though some primary data was collected. Limited focus was placed on environmental degradation.

2.5 Theoretical Framework

This section describes the applicable theoretical lens through which analysis of findings is done.

2.5.1 Institutional Theory

Institutional theory considers the processes through which structures, rules, norms become established as authoritative guidelines for social behavior. The approach examines how institutions are formed, changed, adopt and adapt across time and space (Scott, 2004b).

Institutions are the norms, customs, laws and regulations that guide human behavior. Organizations are the working rules of 'collective action' (van de Ven, 1993). The theory holds that institutions do not only restrain but also, can liberate and expand human action and individuals construct and change institutions thereby adapting the environment to their own needs and purposes. Institutional theory is a dynamic approach that allows institutions to change according to customs, laws and resolve conflicts in a constructive way (Van de Ven, 1993). Institutions change as a result of human action and the changes in expectations and process that result can exert profound effects on state behavior (Keohane, 1989:10).

Institutional theory provides possibilities of cooperation among international, regional maritime parties/actors for peaceful and productive utilization of this domain. This theory holds that global, regional and national peace and stability is maintained through mutually benefitting institutional order.

This study will employ institutional theory to examine international, regional and national institutions that play a role in shaping maritime security in Kenya. It will look at capacity, challenges and nature of cooperation to achieve the desired end.

2.5.2 Routine Activity Theory

Routine activities theory postulated by Cohen and Felson in 1979 explains how crimes are committed. It holds the view that three features need to occur at the same time for a crime to be committed.

The three facets are: a motivated lawbreaker, apt target and absence of an adept protector. According to Cohen and Felson (as cited in Heiple, 2010), a motivated offender is one who has the predisposition towards breaking the law and can effectively execute the vice and a suitable target is one that is: tangible, lacks ability to fend off attacks, is accessible and treasured. The West Indian Ocean route is a significant commercial activities route, which in addition to the ransom paid by pirates and the valuable tuna fish is an attraction to maritime criminals (Potgieter, 2008).

The theory does not explain the foundational reasons predisposing one to commit a crime and it only addresses apparent motives. Further the theory only offers shallow resolutions to crimes and assumes illusory concurrence of activities (Worall, 2000).

2.6 Conceptual Framework

Adaptive and improved institutional strategy and operations can enhance maritime security governance in Kenya. Institutions in this study include formal and informal structures. These components interact with one another to inform organizational effectiveness in maritime security. Security loopholes identified in routine theory will also be addressed in tandem with institutional approach.

Figure III. Transition to Maritime Security
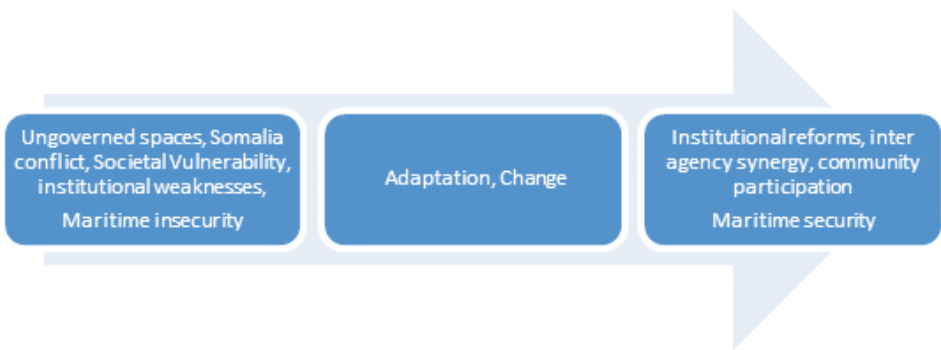
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the research methodology employed in the study. It elaborates on the study population, sampling procedure and justifies the data analysis method used. The chapter also highlights the ethical considerations that were employed by the researchers.

3.2 Research Design

The study employed an exploratory survey research design. An exploratory study endeavours to comprehend an issue under investigation through detailed interrogation. This study design was chosen to help the researchers collect enough information that will act as building blocks for further refined research in maritime security. An exploratory design achieves this by pointing out study variables that are worth further investigation (Eugene & Lynn, 2017). A survey involves the soliciting of opinions of sampled respondents and using the result thereof to infer the population view (Cooper & Schindler, 2014). The study was also cross sectional in nature as it sought data at a given point in time.

3.3 Study Site

The study was done in Mombasa and Lamu Counties of Kenya. The study sites were chosen for hosting most of the institutions and actors associated with the maritime sector. The port at Mombasa handles bulk cargo traffic for the country as well as for the neighbouring land locked countries amongst others. The port of Mombasa handled 27,364 tonnes of cargo and 1.1 million Twenty Foot Equivalent Units (TUEs) in 2016 (KNBS, 2017). Mombasa port is thus key to the growth and development of Kenya.

Lamu port is a key strategic investment for Kenya as identified in its vision 2030. It is projected that it will handle 23.9 million tons of cargo by 2030 once it is operational (Kenya Ports Authority (KPA)), n.d.). The county of Lamu is vulnerable to terrorists' threats (UNODC, 2017).

3.4 Study Population

Njenga and Kabiru (2009) posit that population consists of all individuals/ organizations/institutions that share a common attribute and therefore generalization of deductions can scientifically be drawn from them.

The institutions/organizations identified to be the population of the study constitute part of the maritime domain of Kenya's Indian Ocean. They consisted of key stakeholders and institutions in the maritime sector. The study categorized twenty-eight institutions as the population of the study (see appendix 1).

3.5   Sample Size and Sampling Procedure

This study utilized theoretical sampling. Judgment on what should make up the sample was entered to while in the field as the study progressed based purely on the insight that had been gathered from the previous sample unit. This sampling decision was based on the need to assure accuracy of assessment of the concept under study and not necessarily to assure that the target population was well represented (Finch and Mason, 1990). The choice of target respondents was based on their ability to build on the data the study had collected earlier in the field from the initial respondents. Glaser and Strauss (as cited in Mason, 2010) hold that data saturation refers to a point where further sampling does not yield any new information in the field.

3.6   Data Collection Method and Tools

This study used primary data collected through Key Informants Interviews (KIIs) and Focused Group Discussions (FGDs). Key informants refer to respondents who have a thorough knowledge of the subject under investigation from the perspective of the organization they represent (Payne & Payne, 2011). KII respondents were selected based on their strategic positions in their organization(s).

FGD refers to an extensive discussion of a research subject matter in a group of a maximum of ten (10) people (Gatara, 2010). Each FGD was made up of respondents from the same organization. The FGD respondents were drawn from middle and lower management levels particularly operations and security sections. The study FGDs were made up of between five (5) to eight (8) people. FGDs were used to harness varied opinions of the participants with an ultimate aim of reaching data saturation in a short time (Fusch & Ness, 2015).

According to Gatara (2010), a structured interview refers to a method of data collection where a previously made identical questionnaire is dispensed to all respondents in the study without prejudice. In this study, the structured interview was administered through an open-ended questionnaire so as to provide focus for the respondents while not inhibiting them from free expression. Audio recorders were used both in the KIIs and FGDs to assure the integrity of data collected.

The data from audio recordings were supplemented by written notes made by the researchers.

3.7   Data Analysis

The primary data collected was qualitative in nature as quantitative data in maritime security is rare and difficult to get (Schbley & Rosenau, 2013). The data consisted of: knowledge, experience, feelings and views of the respondents, which cannot be analyzed quantitatively. A theoretical/deductive thematic approach to analysis was adopted in drawing out findings.

Braun and Clarke (2006) postulate that a deductive approach is one in which the researcher retains fidelity to the research question in analysis regardless of the extensiveness of the data. Thematic analysis is a process of isolating relationships in data with a view of identifying and reporting the emerging themes. A theme refers to a statement or word of significance in the data in relation to the research question (Braun & Clarke, 2006). The research questions thus formed the core basis around which data was grouped and analyzed. Data that was not in line with the research questions were discarded. Data from the audio recording devices was transcribed and emerging themes recorded.

3.8   Validity and Reliability

Lincoln and Guba (as cited in Golafshani, 2003) hold that the validity and reliability of a qualitative research is pegged on how realistic, unbiased and provable the research findings are. Patton (as cited in Golafshani, 2003) pitched for the use of triangulation as means of ensuring validity and reliability of findings. Triangulation refers to the use of diverse methods and tools of data collection and analysis to allow for the counterchecking and verification of data collected. In this study, the researchers counter checked data given through KIIs and FGDs. The reconciliation of the two researchers' perspectives served to increase conformability of findings. As suggested by Noble and Smith (2017), the study presented direct quotations of respondents to increase defensibility and believability of the study.

3.9   Ethical Considerations

The researchers maintained fidelity to IPSTC research guidelines that require ethical practice in the field. Informed consent and voluntary participation was sought from the interviewees while guaranteeing them confidentiality. The researchers were also sensitive to the dignity and self-esteem of the respondents.

CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter outlines the study findings gathered through field research. The study targeted twenty-eight institutions making up the population. Only fifteen (15) institutions were sampled after attaining data saturation. From the fifteen institutions/organizations, five (5) KIIs and ten (10) FGDs were conducted. In total 80 respondents were interviewed.

4.2 Nature of Maritime Insecurity

This study sought to evaluate the nature of maritime insecurity in the Kenyan maritime domain. The findings bring out the complex interplay of factors and actors informing maritime security in the region.

4.2.1 Nature of Threats and Ranking

Majority of the respondents identified the following as threats precipitating maritime insecurity: terrorism, piracy, illegal migrants, drug trafficking and arms trafficking. Minority of the respondents pointed out to: poverty, ballast water, IUU fishing, pollution of the sea waters occasioned by amongst others, the dumping of condemned goods in Kenya's EEZ, Stowaways, maritime border dispute between Kenya and Somali, ungazetted fish landing and entry points and mushrooming of private jetties.

There is a long, expansive and porous water mass/maritime border. Along the entire Kenyan coastline, there are many unguarded spaces in the sea. Boats and helicopters can land undetected and unchecked. Kenya's maritime boundary disputes with Somalia at the ICJ can also hinder exploration and exploitation of resources in that domain.

Terrorism (Al Shabaab) is high on the agenda in order to protect oil terminals. Ships and ports can be used as weapons of war. There are recurrent threats of attack, which makes maritime routes vulnerable to terrorism (FGD, 24 May 2017, Mombasa)

Piracy off the coast of Somalia is a threat. Along the entire Kenyan coastline boats and helicopters land undetected and unchecked. Although piracy had gone down, there have been a few cases in the last two years. The shipping industry is sensitive

to pirates attack and hence the need to maintain current international community participation off the Coast of Somalia.

Poverty and unemployment was cited as a foundational threat to maritime security where respondents alleged that shipping companies lower wage cost at the expense of sea farers.

How can we achieve maritime security if the locals are poor and unemployed? Kenya has a well-trained cadre of seafarers who have worked in foreign ships. International Cabottage law requires that for chartered ships the destination country should reserve 70% positions for its labour force (FGD, 22 May 2017)

The International Cabottage Law requires that chartered ships reserve 70% of its labour force to citizens of the destination country. The respondents contend that shipping lines prefer foreign labourers as they can pay them low wages as opposed to Kenyans who are protected by Kenya Labour Laws. This perspective is confirmed by Ukeje & Mvomo Ela (2013) in findings discussed earlier.

On Illegal Unregulated and Unreported Fishing (IIU) fishing a respondent remarked, '*Fish landing sites are not policed. There are also shoreline caves where illegal fishermen can hide*' (FGD, 25 May 2017).

Another respondent amplified the scourge of IUU Fishing by remarking, '*Migratory fishermen use of gears such as dynamite indiscriminately killing fish using explosives. That is not authorized in Kenya*' (FGD, 25 May 2017, Mombasa).

Prosecution of IUU suspects is done through the Fisheries Act and the Deputy Public Prosecutor (DPP) but the Judiciary lack adequate maritime security expertise. There are outcrops in the sea, which acts as fish breeding grounds but have not been mapped for protection.

On drug trafficking a respondent observed that, '*there are many private jetties/canals where ships and boats can anchor without inspection. These can be used to traffic narcotics and arms or to evade taxes*' (FGD, 25 May 2017, Mombasa). Human trafficking was observed by respondents as common amongst people from Somalia with their preferred destination being South Africa.

The respondents observed that marine pollution mostly occurs along Kibarani waste disposal site and through oil spillage. On environmental degradation a respondent

observed that, *'There are some areas where sea reclamation has been done and this can be a danger to marine ecosystem. There are unplanned developments along the coast with negative effects on marine life'* (FGD, 26 May 2017). On dumping of condemned goods in the sea, a respondent remarked, '*we are always asked to give authority for some goods to be dumped at sea yet no study has been done to ascertain the impact of such action!*' (KII, 26 May 2017, Mombasa).

On ranking of the threats, majority of respondents were of the view that terrorism is the key cause of concern followed by piracy, illegal immigrants, narcotics and arms trafficking. The respondents ranked terrorism as the most potent threat due to its ability to cause massive loss of lives and property. Majority of the respondents felt that Al Shabaab may plan to attack oil terminals, Ships and ports in Kenya. They attributed the potency of terrorism to ineffective border security.

Some of the respondents expressed concern of Kenya's lack of ability to monitor the dumping of ballast water and the choice of the sea as the dumping site for condemned goods including hard drugs. Ballast water pose devastating environmental risks as they introduce foreign plants and animals in affected maritime domains (Bruno, 2017). I

4.2.2   Impact of Maritime Security Threats

Majority of the respondents were of the view that maritime insecurity has led to high transport and insurance cost amongst shipping lanes and traders who transport goods by sea. They also contended that maritime security threats have led to high security cost and exorbitant prices of goods and services hauled by sea and delay on ship movements due to change of routes.

At the height of piracy in Somalia, it took ships 11 days to reach Middle East from Mombasa, a distance that usually takes 4 days. Increase in turn-around time means; additional cost of shipping through rerouting, reduced food security preparedness, loss of revenue and loss of data on marine life usually gathered in secure environment. Due to perceived insecurity most private cruise ship and yachts go to Seychelles, Zanzibar and South Africa which means loss of business, jobs, low economy in the country (KII, 24 May 2017, Mombasa)

The respondents further averred that operational costs rose to as much as 45,000 US$ per ship/day. Majority of the respondents were also of the view that maritime insecurity led to capital flight, unemployment, damage to the tourism industry, shipping business and the national economy.

Some of the respondents were of the view that Kenya's maritime boundary dispute with Somalia currently at ICJ can hinder exploration of resources in the maritime domain. Some of the respondents decried the negative impact of IUU fishing on marine life remarking thus:

Some of the valuables within the Marine Protected Areas (MPA) are: Corals, Coral reef which are suitable for Turtles multiplication which is an endangered species, Sea grass that provide breeding ground for fish and development of beaches. The Marine Parks and Reserves have more than 250 species of fish (FGD, 26 May 2017, Mombasa)

The negative economic consequence of IUU fishing was aptly captured by one respondent who remarked thus:

Presently Kenya collects about KES 350,000,000 from the licensing of foreign fishing vessels. With improved surveillance and enforcement, this revenue can reach up to about KES. 4 billion from licensing. Further, the revenue accrued from penalties, fish catches and the fish-value-chain effect is estimated to be in the area of KES 30-50 billion. This estimate does not include the valuation of the jobs created to the Kenyan people in the process (FGD, 25 May 2017, Mombasa)

4.3   Responses to Maritime Security Threats

A raft of measures has been put into place by maritime actors in the Kenya's Indian Ocean domain to mitigate the threats of insecurity. These measures can be categorized as: institutional, legal and regulatory.

4.3.1   Institutional Responses to Maritime Security Threats

Majority of the respondents identified the following forms of physical security measures as part of institutional responses: patrolling of maritime zones, radar surveillance, use of Closed Circuit Television (CCTV) cameras, Perimeter Intrusive Detection Systems (PIDS), Infra-Red lighting system and Long Range Information Tracking (LRIT). A key respondent remarked thus, '*We conduct sea surveillance through Long Range Information Tracking system which can be accessed from ships or stakeholders through subscription' (*KII, 20 May 2017, Mombasa).

The respondents further proffered that acquisition of a strong radar system, modern surveillance system, which can reach far and presence of security personnel has improved maritime security. Another respondent divulged that, '*There has been increased awareness on improving ports security after the September 11, 2001 terrorists'*

*attack in the US. Erecting barbed wires on ships perimeters and hiring internal ships security guards has been introduced '(*KII, 18 May 2017, Mombasa).

A respondent explained that Kenya Navy protects oil exploration, prevents IUU and safe guards legal fishing operations and control illegal migration especially movement of Somalis to South Africa. The aforesaid measures have mainly been put into place by State related organization. The private sector related organizations have also put into place a range of measures in line with the requirements of the ISPS Code. In addition a respondent noted that, '*Due to perceived insecurity most private cruise ship and yachts consult with security agents like the Police and the Navy on security matters and on safe routes. We engage professional security guards in ships and conduct anti-stowaways checks' (*KII, 24 May 2017, Mombasa).

Some of the respondents alluded to the presence of a Maritime Security Committee (MSC). They explained that at the County level the committee is made up of County government, Navy, Police, Kenya Maritime Authority (KMA), Kenya Ports Authority (KPA), Ministry of Fisheries, Kenya Shipping Agents Association and the department of Immigration. The MSC meet on a quarterly basis to discuss maritime security issues; however, meetings are ad hoc since there are no formal structures of coordination. Despite that they expressed satisfaction that an interagency working culture was emerging. The respondents further explained that the KMA and KPA hold regular consultations and have joint teams that board and inspect suspected ships.

The respondents also mentioned the existence of a Monitoring, Control and Surveillance (MCS) Centre. To highlight the role of the MCS a respondent stated the following:

The new Fisheries Management and Development Act of 2016 empowers the Cabinet Secretary responsible for fisheries to make regulations establishing and assigning functions to a Monitoring, Control and Surveillance (MCS) Center which was established in Mombasa. The representation of the Interagency MCS Center is drawn from all the various actors in the maritime sector. The principal function of this unit is to ensure coordinated and effective inter-agency enforcement of and compliance with the Act (FGD, 19 May 2017, Mombasa)

The respondents also explained that there is regional collaboration and networking to share MCS intelligence on IUU related activities and fishing vessels under the *Fish-in Africa Regional Project* that brings together eight Coastal States (Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia and Tanzania). The respondents divulged that there are regional offshore patrols under the Indian Ocean Tuna Commission (IOTC) – Smart Fish Regional Surveillance Programme.

The surveillance program involves sea and air patrols between seven States (Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles and Tanzania). While the MCS can be seen to be more focused on IUU Fishing and kindred issues, the respondents maintained that it also addresses other maritime security issues due to its inter agency composition.

Some of the respondents mentioned a presidential appointed inter agency committee on Blue Economy. The Committee was formed in 2017 and is headed by Chief of Defence Forces (CDF) of Kenya. The Blue Economy Committee brings together various stakeholders including KMA, KMFRI, Kenya Maritime Police Unit (KMPU) and KPA (KPA), amongst others. The respondents observed that the Blue Economy interagency committee is responsible for spearheading strategy formulation in the maritime sector and for assuring sustainable use of resources in the maritime domain. The State Department of Fisheries and the Blue Economy is also responsible for the exploration, exploitation, utilization, management, development and conservation of fisheries resources as well as aquaculture development and to undertake research in marine and fresh water fisheries.

Majority of the respondents mentioned training as a means of mitigating maritime insecurity. They averred that training helped their personnel to raise their security awareness. Underlining the importance of training a respondent said, '*KMA has provided training and education for seafarers. Seafarers receive Standard Training Certification and Watch keeping (STCW). They learn about ship security such as Stowaways search, how to avoid piracy and are given Certification of Competence (CoC)' (*KII, 16 May 2017, Mombasa).

Echoing the importance of training in mitigating maritime insecurity another respondent remarked, '*World Wildlife Fund (WWF) has supported anti-poaching programme to save Turtles through training and funds. Specific areas have been zoned for fishing and restriction made on other areas'* (FGD, 26 May 2017).

Yet another respondent remarked, '*the Navy maintains continuous surveillance presence within the waters. Simulation training is also being done at the Navy to increase level of preparedness' (*KII, 20 May 2017, Mombasa).

To underscore the centrality of training as a means of securing the Kenya's maritime sector, respondents stated, *'The Navy conducts internal and external capacity building of maritime sector personnel through training other agencies including civilians, KMPU, KPA; training in search and rescue, simulations and Training of Trainers' (TOT)'* (KII, 20 May 2017, Mombasa).

Kenya's constitution 2010 captures security as a national priority. The National Security Committee (NSC) chaired by the President is responsible for national security affairs while the National Security Advisory Committee (NSAC) provides implementation and coordination guidelines of NSC decisions (GK, 2017). It is therefore no surprise that majority of the respondents alluded to Kenya Navy, Kenya Maritime Police Unit and Kenya Maritime Authority as lead agents in securing the Kenya maritime domain.

On KMA's role, a respondent remarked that, '*KMA issues certificate of compliance to ports and it approves, monitors and evaluates ports security plan. Security assessment is also done by international stakeholders according to ISPS Code, once in five years with annual verification and quarterly audit' (*KII, 24 May 2017).

Some respondents further mentioned that Beach Management Units (BMU) supplements the efforts of the security apparatus, which help to gather intelligence and to respond to coastal community concerns. The respondents further explained that the BMUs register boats operating in their areas, document and share the record with KMPU.

4.3.2   Legal and Policy Responses to Maritime Security Threats

Majority of the participants alluded to the following legal instruments used by Kenya to assure maritime security. To counter terrorism, Kenya enacted the *Anti-terrorism Act 2002* (revised in 2012). In a bid to manage the maritime sector the followings laws have been enacted: The *Merchant Shipping Act, 2009, Wildlife Conservation and Management Act, 2013, Fisheries Management and Development Act, 2016, Environmental Management and Coordination Act, 2012, Kenya Maritime Authority Act, 2006/2012, The Shipping Operations (Marine Pollution) Act*, 2013, and *National Security Act, 2015.* A respondent also held that Kenya is a signatory

to the Convention on International Trade in Endangered Species (CITES), 1973, which regulates trade in wildlife products for the purpose of conservation. Kenya is party to the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean - *Nairobi Convention, 1985*. This convention authorized establishment of Marine Protected Areas (MPAs), which has played a crucial part in protecting marine life. A respondent suggested that through KMA the institutional and legal framework for the sector has been broadened and modernized. It can be deduced therefore that there is significant legal foundation for addressing maritime security in the country.

Commenting on the Fisheries and Development Act 2016, a respondent said:

The new act has instigated ongoing coast-wide securitization of the fish landing stations under the Blue Economy Initiative, establishment of Beach Management Units by law to manage the fish landing stations in the spirit of community involvement in fisheries resources management and restrictions on landing of fish other than at gazetted fish landing stations. Marine spatial planning is being implemented and European Union (EU) audit is done after every five years to make sure fishing standards are within their requirements (FGD, 26 May 2017, Mombasa)

The Fisheries and Development Act 2016 is significant to maritime security. A respondent collaborated this assertion by remarking:

The Navy could not arrest and prosecute before but now the Fisheries Act empowers the navy to arrest. Previously, there were no laws governing establishment of private jetties but KMA has come up with some rules. Kenya Navy monitors licensing of fishing vessels, contributes in boosting blue economy project through mapping resources in EEZ using MS Utafiti vessel. MS Utafiti is owned by Department of Fisheries but is run by the Navy (KII, 20 May 2017, Mombasa)

The respondents further opined that stiffer penalties for IUU fishing and other related maritime crimes have been provided for in the new fisheries law.

Some respondents suggested that Kenya is developing Integrated National Maritime Policy (INMP). The INMP is in line with the African Union (AU) AIMS 2050 and UNCLOS. The respondents expressed hope that the policy will provide for holistic and broad based ecosystem management of maritime resources.

Some of the respondents further stated that the State Department for Maritime Affairs provides policy guidance in order to promote the maritime and shipping sector.

4.3.3   Regulatory Responses to Maritime Security Threats

Most of the respondents placed the KMA at the Centre of maritime security coordination and regulation. They maintained that KMA is entrusted with the responsibility of implementing international maritime agreements relating to maritime sector that Kenya is a party to. They further explained that KMA regulates and coordinates maritime affairs, ensure safety of lives, security of ships and port facilities and protection of the marine environment. To underline the role of KMA as a regulator a respondent said that, '*it registers and license ships according to relevant Kenyan laws to ensure safety of international shipping. It also certifies maritime training institutions according to international standards and* regulations' (FGD, 25 May, 2017).

Some respondents further explained that Kenya is a member of the Indian Ocean Rim Association (IORA), which promotes sustainable utilization of the blue economy and Indian Ocean Tuna Commission (IOTC). The respondent averred that IOTC members share information and provide regulations, which Kenya follows.

4.4 Challenges to Effective Maritime Governance

To explore the effectiveness of maritime governance the study focused on effectiveness of: Maritime Domain Awareness (MDA) programs, Inter agency approach, enforcement of maritime security related laws, policy and institutional responses.

4.4.1   Effectiveness of MDA

Most of the respondents intimated that there is low MDA in Kenya. To amplify this assertion a respondent observed that:

Small boats and yachts enter and leave without detection and/or inspection posing risks of illicit trade in narcotics and arms. With limited tracking capacity it is difficult to identify whether the many small boats and canoes plying along the coast are criminals or spies (KII, 23 May 2017, Mombasa

Yet another respondent said, *'Overall MDA is low, the absence of maritime security strategy lead to poor utilization of maritime resources.'* (KII, 25 May 2017, Mombasa). Another respondent amplifying the low MDA remarked, *'there is low appreciation of the value of marine resources among policy makers due to lack of awareness. There is no*

effective information sharing among actors. Community awareness is low due to lack of training and sensitization' (FGD, 24 May 2017). One respondent remarked thus, '*there is good awareness in the Kenya Navy and the maritime police whose activities revolve around maritime waters'* (FGD, 25 May 2017, Mombasa).

4.4.2 Effectiveness of Institutional Responses

Most of the respondents deplored the lack of equipment, funds and requisite personnel for effective maritime security. A respondent expressed his frustration by remarking:

KMA is not very effective due to low capacity; inadequate trained staff, lack of effective equipment and low budget allocation. There is poor enforcement of KMA regulations and it is not well empowered to make independent decisions. KMPU does not move beyond the port area (FGD, 24 May 2017, Mombasa)

To enhance safety at sea a respondent said, *'There is a 'Kenya Life Savers Federation' who provide volunteer life saver but they need incentives and support including from the county government for their vital voluntary services'* (FGD, 26 May 2017, Mombasa). Another respondent said, '*Kenya has no adequate maritime disaster preparedness capability'* (FGD, 24 May 2017, Mombasa).

Majority of the respondents were also of the view that Kenya has no adequate maritime disaster preparedness capability.

4.4.3 Effectiveness of Inter Agency Approach

While there is evidence of inter-agency approach in addressing maritime security, a respondent observed that:

Officers from various agencies tend to protect their turfs leading to unrealistic exclusion of good advice and ideas perceived to be from outside of their turf. There is apathy or simple indifference, and thinking that only these things happen to the other agency who should just handle their problems and issues without too much pestering (FGD, 24 May 2017, Mombasa)

Another respondent averred, '*there is no seamless coordination of immigration, customs, Kenya and Somalia border security agencies'* (FGD, 24 May 2017). A key informant underlined the serious handicap of inter-agency approach thus:

Maritime security organizations are at different level of development therefore there are coordination challenges. Current training institutions are at formative stage. Information sharing among partners is done but on ad hoc basis not through formalized institutional structures' approaches. No clear linkages between maritime actors during operations (*KII*, 23 May *2017)*

Some respondents averred that Poor community practices along the coastline negatively affect the sector. Overall, majority of the respondents were of the view that the effectiveness of inter-agency approach in tackling maritime security issues can be rated average due to the challenges explained earlier.

4.4.4 Effectiveness of Legal Enforcement

Majority of the respondents were of the opinion that the judiciary was still developing capacity in maritime security law administration. The respondents indicated that there are ongoing consultations between stakeholders and the judiciary. To underline the ongoing discussions between the judiciary and maritime stakeholders, a respondent observed: *'the judicial court in Lamu provided a test course for interagency maritime cooperation through the Friends of the Court Forum. During the discussions many challenges were observed due to the new frontier in legal jurisdiction'* (KII, 22 May 2017, Mombasa). The respondents observed that the judicial court in Lamu has pioneered participatory approach through cooperation with security agencies in order to find out the best approaches for law enforcement in the sector. Some respondents were however pessimistic on the ongoing consultations remarking that, '*Prosecution of IUU fishing suspects is done through the Fisheries Act but there are many challenges since the Judiciary does not understand clearly about the maritime domain' (*FGD, 25 May 2017, Mombasa).

Majority of the respondents averred that there was poor enforcement of maritime law. A respondent observed that, *'there are grey areas on which laws are applicable in sea crimes. Up to now no prosecution has been undertaken since MV Al Noor was destroyed in 2014, after being suspected of carrying drugs. It has been difficult to obtain successful prosecution and conviction of piracy cases. Sometimes the lawyers lack technical knowledge of the industry'* (KII, 25 May 2017). Some respondents attributed the poor enforcement of maritime law to the new constitutional dispensation where the devolved system has created conflicting jurisdiction of national and county governments in maritime issues. They also mentioned leniency in meting out penalties for maritime security offences. Some respondent averred they did not

know of any law governing how stowaways should be handled. A respondent remarked, '*the judicial requirements for shipping lines to meet the cost of repatriating Stowaways increased cost to shipping companies while at the same time has encouraged them to continue with the crime. Stowaways are jailed for two weeks or one month*' (KII, 25 May 2017).

4.4.5   Effectiveness of Policy Makers

Some of the respondents alluded to a draft bill on Coast Guard whose establishment might resolve coordination problems. Some respondents however observed that some policy makers were not conversant with maritime issues. To underline this assertion a respondent observed that, '*It is very expensive to maintain vessels and some senior officers may not understand maritime security technicalities are reluctant to provide adequate funding*' (KII, 29 May 2017, Lamu). Another respondent remarked, '*There is lack of interest and understanding among senior officers or decisive action on maritime crimes. This affects our morale*' (FGD, 24 May 2017).

4.5   Options for Effective Maritime Security Interventions

This study also aimed at capturing suggestions for effective maritime domain governance from the maritime stakeholders. This section provides analysis of various alternatives for effective maritime security interventions. Recommendations were solicited from respondents to improve; institutions within the maritime sector, legal standing and policy. The following were the options proffered.

4.5.1   Institutional Options

Majority of the respondents were of the view that the establishment of a Coast Guard will be a 'comprehensive solution' to disparate uncoordinated activities among actors in the maritime domain. A respondent observed that:

There is a draft bill on establishment of a coast guard. In the US it has civil, police and military components where it can issue licenses, control immigration, police the coastline and defend the coast against external aggression and it also controls common user facilities such as dockyards, This can provide a solution to our maritime security issues (KII, 25 May 2017, Mombasa)

Majority of the respondents suggested that the existing institutions be capacitated with training, equipment and personnel to increase their effectiveness in combating maritime insecurity. In support of this option, a respondent said, '*Investment in*

institutional structures and technology is required to boost capacity of maritime security actors. There is need to engage international technology consultants in order to comply effectively with ISPS Code standards. More and strong radars need to be installed' (*KII*, 25 May 2017). Another respondent suggested that, *'KMA requires more authority and autonomy to regulate the industry. KMA can tap knowledge of retired professionals with vast knowledge of maritime security issues such as Marine Master Mariners and Marine Engineers to improve performance of the industry'* (FGD, 24 May 2017, Mombasa).

Some respondents suggested that inter-ministerial and inter agency collaboration need to be established. The respondents suggested that ministries such as the Ministries of: Interior, Foreign Affairs, Fisheries, Wildlife, Transport, Defense, Labour, Energy and Immigration need to work together to improve the effectiveness of maritime security. The respondents averred that there was a widespread view that maritime sector can be well appreciated by actors from the strategic, operational and tactical level due to its potential contribution to the national economy if an inter-ministerial (whole of government) approach to MDA is adopted.

The respondents suggested that a more effective and efficient mechanism be adopted. They expressed the need to anchor the inter agency approach in law and at the same time develop Standard Operating Procedures (SOPs) for the interagency operations. To underscore the need for having an effective interagency mechanism, a respondent suggested that:

T*he National Security Advisory Council (NSAC) of the National Security Council (NSC) can provide policy guidelines on maritime security. Development of Kenya's maritime security strategy would provide better legal, policy and operational guidelines for the sector and more efficient coordination framework at the strategic level (*KII, 25 May 2017, Mombasa)

Most of the respondents also emphasized the need to settle the maritime boundary dispute issue between Kenya and Somali expeditiously.

Some respondents suggested the need for more collaboration between private and public sector actors in managing maritime security. A respondent proposed that:

Shipping as business concerns with interests in the security of the sector can contribute funds and equipment to support maritime security'. 'Media and communication strategy should be put in place to manage reporting of incidents in order to avoid exaggeration and out of context misperception (KII, 24 May 2017, Mombasa)

The respondents suggested that improved cooperation between shipping lines and security sector would maximize sustainable utilization of the maritime domain. Yet some other respondents suggested employment of locals as a solution to maritime security threat. To support this view, a respondent stated that:

The government should promote employment of Seafarers professionals from Kenya to maintain standards and to prevent employment of unqualified people who can pose security and operational problems. There is need to improve labour relations amongst stakeholders. All stakeholders should be involved in maritime security issues (FGD, 24 May 2017 Mombasa)

4.5.2 Legal Capacity Options

While appreciating that there might be a lacuna in law, some respondents suggested harmonization of laws especially on issues of jurisdiction. A respondent captured this need by opining:

The grey areas on KPA, KMA, Fisheries Department and County Government of Mombasa's jurisdiction especially on registration and licensing of small boats operating within the brown waters should be ironed out through clear interpretation of mandate, legal interpretation and implementation on the ground (KII, 22 May 2017, Mombasa)

Majority of the respondents were of the view that maritime crime is a relatively new area where legal precedent has not been set. They suggested that legislations and capacity of judges in the maritime sector need to be improved. They further proffered a suggestion that horizontal and vertical cooperation among actors guided by international conventions, regional and national laws and regulations can enhance effectiveness.

4.6 Discussion of Findings

Both literature and field research findings present areas of convergence and divergence. The nature of threats brought out is more or else the same given the enduring terrorists' threats and states fragility in Somalia. Field findings however bring out specific sources of vulnerability and institutional weaknesses and up to date picture of the current situation is provided revealing the nature of response strategies and potential for success.

Both findings highlight recurrent challenges such as dependency on foreign support, low capacity and lack of supporting policy frameworks. However, field findings indicate current legislative, policy and institutional reforms initiatives undertaken

by various actors to improve maritime security. Despite the setbacks the research reveals that there is a growing recognition among stakeholders about the potential of the sector and appropriate measures being put in place.

Both theories shed light on the sources of threats and institutional response challenges. The ungoverned spaces in the maritime domain provide incentives to terrorists/pirates, drug, small arms and human traffickers while lack of institutional response capacity hinder effectiveness. These findings reinforce valid conclusions of previous studies and offer new insights and proposed remedial measures. The findings support the hypothesis as the study has outlined maritime security threats and vulnerabilities and identified factors hindering effective management of the sector. The study operationalizes institutional and routine theory perspectives as both lenses have supported review of threats, institutional capacity, challenges and responses of the sector.

The study also points to a need for common conceptualization of what entails maritime security. The different perceptions of maritime threats as reported by respondents were based on a narrow lens of what is their core mandate. The study findings point to absence of a maritime security strategy. It denotes lack of clear direction on the long-term goals and a matrix of activities execution towards achieving the said vision.

The findings also point to little involvement of coastal communities in assuring maritime security and increased reliance of foreign navies to man the country's waters, which can be a source of insecurity (Woldeyes, 2015). Coastal communities need to be involved more in securing the maritime domain while at the same time be allocated a large chunk of revenues generated from the Indian Ocean to mitigate perceptions of marginalization. Rao (as cited in Woldeyes, 2015) advocates for the development of security communities that involve people living at the coast to assure stable and enduring maritime security.

4.7   Limitations of the Study

The findings of the study may have limitations on their applicability to maritime security challenges in Kenya's inland waters. The dynamics facing the lakes and rivers could be different from what the Indian Ocean contends with. The study was also cross sectional in nature. It thus captured data as it was at the time of conducting the study. A longitudinal study may thus bring out different findings from what is captured in this study.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings. It provides propositions on how the study findings may impact theory, policy and practice. It also points out areas for further research. The chapter also provides recommendations for consideration by stakeholders in the maritime sector.

5.2 Summary of the Findings

The aim of this study was to evaluate the nature of maritime insecurity in the Kenya maritime domain, the challenges and identify means of improving security in the sector. Several structural threats, geostrategic, global conflict dynamics were identified as contributing factors. A number of threats were identified such as terrorism, piracy, illegal immigrants, drug trafficking and arms trafficking.

The nature of challenges identified was institutional, legal and policy, low capacity inhibiting MDA and use of fragmented approach to maritime security enhancement. Interagency coordination lacked cohesive structure. Despite presence of legal regime, capacity and training of judiciary is low.

On institutional options, a proposal was made to establish and operationalize a coast guard as the ultimate solution for maritime security, arguing that coast guards are more suited to assuring maritime security than traditional navies given the unconventional nature of maritime security threats. Institutionalization of interagency approach and harmonization of current laws in addition to building capacity of maritime law amongst Kenya's Judiciary staff was recommended.

5.3 Conclusion

This study has provided response to all the three stated objectives. The various factors and dynamics of maritime security in the Kenya domain have been presented. The key threats identified and institutional challenges presented can inform legislative, policy and strategy review. The range of maritime security threats facing Kenya is varied and non-conventional in nature and thus may require innovative solutions.

The immense potential of the domain in providing resources to the country and creating employment are yet to be tapped sustainably. For this to be done in line

with the country's special focus on the blue economy, security of the domain is paramount. This points to a number of reforms in the sector with a view to improving institutional effectiveness and inter agency coordination.

Though some of the supporting legal and policy framework is in place, there are still opportunities for improvement to cover the gaps identified. The adoption of modern technology to enhance capacity for monitoring and surveillance and inter-agency approach including the inclusion of local communities will go a long way in creating good order in Kenya's coastal maritime domain.

5.4 Suggestion for Further Research

This exploratory study was meant to identify issues that are worth further investigation in future. The study recommends the following as areas for further research in maritime security:

- Maritime security strategy as a pillar of the blue economy and Vision 2030

- Legal, policy and institutional model for a Kenyan Coast Guard: A comparative study of Kenya and Seychelles

- Structural violence factors and maritime insecurity at the Kenyan Coast

5.5 Recommendations

From the findings and interpretation made of the data collected including from literature review, the study makes the following recommendations:

Table 1. Proposed Actions and Unit of Responsibility

NO.	Proposed Action	Responsible Agency
1)	Develop integrated maritime sector governance strategy with specific maritime security component	Ministry of Transport, Infrastructure, Housing & Urban Development
2)	Institutionalize and integrate maritime security and the blue economy through policy and implementation framework	Ministry of Transport Interagency Committee on Blue Economy
3)	Develop guiding framework for National and County governments, Civil Society Organizations (CSO), Community and Private sector participation and collaboration	Interagency Maritime Security Committee
4)	Adopt Community Security approach	Ministry of Transport
5)	Provide binding legal and policy basis for multi-agency operation to enhance coherence	Interagency Maritime Security Committee
6)	Raise capacity of Kenya Navy and Maritime Police to increase presence and reach of the security actors in the Indian Ocean	National Government
7)	Develop a multi-pronged integrated maritime security legislation, policy and strategy to establish and operationalize a Coast Guard	National government Parliament
8)	Include maritime security in the County Integrated Development Plans (CIDP) and County Action Plans for Countering Violent Extremism (CVE)	County governments National Counter Terrorism Center (NCTC)
9)	Consider acquiring a training ship for certification of maritime experts	KMA

REFERENCES

African Union, (2012). *2050* Africa's Integrated Maritime Strategy (2050 AIM Strategy), Addis Ababa

Barnett, R.M (2013). The Next Terrorist Attack: A Detailed Look at Al Qaeda's Maritime History and Ambitions, Consultancy Africa Intelligence

Bateman, S., & Bergin, A. (2011). New Challenges for Maritime Security in the Indian Ocean – An Australian Perspective. Journal of the Indian Ocean Region, 7(1), 207-227

Bellamy, C. (2012). Maritime Piracy: Return of the World's Second Biggest Problem, RUSI, 156 (6), pp.78-83

Bosire, J. (2009). Kenya to Acquire 150 Nautical Miles of Indian Ocean in new 'Scramble'. *The East African*, May, 11

Botha, A. (2014). Assessing the Vulnerability of Kenyan Youths to Radicalization and Extremism, Institute for Security Studies (ISS) Paper, No. 245

Braun, V. & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101

Bueger, C. (2013). Communities of Security Practice at Work? The Emerging African Maritime Security Regime. *African Security*, 6 (3-4), 297-316

Busiega, J. N. (2016). Harnessing Maritime Security and Resource Exploitation: Role of Maritime Diplomacy in Kenya. Unpublished MA Thesis, International Studies Research Project, University of Nairobi

Caron, D. (2011). Negotiating our Futures with Oceans. Retrieved from http://regardssurlaterre.com/en/negotiating-our-future-oceans

CGPCS (2014). Report of 18th Annual Conference and General Meeting of the IAP, Moscow, Russia

Cooper, D.R. & Schindler, P.S. (2014). Business Research Methods (12th ed.). New York: McGraw- Hill Irwin

Engel, U. (2014). The African Union, the African Peace and Security Architecture, and Maritime Security. African Security, 207-227

Eugene, M., & Lynn, C. E. (2017). Research Methods in Social Science. Retrieved from http://lynn-library.libguides.com/c.php?g=549455&p=3771805

Feldt, R., Peter, R. and Thiele, R.D. (2013). Maritime Security: Perspective for a Comprehensive Approach, ISPS Strategy Series, No. 222

Finch, J., & Mason, J. (1990). The strategy of Theoretical or Purposive Sampling. Retrieved from https://books.google.co.ke/books?

Fund for Peace (2017). Global Peace Index, 2017, Washington, D.C.

Fusch, P. I., & Ness, L. R. (2015). Are We There Yet? Data Saturation in Qualitative Research. The Qualitative Report 2015, 20 (9)

Gatara, T. M. (2010). Introduction to Research Methodology (1ˢᵗ ed.). The Olive Marketing and Publishing Company, Nairobi

Germond, B. (2014) The Geopolitical Dimension of Maritime Security, Department of Politics, Philosophy and Religion, LA1 5XE, UK

Gilpin, R. (2016). Examining Maritime Insecurity in Eastern Africa. Commonwealth of Australia: Sea Power Center

GK (2017). Defence White Paper 2017, Ministry of Defence, Nairobi

GK (2017). Kenya Gazette Supplement 55 (n.d.). Legal Notice 82; Proclamation of the President of the Republic of Kenya. Retrieved September 13, 2017, from http://www.icj-cij.org/files/case-related/161/19080.pdf

GK (2012). Kenya Maritime Authority Act, 2006, Chapter 370, Revised Edition, 2012

GK (2012). Kenya's Maritime Zones Act, 2012. Retrieved September 13, 2017, retrieved from http://www.icj-cij.org/files/case-related/161/19080.pdf

GK (2012). Merchant Shipping Act, 2009, Chapter, 389, Revised Edition, 2012

GK (2009). Republic of Kenya's Outer Limit of the Continental Shelf beyond 200m, Ministry of Defence, Nairobi

Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report,* 8(4), 597-607

Hansen, S.J. (2013). Al Shabaab in Somalia: The History and Ideology of a Militant Islamic Group, 2005-2012, C. Hurst & Company (Publishers) Ltd, London

Hamad, H. B. (2016). Maritime Terrorism: Why the East African Community is the next Potential Target. *ISSN*, 6(6)

Heiple, E. (2010). Routine Activities Theory. An Empirical Test in Rural Setting. Retrieved from http://opensiuc.lib.siu.edu/theses

Hoffman, B. (2006). Inside Terrorism, Columbia University Press, NY

ICC International Maritime Bureau (2017). Piracy and Armed Robbery against Ships; Report for the period 1 January – 31 December 2016. London, UK

IMO (2017). International Maritime Organization: Brief History, Amendments to the International Aeronautical & Maritime Search & Rescue (IAMSAR), Manual, www.imo.org

Jones, S. (2014). Maritime Piracy and the Cost of World Trade. *Competitive Review*, 24(3), 158-170

Jurist (2015). Kenyan High Court Declares Sections of Anti-Terrorism Law Unconstitutional, www.jurist.org

Kenya Law. (n.d.). Treaties. Retrieved from http://kenyalaw.org/treaties/treaties/types/Conventions/page/20

Kenya Maritime Authority (2016). *'Enhancement of the Maritime Sector's Contribution to the National Economy.'* February 13-19, *The East African,* p.10

Kenya National Bureau of Statistics (2017). *Economic Survey 2017*, KNBS, Nairobi

Kenya News Agency (2016). Maritime Industry Contributes Greatly to National Economy. Kenya News Agency, March, 3

Kenya Ports Authority (n.d.). Lamu Port Project. Author. Retrieved from https://www.kpa.co.ke/OurBusiness/pages/lamu.aspx

Keohane, R.O. (1989). International Institutions and State Power, Westview, Boulder, Colorado

Long'iro, M. J. (2014). Maritime Security in East Africa: The role of international and Regional instruments. Unpublished Diploma in International Studies Research Project, University of Nairobi

Macharia, J.W. (2016). '*We Aspire to Turn Kenya into a Rich Maritime Nation.' The Daily Nation*, July, 25, p. 24

Malaquias, A. (2017). Maritime Security in the Western Indian Ocean: A Discussion with Assis Malaquias. Africa Center for Strategic Studies

Marete, G. (2016). All Hands Must come on board to Develop Budding Maritime Sector. *The East African*, March, 5

Mason, M. (2010). Sample Size and Saturation in PhD Studies using Qualitative Interviews. *Forum: Qualitative Social Research,* 11(3)

Mukinda, F. & Opiyo, D. (2014). '*Kenya's Security Forces Caught Unawares as Australians seize Massive Drug Haul*,' The Daily Nation, April, 25

Mutoka, R. (2014). Assessing Current Trends & Efforts to Combat Piracy: A Case Study on Kenya. *Case Western Reserve Journal of International Law*, 46(1), 125 -142

Njenga, K., & Kabiru, J. (2009). *Research Techniques*. Nairobi: KIE

Noble, H. & Smith, J. (2017). Issues of Validity and Reliability in Qualitative Research. *Evidence Based Nursing.* Retrieved from http://ebn.bmj.com/content/18/2/34

Nyakera, W. I. (2016, July 25). Our Ocean Resources will Enable us Create more Jobs and Wealth. *The Daily Nation*, p. 24

Oceans beyond Piracy (OBP) (2017). The State of Maritime Piracy 2016: Assessing the Economic and Human Cost. Author. Retrieved from http://oceansbeyondpiracy.org/reports/sop/east-africa#humancostea

Otto, L. (2012). Kenya and the Pest of Piracy: A Prospective Partner for Peace, Situation Report, Institute for Security Studies, Pretoria, South Africa

Payne, G. & Payne, J. (2011). *Key Informants*. London: Sage Publication

Pesjova, E. (2016). Scrambling for the Indian Ocean. *European Union Institute for Security Studies*, 4, 1-4

Potgieter, T. (2008). The Maritime Security Quandary in the Horn of Africa Region: Causes, Consequences and Responses, Hans Seidel Foundation, Washington, D.C.

Rahman, C. (2009). Concepts of Maritime Security: A Strategic Perspective on Alternative Visions for Good order and Security at Sea, with Policy Implications for New Zealand, Victoria University

Rateng', J. (2008). The Status of Maritime Boundaries in Kenya. Unpublished BSc. Thesis, Geospatial Engineering Research Project, University of Nairobi

Rosenau, W. (2013). Piracy, Illegal Fishing and Maritime Insecurity in Somalia, Kenya and Tanzania, Center for Naval Analysis, Washington, D.C.

Schbley, G. & Rosenau, W. (2013). Piracy, Illegal Fishing and Maritime Insecurity in Somalia, Kenya, and Tanzania, CAN

Schofield, N. (2003). Maritime Zones and Jurisdiction. University of South Wales. Retrieved from http://www.iho.int/mtg_docs/com_wg/ABLOS/ABLOS_Conf3/SESSION3.PDF

Scott, W.R. (2004b). Institutional Theory, In Encyclopedia of Social Theory, Ritzer, G. (ed.), pp.408-14, Sage: Thousand Oaks, CA

Singh, B. (2014). Maritime Security Threats in the Indian Ocean: How Prepared is the Indian Navy? The IUP Journal of International Relations, VIII (3), 55-70

Thadeus, W. J. (2013). The Effects of Somali Piracy on Kenya's Maritime Sector. Unpublished M.A Thesis, International Studies Research Project, University of Nairobi

The Standard Media (2017). *Kenya Loses First Round in Battle with Somalia on Maritime Border,* Kamau Muthoni, February, 3rd, 2017

Ukeje, C. & Mvomo Ela, W. (2013). African Approaches to Maritime Security: The Gulf of Guinea, Friedrich Ebert Stiftung, Abuja, Nigeria

UNCTAD (2007). Maritime Security: ISPS Code Implementation, Cost & Related Financing, Geneva

UN (1982). The United Nations Convention on the Law of the Sea. Author. Retrieved from http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

UNODC (2017). Global Maritime Programme: Annual Report *2016*. Nairobi

UNODC (2013). Transnational Organized Crime in Eastern Africa: A Threat Assessment, Vienna, Austria

USAID (2010). Maritime Security Sector Reforms Guide, USAID, USDHS & USDS

Vrey, F. (2010). African Maritime Security: A Time for a Good Order at Sea. Australian Journal of Maritime & Ocean Affairs, 2(4), 121-132

Wambua, P. M. (2012). The Jurisdictional Challenges to the Prosecution of Piracy cases in Kenya: Mixed Fortunes for a Perfect in the Global War against Piracy. WMU J Maritime Affairs, 11, 95 – 113

Wilson, B. (2009). Naval Diplomacy and Maritime Security in the Western Indian Ocean. Strategic Analysis, 33(4), 488-497

Woldeyes, Y. G. (2015). An East African Perspective for Paradigm Shift on Maritime Security in the Indian Ocean Region. Journal of the Indian Ocean Region, 11 (1), 207-227

Worall, J. L. (2000). The Routine Activities of Maritime Piracy. Security Journal, 35-52

Van de Ven, A.H. (1993). The Institutional Theory of John R. Commons: A Review and Commentary, the Academy of Management Review, vol. 18, no. 1, 139-152

Appendix

Study Population

1. Beach Management Units
2. County Government of Kilifi
3. County Government of Lamu
4. County Government of Mombasa
5. International Maritime Organization (IMO)
6. Kenya Ferry Services
7. Kenya Fisheries Services
8. Kenya Forest Service (KFS)
9. Kenya Maritime Authority
10. Kenya Maritime Court at Shanzu
11. Kenya Marine and Fisheries Research Institute
12. Kenya Maritime Police Unit
13. Kenya Navy
14. Kenya Ports Authority
15. Kenya Revenue Authority
16. Kenya Ship Agents Association (KSAA)
17. Kenya Tourist Police
18. Kenya Wildlife Service
19. Local Fishermen
20. Ministry of Interior – Department of Immigration
21. National Intelligence Service
22. National Environmental Management Authority (NEMA)
23. Port Management Association of Eastern and Southern Africa (PMAESA)
24. Sea Farers Union of Kenya
25. Shippers Association of Kenya
26. State Department for Shipping and Maritime Affairs
27. United Nations Office on Drugs and Crime (UNODC)
28. Women in the Maritime Sector in Eastern and Southern Africa (WOMESA)

About the Authors

Mr Joseph Kioi Mbugua is a researcher at IPSTC. He has published a number of articles in the IPSTC occasional papers and issue briefs. Mr. Mbugua has over twenty years' experience in peace and security research, training and facilitation in peace building and as a writer and editor in media and publishing industry. Mr. Mbugua has done consultancy work for a number of organizations including UNDP, UN Women, National Council for Gender and Development (NCGD), Security Research and Information Centre (SRIC), Ministry of Youth Affairs and Sports, National Steering Committee on Peace building and Conflict Management, GIZ, PACT-Kenya, COPA, Kenya Institute of Governance (KIG), NPI-Africa, and Practical Action, among others. He has facilitated peacebuilding training for District Peace Committees (now County Peace Committees) in Moyale, Marsabit, Isiolo, Samburu, Meru North, Trans Nzoia, Kajiado, Nairobi, Bungoma, Uasin Ngishu and Turkana. Mr. Mbugua is a graduate of the University of Nairobi and holds an M.A degree in peace and justice from the University of San Diego in California, and is also a recipient of the prestigious Fulbright and Rotary Ambassadorial Scholarships from the United States. Mr. Mbugua is currently a PhD Candidate at the School of Security, Diplomacy and Peace Studies, at Kenyatta University.

Maj Mwachinalo Saidi is currently an Applied Researcher at IPSTC. He holds a Master's Degree in Strategic Management and a Bachelor's Degree in Education from the University of Nairobi. He previously worked at Kenya Military Academy and 77 Artillery Battalion as an Assistant Lecturer and Education Officer respectively. He served in United Nations' Mission in South Sudan (UNMISS) between the years 2011 and 2012.

Publication: Maalu, J., & Mwachinalo, S. D. (2016). Knowledge Management Strategy and Organizational Change in Commercial Banks in Kenya. Review of Social Sciences, 1(7), 32 – 43. DOI: http://dx.doi.org/10.18533/rss.v1i7.44

Conference Paper: Maalu, J., & Mwachinalo, S. D. (2016). Knowledge Management Strategy and Organizational Change in Commercial Banks in Kenya. Paper presented at the 7th Africa International Business Management (AIBUMA) Conference on 28 July 2016 held at the University of Nairobi.