

**CONTRIBUTIONS BY MOMBASA PORT TO THE IMPROVEMENT OF  
INTERNATIONAL MARITIME TRADE**

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## DECLARATION

This research project is my original work and has not been presented for the award of degree in any other university or institution for any other purpose.

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This research project has been submitted for examination with my approval as University supervisor.

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## **DEDICATION**

To my parents Mr. Khayumbi and Mrs. Martha Khayumbi for being there for me with their tremendous support through prayer and belief in me even during this period, my loving husband for stepping into my motherly responsibilities each evening I came home late.

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## **ABSTRACT**

In today's era of globalization, international trade has evolved to the level where almost no nation can be self-sufficient and global trade has fostered an interdependency and inter-connectivity between countries. Shipping has always provided the most cost-effective means of transportation over long distances and containerization has played a crucial role in world maritime transport. International trade is increasing significantly with the expanding global economic integration. The development of the port sector is important to development of maritime trade is an axiom that no nation can afford to ignore in today's globalized world. This was equally true in the distant past, when maritime nations undertook extensive overseas maritime explorations and trade to set their mark on global economic history. The objective of the study was to determine the contributions of Mombasa port to the improvement of international maritime trade. The research design adopted was a case study. The study used primary data which was collected using an interview guide. Content analysis was used to analyze the collected data. The findings of the study was that infrastructure development had increased importation and exports, increased availability of goods and increased choice of consumers. The usage of KWATOS system, Simba system and the Kenya National Electronic Single Window System usage in the port has resulted in increased efficiencies and effectiveness in operations and also enable organizations to deliver flexible services in step with constantly changing customer demands. The study also found out that effective and motivated port management reduces traffic, congestion, promotes international relationships and facilitates international trade by providing conducive and efficient port and port services. The challenges encountered in maritime trade emanates from inefficiency, cumbersome documentation requirements, corruption and political interference. This was found to have resulted in congestions, slows off take of cargo, increased storage cost, loss of revenue by the government through nonpayment of taxes, increased costs due to bribery and increased taxes and excise.

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**LIST OF ABBREVIATIONS**

<b>KPA</b>	-----	Kenya Ports Authority
<b>ICD</b>	-----	Inland Container Depots
<b>CSC</b>	-----	Customer Service Charter
<b>ICT</b>	-----	Information communication and Technology
<b>I-R</b>	-----	Internationalization Theory
<b>KWATOS</b>	-----	Kilindini waterfront Terminal Operating System
<b>ERP</b>	-----	Enterprise Resource Planning

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

The globalization of world economy has brought about tremendous increase in exchanges of goods across the world. The world trade also accelerated as cost of shipping has increased due to the introduction of economy of scale and the development of technology in shipping (Biggam 2008). To cope with the ever growing world trade, ports of every country will no doubt continue to play a critical and important role in providing the cheapest mode of transportation. For consumers, international business brings increased varieties of goods and services into the world marketplace and enhances living standards. Just as important, open borders means increased exposure to new ideas, technologies, and ways of doing things (Devinney, 2010). Marine international trade is vital to the nation's economy and security. The waterborne movement of cargo and passengers requires an efficient port that is smoothly connected to the nation's inland highway and rail infrastructure to meet current and future demands. In addition, improving the nation's marine trade depends on improved interagency coordination, including between marine transportation and other important ocean and coastal activities, enhanced emergency preparedness and security at the nation's ports, and improved strategic planning to ensure that increased levels of marine commerce are managed in the most effective, safe, secure, and environmentally responsible manner possible

The traditional trade theory anchors the study as it emphasizes the gains from specialization made possible by differences among countries (Marshall *et al.*, 2011). The main contribution of this strand of thought is that opportunities for mutually beneficial trade exist by virtue of specialization on the basis of relative efficiency –a country does not have to be better at producing something than its trading partners to benefit from trade (absolute advantage). It is sufficient that it is relatively more efficient than its trading partners (comparative advantage). This insight explains why so many more opportunities to gain from trade exist than would be the case if only absolute advantage counted.

The port of Mombasa is the largest in East Africa and a vital gateway for imports to Kenya and its neighboring countries. The imports that pass through the port of Mombasa are critical to Kenya's economic growth, and to the economic well-being of its neighbors. Over the last few years, there has been a significant spurt in handling of value-added goods mainly in form of containerized cargo movement which in the last year handled one million containers. This has given rise to many new dimensions in the development of the port in the country. Containerization of cargo has brought about a significant redefinition of port services and demands for highly sophisticated handling equipment and logistics service efficiencies. Consequently, the port is going with considerable business optimism with respect to generation of increasing cargo traffic volumes and of trade in general in the coming years. Considerable future business potential is also seen with respect to generating enhanced earnings from port operations through improving efficiencies and other value-added activities contributing also thereby to making country's external trade competitive in the global market.

### **1.1.1 Concept of International Business**

International business consists of any commercial transaction that crosses the borders of any two nations and comprises a large and growing portion of world's total business (Bennett, 2009). It is an extension of domestic business, which includes the transactions of economic resources such as goods, capital and services comprising of technology, skilled labor, transportation among others (Buckley, 2005). It includes not only international trade of goods and services, but also foreign investment. International business has gained wide popularity, because of the growing rate of multinational enterprises. The flows of goods, services, technologies, resources, people, and ideas among markets have major effects on countries and their governments, companies, and individuals (McDonald *et al.*, 2002). At the nation-state level, participation in international business activities helps countries take advantage of national expertise in commerce to deliver goods and services into the international marketplace. It also increases the varieties of goods and services available in national markets and exposes consumers to new lifestyles and ideas.

Global competition forces firms to be more innovative and efficient in their use of resources. For consumers, international business brings increased varieties of goods and services into the world marketplace and enhances living standards. Just as important, open borders means increased exposure to new ideas, technologies, and ways of doing things (Devinney, 2010). International trade policy consists of bilateral and multilateral arrangements between countries and dictates the terms of commerce between them. These trade policies and relations vary in scope and content but generally depend on the structure of the economy of a particular country (Hill, 2005). At the international level, the process of globalization plays a major role in influencing and shaping subsequent trade policies. At the domestic level, policy making is intimately linked with the nature of the public-private relationship as well as the autonomy of state agencies and their

institutional strength and capacity. Since no nation can produce all it needs by itself alone, international trade has become not only a means by which nations source those goods and services they lack or do not have in sufficient quantities but also a subject of international politics either for achieving, promoting or maintaining peace between international trading partners or countries and a source of national insecurity as a result of external developments in countries with which it inter-dependes or depends on for essential products and sometimes wars are fought to preserve that national security (Torre, 2008).

### **1.1.2 Maritime Trade**

Maritime trade comprises of export-import trade in various bulk commodities like crude oil and other petroleum products, iron ore and coal, besides general purpose cargo (Redding and Venables, 2011). Maritime transport is a catalyst of world trade, and it has been so for thousands of years. This is why it is important for States to maintain a conducive maritime trade environment. Song and Yeo (2014) state that maintenance of a 'stable' market is viewed as of prime importance in a number of countries and that regulator's should ensure that markets develop towards optimal effectiveness and efficiency.

The seaports play a historical role in the development of maritime trade and economy. Biggam (2008) noted that maritime trade has been and continues to be almost synonymous with overseas trade, accounting for over 95 per cent of world's total cargo volumes. The structure, composition and direction of overseas trade has however, been undergoing important changes over the last five decades, in line with the broader macro-level changes in the economy. The last few years of economic reforms and globalization, in particular, have accelerated the process of change towards a more diversified commodity composition of trade. Stair and Reynolds (2009) noted

that ports all over the world, especially container cargo ports have also begun to witness fierce competition for cargo, with each port trying to gain a competitive advantage over the other. While the degree of competition still varies among different ports, there are few ports today that can ignore competition from other international ports or from ports in their immediate neighborhood.

### **1.1.3 Contributions to Maritime Trade by International Ports**

Ports as one of the important maritime institutions have continued to evolve with the changing demands of the global shipping trade and are more than just stop-over points for ships to load and unload cargo. They have indeed, emerged to be highly sophisticated and integrated systems, which provide full range of services for the shipping industry and are increasingly getting integrated into logistics value chain, which extends from origin of cargo to its final destination (Limao and Venables, 2011). Song and Yeo, (2014) noted that port development has positive employment and revenue effects. The positive balance of trade and balance of payments effects of good ports and harbors cannot be denied. The beehive of activities in seaports all over the world clearly shows that ports have significant economic impact both locally, regionally and nationally. Ports are highly significant in facilitating international trade. They play critical roles or interface between marine and land or air and land-based transportation. They are part of the international supply chain network (Pomeroy, 2004). Effective ports management is crucial in successful international trade practice. This is because it ensures clean, safe and secure ports operations and provides effective and efficient ports services and reception facilities. Malchow and Kanifani (2011) notes that effective ports facilitates international trade because it reduces

some of the traffic bottle-necks and huddles that usually cause delays and discourage international traders from venturing into foreign markets.

Devinney (2010) noted that ports have various unique characteristics that make them important. Ports are significant as they link any country's hinterlands with overseas points. Ports that cannot perform that function are insignificant to the country. On the other hand, the country's inner linkages such as links to other ports, airport and railway connections are also vital elements to the efficient working of the port. The port should improve all the relevant things to adjust itself to fulfill the increasing amount of requirements by the customers and to attract more cargo to get the further development. The competition between different ports is getting fiercer than before, to survive in the market, what factors can influence the choice of ports by the customer should be realized (Malchow and Kanafani, 2011). Adequate infrastructures mean the proper operation facilities and equipment like high quality and big quantity of berths, cranes and tugs, the size of terminal area and container yard can guarantee the capacity of the port (Zhang, Xi and Zhang, 2011). The information system becomes more and more important in every industry contemporarily. For port management, the high effective information system with reliable security can make the production for the container easier with smooth cooperation. The information systems can allow the shipping to function efficiently and effectively (Stair and Reynolds 2009).

#### **1.1.4 Kenya Ports Authority**

Kenya Ports Authority (KPA) is a statutory body under the Ministry of Transport. It was established by an Act of parliament on 20<sup>th</sup> January 1978. It's responsible for the operation and management of the port of Mombasa and other seaports along the Kenyan coastline. It operates

in Mombasa, Inland Container Depots (ICD) in Nairobi and Kisumu, and runs a liaison office in Kampala and recently opened another office in Kigali, Rwanda. KPA's mandate is to operate, improve and regulate all the scheduled seaports along the Kenyan coastline. KPA's vision is to be a world class sea-port of choice by facilitating and promoting global maritime trade through provision of competitive port services. To be a world class seaport of choice KPA have put in place strategies and ways of managing its knowledge base to enable them discharge their duties and provide world class services which are accepted globally.

Today's ports are no longer viewed as stand-alone entities or even start/end points in the transport chain. Ports nowadays play a pivotal role in the overall supply chain of global distribution networks and are thus viewed as crucial nodes along the logistics chain. Ports worldwide are also coming under intense pressure to deliver and are increasingly facing both intra and inter port/terminal competition. To survive in this cut-throat business and meet customer demands and expectations and be effective, ports have had to realign their business processes, enhance and properly manage their knowledge base. KPA in keeping pace with the current global trend has been enhancing its organizational effectiveness through various ways.

As stated above, organizational effectiveness which is seen as the extent to which a firm can accurately perceive the external environment, acquire resources from it and understand and respond to any feedback from the external environment is very much a part of KPA. KPA not only operates in the narrow transport sector/environment but is in the much bigger supply chain environment and this perception is what has made the Authority come up with its Customer Service Charter (CSC) which not only point out the environment but also outlines how it views its customers and the way it intends respond to them.

## **1.2 Research Problem**

In today's era of globalization, international trade has evolved to the level where almost no nation can be self-sufficient and global trade has fostered an interdependency and inter-connectivity between countries. Shipping has always provided the most cost-effective means of transportation over long distances and containerization has played a crucial role in world maritime transport. Nowadays countries all over the world rely more heavily on trade and trade linkages increasingly foster global interdependence. International trade is increasing significantly with the expanding global economic integration. And the developing countries that have rapidest growth in the international trade are more dependent than developed countries. International trade is increasing significantly with the expanding global economic integration (Lun, Lai and Cheng, 2010). The development of the port sector is important to development of maritime trade is an axiom that no nation can afford to ignore in today's globalized world. This was equally true in the distant past, when maritime nations undertook extensive overseas maritime explorations and trade to set their mark on global economic history. Needless to say, some of the world's most developed nations have also been among the most important maritime nations of the world, actively involved in global maritime trade (Song and Yeo, 2014).

The competition facing Kenya Ports Authority and the reforms initiated by the government in the recent past has changed the landscape of the authority. The cargo being handled by the port has increased rapidly in the recent past owing to increased import and export of goods by several countries, however clearing of cargo has been at a slow pace and this has resulted in other countries using other ports as an alternative thus affecting the country's' maritime international trade. The relevance of international maritime trade in social economic development and growth of a nation is paramount. The bulk of maritime international trade is carried out by sea, thereby

bringing to focus the significance of Mombasa port in maritime international trade. Without an effectively managed port, the success of maritime international trade is low. This is because international vessels cannot access the ports to offload or load cargo nor be secured if the ports are not functional or the berths and anchorages are not in good condition, ultimately, hindering the benefits of maritime international trade.

Studies that have been undertaken on maritime trade include Milner, Morrissey and Zgou (2009) study on the role of effective ports management in facilitating international trade in India. The findings of the study was that there is a direct relationship between adequate port reception facilities, ports decongestion, less traffic, secure and safe ports (which form the nucleus of good management) and successful international trade. The study therefore, agrees that effective and efficient ports management in India is a strong panacea in oiling the wheel of international trade. Malchow and Kanafani (2011) undertook a study on improving port efficiency and custom operations in Asia and established the scope and extent of the usage of the automation system in ports and customs operations and other institutions, efforts in managing and improving the system in ports and customs operations, the positive effects of the automated system on promoting international trade and making the countries the trade hub of the sub-region.

Studies that have been undertaken on maritime international trade include Mwashigadi (2014) study on the factors influencing effectiveness in the execution of mandate of state regulatory and enforcement agencies within maritime trade in Kenya. The study found out that lack of proper ICT infrastructure, bureaucracy and political interference and poor integration of a harmonized regulatory framework among the state agencies were noted to be a significant hindrance in trade facilitation. Nguku (2013) undertook a study on external environmental factors influencing

China-Kenya trade and established that external environmental factors like; political environment, legal environment, economic factors, social cultural factors and technological environment influenced the growth of Sino-Kenya trade. Nyagaka (2014) researched on the role of international trade in achieving food security in sub Saharan Africa. He found out that the capacity to import food has plummeted, occasioning the country into more food insecure issues. The balance of trade between Kenya and the rest of the world has deteriorated against Kenya. From the studies that have been undertaken, there is no known study that has been done on the contributions of Mombasa port to the improvement of international maritime trade. This study therefore seeks to answer the question; what are the contributions of Mombasa port to the improvement of international maritime trade?

### **1.3 Research Objectives**

The research objective of the study was to determine the contributions of Mombasa port to the improvement of international maritime trade.

### **1.4 Value of the Study**

The study findings will benefit management and staff of Kenya Ports Authority who will gain an insight on the importance of maritime in promoting international trade and therefore ensure that the port put in place measures that ensure that the port compete international with other ports. The findings of this research will sensitize ports management and other stakeholders on the usefulness of the port in international trade thus fast tracking changes that are aimed at improving efficiency and competitiveness of the port.

The understanding of the role ports in fostering international trade in a country will help policy makers – governments and other stakeholders – to design targeted policies and programs that

will actively stimulate the growth and sustainability of such businesses due to the role they play, as well as helping those policy makers to support, encourage, and promote the establishment of appropriate policies to guide the firms. Considering that Kenyan port projects is now increasingly becoming key destinations for strategic business investments and is increasingly becoming key links in the rapidly expanding global trade, understanding of the working of the port sector becomes an urgent and critical task both from the public policy angle and strategic business decisions. This study will also create a monograph which could be replicated in other sectors of the economy. Most importantly, this research will contribute to the literature on the international trade in firms especially in developing countries like Kenya. It is hoped that the findings will be valuable to the academicians, who may find useful research gaps that may stimulate interest in further research in future. Recommendations will be made on possible areas of future studies.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The present chapter examines the extant literature review, coalescing relevant information regarding theoretical foundation, contributions of port to international trade and the challenges encountered in international trade.

#### **2.2 Theoretical Foundation**

For any business to succeed, theories are very important as they provide guideline and answers of significant questions like why to trade, which kind of goods and services can be traded and how it can be beneficial for each participant. There are several theories of international trade that analyses different issues on trade by providing critical issues on trade liberalization. Internationalization theories focus more on dynamic changes in internationalization over time (Laantiet *al.*, 2009). This study is founded on two theories which are the absolute advantage theory and the innovation-related internationalization theory.

##### **2.2.1 Absolute Advantage Theory**

The theory was advanced by Smith (1776) who argues that nations should specialize in the production of the goods for which they have absolute advantage in and trade in those goods with which they have no absolute advantage with other countries (Hill and Jain, 2005). The theory promotes specialization and trade among nations and therefore promoting international trade and exporting. The theory was a direct reaction to the theory of mercantilism which smith and other critics described as a zero-sum game. In this regard, smith argues that the theory of absolute advantage is a positive sum game in which there are gains for all the involved. Although the

theory provides adequate bases to explain export business, its weakness lies in the fact that it assumes that the participants of international business and hence exporting are countries not firms. This simplifies the concept of international competition which is firm based and more complex due to the large number of participants.

The theory argues that potential world production is greater with unrestricted free trade than with restricted trade. The theory argues that trade is a positive sum game in which all countries that participate realize economic gains (Hill and Jain, 2005). The theory argues that absolute advantage arises from differences in productivity especially in labor productivity. The theory encourages free trade and therefore a major contribution to the growth of exporting and international trade in general. The theory therefore has contributed to the development of international trade and export marketing.

### **2.2.2 Internationalization Theory**

The Innovation-Related (I-R) Model considers internationalization as an innovative process because it requires a pro-active approach which implies a favorable attitude toward international expansion. This model analyses the development of export activities as an export development learning curve (Shirani, 2009). The models focus on the learning sequence in connection with adopting an innovation. The various Innovation-Related models can be viewed as the incentives to start exporting. Andersen (2009) noted that the firm is not interested in exporting at Stage 1 and is willing to fill unsolicited orders or is partially interested at Stage 2. This implies an external change agent or “Push” mechanism to initiate the export decision. The latter models describe the firm as a more interested party and active in the first two stages. An internal change agent is probably a more relevant reason as to why a firm would move to the next stage of internationalization.

Based on internationalization process theories, organizations generally internationalize incrementally in regard to their operation strategies (Laantiet *al.*, 2009). This means that they first start with export modes then gradually enter more committed modes like foreign – country based subsidiaries. The Uppsala model suggests that internationalization can be viewed as a dynamic cycle. In this case, the change in the state of internationalization depends on the state of internationalization. The distinction therefore between state and change aspects of internationalization is emphasized. In contrast, the Innovation-Related models view internationalization as an innovation for the firm. Both of these models view internationalization as a sequential incremental process with a varying number of stages (Wickramasekera & Oczkowski, (2006).

There has been much debate over the practicability of the stage models of internationalization especially with the International New Ventures research which focuses on small firms in the high technology fields.

### **2.3 Contributions of port to International Trade**

Port efficiency, proper customs environment, regulations that are prominently published after consultation with parties concerned and consolidated costs that are commensurate with services rendered by government agencies form the basic frame work of trade facilitation that result in immense benefits as reiterated by Hertel, Wansley and Itaura, (2011). The economists allude to the fact that measures to address trade facilitation for each country will enhance trade for these countries even with their unique trade facilitation measures and patters of trade. The review has shown that using augmented gravity model resulted in confirming that trade facilitation enhances trade. Ports are vital in the facilitation of efficient and cost effective movement of freight in modern global logistics systems. As essential links within global supply chains they are subject

to increasing pressures from shippers, who are in turn driven by the ever-increasing expectations of their own customers (Djankov, Freund, & Pham, 2010). The benefits that accrue to shippers due to efficiency in ports operations and clearance procedures cannot be over-emphasized and this has led to many shipper demands on ports and the authority's that operate them. Some of these demands include better on-time performance, improved document accuracy, greater in-transit visibility and enhanced information flows.

Morrissey (2008) notes that efficient trade contribution can help lower trade transaction costs hence reduce the margin between domestic and international prices to benefit consumers and producers. In some case increasing efficiency of border procedures may require simple re-organization of tasks and procedures, whilst in others it might require investment in infrastructure and human resources. The cost of implementing improvements (reform and modernization) in customs procedures varies according to the size of the customs service, existing customs infrastructure and human resources. The general economic environment also plays an important role – for example, the availability of functioning basic infrastructure such as communication facilities and stable energy supply.

The introduction of very large container vessels has contributed to a widening gap between few large efficient ports, which benefit from the economies of scale of these vessels, and most ports in developing countries, which will increasingly have to rely on feeder services (Harding et al, 2007). Ports with sufficient capacity, efficient facilities with high technology, and good management contribute to lower transportation and trade costs. In addition to the explicit costs from tariffs and loading/unloading charges, the time costs from congestion and inefficient

facilities/management contribute to transportation costs. These costs are reflected in freight charges by shipping companies, storage costs, and brokerage fees by port broker incurred by traders. More frequently, these costs are charged to traders in payments to forwarders (Heaver, 2011).

Clark *et al* (2004) estimate a maritime transport function that includes determinants for distance, product specific requirements (including value), directional imbalance, total trade volume on a route (to represent increasing returns to scale), technological innovation, anti-competitive practices, and the quality of port and cargo handling infrastructure. They find that seaport efficiency is an important determinant for transport costs. From their analysis, they also conclude that transport costs are potentially a barrier to trade, and need to be considered by policy makers. Arviset *al* (2013) also analyze trade costs, which they derive as an implication of the pattern of bilateral international trade. Trading globally gives consumers and countries the opportunity to be exposed to goods and services not available in their own countries. Trading globally gives consumers and countries the opportunity to be exposed to goods and services not available in their own countries. Imports and exports are accounted for in a country's current account in the balance of payments. Global trade allows wealthy countries to use their resources -whether labor, technology or capital -more efficiently. Because countries are endowed with different assets and natural resources (land, labor, capital and technology), some countries may produce the same good more efficiently and therefore sell it more cheaply than other countries (Krugman, 2012).

## **2.4 Challenges Encountered in International Trade**

Several barriers impairing the promotion of international trade and commerce have been identified and once these hurdles are dismantled, one can expect more investment in the maritime sector to boost capacity and productivity and facilitate greater volume in trade.

Poor trade contribution can be described as a cluster of actions that are either deliberately or otherwise perpetuated by relevant trade authorities which eventually leads to non-realization of objectives instituted under trade facilitation initiatives. Among the objectives is the need to reduce trade transaction costs, increase government revenue, and achieve efficiency at customs points including ports (Notteboom, 2010). Economies and other stakeholders of trade have to bear the brunt that poor trade facilitation has to offer. Indeed, as a result of poor trade facilitation and inefficiency, direct charges, such as public port charges and shipping costs, are astronomically high. In addition to these direct costs, shippers are compelled to also bear indirect logistics costs related to excessive inventory costs and dwell time; and such may constitute an even greater cost. Limao and Venables (2011) noted that cumbersome documentation requirements within the trade chain have very often led to excessive delays at ports. Time in port is a major criterion to choose to call at a port. Poor port efficiency is usually embedded in higher ship turnaround time. When facing this constraint, shipping lines inevitably increase shipping costs charged to the shipper.

Djankov, Freund and Pham (2010) noted that slow adaptation to modern technology has made improvement in ports operations difficult especially in the areas of port technology, port management, and Portlabor and custom practices at the ports. This difficulty has hindered changes in the flexibility and diversity in port management, investment, ports designs and even

in the use of ports resources. As the size of container vessels has increased, many ports have seen their competitive ambitions run aground. The probability of increase in maritime trade is very high based on existing forecasts for world economic growth and trade statistics. It is certainly necessary that constraints on port expansion should be a motivating factor for increase in port efficiency (productivity).The space for port expansion is usually scarce because port location is traditionally near the commercial center of a city.

Many ports have suffered from this problem when they try to establish an ambitious port development project (Notteboom, 2004).The world populations higher (two thirds) around coastal areas where ports are located and this has placed additional pressure on lands in these areas as portions earmarked for port expansion projects is being competed for by other land users.

Subramanian and Arnold (2001) that poor trade facilitation is caused only in part by poor quality of physical infrastructure. Instead, inadequacies in trade facilitation often are triggered by institutional constraints such as: complexity in customs clearance procedures, opaqueness of trade rules and regulations, port and border delays, high level of corruption among trade officials, unnecessary restrictive controls on cargo movement (so called protocols), high percentage of cargo inspections, institutional issues such as customs inspection and clearance, technical clearance, and document processing are among the most important factors in the cost and time of shipments, more important even than the physical condition of roads or rail (Subramanian 2011). Grainger (2009) noted that lack of adequate facilities and infrastructure at the ports have militated against ports operations with regard to inter-feeder transfer of cargo and services, cargo storage, cargo consolidation and cargo manipulation as well as cargo packaging

and processing. Congestion at container terminals, vessels traffic and delays in cargo flow are borne by this challenge in the operations of the ports.

Lengthy time delays for ocean shipping can be experienced due to port congestion and/or inefficient port infrastructure for loading and unloading cargo (Fink, Matoo, and Neagu, 2012). Time delays at the border due to inefficient and lengthy administrative procedures related to importing and exporting can also have a detrimental effect on trade volumes. In addition, time delays may affect firms that rely on just-in-time deliveries of critical components to their manufacturing processes as well as firms who require short lead times between placing an order and getting it to market. Institutions like customs and excise form the bedrock of implementation with regards to trade facilitation initiatives. The success of implementation will be influenced by the degree of transparency and corruption existing in the environment that these institutions operate in. Weak institutions act as significant barriers to international trade (Anderson and Marcouiller, 2012).

Lee and Back (2009) indicates that international market development is an incremental process characterized by the firm's acquisition, integration and use of knowledge about foreign markets and operation and by a successively increasing commitment to foreign markets. Organizations that are resource-constrained lessen their ability to engage in international trade. These organizations are more likely to face scarcities of financial and human resources that limit their ability to act on opportunities abroad (Okpara, 2010). This can be justified by the fact that the perception of non-exporters about financial incentives for international trade activities are not adequately attractive, they may have little or no interest in international trade, or may lack the time and expertise to apply for government funds.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter describes the proposed research design, the target population, data collection instruments and the techniques for data analysis.

#### **3.2 Research Design**

The research design was a case study. A case study is an in-depth investigation of an individual, institution or phenomenon. Case studies allow a researcher to collect in-depth information, more depth than in cross-sectional studies with the intention of understanding situations or phenomenon. It also helps to reveal the multiplicity of factors, which have interacted to produce the unique character of the entity that is subject of study. The reason for this choice was based on the knowledge that case studies are the most appropriate for examining the processes by which events unfold, as well as exploring causal relationships and also they provide a holistic understanding of the phenomena.

#### **3.3 Data Collection**

The study used primary data which was collected using an interview guide. An interview guide is a set of questions that the interviewer asks when interviewing. The respondents interviewed were key informants, comprising managers in charge of planning, administration, human resource management and development. These were considered to be key informants for this research.

The choice of the managers in this study was very important, as they were the head of the organization and the ones who can foster organizational objectives. Furthermore, they provided

access to more significant and useful secondary data as documents, and other valuable information. The order of the questions varied depending on the flow of the conversation.

### **3.4 Data Analysis**

The data obtained from the interview guide was analyzed using content analysis. Content analysis is the systematic qualitative description of the composition of the objects or materials of the study (Hsieh and Shannon, 2005). It involves observation and detailed description of objects, items or things that comprise the object of study. Content analysis, as a class of methods at the intersection of the qualitative and quantitative traditions, is used for rigorous exploration of many important but difficult-to-study issues of interest to management researchers. This approach was more appropriate for the study because it allowed for deep, sense, detailed accounts in changing conditions. This was relevant because organizational objectives usually occur in myriad of circumstances.

## **CHAPTER FOUR**

### **FINDINGS AND DISCUSSIONS**

#### **4.1 Introduction**

The research objective was to establish contributions by Mombasa port to the improvement of international maritime trade. This chapter presents the analysis and findings with regard to the objective and discussion of the same.

#### **4.2 Interviewees Profile**

The interviewees comprised the middle and top management of Kenya Ports Authority (KPA). In total, the researcher interviewed five interviewees out of the six that had been intended to be interviewed. One of the interviewees was not available during the interview. The duration that the interviewees have been holding the current position varied although majority has held their respective positions for more than five years. Majority of the interviewees held managerial position in the institution and therefore considered to be more versed with the subject matter of the study.

The duration in which the interviewees have worked in KPA varied from fifteen to thirty five years. Three of the interviewees have worked with KPA for more than twenty years while the other two had worked for more than fifteen years. This indicates that all the interviewees have worked in KPA for a longer duration of time and therefore understand the contributions of Mombasa port to the improvement of international maritime trade. On the level of education, two of the interviewees indicated that they were post graduate holders, one interviewee had attained undergraduate level, another one indicated that diploma level was his highest level of education while another interviewee said that A-level was the highest level attained. With their solid academic and work

life background in the affairs of the organization, the respondents were found to be knowledgeable on the subject matter of the research and thus capable to help in the realization of the research objective.

#### **4.3 Contributions of Mombasa Port to International Maritime Trade**

The cargo being handled by the port has increased rapidly in the recent past owing to increased import and export of goods by several countries in the region, thus the need to establish the containerization is the fastest growing sector in the shipping. Growing sizes of vessels and the accompanying demands for higher and better performing equipment together with timely supply of cargo and ship services has put pressure on both terminal operators and Port authorities. Hence, more, vast, infrastructural bigger and deeper-watered ports will be required to serve ships and trade.

The critical role that container infrastructure plays in favoring the economic development of a country or region is well established. Mombasa port infrastructure is the necessary condition for efficient cargo handling operations and adequate infrastructure is needed to avoid congestion, foster trade development as well as securing deep-sea container connectivity for economies heavily dependent on international trade. Thus in order to meet the demand for port usage, Kenya as a country has responded with a multi-million dollar investment programme to transform cargo handling capacity. These activities include; dredging of the water channel programme to allow modern post panama vessels to berth, construction of an additional berth, and construction of a second container terminal, expansion and upgrading of the information and communication systems, investment in new handling equipment. In addition, work is starting on

the mega port in Lamu in the north of Kenya's coastline that will open up a new transport corridor across the region to Ethiopia, South Sudan and eventually further west

#### **4.3.1 Increased importation and exports**

The interviewees indicated that Mombasa port infrastructure has resulted in increased importation and exports, increased availability of goods and increased choice of consumers. The dredging of the port enabled larger ships to dock enabling resulting in the port through cheaper movement of goods through the port. Recently Mombasa port received the biggest vessel, MV Clemens Schulte, to ever call at the facility, signaling positive results following the deepening of the harbor to 15 metres and widening of the turning basin to 300 metres. The vessel with a capacity of 5,466TEUs and this marks an important milestone in KPA agenda towards becoming a world class sea port of choice. It also signifies the benefits accrued from the port's completed infrastructure expansion projects.

In today's competitive maritime trade, competitive advantage is realized by combining technology with company specific resources, competences and infrastructure. Today's global business is heavily dependent on information technology. The usage of KWATOS system, Simba system and the Kenya National Electronic Single Window System usage in the port has resulted in increased efficiencies and effectiveness in operations and also enable organizations to deliver flexible services in step with constantly changing customer demands. IT systems electronically link port administration, terminal operators, truckers, customs, freight forwarders, carriers, ship agents, and other members of the port community. The technology provides port users with real time data on the status of cargo, paperwork, and availability of port facilities, and enables ships and terminals to be part of an integrated office infrastructure. IT reduces time for

delivering cargo; provides more accurate transfer and recording of information; reduces manpower for port operation paperwork; offers advance information on ship, barge, truck, wagon, container, and cargo movements; and improves planning and coordination of berths, handling equipment, and storage facilities. Thus for KPA to be able to compete effectively, it has to keep pace with information technology otherwise it will be left behind in the competitive ocean transport market.

#### **4.3.2 Information communication technology**

A fully integrated ICT Strategy has embraced an Enterprise Resource Planning (ERP) system, a Water Front system, and a Community Based System, all web enabled. The ERP system integrates all functions at the Port to provide on-line and real-time information hence assisting in making timely decisions. Benefits of the waterfront system include: reduced Human intervention due to system controls that are based on authorization, reduced cargo documentation processing duration, Reduced cargo dwell time from an average of 8 days to 5 days, reduced port clearance time from 5.5 days to 3 days, enhanced planning process both in the yard and on board ship, easy access of statistical data for planning and decision making, enhanced audit trails, hence minimized cargo pilferage at the port

#### **4.3.3 Gateway**

The port of Mombasa is the gateway seaport for East Africa's trading route. The port handles a mixture of containerized cargo, dry bulk cargo, general cargo and liquid bulk goods consisting mainly of crude and petroleum products. The imports and exports that pass through the port of Mombasa are critical to Kenya's economic growth, and to the economic well-being of its neighbors as well. In order to enhance port efficiencies and boost international trade, the government embarked on formulating strategic reforms, particularly in the ports and inland

transportation. Some of these reforms have involved, the running of the port on 24 hours a day in order to increase cargo clearance, establishing public-private partnerships in the development and management of various aspects of the logistics chain, including port, roads, railways and waterways. The 24 hours/7 days a week processing of declarations facilitates ports and customs operations as trade transactions can be carried out throughout the week. In addition to this, the system grants declarants the opportunity to access and process their declaration at any time or day of the week. Furthermore, there is a growing view that enhanced inland connectivity, which is capable of providing land-locked countries with effective access to the port, requires the adoption of a holistic trans-border management approach. Thus far, the government put in place a corridor management approach has been embraced for the development and management of trade and transportation channels between key regional gateway port and their hinterlands.

#### **4.4.4 Increase capacity and expansion**

Ports are widely recognized as crucial nodes in international trade and transport. However, for various reasons, capacity does not always match demand: sometimes there is overcapacity, whereas in other cases, demand exceeds capacity and there is a shortage of the latter. In order to enhance maritime international trade connectivity, the Kenyan government and the KPA has continued to invest large sums of money towards the expansion of port of Mombasa in order to increase its capacity as a result of a surge in shipping traffic and cargo volumes especially on container traffic has placed the port with a huge responsibility to provide effective, efficient and reliable maritime service. Recent capacity expansion has seen Mombasa port handle more than one million containers in a years and this has propelled the port of Mombasa to the ranks of top world container ports, the port of Mombasa has been ranked 117th out of the leading 120 container world ports and 5th in Africa. The expansion of the port has seen increased cargo

handling, expansion of trade and ease in logistical procedures, faster clearing of goods in port handling process, and easier movement of goods.

Ports are highly significant in facilitating international trade. They play critical roles or interface between marine and land or air and land-based transportation. They are part of the international supply chain network. Effective Mombasa port management is crucial in successful international trade practice. This is because it ensures clean, safe and secure port operations and provides effective and efficient ports services and reception facilities. They further noted that effective and motivated port management reduces traffic, congestion, promotes international relationships and facilitates international trade by providing conducive and efficient port and port services. The competence of Mombasa port employees resulted in seamless process and transitory in the port process hence boosted volumes to trade.

In the context of the international trade environment, customs and excise officials plays a critical role not only in meeting the goals of the governments but also in ensuring effective controls that secure revenue, compliance with national laws, ensuring security and protection of society. It is also acknowledged that the efficiency and effectiveness of customs and excise officials' procedures has a significant influence on the economic competitiveness of nations and in the growth of international trade and the development of the global marketplace. The interviewees noted that the introduction of document processing center eliminated human contact between customs entry processing staff and the public. This resulted in reduced corruption, few bureaucratic processes and ease in movement of goods. They further indicated that, very often, clearing agents connive with customs officials to demand facilitation fees and other payments from importers and exporters, especially when all documentation is not in order. Integrity in the

customs administrations has improved in tandem with improved transparency and accountability of the port management and government. Government and the business community expect greater professionalism from customs, in terms of technical competence, focus on corporate strategy, appreciation of the complexities of the international trading environment, and a client service orientation across all levels of management.

#### **4.4.5 Globalization**

In the world of globalization, making trade across borders as simple, efficient and safe as possible is essential for traders, concerned public authorities and governments. The complexity of cross-border trade and the number of parties involved greatly increase the coordinated requirements of information for facilitating and controlling the movement of goods. The participation of major and minor stakeholders in the operations of ports is very essential in ensuring effective and efficient functioning of the ports. The realization of ports objectives is greatly determined by the level of involvement and coordination among the various stakeholders. The interviewees indicated that the management of KPA engages all the stakeholders so that the port can be effective in meeting the users' expectations. The involvement of these stakeholders in ports operations and custom practices dictate the level of performance and achievements of the ports. The motive behind increasing stakeholders' participation in ports operations is to increase private sector involvement by promoting and enhancing efficiency through competition. The involvement of stakeholders by the port management resulted in seamless trade in uniformity and standardization of custom and port process through national single window hence boosting volumes. Single window initiative is highly instrumental in providing a platform for collaboration and information exchange between government agencies and business communities involved in cross border trade.

## **4.5 Challenges Encountered in International Trade**

### **4.5.1 Increased shipping costs and port charges**

Due to its close connection to global commerce, international maritime trade plays a vital role in the facilitation of world trade as the most cost-effective and energy-efficient mode of mass transport, making a significant contribution to global prosperity in both developing and developed countries. The administration and management of port in Kenya have consistently been concerned with improving efficiency of ports operations and custom practices even in the midst of several difficulties and challenges. The interviewer sought to establish from the interviewees how port inefficiency, port charges and shipping costs at the port have affected Kenya's international trade. The interviewees indicated that the inefficiencies has resulted in increased cost of trade that directly influence volumes to trade and that it promotes imbalances of trade and bad business.

### **4.5.2 Delays and congestions**

Transporting goods by sea remains the most common way to trade globally, however in several countries cargo spends an abnormally long time in ports before it is moved inland, presenting a serious obstacle to the successful integration of economies in worldwide trade networks. On the effect of cumbersome documentation, the interviewees indicated that it has caused delays and congestions, slows off take of cargo, increased storage cost thus greatly affected trade. The longer time that the ship stays at berth will increase the cost of the goods, and then the cost will be passed to the final customer with higher freight rates. Nowadays with the fast-paced industries, almost every product should be delivered to the market on time, so the terminal operators must be reliable and quickly response to the delivery order from the customer.

The information system becomes more and more important in every industry contemporarily. For port management, the high effective information system with reliable security can make the production for the container easier with smooth cooperation. The information systems can allow the shipping to function efficiently and effectively. The slow adaptation to modern technology has affected international trade as it reduces the volume of trade and increased time in handling customers' process.

#### **4.5.3 Poor infrastructure and inadequate facilities**

Lack of adequate facilities and infrastructure at the ports have militated against ports operations with regard to inter-feeder transfer of cargo and services, cargo storage, cargo consolidation and cargo manipulation as well as cargo packaging and processing. Congestion at container terminals, vessels traffic and delays in cargo flow are borne by this challenge in the operations of the ports. Like what obtains in most ports of the developing world, lack of infrastructure necessary for effective and efficient port connectivity that will provide standard logistics and supply chain operations is often the problem. The road network leading into Mombasa as well as roads connecting the city to the ports is quite in a state of low traffic carriage capacity relative to the traffic volume connecting the port. This causes a build-up of traffic along the route leading to the Mombasa port. The implication of this is that it slows down the vehicular movement into and out of the port. This further slows down the pace at which cargo is carried into or evacuated from the port, thereby causing congestion of trucks at the port gate, particularly waiting to enter and congestion of cargo at the terminal, particularly waiting for trucks to evacuate same.

The interviewees noted that power failure at the port result in shutting down of port cargo handling equipment which causes stoppage of work at the Mombasa port. This by implication could create queue of ships and cargo operations at the port if halted. The effect of all these is delays and subsequent build-up of congestion of both ship and cargo at the port. The power

outage often cripple the giant ship to shore cranes at the port including operations at the Mombasa container terminal, thereby slowing down port business and causing port congestion. The interviewees further noted that congestion in the port of Mombasa has been caused by inadequacy of the railway system to transport large quantity of cargo through the system thus freeing the port. The high speed trains, which are designed for double stacking of containers on wagons for evacuation or delivery to the port are expected to reduce the influx and associated congestion of trucks along Kenyan highways and towards the port's landward access. The high speed train service will also ease congestion of cargo at the port through faster and more efficient evacuation of cargo. It is a common knowledge that standard gauge railway will handle over 22 million tonnage of cargo against the current single gauge handling only 1.2 Million tonnes. Linking the port of Mombasa to Nairobi and continuing onward into Uganda, it is a key conduit for bulk freight, easing pressure and providing additional capacity along the northern corridor. Currently the cargo is mostly transported using the road and few on rail.

#### **4.5.4 Delayed documentation**

Excessive control and inefficiencies in customs procedures, combined with a monopoly of service providers at key entry points in importing countries, are prevalent in many parts of the developing world. The transparency and corruption in the port were noted as having affected international trade as it has slowed down clearance procedures or loss of cargo. It also encouraged importation of illegal goods to the country. Though the Kenya custom authorities through their software Simba system had been able to capture many irregularities in the importing system, corruption still remained a threat to the industry. The interviewees further indicated that transparency and corruption result in loss of revenue by the government through nonpayment of taxes, increased costs due to bribery and increased taxes and excise. Sometimes it is easier and cheaper for businessmen to bribe a customs officer than to discharge all duties or to

avoid paying customs duties by wrongly declaring goods at customs. Wrong declaration of goods at customs brings risks, that customs officer might reveal the cheating during inspection of cargo. The interviewees noted that political interference hinders the movement of goods and logistics in port process, increased storage charges, bad legislation to government taxes and increased uncertainty of stake holders.

#### **4.6 Discussion**

The world trade also accelerated as cost of shipping has increased due to the introduction of economy of scale and the development of technology in shipping. To cope with the ever growing world trade, ports of every country will no doubt continue to play a critical and important role in providing the cheapest mode of transportation. The study established that port infrastructure has enabled the port of Mombasa to be competitive through increased importation and exports, increased availability of goods and increased choice of consumers. The infrastructure changes that have been undertaken in the port was dredging of the water channel programme to allow modern post panama vessels to berth, construction of an additional berth, and construction of a second container terminal, expansion and upgrading of the information and communication systems, investment in new handling equipment. The findings were found to be consistent with Harding et al, (2007) findings that ports with sufficient capacity, efficient infrastructure facilities with high technology, and good management contribute to lower transportation and trade costs. In addition to the explicit costs from tariffs and loading/unloading charges, the time costs from congestion and inefficient facilities/management contribute to transportation costs.

Today's global business is heavily dependent on information technology. Morrissey (2008) notes that efficient use of information technology can help lower trade transaction costs hence reduce

the margin between domestic and international prices to benefit consumers and producers. In some case increasing efficiency of border procedures may require simple re-organization of tasks and procedures, whilst in others it might require investment in infrastructure and human resources. This was found to be in tandem with the findings of the study which established that the port of Mombasa use the KWATOS system, Simba system and the Kenya National Electronic Single Window System usage in the port has resulted in increased efficiencies and effectiveness in operations and also enable organizations to deliver flexible services in step with constantly changing customer demands. IT systems electronically link port administration, terminal operators, truckers, customs, freight forwarders, carriers, ship agents, and other members of the port community.

In order to enhance port efficiencies and boost international trade, the government embarked on formulating strategic reforms, particularly in the ports and inland transportation. Some of these reforms have involved, the running of the port on 24 hours a day in order to increase cargo clearance, establishing public-private partnerships in the development and management of various aspects of the logistics chain, including port, roads, railways and waterways. The 24 hours/7 days a week processing of declarations facilitates ports and customs operations as trade transactions can be carried out throughout the week. This was found to be consistent with Djankov, Freund, & Pham (2010) findings that the benefits that accrue to shippers due to efficiency in ports operations and clearance procedures include better on-time performance, improved document accuracy, greater in-transit visibility and enhanced information flows.

Poor trade contribution can be described as a cluster of actions that are either deliberately or otherwise perpetuated by relevant trade authorities which eventually leads to non-realization of objectives instituted under trade facilitation initiatives. Limao and Venables (2011) noted that

cumbersome documentation requirements within the trade chain have very often led to excessive delays at ports which in turn result in increased costs of goods. This was found to be consistent with the findings of the study which established that it has caused delays and congestions, slows off take of cargo, increased storage cost thus greatly affected trade. Grainger (2009) noted that lack of adequate facilities and infrastructure at the ports have militated against ports operations with regard to inter-feeder transfer of cargo and services, cargo storage, cargo consolidation and cargo manipulation as well as cargo packaging and processing. Congestion at container terminals, vessels traffic and delays in cargo flow are borne by this challenge in the operations of the ports. The study findings was that road network leading into Mombasa as well as roads connecting the city to the ports is quite in a state of low traffic carriage capacity relative to the traffic volume connecting the port. This causes a build-up of traffic along the route leading to the Mombasa port. The implication of this is that it slows down the vehicular movement into and out of the port. This further slows down the pace at which cargo is carried into or evacuated from the port, thereby causing congestion of trucks at the port gate, particularly waiting to enter and congestion of cargo at the terminal, particularly waiting for trucks to evacuate same.

## **CHAPTER FIVE**

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

#### **5.1 Introduction**

The chapter is outlined into summary of the findings, conclusions, recommendations, limitations of the study and suggestions for further research.

#### **5.2 Summary of Findings**

Ports are widely recognized as crucial nodes in international trade and transport. The study found out that KPA has undertaken measures to position the port of Mombasa as the regional business hub. The contribution of infrastructure activities includes increased cargo handling, reduced congestion and securing deep-sea container connectivity for economies heavily dependent on international trade. Thus in order to ensure the port remain competitive, the government and KPA undertook dredging of the water channel programme to allow modern post panamax vessels to berth, construction of an additional berth, and construction of a second container terminal, expansion and upgrading of the information and communication systems, investment in new handling equipment. The movement of goods and clearing at the port needs to be undertaken at a faster rate in order to reduce the costs charged on vessels that increase the cost of goods, reduce corruption and increase government revenue. The study found out that in the port, there is usage of KWATOS system, Simba system and the Kenya National Electronic Single Window System usage in the port has resulted in increased efficiencies and effectiveness in operations and also enable organizations to deliver flexible services in step with constantly changing customer demands.

Efficiency in the port is essential for faster movement of goods. Efficiency in the port has resulted in the running of the port on 24 hours a day in order to increase cargo clearance, establishing public-private partnerships in the development and management of various aspects of the logistics chain, including port, roads, railways and waterways. Effective Mombasa port management is crucial in successful international trade practice and therefore effective and motivated port management reduces traffic, congestion, promotes international relationships and facilitates international trade by providing conducive and efficient port and port services.

The customs and excise officials plays a critical role not only in meeting the goals of the governments but also in ensuring effective controls that secure revenue, compliance with national laws, ensuring security and protection of society. The study found out that introduction of document processing center eliminated human contact between customs entry processing staff and the public. This resulted in reduced corruption, few bureaucratic processes and ease in movement of goods. International trade through the port of Mombasa was found to have faced several challenges. The study found out that cumbersome documentation has caused delays and congestions, slows off take of cargo, increased storage cost thus greatly affected trade. Congestion at container terminals, vessels traffic and delays in cargo flow are borne by lack of adequate facilities and infrastructure in the operations of the ports.

The transparency and corruption in the port were noted as having affected international trade as it has slowed down clearance procedures or loss of cargo. It also encouraged importation of illegal goods to the country. Corruption in the port was found to still exist and pose a challenge as it result in loss of revenue by the government through nonpayment of taxes, increased costs due to bribery and increased taxes and excise. Political interference hinders the movement of

goods and logistics in port process, increased storage charges, increases uncertainty of stake holders and bad legislation.

### **5.3 Conclusion**

The study established that the upgrading of infrastructure in the port of Mombasa has resulted in faster movement of goods through the port and the socking of large ships. The advancement of information technology provides a wide range of options for the port to automate its information system. Electronic devices employed in the port reduced the manual effort and paper flow, facilitated timely information flow and enhanced control and quality of service and decision made. The use of computer simulation has become a standard approach for evaluating design of complex cargo handling facilities.

The adoption of various measures geared towards effectiveness of the port ensures that the operations of the ports and customs would be a more efficient, comfortable and functional place to transact trade business thus augmenting government revenue while increasing job openings. The development of the Kenya National Electronic Single Window System would also increase the revenue base of the customs excise and preventive service as clients/traders would be tracked and taxed. In addition, ports and customs management would be made easier as clients and the general public will appreciate and understand functions and operations of the system.

#### **5.4 Limitations of the Study**

The most challenging limitation was the sample-size of the study. In order to gain more exact results, the sample-size should have been larger, perhaps the users and managers of the port. However due to the time limit and personal as well as monetary reasons the study had to be limited to the management of KPA alone.

There are limitations about the objectivity of data gathered from the interview guide. Although this study took all the precautionary steps to reduce the possibility of response bias and applied the procedural remedies, there may still be some bias in the responses generated from the interview. However, despite the above limitations, the findings presented in this paper have important policy implications.

#### **5.5 Recommendations for Policy and Practice**

The study found out that inefficiency at the port has seen the port face competition from other ports and it is recommended that in order to be competitive the government and the port managers need to give attention to the challenges that affect effective movement of goods in the port. This will help surmount the challenges confronting ports and customs operations especially on revenue collection and generation. Government policies on trade and the several policies on customs and ports operations, for instance, would be realized through the use infrastructure development to suit the current development pattern of ports and customs.

The study recommends policies intended to encourage increased efficiency of the transport and technology systems through the region. The effects of changes the Kenya government policies on the port planning, road transport and technology are to some extent mediated on a national level

policy. This study recommends that all stakeholders in the import trade business, governments of countries in the Great Lakes region and Port associations be more actively involved in import regulations and policies formulation. This includes importers, clearing agents, transporters and freight stations.

Harmonization and cooperation are key in ensuring effective utilization of the information technology and for that matter enhancing the operations of ports and customs operations. There is the need for all actors to consent on the clarity of their responsibility in the usage of the information technology. In the public context, the actors should liaise with each other in joint meetings where all other actors would make input and understand the principles and reasons behind the use of information technology.

The system used in the port is considered by many as an alternative ports and customs strategy to the manual process that encourages and supports ports and customs activities while enhancing local and international trade. It calls for building trade agencies and institutions that are more efficient, productive, and financially responsible in ports and customs operations in Kenya. The Kenya Revenue Authority in collaboration with Kenya Ports Authority and the other trade agencies should finalize the preparation of a strategic plan for the future through government policy of making Kenya the hub of international trade in Eastern Africa

The study established that the port of Mombasa encounters several challenges in positioning the port international. It is recommended that to ensure attainment of the port objectives all the stakeholders need to come together and put in place measures that would ensure that the port remains competitive international. The government should also provide and put resources into the development and interlink all the border points to ensure that the goods destined for other

countries actually leaves the country in order to curb dumping of illegal goods which deprives the government its revenue.

### **5.6 Suggestion for further research**

The study was undertaken on the contributions of Mombasa port to maritime international trade, however maritime trade is affected by many factors and it is recommended that further study be undertaken to identify all the factors that contribute to maritime trade.

Feasibility studies on expansion of infrastructure and efficient transport systems will open up markets along the Northern Corridor all the way to the Southern parts of Africa. This will expand the continents balance of payments due to greater efficiencies in the export and import trade. More research on local and external funding for the expansion of port, rail and road infrastructure in the region is also vital in the expansion of trade across the region.

## REFERENCES

- Andersen, O. (2009). The Internationalization Process of Firms: A Critical Analysis. *Journal of International Business Studies*.
- Biggam, J. (2008). Port choice and freight forwarders. *Transportation Research Part E: Logistics and Transportation Review*, 45(1), 186-195
- Buckley, P.J. (2005). Foreign direct investment by small and medium-sized enterprises: the theoretical background, *Small Business Economics*, 1(2), 89-100.
- Devinney, T. M. (2010). *The Past, Present and Future of International Business & Management*. Bingley, UK: Emerald.
- Djankov, S., Freund, C., & Pham C. S., (2010). Trading on Time, *Review of Economics and Statistics*, 92(1), 166-173.
- Fink, C., Mattoo, K. & Neagu, R.E. (2012). Trade in International Maritime Services: How Much Does Policy Matter? *World Country Economic Review*, 16(1), 81-108.
- Heaver, D.T. (2011). The evolving roles of shipping lines in international logistics. *International Journal of Maritime Economics*, (4), 210-230.
- Hertel, A., Walmsley, N.H. & Itakura, L. (2011). Dynamic Effect of the “New Age” Free Trade Agreement between Japan and Singapore. *Journal of Economic Integration*, 16(4), 46-84.
- Hill, C. W. L. (2005). *International Business: Competing in the Global Marketplace*. Boston: McGraw-Hill/Irwin.

- Hill, C & Jain, K. (2005).The mechanism of internationalization *International Marketing Review*, 7 (4), pp. 11-24.
- Laanti, A., Parola, F. &Gattorna, E., (2009). The impact of carrier service attributes on shipper-carrier partnering relationships: a shipper's perspective, *Transportation Research Part E Logistics and Transportation Review*, 39 (5), 399–415.
- Limao, N. &Venables, A. J. (2001).Comparing maritime containers and semi-trailers in the contextof hinterland transport by rail.*Journal of Transport Geography*, 19(4), 80-88.
- Lun, Y.H.V., Lai, K.H. & Cheng, T. E, (2010).Port efficiency and international trade: Port efficiency as a determinant of maritime transport costs. *International Journal of Maritime Economics*, (5), 199-218.
- Malchow, M.B. &Kanafani, A., (2011). A disaggregate analysis of factors: influencing port selection.*Maritime Policy & Management*, 28 (3), 265–277.
- Marshall, A., Davies, D., &Eckberg, C., (2011). The Determinants of Norwegian Exporters'Foreign Exchange Risk Management, *The European Journal of Finance*, 12(3), 17-40.
- McDonald, D., Lugovskyy, V.&Skiba, A. (2002).The trade reducing effects of market power in international shipping, *Journal of Development Economics*, 89(1), 84–97.
- Notteboom, T., (2010). Thirty-five years of containerization in Antwerp and Rotterdam: structuralchanges in the container handling market, *Journal of International Business Studies*, 38(4), 41–55

- Okpara, J. O. (2010). Latin American Ports: Results and Determinants of Private Sector Participation, *International Journal of Maritime Economics*, 3.
- Pomeroy, S.R. (2004). Container shipping and Ports: An overview, *Review of Network Economics*, 3(2), 86-106.
- Redding, S. & Venables, A. J. (2011). Infrastructure, Geographical Disadvantage, Transport Costs, and Trade, *The World Economic Review*, 15(3), 451-479.
- Shirani M. (2009). The adoption of export as an innovative strategy, *Journal of International Business Studies*, 9, 85-93.
- Stair, R. & Reynolds, G., (2009). Principles of Information Systems, Boston: Cengage Learning Tianjin International Freight Forwarder Association, *Journal of Transport Geography*, 19(4), 680-688.
- Subramanian, U. & Arnold, J. (2001). Contestability, Competition and Regulation, the Case of Liner Shipping, *International Journal of Industrial Organization*, 9(1), 141-59.
- Torre, A. (2008), *On the role played by temporary geographical proximity in knowledge transmission*. *Regional Studies* 42, 869–89.
- Zhang, W., Xi, T. & Zhang, R., (2011). A Case Research on Vulnerability of logistics system in the Tianjin port. *Journal of Transport Geography*, 5, 59-64.

## **APPENDIX I: INTERVIEW GUIDE**

The interview guide will seek to achieve the following objectives;

- i. To determine contributions of Mombasa port to the improvement of international maritime trade.
- ii. To determine the challenges encountered in international trade.

### **Section A: Demographic Data**

1. What is your designation at the port?
2. For how long have you been holding the current position?
3. For how long have you worked at KPA?
4. What is the highest level of education you have achieved?

### **Section B: Contributions of Mombasa port to the improvement of international maritime trade.**

5. How has Mombasa port infrastructure contributed to maritime international trade?
6. How has information system in the port affected maritime trade?
7. How has Mombasa port efficiency influenced international trade?
8. Has the port of Mombasa capacity contributed to maritime international trade?
9. How has motivated management and sufficiently qualified employees contributed to maritime international trade?
10. How has professionalism on the part of Customs & Excise officials contributed to international trade?

11. How has the involvement of stakeholders in port operations contributed to maritime trade?

**Section C: Challenges encountered in international trade.**

12. How has port inefficiency, port charges and shipping costs at the port affected international trade?
13. How have cumbersome documentation requirements within the trade chain which have resulted in excessive delays at port affected trade?
14. How has slow adaptation to modern technology hindered maritime trade?
15. Has the lack of adequate facilities an
16. d infrastructure at the ports affected ports operations?
17. How has transparency and corruption hindered development of maritime international trade?
18. How has political interference hindered effective maritime trade?