EFFECT OF CUSTOMS ADMINISTRATION PROCEDURES ON TRADE FACILITATION IN KENYA

BY

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DECLARATION

Declaration by Candidate

This research project is my original work and has not been presented for a degree in any other university. No part of this research project should be reproduced without prior consent of the author and/or Moi University

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Declaration by the Supervisor

This Research Project has been submitted with our approval as the university Supervisors.

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DEDICATION

I dedicate this research project work to my family for their moral and financial support throughout the research process.

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ABSTRACT

Trade facilitation contributes to economic growth and development among the trading partners by improving volume of trade and reducing costs of trade. Customs administrations find themselves increasingly under pressure from national governments and international organizations to facilitate the clearance of legitimate passengers and cargo. The general objective of the study was to investigate effect of customs administration procedures on trade facilitation in Kenya. The study was guided by the following specific objectives; to determine the effect of declaration of goods on trade facilitation, to establish the effect of documentation on trade facilitation, and to investigate the effect of verification of goods on trade facilitation in Kenya. The following theories were used to expound on the study; Resource-Based View Theory, Heckscher-Ohlin Theory, and New Trade Theory. The study used explanatory research design. Explanatory research design enables researchers to connect ideas to understand the cause and effect among variables. The population of this study consisted of customs officials whose total number is 200. Data was collected using a questionnaire based on the specific objectives. Diagnostic tests of both the independent and dependent variables were carried out to establish whether regression analysis test can be undertaken on them. The study adopted linear regressions analysis which indicates the influence of custom administration on trade facilitation performance in Kenya. The descriptive statistics of the study was presented through percentages, means, standard deviations out by the customs office and is an important part of customs procedures. The results indicated that declaration of goods had a positive and significant effect on trade facilitation (β = 0.416, p = 0.000); documentation had a positive and significant effect on trade facilitation (β = 0.200, p = 0.007); and verification of goods had a positive and significant effect on trade facilitation (β = 0.314, p = 0.000). From the study findings, the study concluded that customs administration procedures have a significant influence on trade facilitation in Kenya. The study recommended that Kenya Revenue Authority should enhance declaration of goods by ensuring that declaration of goods follows the international standards; should ensure accurate completion of required export documentation, comply with import/export documentation requirements and produce documents such as invoice for the goods; and should ensure thorough inspection of the goods, conduct complete inventory inspection and application of scanners in verification of goods. The study suggested that future studies could focus on customs administration procedures and trade facilitation in within the East African Community states for comparison purposes.

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ABBREVIATIONS AND ACRONYMS

AEO	Authorized Economic Operators
COMESA	Common Market for Eastern and Southern Africa
CSD	Customs Services Department
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KRA	Kenya Revenue Authority
OECD	Organization for Economic Cooperation and Development
RADDeX	Revenue Authorities Digital Data Exchange
RARMP	Revenue Administration Reform and Modernization Program
TMP	Tax Modernization Program
VAT	Value Added Tax
WCO	World Customs Organization
WTO	World Trade Organization

OPERATIONAL DEFINITION OF TERMS

Customs administration procedures: are the set of managements and operations that are carried out related to a specific customs destination, when one wants to import or export a certain merchandise (Tosevska-Trpcevska, 2014)

Declaration of goods: is a statement made in the manner prescribed by Customs, by which the persons concerned (importer/exporter or agent) indicate the Customs procedure to be applied to the goods and furnish the particulars which Customs require for its application (Pappel, 2020).

Documentation: refers to checking the declaration against the documents forwarded for verification. (Hornok & Koren, 2015).

Trade facilitation: is the simplification and harmonization of international trade procedures (Grainger, 2008).

Verification of goods: is the inspection of goods by customs, or more specifically by a clearance officer, to check their quantity, properties, or value (Drobot et al., 2017).

CHAPTER ONE

INTRODUCTION

1.0 Chapter Overview

This chapter discusses the study's background, problem statement, research aims, research hypotheses, significance, and scope.

1.1 Background of the Study

Trade facilitation is defined by the World Trade Organization (WTO) as the streamlining and harmonization of international trade procedures. The Kyoto Convention on the Simplification and Harmonization of Customs Procedures is part of the international customs community's commitment to trade facilitation. Time Release Study, Framework of Standards to Secure and Facilitate Global Trade, Risk Management Guidelines, World Customs Organisation (WCO) Data Model (TRS) Information and telecommunications technology, as well as other legal instruments and best practices are used.

The importance of customs has changed dramatically in the twentieth and twenty-first centuries. The role of tariffs in trade facilitation has become more prominent in most regional trade agendas as a result of the development of Regional Trade Agreements (RTAs), whose major goal is to enhance trade between nations by removing tariff and non-tariff barriers to trade (Shayanowako, 2015). This is mostly owing to the fact that customs is responsible for carrying out the RTA's duty liberalization promises. Equally essential is the incontrovertible reality that one of the most significant non-tariff barriers (NTBs) is onerous customs processes (Sibangilizwe & Jeffrey, 2019).

Reduce the quantity of paperwork required for international trade and replace paper forms with electronic forms that are easier to deliver to simplify customs and trade

procedures. Tariff reform is more beneficial to industry than tariffs negotiated in multilateral discussions (Mann, 2012). This approach can be made easier by more efficient business tax collecting (Hoekman & Shepherd, 2015). Increasing national government income by reducing the time necessary for physical conferences and transporting imported items (Helble, Shepherd & Wilson, 2007).

The globalization of trade has put considerable and sometimes conflicting demands on Customs (Mangan & Lalwani, 2016). On the one hand, there is a pressing need for security and effective supervision of international supply chains, while on the other hand, there are growing calls to make lawful trade more accessible. Customs administrations throughout the world are aware of their obligation to generate new strategic perspectives and policies that will determine customs' function in the twenty-first century. There are numerous opportunities for bold, proactive, and innovative responses: a global customs network; better border management; a strategic framework with globally applicable objectives; a deeper understanding of supply chains and how to manage them; the use of new technologies; and strengthened customs partnerships with trade, border, law enforcement, and other relevant government agencies. Reduced compliance costs for legitimate merchants, more efficient and effective targeting of high-risk movements, and enhanced trust and mutual recognition of each other's programs and controls are just a few of the many advantages of an adaptive and strategically coordinated customs administration (Mangan & Lalwani, 2016).

The new realities of the global trading system and the increase in trade in services have made logistics and other trade facilitation measures increasingly important in regional and international trade (Mangan & Lalwani, 2016). The research available in this area focuses on the needs and priorities for trade and transport facilitation for developing countries (Africa) and how they can be better implemented to contribute to

sustainability and economic development (Arvis, Saslavsky, Ojala, Shepherd, Busch, Raj, & Naula, 2016; Buckley, 2016; Hoekman & Shepherd, 2017). The World Trade Organization trade facilitation agreement entered into force in early 2017 and could have major implications for poor countries seeking to integrate into the global economy (Moïsé & Sorescu, 2019).

Tariff changes are frequently related with so-called "hard infrastructure reforms" in Sub-Saharan Africa (SSA), such as the building or upgrade of roads, trains, airports, and ports, as well as information and communication technology (ICT) networks... and reliable energy sources (Barka, 2012; Hoffman, De Coning, Bhero & Lusanga, 2015; Gnangnon, 2017). Streamlining and harmonizing customs and border procedures, integrating ICT-enabled operations, and eradicating corruption at border crossings are all examples of "soft infrastructure changes" (Peterson, 2017). Customs delays in Africa are exacerbated by the use of manual methods for customs documentation or the use of electronic devices with insufficient power or repair capability (Hansen & Nygaard, 2019). As a result of the delay, traders are more likely to pay 'kickbacks' (bribes) to customs authorities in order to get their goods through border checkpoints faster (Barka, 2012). Furthermore, customs charges in Africa are anticipated to require up to 30 different entities, 40 different documents, and 200 different data pieces, with 60 to 70% of them requiring re-entry at least once (Barka, 2012; Hansen & Nygard, 2019).

In accordance with the requirements of the SADC Trade Protocol (STP), the South African Development Community (SADC) introduced a Free Trade Area (FTA) in 2008 (Muntschick, 2018). This was the culmination of a long process of cutting tariffs on originating commodities that began in 2000. Simultaneously, all existing types of NTB should be phased out without the introduction of new ones. Despite significant progress in reducing tariff and non-tariff trade barriers, Dabrowski and Myachenkova

(2018) found that most developing country economic blocs have achieved minimal progress. The continued incidence of NTBs is a direct affront to efforts in regions across African continent to facilitate intraregional trade in fulfilment of their respective regional integration agenda (Dabrowski & Myachenkova, 2018; Bünder, 2018).

Customs, like in many other places, plays a major role in international trade in the East African Community's (EAC) Customs Union (CU) (Shinyekwa & Othieno, 2016). The foundation of the EAC CU, which advocates for trade facilitation, was prompted by Article 75 of the EAC Treaty (1999). Article 6 of the EAC Protocol, which establishes the EAC CU, calls for initiatives to reduce the amount and volume of trade documentation, adopt common standards and documentation, coordinate trade facilitation and intra-community transportation, review procedures on a regular basis, disseminate trade information, and adopt joint external tariffs (Shinyekwa & Othieno, 2016; Bunder, 2018). The 1999 Agreement, the Customs Union Protocol, 2004, the Customs Administration Act, 2004, various legal instruments related to trade in goods, such as the Standardization, Quality Assurance, Measurement and Testing (SQMT) Act 2008, and instruments to address supply bottlenecks, such as the Tripartite Road Transport Agreement, 2001, are all examples of instruments to facilitate intra-Community trade. This program, according to Kafeero (2008), enhances commercial efficiency. Theoretically, a growth in the volume and/or value of exports leads to an increase in exports, a rise in foreign exchange, and a rise in the economy of the country (McCombie & Thirlwall, 2016; Cooper, Hartley & Harvey, 2018).

In a globalized world, where intermediate goods and end products frequently cross borders, trade facilitation helps reduce the overall costs of trade and increase economic prosperity (Hornok & Koren, 2015; Arvis, et al., 2016). Trade facilitation measures aim to improve the trading environment by reducing transaction costs and thereby

increasing trading profits. Trade facilitation focuses on using measures that have a positive impact on trade. Trade facilitation, according to Fessehaie and Morris (2018), entails multiple parties putting in place a set of laws, policies, and processes that support rather than inhibit trade. Different writers and organizations utilize different meanings of trade facilitation. For example, the United Nations Economic Commission for Europe (UNECE) defines it as "a comprehensive and integrated approach to reducing the complexity and costs of the trade transaction process and ensuring that all of these activities can be carried out in an efficient, transparent, and predictable manner based on norms" (UNECE, 2006).

Trade facilitation, according to the International Chamber of Commerce, is defined as improving the effectiveness of administrative and logistical measures connected to international trade in products (Grainger, 2008; 2016). To condense the list of instances, it's worth noting that there are a variety of definitions for lowering the time and cost of completing trade transactions (Kafeero 2008; Wolffgang & Kafeero, 2014). The traditional World Customs Organization (WCO) definition of trade facilitation is "simplification and harmonization of international trade procedures; where trade procedures are the activities, practices and formalities associated with the collection, presentation, transmission and processing of data necessary for the movement of goods in international trade" (Taneja, Joshi, Prakash & Bimal, 2018).

Although the use of trade facilitation measures to address trade bottlenecks in East Africa has recently gained popularity, aspects of customs administration remain largely unexplored. The Organization for Economic Cooperation and Development (OECD) has established a set of trade facilitation indicators (see Annex 1) that highlight areas for change and assess the potential impact of reforms (Hynes & Lammersen, 2017; Mosé & Sorescu, 2019). These metrics include the entire range of border operations,

from initial decisions to transit guarantees, for 133 nations, broken down by income level, geographic area, and development stage. Governments can use indicator-based assessments to prioritize trade facilitation and mobilize more targeted technical assistance and capacity building for developing nations (Hynes & Lammersen, 2017).

Logistics performance is important to facilitate trade. Effective logistics is critical to meeting many trade facilitation indicators (Shepherd, 2016). According to Arvis et al., the World Bank has established a set of indicators to quantify trade logistics efficiency (2016). The Logistics Performance Indicator (LPI) is an interactive benchmarking tool that aims to help countries discover the issues and possibilities they have in retail logistics, as well as what they can do to improve their results. While the OECD and World Bank measures can be used to evaluate trade facilitation performance, they can also be used to measure overall performance. The World Bank's Logistics Performance Index, on the other hand, is regarded beneficial for evaluating the performance of day-to-day logistics operations.

According to the recent report by Tralac (2019) developing countries were expected to implement Trade Facilitation Agreements (FTA) by 2017 and Less Developed Countries (LDCs) by 2018. However, as it stands out, few countries from Africa have implemented the same (Hoekman, 2016; Odularu & Alege, 2019). Trade facilitation performance by regional economic communities (RECs) comprise of logistics performance, customs and border control, FTA, as well as postage performance. According to Chen and Ma (2015), the main objectives of this framework are: to establish supply chain security standards and trade facilitation that promote "security and predictability" in the global trading system; strengthen the "role, function and capacity" of customs administrations to promote and secure world trade; expand cooperation between customs administrations of each country (ie through customs

cooperation), between customs and other government agencies in the same country and between customs agencies and the private sector (ie through customs partnerships); and ultimately enable global supply chains to function safely and smoothly. The SAFE framework aims to ensure the safety of goods as they move through the global value chain (Gereffi & Sturgeon, 2013).

In many countries, customs provide services that are primarily concerned with collecting taxes, which are not in the interest of economic actors. The tax collection services offered by customs authorities also play an important role in the economies of various countries, which may explain why some countries avoid Trade Facilitation (TF) measures: the fear of losing revenue. It seems that the opening of borders to facilitate the international flow of goods must be accompanied by a weakening of border protection (Bersin, 2012). Due to excessive concerns about customs restrictions, customs administrations in some nations can lead to increasing uncertainty in international supply chains. The government, according to Sawhney and Sumukadas (2005), is a major provider of regulatory services, many of which are optional. According to Liu and Yue (2013), speeding up customs procedures can affect a country's economic structure and hence boost international transactions. They created a model to illustrate the growth of each country's customs agency, beginning with physical controls over commodities. The details of all arriving commodities are normally examined at this early stage. Before the goods are delivered, the information is double-checked. Importer internal control and follow-up audits are included in the third stage of TF.

Customs administrations exist in every country to support trade, including lowering trade obstacles between countries. In some countries, the customs administration is independent, while in others, the customs function is integrated with other government

departments such as security, domestic affairs, immigration, and finance (Peterson & Ketners, 2013). This is due to the fact that the customs administration's role is viewed differently in different countries. Customs' position in industrialized countries can be considered as more of a guardian and facilitator of trade (Ismail & Mahyideen, 2015). Tariffs for producing income, for example, are claimed to have a substantial impact on the collection of state revenues in Romania, and this impact has a multiplier effect on government revenues (Mirela and Marilena, 2013). In developing countries, including coastal Kenya and Tanzania, where import taxes are an important part of budget funds (Cherono, Omar & Nsavyimana, 2019), the role of customs is to collect revenue by collecting various duties and taxes, and therefore Customs duties Excise is extended to the fiscal sector.

According to Chimilila, Soapani, and Benjamin (2014), they are at the intersection of trade, economy, tax and financial difficulties, criminal prevention, environmental protection, and transportation, to name a few. Customs officers all across the world are accustomed to dealing with people from different countries, so they are often the first to learn about new products, activities, and even ideas. Customs administrations collaborate with their overseas counterparts far more effectively than other border agencies, and they have regular and unrestricted access to critical commercial data (Liu, 2012). Trade facilitation is carried out in Kenya by several institutions carrying out different functions (Bienen, 2015; Nkoroi, 2015). The responsibilities of a trade promotion agency include collecting revenue, providing facilities for carriers to load and unload cargo, and verifying the goods comply with certain health standards and regulations. Another function that is part of trade facilitation is the transportation of goods to their destination (Beverelli, Neumueller & Teh, 2015).

The Kenya Revenue Authority (KRA) has long been associated solely with tax collection or what is popularly called tax collection. This is also pointed out by the media, which without exception refers to KRA as a "tax". However, KRA is not only a tax-collecting company, but also as a regional and world trade facilitator. This is based on the fact that the agency recognizes trade as a key factor in accelerating economic growth and reducing poverty (Joy, et al., 2018). KRA takes an integrated and comprehensive approach to improve its system, especially in the customs sector. According to Migot and Paul (2019), the transformation begins with ensuring that the challenges of handling import and export shipments are reduced in order to run local and international businesses efficiently. The integrated and comprehensive approach chosen should benefit governments, producers, traders and consumers. This approach focuses on infrastructure such as One-stop border crossing and information technology.

The KRA is the government agency in Kenya that enforces international law. In this case, most of the cargo destined for export through all ports is scanned. It builds trust because it makes it easier for taxpayers to promote compliance with tax and customs laws (Bett & Yudah, 2017). In addition, the Agency has put in place a framework for joint inter-agency coordination when investigating serious security and customs crimes. KRA considers inter-agency coordination to be very important in dealing with serious tax evasion, including those related to evasion, declaration errors and trafficking in prohibited goods (Kinyua, 2019).

1.2 Statement of the Problem

Trade facilitation has become one of the most challenging tasks for customs administrations. For countries undertaking trade facilitation improvements in customs, ports, and other institutions, trade facilitation provides a comparative advantage (Hoekman, & Nicita, 2010). Improving customs and port administration, as well as

lowering other non-tariff trade obstacles, facilitates the timely supply chain strategy expected by globally competitive enterprises. It is estimated that the delay in delivery time is around 0.8% of the price of finished goods per day (Uzzaman, & Yusuf, 2011). According to the Organization for Economic Cooperation and Development (OECD), the worldwide benefit per one percent reduction in transaction costs was US$43 billion (Sandford & Temby 2010). According to Hoekman and Nicita (2010), a 10% reduction in the cost of imports (exports) will result in a 5% increase in imports (exports). Customs and administrative procedures have a major impact on international trade, according to OECD studies. Furthermore, while exporting to developed and developing countries, difficult customs and administrative procedures have proven to be a challenge for developing countries (Marti, Puertas, & Garca, 2014).

From previous studies on customs administration and the effectiveness of trade facilitation, Chiukira (2019) investigates the role of customs administration in developing country trade facilitation. It acknowledges that interoperable trade is inescapable, and that the parties must comply with the provisions of the trade facilitation agreement. In Bangladesh, Uzzaman and Yusuf (2011) investigate the function of customs and other government institutions in facilitating commerce. The findings demonstrate that traders in Bangladesh endure delays in carrying out their operations due to excessive paperwork, inefficiencies, and arbitrary judgment. Morini, Sa Porto, and Inácio (2017) looked into whether trade facilitation (TF) could lead to a loss of customs control or revenue. The findings reveal that there is no direct relationship between the likelihood of complying with TPPT practices and the government's reliance on tariff income.

The impact of system automation on tax collection at the Kenya Revenue Agency was studied by Gitaru (2017). This research relies on secondary data. The results of the

study revealed that the number of transactions increased significantly after the implementation process, which means that due to the automation of the revenue system, a large number of import shipments were processed and routed through the central document processing center (CSD). Kwalia (2012) assessed the extent to which clearing and freight forwarders in Nairobi have adopted electronic customs procedures. The study found that electronic customs procedures had a major impact on organizations. They are forced to have an IT system connected to the internet. It has been found that electronic customs procedures have drastically reduced the average time to file, as well as processing and filing costs. There are varied findings on trade facilitation and customs administrations in empirical studies, and the study's goal was to look into the impact of customs administration procedures on trade facilitation in Kenya.

1.3 Research Objectives

1.3.1 General Objective

The general objective of the study was to investigate effect of Customs administration procedures on trade facilitation in Kenya.

1.3.2 Specific Objectives

i. To determine the effect of declaration of goods on trade facilitation in Kenya.

ii. To establish the effect of documentation on trade facilitation in Kenya.

iii. To investigate the effect of verification of goods on trade facilitation in Kenya.

1.4 Research Hypotheses

i. H_0: There is no significant relationship between declaration of goods and trade facilitation in Kenya.

ii. H_0: There is no significant relationship between documentation and trade facilitation in Kenya.

iii. H_0: There is no significant relationship between verification of goods and trade facilitation in Kenya.

1.5 Significance of the Study

The Customs Administration implemented trade facilitation measures and began evaluating the activities of companies seeking AEO status (Adomavičiūtė & Daujotaitė, 2017). If customs administration efforts are not adequately coordinated, they can have both positive and negative effects on trade outcomes and economic growth (Khan, Siddique, Zaman, Yousaf, Shoukry, Gani, and Saleem, 2018). Trade facilitation that is well-supported can enable a country to engage in trade and maximize the benefits of trade by lowering trade costs, increasing firm competitiveness, and improving human well-being. As member states reacts on implementing trade facilitation initiatives, intra-EAC trade is likely to increase considerably. Other benefits associated with trade facilitation as implemented by customs administration include increased flow of Foreign Direct Investments (FDI) into the country and region (EAC) as well. FDI is important for economic growth by creating jobs and increasing production. FDI also has technology spillovers that have a positive impact on local producer productivity and increased competitiveness.

It is suggested that customs administrations can implement trade facilitation practices without diminishing revenues or weakening controls. This study was conducted with the understanding that there is great trade potential between Kenya and other countries and that trade liberalization through regional cooperation initiatives can increase the realization of this potential. A more proportionate trade policy is needed. While policy measures are examined and to some extent implemented, the focus should be on

removing trade barriers including non-tariff and institutional barriers that increase transaction costs for importers and exporters.

Considering the rapid growth of regional economic integration, the study findings may inform government policies on Free Trade Agreements (FTAs), Customs Unions, and trade (or transit) corridors. The findings may inform the government on a set of policies meant to promote exports and achieve a sound response. The findings in particular may contribute to either enforcing or redesigning existing policies or arrangements to enhance liberalization of market access for participating countries. It could be done by removing or managing trade hurdles like customs barriers, as well as developing trade corridors to promote trade between landlocked countries and Kenya, given the latter's coastline location. Also, the governments that are party to existing agreements could determine whether to harmonize customs procedures and regulations to control flow of goods and people as well as enhance social protection.

The results can inform customs administrations if there is strong evidence that the reforms implemented by the KRA are motivated by a desire to significantly reduce trade and service costs. It can also explain KRA, in particular the increased interaction between different customs authorities and between customs and the private sector. This understanding can help facilitate trading. The findings inform customs administrations of the benefits to participants in terms of information exchange, data sharing and simplification of procedures, which can avoid double checks and thereby minimize time loss in the clearance process. The Kenyan government could be informed to take an integrated and comprehensive approach aimed at improving their trade facilitation system.

The findings may shed light to traders in the sense that they are likely to understand how the custom administrations may enhance their trading activities. It gives more insights on the contributions of custom administrations in revenue collection, control of flow of goods as well as social protection. Similarly, recognized customs administration processes allow relevant corporate employees to identify and reflect on areas for improvement, as well as make more educated trade-off judgments about time and effort allocation.

To the researchers and academicians, the findings act as a reference point for more debates on the linkage of custom administration in trade facilitation measures and growth in Kenya and other developing countries. Also, it contributes to the literature in the field of custom administration.

1.6 Scope of the Study

The research examined the effect of customs administration procedures on trade facilitation in Kenya. The key components of customs administration procedures were; declaration of goods, documentation and verification of goods. The target population of the study included 200 customs officers from KRA headquarters and ICD. The main reason for choosing this population was due to their direct involvement with customs procedures in the operation of their respective enterprise which directly affect the performance of their respective businesses. A census of all the 200 customs officers was done since the researcher could manage to collect data from all the respondents. The study used explanatory research design and collected primary data using questionnaires.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the literature. It covers the concepts of the study, the theoretical framework that grounds the variables, literature review in line with the study variables; critiques the literature to present the research gaps and the conceptual framework.

2.2 Concepts of the Study

2.2.1 Trade Facilitation

The simplification and harmonization of international trade procedures is known as trade facilitation (Grainger, 2008). The many activities, practices, and formalities connected with the gathering, presentation, transmission, and processing of data necessary for the movement of goods in international trade are included in this description. Improving transportation infrastructure, modernizing customs administration, reducing non-tariff trade barriers, and increasing exports are among them. Trade facilitation is a concept aimed at reducing the complexity and cost of completing trade transactions, as well as ensuring that all of these activities are completed in a timely, transparent, and predictable manner. It encompasses a wide range of topics and activities, including government regulation and control, business efficiency, transportation, ICT, and payment systems.

2.2.2 Declaration of Goods

Declaration of goods is made in the manner prescribed by customs in which the person concerned (importer/exporter or agent) indicates the customs regime applicable to the goods and provides data required by customs for its implementation, according to the general application of the Revised Kyoto Convention (RCC). Cargo declaration is data

provided (by the consignor or agent) before or at the arrival or departure of a commercial vehicle that contains data required by customs regarding the goods carried or taken over. from the customs area and may not contain more than the information necessary to identify the goods and mode of transport.

The information for the goods and shipping declarations comes from business and transportation documentation for international freight traffic, such as invoices, bills of lading, packing lists, and so on. These documents are referred regarded as accompanying documents since they must be provided with the customs notification. A key decision to facilitate trade in goods and cargo declaration is to comply with international standards and harmonize data requirements. Therefore, the RKC Standard 3.11 requires that the declaration of goods be subject to the mandatory application of UN layout keys for paper forms or WCO recommendations on electronic communications. The latter are consolidated in the WMO data model, which is based on existing UN and ISO standards. For paper forms, the European Community Single Administrative Document (SAD) is the most widely used standard customs form, as it is the basis of the Asycuda Customs Information System, which was developed and promoted by the United Nations Conference on Trade and Development (UNCTAD).

2.2.3 Documentation

The accurate completion of the documentation required for export and import is one of the most critical aspects of a successful international business transaction. Due to a lack of such paperwork, the manufacturer or supplier may be unable to deliver products and, as a result, the client may not receive goods on time. Failure to comply with import or export documentation might result in fines or imprisonment in more extreme circumstances. When sending items overseas or receiving goods from foreign nations, enterprises must often prepare three general paperwork. A commercial invoice is the

first. A commercial invoice includes an official list of the products purchased, as well as the price and quantity ordered. The full name and address of the sender or supplier, as well as the full name and address of the authorized consignee or consignee, must be included on commercial invoices. A commercial invoice also includes the signature of the supplier and a statement describing the product purchased. Commercial invoices, which serve as official records of financial transactions between exporters and importers, are possibly the most significant aspect of import/export tax documentation.

The packing list is usually the second document necessary for international shipments. The packing list similarly includes the names and addresses of suppliers and consignees, but it is more concerned with the shipment's content than with its cost. A complete list of shipping components can be found on the packing list. A certificate of origin is the third document that is frequently required while engaging in international trade. The exporter fills out a Certificate of Origin, also known as a C/O or a COO, which specifies the nation in which the goods were made. Because corporations may be barred from sending or receiving goods from specific nations, this documentation is critical. Businesses in the United States, for example, are prohibited from delivering goods to Cuba and Iran due to a long-standing trade embargo. Attempts to ship or receive goods from a country that has been embargoed can result in harsh consequences. Other, less desirable things may be necessary for foreign trade in addition to the three general documents described above. A free certificate of sale, an airplane transportation invoice, or a copy of the exporter's FDA registration are all examples of acceptable documentation. Customers who need to travel to the airport or local customs office to receive goods frequently request airline invoices, which include the departure date and expected arrival date.

2.2.4 Verification of Goods

Customs is the official measure of the customs office and an important part of the customs procedure. This use means as a scanner or manual inspection process, such as: B. Landing and digging to determine the contents of a shipment during import and export. Special reasons for customs and/or verification can be in the form of allegations of customs notification, supervision or suspicion of smuggling or brand infringement. During customs inspection, your goods are inspected by customs, or rather by officials, for quantity, quality or value. During testing, either a random sample (partial test) or the entire inventory (full test) can be checked. In addition, you may need to disassemble certain items, sometimes resulting in damage to the item itself.

2.3 Theoretical Review

This study was anchored on three theories including Resource-Based View (RBV) Theory, Heckscher-Ohlin Theory and New Trade Theory.

2.3.1 Resource-Based View Theory

First proposed by Wernerfelt in 1984 and later extended by Helfat 2003, RBV theory focuses on organizational resources as an important determinant of efficiency. According to the theory, to achieve high productivity, organizations must find, develop, and use their resources in a sustainable manner. The theory makes two assumptions in analyzing the sources of competitive advantage (Barney, 1991). First, it is believed that firms in an industry can be heterogeneous in terms of the pool of resources they control. Second, it is believed that the heterogeneity of resources can be sustained over time because the resources used to implement the firm's strategy do not exhibit perfect mobility between firms. Heterogeneity (or uniqueness) of resources is considered a prerequisite for a resource package to contribute to competitive advantage (Bridoux, 2004).

The theory is applicable to this study because it brings out the role of customs administration procedures as critical resources that customs officer can utilize to enhance trade facilitation performance. Declaration of goods, documentation and verification of goods particularly stand out as essential organization resources that custom officers can take advantage off in their daily operations. The purpose of this research was to determine how different types of customs administration effected trade facilitation. The RBV theory therefore, supported the independent concept in the study, which constitutes of the following customs administration procedures: verification of goods, documentation and declaration of goods.

2.3.2 Heckscher-Ohlin Theory

The development of trade theory, which is recognized as the standard theory of international trade, began in the 17th century, which marked the publication of Adam Smith's Wealth of Nations. Smith and Ricardo's theory does not help countries determine which products will benefit the country. In the Heckscher-Olin (H-O) model, countries that use their rich inputs relatively intensively tend to export goods (Kalu, Nwanosike, & Ogbuabor, 2016). It is assumed that countries and producers use free and open markets to identify which items they can manufacture more efficiently. Their idea, also known as factor proportion theory, holds that countries create and export commodities for which resources or factors are abundant, and hence production factors are less expensive (Leamer, 1995).

The huge volume of intra-industry trade is frequently cited as a significant aspect supporting the theory of trade based on increasing returns and imperfect competition versus those based on constant returns and perfect competition, according to Davis (1995). According to the Heckscher-Olin theory, moving from a closed to an open economy delivers large economic benefits because trading countries profit from

specialization and more effective resource allocation. Overall, trade's impact on productive opportunities such as economies of scale, international investment, and the transfer of new technologies and skills that contribute to increased productivity are all dynamic benefits of trade (Lam, 2015). The idea applies to this research since it highlights the relevance of trade facilitation in boosting cross-national trade. The current study focused on trade facilitation as the dependent variable.

2.3.3 New Trade Theory

Paul Krugman, a new trade theory economist, believes that international commerce can support economic growth in two ways. The first is the influence of trade-based economies of scale, and the second is that international commerce can stimulate economic growth by increasing the optimal allocation of resources between materials and knowledge sectors (Chen, 2009). New Commerce Theory (NTT) is a new growth theory that evolved in the context of international trade and economic growth, according to (Lam, 2015). As explicit variables that determine economic growth, the new growth theory stresses both technology and the externalities offered by the invention and application of new knowledge. NTT was created to explain why these countries have such a high degree of intra-industrial trade and a substantial share of global trade (Dicken, 1998). This implies that even when countries are comparable in terms of variables, increasing returns to scale and imperfect competition give grounds for specialization and trade (Poon, 1997).

Although most jobs in NTT assume that income increases are intrafirm, income increases are extra firms (Krugman 1991). Krugman's (1991) model also illustrates that trade leads to a regional concentration of major industries in the presence of external economies of scale. Krugman also points out that the long-term regional consequences of trade are typically cumulative and self-reinforcing. The emergence of globalization

is also explained by the new trade theory. As a result, poorer developing countries may struggle to grow some industries in the future because they are too far off from the economies of scale that industrialized countries enjoy. This is due to the economies of scale that mature enterprises already have, rather than a fundamental comparative advantage. The theory can be applied to this research because it explains the role of trade facilitation in helping developing countries compete in the global market.

2.4 Empirical Review

Lubos, Jindrich, Natalia and Richard (2016) investigated the impact of Russia's agricultural import embargo on imports of specific agricultural products from Europe, Norway, Canada, the United States, and Australia. The major goal of the Russian embargo is to help local producers attain greater levels of self-sufficiency in agricultural commodities, rather than to harm individual countries, particularly the European Union. The imposed import ban resulted in a considerable fall in the value of Russian agricultural imports, according to the findings. The import prohibition has also improved the overall competitiveness of Russia's agricultural trade, although other commodity groups' competitiveness has declined.

In Sub-Saharan Africa (SSA), customs receipts are a significant source of revenue, and non-compliance with customs procedures hinders governments' capacity to finance economic development. Bezabih (2018) investigated tariff avoidance in Sub-Saharan Africa, as well as the impact of subsidies in trade facilitation. The primary finding is that tariff evasion in SSA has risen over time and continues to be greater than in high-income nations while remaining comparable to the rest of the world. Tariff avoidance has also been demonstrated to have increased for imports from BRIC countries while decreasing for imports from OECD countries. The findings demonstrate that the extent of corruption in both importing and exporting countries enhances tariff evasion in the

region significantly. The findings suggest that Aid for Trade improves the efficiency of customs procedures, which reduces smuggling. Non-compliance with SSA customs regulations and duties, corruption, customs procedural effectiveness, and trade facilitation aid all have a strong link. These findings have the principal consequence that focused reform of customs procedures and trade facilitation in the region can help with customs law enforcement.

To assess the influence of chosen trade facilitation measures on international trade flows, de Sá Porto, Canuto, and Morini (2015) used a variety of panel data, including trade data from 72 countries from 2011 and 2012. Four equations were estimated with the help of a gravity model: a uniform cross-sectional model, a fixed effect model, a random effects model, and a maximum Poisson probability estimate. Notional variables such as the existence of the Official Economic Operator Scheme, the existence of a single window scheme in the sample countries, and the presence of mutual recognition agreements between the sample partner countries are included in the analysis to assess the impact of trade facilitation measures. The findings show that the Official Economic Operator Scheme and the One Window Scheme will improve the country's trade performance. On the other hand, the existence of an agreement on mutual recognition does not necessarily improve the trading performance of the parties. These results suggest that trade facilitation policies in general will help countries improve their trade performance.

On the one hand, there is a demand for trade facilitation as a process of simplicity, standardization, and unification of documents and procedures in international supply chains, while on the other hand, there is a need for control and intervention. In the Republic of Macedonia, Bilyan and Traikov (2012) investigated risk management and improvement in customs procedures. The determination of which individuals, products,

and modes of transportation must be managed and to what extent is a major aspect of the customs risk management method. People, items, and modes of transportation that pose a high danger are subjected to the strictest levels of surveillance and intervention, while low-risk trade opportunities are maintained at high levels. Overall customs and institutional improvements performed as part of the trade facilitation process are linked to improved customs performance. However, because to the exponential growth of trade on the one hand and significant international pressure for trade facilitation in other nations, the adoption of risk management approaches at the strategic, tactical, and operational levels has the biggest impact on the results produced.

Ghani (2017) investigates the role of logistics in international trade. This analysis is based on a wide sample of countries' overall logistics performance as well as disaggregated data on logistics specifics. Estimates of the standard equations for exports and imports, as well as essential logistical performance metrics, are included in regression analysis. The findings demonstrate that overall export and import logistics performance is positive and statistically significant. This study is also extended to see if logistics characteristics are important in international trade. The findings revealed that various aspects of logistics performance, particularly in terms of exports, had a statistically significant and favorable impact.

Vijil and Wagner (2012) used a two-stage regression study to see if institutions and infrastructure (two potential transmission channels) are important predictors of export efficiency. The impact of subsidies on trade sector flows on the previously identified determinants of exports is also investigated in this study. They discover that the infrastructural pathway is a key determinant of export efficiency, while the institutional pathway appears to have just a minor beneficial impact on developing nation export performance. They also reveal that, once applied, infrastructure support has a

significant and favorable influence on infrastructure. As a result, they discovered that a 10% increase in per capita aid to infrastructure commitments in developing nations resulted in an average 2.34 percent increase in the export-to-GDP ratio. This is also in line with the 2.71 percent reduction in tariff and non-tariff trade obstacles.

Policies aimed at improving logistical efficiency and trade facilitation are anticipated to have the most favorable impact on growing trade with developing nations, boosting the trade impact of removing remaining border barriers by two or more factors. A study by Ivanov and Kirkpatri (2009) examined the new World Bank trade facilitation and restriction index. The impact of various types of trade restrictions on trade at the border is compared to the influence of national policy impacting trade costs in this study. The evaluation advises that, despite preferential access programs, tariffs and non-tariff barriers remain a significant source of trade constraints for low-income countries, according to the gravity regression model. This is due to the fact that the value of trading preference is fairly limited: the new measure of relative preference range presented in the research reveals that it is quite tiny for most pairs. Most countries with excellent market access (duty-free) usually have competitors who have equal access.

Puertas, Marty, and Garcia (2014) conducted a study to determine the possible advantages from trade outcomes as a result of trade facilitation reform adoption in European countries. To examine the influence of trade facilitation and other trade-related restrictions on export performance, this study used a gravity model supplemented by trade facilitation indicators, regulatory quality, and infrastructure indicators. Quantitatively, the data demonstrate that a ten percent improvement in trade facilitation will result in a five percent rise in exports. Rises of 9-11 percent in the regulatory environment and 8% in the quality of infrastructure provision, respectively, would result in increases of 9-11 percent and 8%. While trade facilitation can help

enhance export efficiency, the results show that upgrading the regulatory environment and basic transportation and communication facilities is just as significant, if not more important, in promoting export growth. They come to the conclusion that trade facilitation by itself will not result in a large rise in exports.

Dennis and Shepard (2011) look at how developing nations might improve trade facilitation and diversify their exports. In a sample of 118 developing nations, studies suggest that a 10% reduction in international transportation costs and local export costs (documentation, land transportation, ports, and customs) is related with a 4 and 3 percent increase in export diversification, respectively. The outcome is heavily influenced by customs clearance. Diversification can be aided by lower entry costs, but the effect is lesser (1 percent). In addition, the study shows evidence that trade facilitation has a greater impact on diversity in impoverished nations.

Engman (2005) investigates the economic impact of trade facilitation, specifically the relationship between trade flows, government income, and foreign direct investment in developing nations. This is one of a series of studies looking into various aspects of trade facilitation, with the goal of contributing to debates in the WTO's Trade Facilitation Negotiated Group (NGTF) and elsewhere in the trade policy community. Improved and simplified customs procedures, according to the report, would have a major positive influence on trade flows. He also points out that most developing countries have been successful in raising government revenues by implementing tariff modernization initiatives that result in more efficient company tax collection. Furthermore, the study finds that facilitating cross-border goods movement will improve a country's ability to attract foreign direct investment and better integrate into global industrial supply chains.

According to Shinyekwa and Othieno (2013), they used a gravity model to compare trade performance in Uganda within the East African Community and other trading blocs. This study examines the factors driving Ugandan trade flows and specifically compares the influence and performance of various trading blocs on Ugandan trade flows and patterns. Two analytical approaches used are trading indicators and gravity model assessment using data taken from COMTRADE for the period 2001-2009 (panel). This study separately evaluates the determinants of export and import trade flows using static random, dynamic random and IV-GMM models. The results show a strong relationship between trading affiliation and trade flows. Uganda's import and export trade flows also appear to be adapting to the gravity of the EAC as integration progresses. Trade indicators show that Uganda mainly exports primary products and imports finished products. Uganda urgently needs to focus on implementing regional trade agreements to expand the country's export market.

It is widely believed that practical considerations such as the volume of unregistered trade between Kenya and its trading partners are based on trade, security, communications and transportation which are important and vital to both countries. Ackello-Ogutu and Echessah (1997) conducted a study to investigate unrecorded cross-border trade between Kenya and Uganda. They concluded that measures to encourage international or intra-regional trade and meteorological conditions were identified as key factors influencing the rate and seasonality of informal cross-border trade, particularly in food. While there is a comparative advantage in the production of some goods, trade in many goods is determined by supply and demand factors.

The gravity model was used by Wanjala (2004 to investigate the influence of the Common Market for Eastern and Southern Africa (COMESA) on the flow of Kenyan exports. COMESA has a positive impact on trade, according to the data. There was no

proof of smuggling. As a result, COMESA has aided Kenya's efforts to attain the Millennium Development Goals by improving the country's export performance. The findings also reveal that importing nations' nominal GDP, distance, proximity, and shared official language all have statistically significant effects on Kenya's export flow.

Uzzaman and Yusuf (2011) examine the role of customs and other government agencies in facilitating trade in Bangladesh to suggest possible actions. This study uses a combination of primary and secondary data sources to determine that traders in Bangladesh face delays due to too much formality, inefficiency and arbitrary judgment in carrying out their trades. These problems mainly occur in customs and port administration. Other issues that may contribute to the delay and inefficiency of import and export permits include faulty net finding reports, certificates provided by pre-shipment inspection authorities, a lack of testing facilities, cases brought by traders, and misleading representations made by the trading community. This study demonstrates that customs or port administration activities alone are insufficient to encourage trade; instead, an integrated approach is required. Because the trading climate in Bangladesh differs from that in Kenya, it is impossible to apply the conclusions of the study to the local context.

Chiukira (2019) investigates the importance of customs administration in developing countries' trade facilitation. It acknowledges that interoperable trade is inescapable, and that the parties must comply with the provisions of the trade facilitation agreement. Its goal is to "clarify the notion that trade facilitation results in revenue losses and show how trade facilitation can boost revenue collection while lowering expenses." The document also looks at the benefits of trade facilitation for the private sector in its international trade activities. As trade grows, countries require trade facilitation measures from their customs administrations to ensure there are no non-tariff trade

barriers. Before any policy framework can be implemented at the national or regional level, these customs administrations must be allowed to perform certain trade facilitation steps. The main reasons for trade facilitation measures include growing commerce in finished products from developing nations, globalization of production processes, enhanced regional trade agreements, and sustainable export diversification. This study was not conducted in Kenya, which is a substantive gap.

Wilson (2017) investigates the commercial consequences of various customs and administrative procedures. Customs and administrative procedures have a major impact on trade flows, according to recent research. The impact of customs and administration processes on trade flows between bilateral trading partners is assessed using a gravity model in the World Bank's Doing Business study (2005) measures of customs procedures and administration. The findings demonstrate that more efficient customs and administrative procedures would benefit all countries, with the countries with the least efficient customs and administrative procedures receiving the most benefits. Efforts should be made by both trading partners to get the greatest benefit from improved customs and administrative procedures, even if these efforts are not balanced. There is a conceptual gap because this study does not focus on trade facilitation as a dependent structure.

Toshevska-Trpchevska and Tevdovski (2014) studied the effects of various customs and administrative processes on commerce between Southeast European nations from 2008 to 2012. We utilized an escalating severity model, as recommended by the OECD. In the period 2008-2012, empirical findings reveal that the number of days spent at the border and the fees paid have a considerable negative influence on trade volume in both importing and exporting countries. The fact that the former Yugoslavia shares a border and is a part of the former Yugoslavia's market are key determinants of trade in the

region. Because of the differences in context, summarizing study findings in respect to local contexts is difficult.

Elliott and Bonsignori (2019) investigate the function of customs operations that emphasize on the immediate release of goods in facilitating trade flows, as well as the role of international express air freight in transmitting this effect. This study employs a 'gravity' model to show that boosting measures in the Global Express Association Customs Capacity Database can dramatically enhance trade flows: the implementation of measures could result in a 5% increase in trade flows. About half of this effect is conveyed via international air express delivery networks, which helps to encourage larger trade. Its impact is comparable to the telegraph's impact on transatlantic shipping in the nineteenth century. Because this study was not conducted in Kenya, there is a significant gap.

Adeniji (2018) examined the role of customs services in facilitating trade in Nigeria and compares their performance with Finland. This study follows a qualitative approach and mainly uses secondary data. This study examines some of the weaknesses that make it difficult to achieve the ultimate goal of both parties. However, Nigerian Customs has taken steps from time to time to improve its services, which are quite minor compared to its counterparts. These results form the basis for improvement proposals for both agencies to maximize their effectiveness. Effective and efficient institutions to facilitate transit, such as Corridor Agreements, can encourage active cooperation between transit and landlocked countries.

Khaguli (2013) examined the factors that influence trade facilitation at East African border crossings. This study uses the gravity model to build relationships between variables. The model starts with fixed effects and random effects. The Horseman test is

then carried out to determine what fits between the fixed effects and random models. Secondary data were taken from the World Bank database and the International Monetary Fund (IMF) CEPII Annual Book. The findings show that border crossings in East Africa play an important role in facilitating trade when overcoming trade barriers. The eight thresholds in the study represent transverse non-tariff barriers that negatively impact trade facilitation and increase the cost of doing business. Trade facilitation leads to increased trade flows and economic growth. The recommendation states that the government should, among other things, invest in trade facilitation initiatives for the economic growth of East African countries.

2.5 Critique of the Studies and Research Gaps

Most of the reviewed studies never specifically focused at developing countries (Biljan & Trajkov, 2012; Puertas et al., 2014; de Sá Porto, et al, 2015; Lubos, et al., 2016). They further failed to consider performance of trade facilitation; instead, they explored trade performance among countries that were involved in bilateral or multilateral trading. Studies that were reviewed examining trade performance via export and import trade flows as well as trade facilitation where factors that led to their growth was determined (Shinyekwa & Othieno, 2013; Gani, 2017). Engman (2005), for example, looked at the economic consequences of trade facilitation, specifically the relationship between trade flows, government income, and FDI. Dennis and Shepherd (2011) looked into trade facilitation and diversification in developing nations, whereas Vijil and Wagner (2012) looked into whether potential transmission routes are important predictors of export performance in developing countries.

Empirical expositions were not highly robust to estimation as they failed to employ alternative dependent and independent variables, different country samples as well as alternative econometric techniques. Improved trade facilitation has been shown

promote export diversification in developing countries however, the key determinants are not established. Models employed include regression analysis via two-step regression analysis, ordinary least squares (OLS), static random, dynamic random and IV GMM models.

In Kenya, there are no specific studies linking customs administration to either trade performance or trade facilitation. Ackello-Ogutu and Echessah (1997) looked at unrecorded cross-border trade between Kenya and Uganda, whereas Wanjala (2004) looked into the impact of COMESA on Kenya's export flow. This study will therefore fill empirical as well as methodological gaps in establishing econometric relationship between custom administrations and trade facilitation performance in Kenya.

2.6 Conceptual Framework

The conceptual framework indicates the link among the various variables (dependent and independent variables). The dependent variable is trade facilitation performance while independent variable is custom administration procedures. The conceptual framework gives a depiction on how the variables are related to each other.

```
┌─────────────────────────────┐
│ Declaration of Goods        │
│                             │
│ 1   The Invoice             │
│ 2   Packing List            │
│ 3   Bill of Lading          │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Documentation               │
│                             │
│ 1.    Export documentation  │
│ 2.    Components of         │
│       Shipment              │
│ 3.    Import/Export Tax     │
│       Documentation         │
└─────────────────────────────┘

┌─────────────────────────────┐        ╭──────────────────────╮
│ Verification of Goods       │        │ Trade Facilitation   │
│                             │        │ 1.  Trade volume     │
│ 1.    Customs inspection    │        │ 2.  Cost reduction   │
│ 2.    Partial inspection    │        │ 3.  Release of goods │
│                             │        ╰──────────────────────╯
│ 3.    Full inspection       │
└─────────────────────────────┘
```
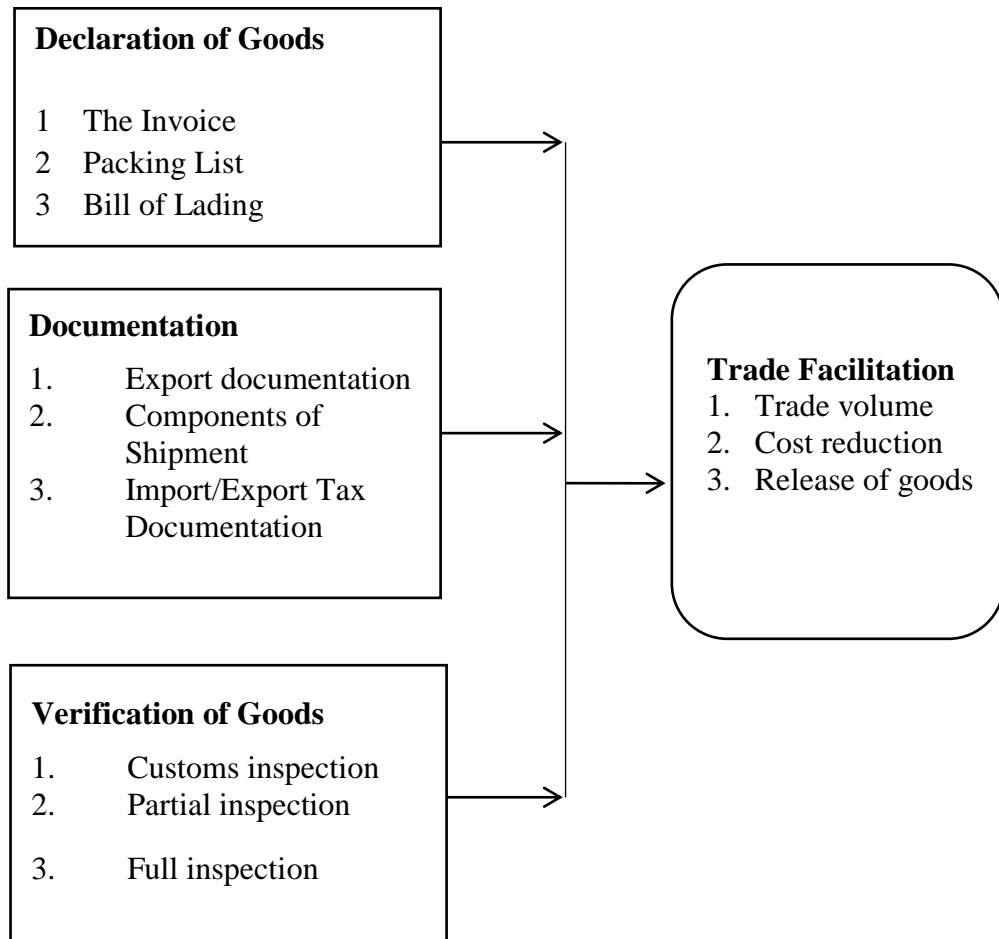
Independent Variables   **Dependent Variable**

Figure 2.1: Conceptual Framework

Source: Empirical Literature (2021)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The methods utilized to conduct this study is presented in this chapter. The term "research methodology" refers to an operational framework in which facts are organized in such a way that their significance is evident. The task of project preparation follows the definition of the research problem. The research technique encompasses the research concept, study population and sampling strategy, data collection process, data collection tools, and data analysis and presentation.

3.2 Research Design

Research design, according to Cooper and Schindler (2014), is a plan and framework of an inquiry that tries to provide answers to research questions or objectives. It gives a summary of the researcher's work, from developing the hypothesis to determining its operational importance to assessing the data. Researchers can conduct research, describe, explain, conduct a case study, conduct a cross-sectional study, conduct a longitudinal research project, or conduct a time series. This study uses an explanatory study design. Explanatory research design allows researchers to relate ideas to understand cause and effect between variables; Therefore, the researcher was able to understand the effect of the three separate variables studied on the effect of customs administration procedures on trade facilitation, making it the most appropriate research design for this particular study, thus the reason for its selection. The main purpose of explanatory research is to identify causal relationships between factors or variables related to the research problem.

3.3 Target Population

Cooper and Schindler (2014) describe the target population as a collection of items from which we want to draw conclusions. Burt, Barber, and Rigby (2012) identify it as the set of all people relevant to a particular study. The target population of the study included 200 customs officers from KRA headquarters and ICD. The main reason for choosing this population was due to their direct involvement with customs procedures in the operation of their respective enterprise which directly affect the performance of their respective businesses. A census of all the 200 customs officers was done since the researcher could manage to collect data from all the respondents. Therefore, sampling was not necessary.

Table 3.1: Target Population

Categories	Target Population	Percentage (%)
Customs officers at KRA	100	50%
Customs officers at ICD	100	50%
Total	**200**	**100%**

Source: (Kenya Revenue Authority Annual Report, 2019)

3.4 Research Instrument

Primary data collection method was used in this study. Data was collected using a questionnaire. A questionnaire is basically a research instrument that contains formulated questions that are geared to answer specific research queries, and are usually familiar to most people, are cost effective, reduces bias, are easy to analyze and are considered less intrusive (Creswell, 2014), thus best suited for conducting research. The questionnaires consisted of a structured (close-ended) questions and was administered through drop and pick method to the respondents. The questionnaire is divided into five sections, each representing a different category of questions. In the first part of the

questionnaire, respondents must provide general information such as gender, age and education level. Sections two through five use a Likert scale, with respondents indicating their level of agreement or disagreement on a range of one to five. The advantage of the Likert scale is that it does not need a simple yes/no response from the respondent, but rather allows for multiple perspectives and even no opinion. As a result, quantitative data is acquired, implying that the data can be simply evaluated.

3.5 Data Collection Procedure

The process of data collection is an important aspect in creating useful research data (Groves, 2009). The researcher began the data collection process after receiving clearance from the Kenyan tax officials in a cover letter. The National Commission on Scientific Technology and Innovation granted researchers approval and research permits (NACOSTI). The questionnaire comes with a cover letter from the school and a cover letter that is as personal as possible; emphasize why the survey is important and why respondents should fill out the questionnaire. The respondents were requested to complete the surveys and were given ample time to do so.

3.6 Piloting Testing

A pilot study was conducted to determine whether respondents could easily answer the questions. Pilot studies are frequently undertaken to evaluate the viability of methodologies, procedures, questionnaires, and interviews, as well as how they interact in specific circumstances, according to Shea and Bigerano (2018). They can also expose ethical and practical difficulties that may obstruct basic research (Doody, & Doody, 2015). Pilot studies aid researchers in identifying design faults, refining data collection and analysis methods, gaining experience and training research teams, evaluating the recruitment process, and learning critical information on participant weights prior to launching a bigger study. According to Mugenda and Mugenda (2013), a pilot study

requires only 10% of the sample population. Twenty questionnaires were given to customs officials at JKIA's customs department for this study. The responses from the pilot were not included in the final study to avoid bias.

3.6.1 Validity of the Instrument

The amount to which an instrument measures what it claims to measure is referred to as validity (Mugenda & Mugenda, 2013). Research studies have internal validity when their results depend on the variables specifically studied. In this study, the validity of the content of the questionnaire was checked to get a lot of help from regulators to ensure that the instrument, whether in the form of a statement, question or indicator, represents the aspect being measured (Saunders, Lewis & Thornhill, 2012). Data collection tools are reviewed by the regulatory authority that validates the tool. For the sake of clarity, the research tool was modified on a pilot basis before being applied to research respondents.

The extent to which a research tool can provide theory-based evidence is known as constructive validity (Cooper & Schindler, 2014). The amount to which a measuring question truly evaluates the existence of the structure that the researcher is trying to measure, such as B. Attitudes, skills, and personality tests, is defined by Saunders et al. (2007). The questionnaire was separated into multiple pieces to ensure design validity, with each segment analyzing the information for a specific purpose and tying it to the study's conceptual framework.

3.6.2 Reliability of the Instrument

Reliability is defined as the consistency with which a tool measures the same way every time it is used in the same setting with the same subject (Kölln, et al., 2018). To test reliability of the questionnaires, the responses were analyzed, and the result of the

reliability test produced. The researcher determined Cronbach's Alpha which estimated the internal consistencies of data in measuring a given construct. The greater the score, the extra reliable the developed scale is. Polit and Beck, (2006) indicated that a Cronbach's alpha of 0.7 is an acceptable reliability.

3.7 Data Analysis and Presentation

The questionnaires were reviewed for completeness and consistency before being used to process the survey responses. Using SPSS software, descriptive statistics and derived statistics were used to examine the quantitative data acquired. Research descriptive statistics are presented with the percentage, mean value, standard deviation and frequency for the effort required to answer the research problem. Statistics, including correlation and regression analysis, were used to establish relationships between study variables.

The research used multiple regressions analysis which indicated the influence of custom administration on trade facilitation in Kenya. The model for these study was therefore represented by;

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

Where, **β_0, β_1, β_2, and β_3,** are coefficients,

Y = Trade Facilitation

X_1 = Declaration of goods,

X_2 = Documentation,

X_3 = Verification of goods,

ε = error term for regression.

3.7.1 Diagnostic Tests

Diagnostic tests were run on the independent and dependent variables to see if they could be used in a regression analysis test. Normality, multicollinearity, linearity, automated correlation, and heteroscedasticity tests are some of them.

3.7.1.1 Normality test

The normality test is performed to see if a data set is evenly distributed. It's used to see if the data in the sample is from a regularly distributed population. Normality tests and other statistical methods of data analysis were used to assess the measure of the central trend using continuous data. The Kolmogorov-Smirnov test was performed to check for normality (Bryman, 2012).

3.7.1.2 Multicollinearity test

Multicollinearity is a condition in which the correlation or reciprocity between independent variables is extremely high (Gujarati & Porter, 2009). This calls into question the independent variable's statistical significance. The value of the variance inflation factor is used in the multicollinearity test (VIF). A VIF greater than ten (VIF 10) implies a multicollinearity issue (Bryman, 2012).

3.7.1.3 Auto correlation test

At consecutive intervals, autocorrelation is the degree of resemblance between the time series and the version of the lag itself. It assesses the relationship between the current and previous values of a variable (Gujarati & Porter, 2009). This is the degree of similarity between observations as a function of time. The Durbin-Watson (DW) statistic was used to determine automatic correlation. The null hypothesis does not reveal an automatic association, according to Gujarati and Porter (2009), and is only rejected when the Durbin-Watson (DW) statistic is greater than 2.

3.7.1.4 Linearity Test

A scatter plot is used to test for linearity, which demonstrates if the independent and dependent variables have a linear relationship. Before using the regression model, the relationship between variables should be fairly linear (Jain et al., 2017).

3.7.1.5 Heteroscedasticity test

Without accounting for heteroscedasticity, running a regression model would result in skewed parameter estimations. The Ho claimed that the error term's variance is constant. Normal P-P plot was used to test for heteroskedasticity.

3.7.2 Test of Hypothesis

Hypothesis testing determines whether or not the stated premise is supported by your data collection or population (Begum & Ahmed, 2015). The hypothesis is tested using a regression analysis model in this study. The conclusion for the null hypothesis is taken based on the results of the calculation of the t value. If the value of t is greater than 1.96 (critical value of t), then the conclusion is that the null hypothesis is rejected and vice versa.

3.8 Ethical Considerations

Ethics is a structure of moral values related to the extent to which the process supports professional, legal, and social obligations to research subjects (Shafer, Simmons, & Yip, 2016). The respondents gave their agreement after the researcher assured them that the information they provided would only be utilized for academic purposes. Researchers sought written approval from Moi University, Graduate School and NACOSTI. Researchers respect all guarantees of confidentiality, confidentiality and anonymity when conducting research. Data collected from the study area is checked and processed to ensure proper data management.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter covers the data analysis, outcomes, and interpretation. The findings are presented using tables and graphs. The information gathered is divided into topics that match to the study's objectives.

4.2 Response Rate

A total of 200 questionnaires were distributed to customs officers from KRA headquarters and the ICD. The response rate is presented in Table 4.1.

Table 4.1: Response Rate

Response	Frequency	Percent
Returned	151	75.5%
Unreturned	49	24.5%
Total	**200**	**100%**

Source: Research Data (2021)

A total of 151 surveys were completed and returned correctly. As a result, the total response rate was 75.5 percent, indicating a successful response rate, according to Babbie (2004), who stated that a response rate of more than 60% is considered a good response for a study.

4.3 Pilot Results

A reliability test was used to analyze the internal consistency of the variables as determined by the five-point Likert scale. The reliability coefficients for each Likert scaled item were calculated, and the findings are reported in Table 4.2.

Table 4.2: Reliability Test

Variable	Cronbach's Alpha	Number of items	Comment
Declaration of goods	0.830	6	Reliable
Documentation	0.857	7	Reliable
Verification of goods	0.868	6	Reliable
Trade facilitation	0.911	7	Reliable

Source: Pilot Data (2021)

Results showed Cronbach alpha of 0.830 for declaration of goods, 0.857 for documentation, 0.868 for verification of goods and 0.911 for trade facilitation. All the variables had Cronbach alpha greater than 0.7 implying that the items measuring the variables were reliable.

4.4 Demographic Information

This section presents the descriptions of the respondents in terms of their gender, age, education level

4.4.1 Gender

The respondents were asked to indicate their gender. The findings are presented in Figure 4.1.
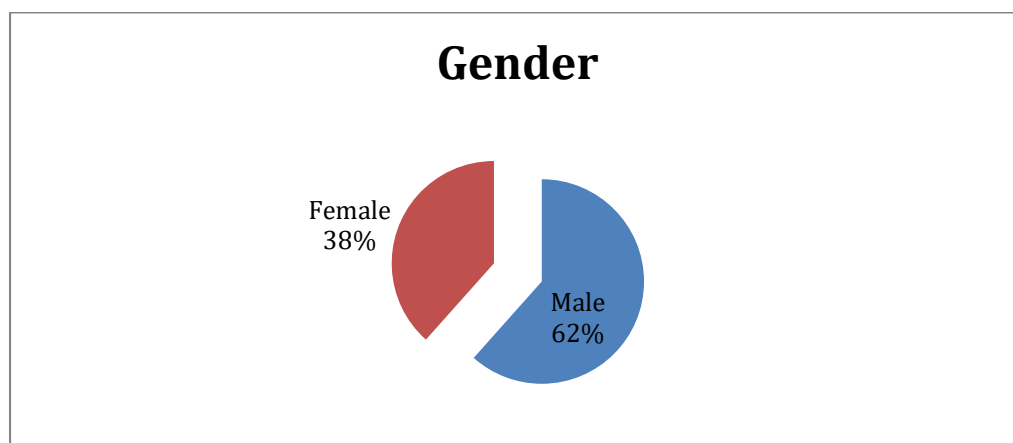
Figure 4.1: Gender of the Respondents
Source: Research Data (2021)

The male respondents were 62% while the female respondents were 38%. This implies that most customs officers from KRA headquarters and ICD were men. However, KRA offices and its agencies have met the 1/3 gender rule since women are more than 1/3 of the total employees.

4.4.2 Age of the Respondents
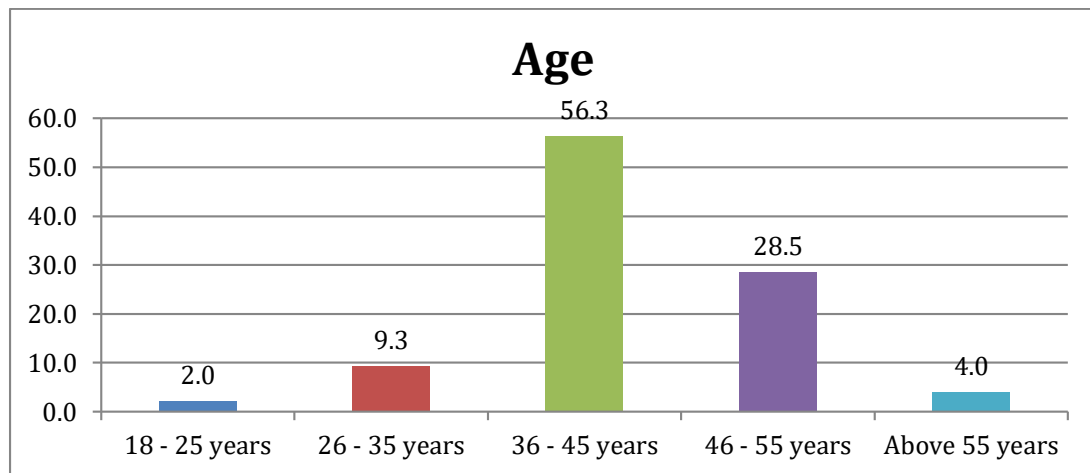
Figure 4.2: Age of the Respondents
Source: Research Data (2021)

Figure 4.2 shows that the majority of respondents (56.3%) were between the ages of 36 and 45, 28.5 percent were between the ages of 46 and 55, 9.3 percent were between the ages of 26 and 35, 4.0 percent were over 55, and just 2.0 percent were between the ages of 18 and 25. This indicates that the majority of respondents in the KRA offices had adequate and up-to-date knowledge of the subject under discussion.

4.4.3 Education Level

The respondents were further asked to indicate their education level. Results are presented in Figure 4.3.
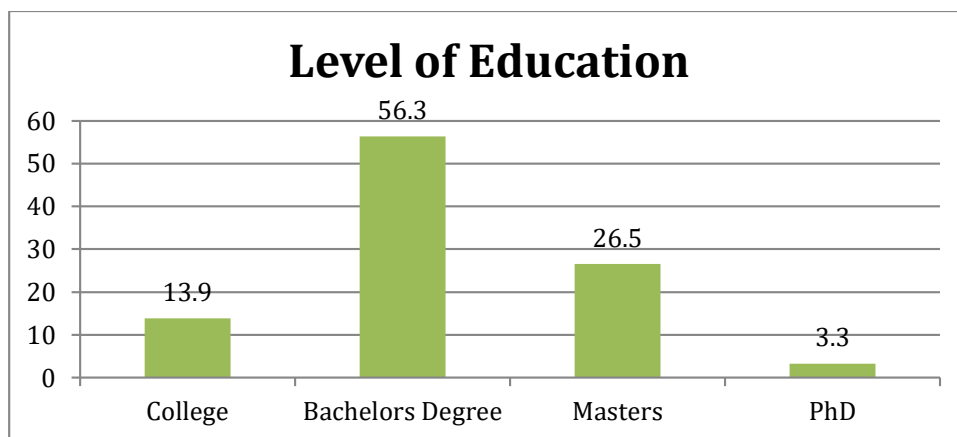
Figure 4.3: Level of Education
Source: Research Data (2021)

The results showed that majority of the respondents who were 56.3% had a bachelor's degree, 26.5% had a master's degree, 13.9% had a diploma/certificate while only 3.3% who had a PhD. This implied that most customs officers were educated and thus had the capacity to enhance trade facilitation in Kenya.

4.5 Descriptive Analysis

4.5.1 Declaration of Goods

The initial goal was to see how the declaration of goods affected trade facilitation in Kenya. To interpret the research results objectively, 5 and 4 (strongly agree and agree) were grouped as consonants, 2 and 1 (disagree and strongly disagree) were grouped as disagree, while 3 were neutral. Table 4.3 shows the results.

Table 4.3: Descriptive for Declaration of Goods

Statement	1	2	3	4	5	Mean	Std. Dev
Cargo declaration depends on the documentation	6.00%	13.20%	17.20%	41.70%	21.90%	3.60	1.14
The invoice, bill of lading, packing list have to be submitted together with the declaration to Customs	9.90%	11.30%	14.60%	41.70%	22.50%	3.56	1.24
Key trade facilitation solution with regard to the goods declarations is to follow international standards	7.90%	2.60%	13.90%	38.40%	37.10%	3.94	1.16
Efficiency in customs procedures aid for trade facilitation	11.90%	4.00%	18.50%	37.10%	28.50%	3.66	1.26
The aid for trade facilitation positively affects the level of efficiency of customs procedures which in turn leads to reduced smuggling	9.30%	11.90%	17.20%	31.10%	30.50%	3.62	1.29
Levels of corruption in both importing and exporting countries significantly reinforce tariff evasion in the region	7.90%	6.00%	18.50%	42.40%	25.20%	3.71	1.15
Average						**3.68**	**1.21**

Source: Research Data (2021)

The results showed that 63.6% of respondents agreed that cargo declaration depends on documentation. The mean score for this statement is 3.60, with a standard deviation of 1.14. Additionally, 64.2 percent of respondents agree that invoices, bills of lading, and packing lists must be lodged with customs. The average score for this statement is 3.56, with a standard deviation of 1.24.

Furthermore, according to the study's findings, 75.5 percent of respondents feel that compliance with international standards is the most significant decision in facilitating a declaration of trade in commodities. The average score for this statement is 3.94, with a standard deviation of 1.16. Furthermore, 65.6 percent of respondents feel that the

effectiveness of customs procedures aids trade facilitation. The average score for this statement is 3.66, with a standard deviation of 1.26.

Furthermore, the study's findings suggest that 61.6 percent of respondents feel that Aid for Trade improves the efficiency of customs procedures, which leads to a decrease in smuggling. The average score for this statement is 3.62, with a standard deviation of 1.29. Furthermore, 65.6 percent of respondents feel that the amount of corruption in importing and exporting countries enhances tariff evasion in the region significantly. The average score for this statement is 3.71, with a standard deviation of 1.15.

The total mean was 3.68, indicating that the majority of respondents agreed with the declaration of goods statements. Additionally, the standard deviation of 1.21 implied that majority of respondents had similar views on statements relating to declaration of goods. The results supported Wanjala (2004) observation that declaration of goods has the effect of trade creation.

4.5.2 Documentation

The second objective was to determine the effect of documentation on trade facilitation in Kenya. To interpret the research results objectively, 5 and 4 (strongly agree and agree) were grouped as consonants, 2 and 1 (disagree and strongly disagree) were grouped as disagree, while 3 were neutral. Table 4.4 shows the results.

Table 4.4: Descriptive for Documentation

Statement	1	2	3	4	5	Mean	Std.Dev
The precise preparation of needed export documents is one of the most important components of a successful international business transaction.	11.3%	11.9%	13.9%	34.4%	28.5%	3.57	1.32
Failure to comply with import or export documentation standards can result in fines or jail for business owners.	5.3%	11.3%	6.0%	38.4%	39.1%	3.95	1.18
In order to send products outside of the country, businesses often need to submit paperwork such as an invoice for the goods.	4.6%	13.9%	7.9%	47.7%	25.8%	3.76	1.12
The packing list contains a complete list of the shipment's components.	10.6%	6.0%	24.5%	39.7%	19.2%	3.51	1.18
The most significant component of import/export tax documentation is the commercial invoice, which acts as an official record of the financial transaction between the exporter and the importer.	9.9%	8.6%	8.6%	27.8%	45.0%	3.89	1.33
The consignee or designated recipient's full name and address should be included on the invoice.	16.6%	4.0%	13.2%	39.7%	26.50%	3.56	1.36
Each goods purchased is listed on a commercial invoice, together with the purchase price and quantity ordered.	12.6%	5.30%	6.60%	51.0%	24.50%	3.70	1.25
Average						**3.71**	**1.25**

Source: Research Data (2021)

According to the findings, 62.9 percent of respondents feel that the completion of needed export documentation is one of the most significant components of a successful international deal. The average score for this statement is 3.57, with a standard deviation of 1.32. In addition, 77.5 percent of respondents agree that if entrepreneurs fail to meet the standards of import or export documentation, they can be penalized or imprisoned. The mean score for this statement is 3.95, with a standard deviation of 1.18.

Furthermore, 73.5 percent of respondents agreed that when sending goods internationally, enterprises normally need to produce papers such as invoices for goods. The average score for this statement is 3.76, with a standard deviation of 1.12. According to the findings, 58.9% of respondents agree that the packing list gives a thorough list of products in transit. The average score for this statement is 3.51, with a standard deviation of 1.18.

According to the findings, 72.8 percent of respondents believe the trade invoice is the most significant aspect of the import/export tax documentation since it acts as an official record of financial transactions between exporters and importers. The average score for this statement is 3.89, with a standard deviation of 1.33. According to the findings, 66.2 percent of respondents agreed that the invoice contains the entire name and address of the recipient or recipients listed on the invoice. The average score for this statement is 3.56, with a standard deviation of 1.36. Furthermore, 75.5 percent of those polled agreed that the business invoice comprises an official list of all things purchased, as well as the purchase price and quantity ordered. The mean score for this statement is 3.70, with a standard deviation of 1.25.

The overall mean was 3.71, indicating that the vast majority of respondents agreed with the documentation assertions. Additionally, the standard deviation of 1.25 implied that majority of respondents had similar views on statements relating to documentation. The findings agreed with Biljan and Trajkov's (2012) argument that document simplicity, standardization, and unification improve trade performance.

4.5.3 Verification of Goods

The third objective was to determine the effect of verification of goods on trade facilitation in Kenya. To interpret the research results objectively, 5 and 4 (strongly

agree and agree) were grouped as consonants, 2 and 1 (disagree and strongly disagree)
were grouped as disagree, while 3 were neutral. Table 4.5 shows the results.

Table 4.5: Descriptive for Verification of Goods

Statement	1	2	3	4	5	Mean	Std.D
Customs officers inspect the items during a customs examination to verify their amount, actual type, and value.	9.90%	0.70%	4.60%	29.10%	55.60%	4.20	1.22
Customs verification is an important aspect of customs procedures that is carried out by the customs office.	6.00%	7.90%	10.60%	31.10%	44.40%	4.00	1.19
Partial inspection of goods may be carried out.	9.90%	2.60%	6.60%	29.10%	51.70%	4.10	1.26
During the inspection, the full inventory of goods may be examined.	9.30%	1.30%	8.60%	33.10%	47.70%	4.09	1.21
There is application of scanners in verification of goods	9.30%	2.60%	7.30%	32.50%	48.30%	4.08	1.22
There is manual verification of goods by clearance officers.	12.60%	3.30%	2.00%	29.10%	53.00%	4.07	1.35
Average						**4.09**	**1.24**

Source: Research Data (2021)

The results showed that 84.7% of respondents agreed that the goods were inspected by
customs officials for quantity, original nature of goods and value during customs
inspection. The mean score for this statement is 4.20, with a standard deviation of 1.22.
75.5 percent of respondents think that customs is an administrative operation of the
customs office and an important component of the customs process, according to the
findings. The mean score for this statement is 4.00, with a standard deviation of 1.19.
According to the findings, 80.8 percent of respondents agreed that a partial examination
of the goods may be conducted. The mean score for this statement is 4.10, with a
standard deviation of 1.26.

Furthermore, 80.8 percent of respondents feel that the complete inventory may be inspected during the inspection, according to the statistics. The mean score for this statement is 4.09, with a standard deviation of 1.21. In addition, 80.8 percent of those polled agree that scanners are used to inspect items. The mean score for this statement is 4.08, with a standard deviation of 1.22. Furthermore, according to the study's findings, 82.1 percent of respondents think that goods are manually inspected by staff for dismissal. The mean score for this phone statement is 4.07, with a standard deviation of 1.35.

The total mean was 4.09, indicating that the majority of respondents agreed with the assertions regarding product verification. Additionally, the standard deviation of 1.24 implied that majority of respondents had similar views on statements relating to verification of goods. These findings corroborated those of de Sá Porto, Canuto, and Morini (2015), who stated that having a commodities verification program and a single-window program will improve a country's trade performance.

4.5.4 Trade Facilitation

The dependent variable was trade facilitation in Kenya. To interpret the research results objectively, 5 and 4 (strongly agree and agree) are grouped together as consonants, 2 and 1 (disagree and strongly disagree) are taken as disagree, while 3 are neutral. Table 4.6 shows the findings.

Table 4.6: Trade Facilitation

Statement	1	2	3	4	5	Mean	Std.Dev
Cooperation with neighboring countries could facilitate trade.	11.90%	2.00%	6.00%	29.10%	51.00%	4.05	1.32
There is improved cooperation between various border agencies	11.90%	0.00%	11.90%	27.80%	48.30%	4.01	1.30
In terms of paying fees and charges imposed on imports and exports, there is collaboration.	9.90%	4.60%	23.20%	25.80%	36.40%	3.74	1.27
There is enhanced exchange of data through automation of border procedures	11.30%	13.20%	15.90%	33.80%	25.80%	3.50	1.31
There is improved simplification and harmonization of trade documents	9.30%	4.60%	12.60%	37.70%	35.80%	3.86	1.22
There is increase in consultations with stakeholders, especially with traders	11.30%	0.70%	11.30%	27.20%	49.70%	4.03	1.29
There is increase in publication of trade information through channels such as internet.	4.00%	7.30%	11.90%	21.90%	55.00%	4.17	1.14
Average						**3.91**	**1.26**

Source: Research Data (2021)

The results showed that 80.1% of respondents agreed that cooperation with neighboring countries could facilitate trade. The mean score for this statement is 4.05, with a standard deviation of 1.32. In addition, 76.1 percent of respondents feel that there has been an improvement in collaboration between border authorities. The mean score for this statement is 4.01, with a standard deviation of 1.30. 62.2 percent of respondents agreed that there was collaboration in the payment of import and export customs and levies, according to the findings. The average score for this statement is 3.74, with a standard deviation of 1.27.

Furthermore, the findings suggest that 59.6% of respondents believe that automating border operations will increase data interchange. The mean score for this statement is 3.50, with a standard deviation of 1.31. According to the findings, 73.5 percent of

respondents agreed that trade document simplicity and harmonization had increased. The average score for this statement is 3.86, with a standard deviation of 1.22.

Furthermore, the study's findings suggest that 76.9% of respondents feel that stakeholder dialogue, particularly with traders, is becoming more common. The mean score for this statement is 4.03, with a standard deviation of 1.29. 76.9% of respondents agree that the dissemination of commercial information through channels such as the Internet has risen, according to the findings. The mean score for this statement is 4.17, with a standard deviation of 1.14.

The total mean was 3.91, indicating that the majority of respondents agreed with the trade facilitation assertions. Additionally, the standard deviation of 1.26 implied that majority of respondents had similar views on statements relating to trade facilitation.

4.6 Diagnostic Tests

Data analysis as a process, according to Shevlin and Miles (2010), necessitates a series of tests before the actual process can begin. The distribution of the response variable and the distribution of the residuals are the two main assumptions. This assumption differs depending on the investigation. The following diagnostic tests are measured in this study: normality, linearity, multicollinearity, autocorrelation, and heteroscedasticity.

4.6.1 Normality Test

The Shapiro-Wilk test was performed to check for normality. The null hypothesis is that the data are normally distributed. The rule is: If the p-value is greater than 0.05, H0 is not rejected, if the p-value is less than 0.05, H0 is rejected.

Table 4.7: Normality Test

	Shapiro-Wilk		
	Statistic	**df**	**Sig.**
Declaration of Goods	0.868	151	0.076
Documentation	0.842	151	0.071
Verification of Goods	0.768	151	0.120
Trade facilitation	0.828	151	0.201

Source: Research Data (2021)

The results in Table 4.7 revealed probability values greater than 0.05. This led to acceptance of the null hypothesis. Therefore, data for declaration of goods, documentation, verification and trade facilitation variables were normally distributed.

4.6.2 Linearity Test

Linearity was tested using scatter plots as shown in Figure 4.4, 4.5 and 4.6.
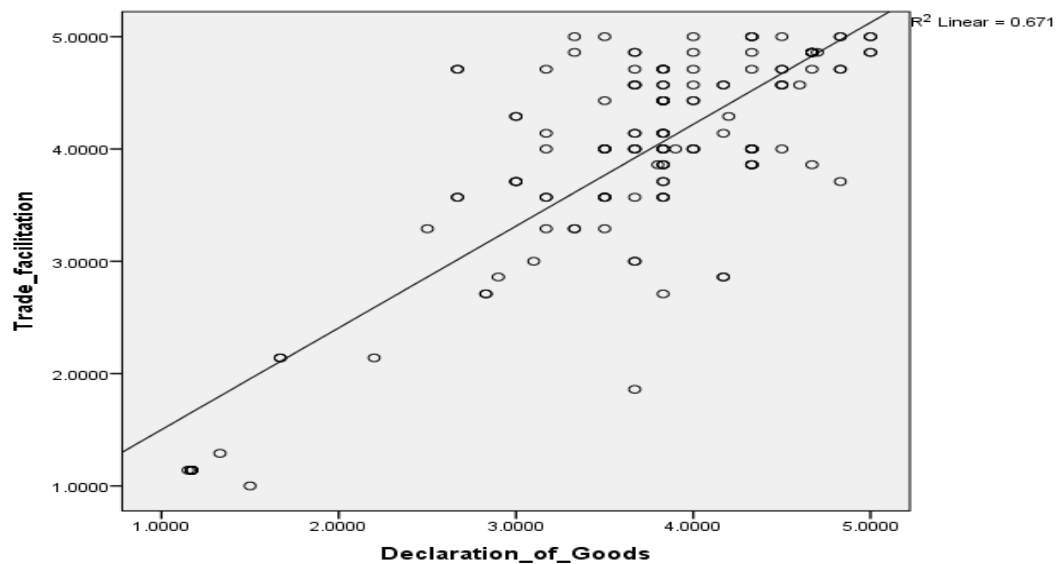
Figure 4.4: Declaration of goods and trade facilitation
Source: Research Data (2021)

Figure 4.5: Documentation and trade facilitation

Source: Research Data (2021)

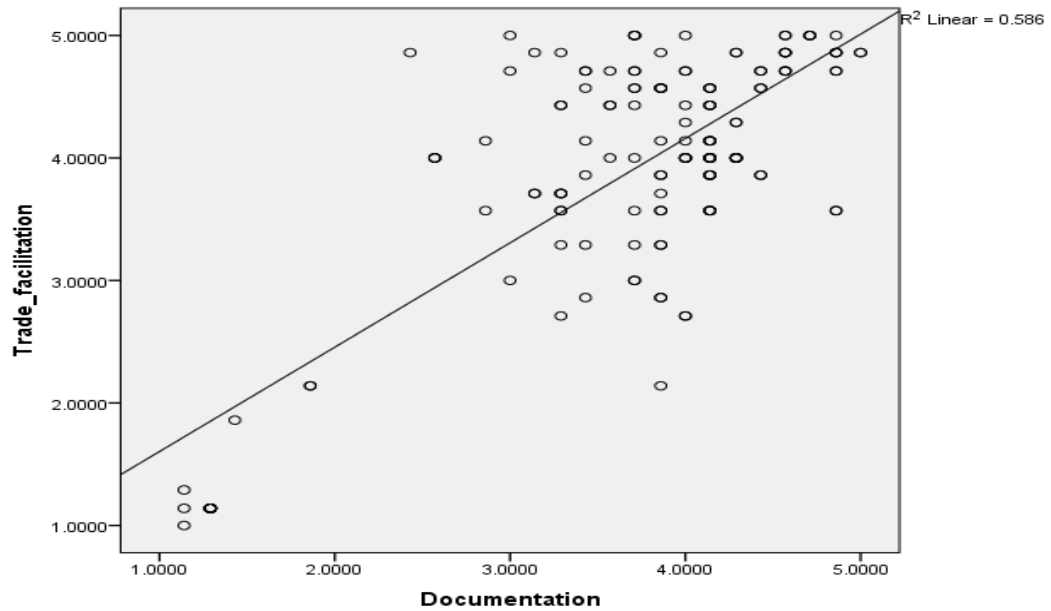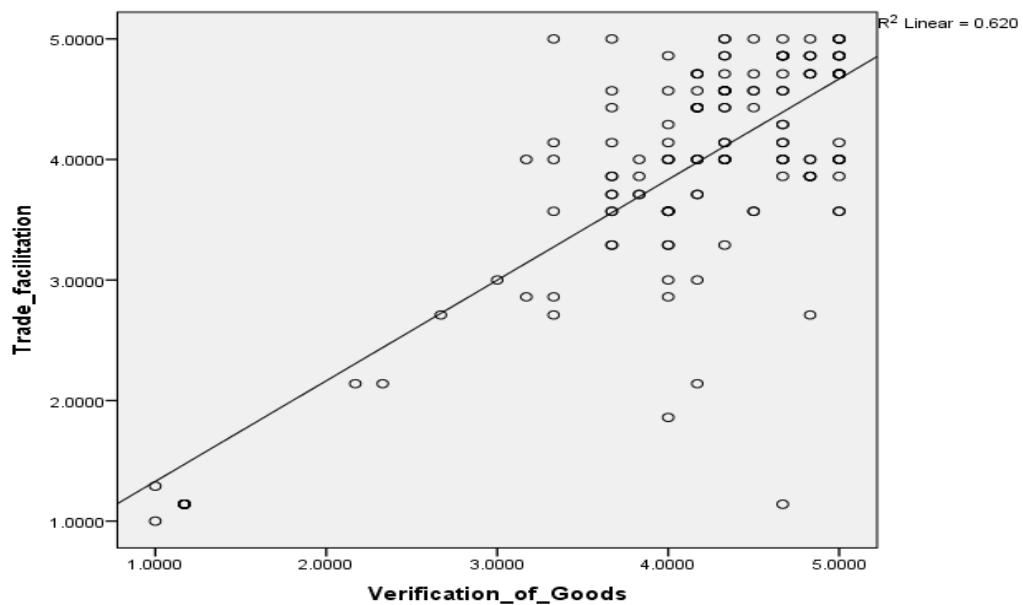**Figure 4.6: Verification of goods and trade facilitation**

Source: Research Data (2021)

The linearity results indicate that the relationship between declaration of goods, documentation, verification of goods and trade facilitation was linearly positive.

Linearity between the independent variables and the dependent variable was therefore confirmed.

4.6.3 Multicollinearity Test

The multicollinearity test was assessed using VIF and tolerance statistics (Gujarati 2013). Field (2009) argues that a VIF value above 10 is an indication of multicollinearity. The results in Table 4.8 show the results of the multicollinearity test.

Table 4.8: Test of Multicollinearity

Variable	Tolerance	VIF
Declaration of Goods	0.293	3.409
Documentation	0.325	3.077
Verification of Goods	0.348	2.869
Overall	0.322	3.118

Source: Research Data (2021)

VIF values ranged from 2.869 (verification of goods) and 3.409 (declaration of goods). The mean of VIF was 3.118, which was less than 10 implying that there was absence of multicollinearity among the independent variables.

4.6.4 Test of Autocorrelation

Table 4.9: Durbin Watson Test

Model	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0 861a	.741	0.736	0.5251	2.267

a Predictors: (Constant), Verification of Goods, Documentation, Declaration of Goods

b Dependent Variable: Trade facilitation

Source: Research Data (2021)

The results in Table 4.9 show that there is no autocorrelation because the Durbin-Watson statistic of 2,267 is in the acceptable range of 1.5 and 2.5. As a general rule, a value of $1.5 < d < 2.5$ does not indicate autocorrelation (Garson, 2012).

4.6.5 Heteroscedasticity Test

Normal P-P plot was used to test for heteroskedasticity. The test results are presented

in Figure 4.4.
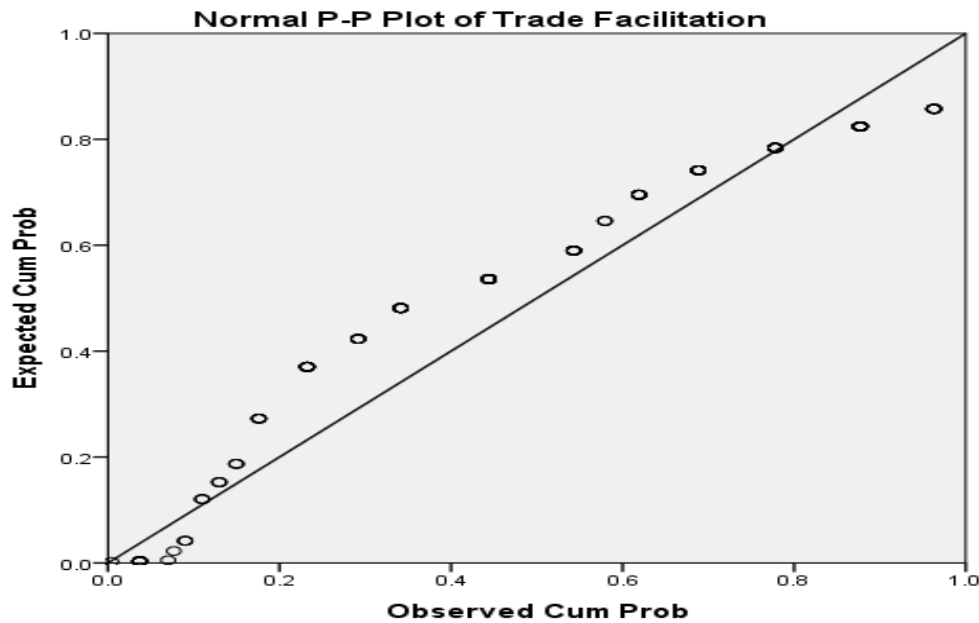
Figure 4.7: Test for Heteroscedasticity
Source: Research Data (2021)

It can be observed from the above data that the points are roughly the same distance

from the line. As a result, the information is not heteroscedastic. This demonstrates that

the data supports the regression model established between customs administration

procedures and trade facilitation.

4.7 Inferential Analysis

Inferential analysis contained both the correlation and the regression results.

4.7.1 Correlation Results

Correlation analysis was conducted to measure the connection between the independent variable and the dependent variable. Correlation measures the direction and strength of a linear relationship between two variables. The results are presented in Table 4.10.

Table 4.10: Correlation Results

		Trade facilitation	Declaration of Goods	Documentation	Verification of Goods
Trade facilitation	Pearson Correlation	1.000			
	Sig. (2-tailed)				
Declaration of Goods	Pearson Correlation	.819**	1.000		
	Sig. (2-tailed)	.000	0.00		
Documentation	Pearson Correlation	.766**	.794**	1.000	
	Sig. (2-tailed)	.000	.000		
Verification of Goods	Pearson Correlation	.787**	.777**	.749**	1.000
	Sig. (2-tailed)	.000	.000	.000	

** Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data (2021)

The results showed that declaration of goods had a strong positive linear association with trade facilitation ($r = 0.819$, $p = 0.000 < 0.05$). The finding agreed with Wanjala (2004) who indicated that declaration of goods has the effect of trade creation.

In addition, documentation had a strong positive linear association with trade facilitation in Kenya ($r = 0.766$, $p = 0.000 < 0.05$). The finding agreed with Dennis and Shepherd (2011) whose findings revealed that documentation is associated with export diversification gains.

Results further showed that verification of goods had a strong positive linear association with facilitation in Kenya ($r = 0.787$, $p = 0.000 < 0.05$). The finding agreed with Ackello-

Ogutu and Echessah (1997) who concluded that policies aimed at promoting inspection of goods were found to be the prime determinants of the trade performance.

4.7.2 Regression Results

The influence of the independent factors (goods declaration, documentation, and verification) on the dependent variable was determined using regression analysis (trade facilitation).

Table 4.11: Model Fitness

Model	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
861a	0.741	0.736	0.5251	2.267

Source: Research Data (2021)

Table 4.11 shows that the R was 0.861 while the R square was 0.741. This implies that customs administration procedures accounts for approximately 74.1% of the variation in trade facilitation. According to Engman (2005), streamlined and simplified customs procedures would have a major positive impact on trade flows.

The model in Table 4.11 was further examined for its significance using ANOVA. The results for ANOVA for customs administration procedures and trade facilitation are presented in Table 4.12.

Table 4.12: ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	116.042	3	38.681	140.284	.000
Residual	40.532	147	0.276		
Total	156.575	150			

Source: Research Data (2021)

The F-statistic of 140. 284 and the related P value of 0.000 0.05 are shown in Table 4.12. This suggests that customs procedures have a statistically significant effect on

trade facilitation at the 95% confidence level. These findings are in line with those of Bezabih (2018), who found a link between non-compliance with customs rules in SSA and tariffs, corruption, customs procedural efficacy, and trade facilitation aid.

Table 4.13: Regression of Coefficient

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.039	0.196		0.201	0.841
Declaration of Goods	0.460	0.086	0.416	5.367	0.000
Documentation	0.222	0.082	0.200	2.715	0.007
Verification of					
Goods	0.333	0.075	0.314	4.422	0.000

Source: Research Data (2021)

The results of the regression coefficients in Table 4.13 show that the declaration of goods has a positive and significant effect on trade facilitation ($\beta = 0.416$, p = 0.000 <0.05). This means that an increase of one unit of declaration of goods is likely to increase trade facilitation by 0.416 units. This result is in accordance with Wanjala (2004) which states that the declaration of goods has a trade promotion effect.

The results also show that documentation has a positive and significant effect on trade facilitation ($\beta = 0.200$, p = 0.007 <0.05). This indicates that an increase of one unit in documentation is likely to increase trade facilitation by 0.2 units. These results are in accordance with Bilyan and Traikov (2012) who showed that the document simplification, standardization, and unification processes improve commercial performance.

Furthermore, the results showed that verification of goods had a positive and significant effect on trade facilitation ($\beta = 0.314$, p = 0.000 < 0.05). This means that a one-unit rise in goods control will likely result in a 0.314-unit increase in trade facilitation. This finding is consistent with that of de Sá Porto, Canuto, and Morini (2015), who

concluded that having a commodity control program and a one-window program will improve the country's trade performance.

Model:

$Y = 0.416X_1 + 0.200X_2 + 0.314X_3$

Where:

Y = Trade Facilitation

X_1 = Declaration of goods,

X_2 = Documentation,

X_3 = Verification of goods

4.8 Hypothesis Testing

The hypothesis (H_01) stated that there is no significant relationship between declaration of goods and trade facilitation in Kenya. The results revealed p value less than 0.05 (Table 4.13). As a result, the study revealed that in Kenya, there is a significant association between products declaration and trade facilitation. These findings agreed with Wanjala (2004) who indicated that declaration of goods has the effect of trade creation

The hypothesis (H_02) stated that there is no significant relationship between documentation and trade facilitation in Kenya. The results revealed p value less than 0.05. As a result, the study came to the conclusion that there is a strong link between documentation and trade facilitation in Kenya. These findings agreed with Dennis and Shepherd (2011) whose findings revealed that documentation is associated with export diversification gains.

The hypothesis (H$_0$3) stated that there is no significant relationship between verification of goods and trade facilitation in Kenya. The results revealed p value less than 0.05. As a result, the study revealed that in Kenya, there is a significant link between goods verification and trade facilitation. These findings agreed with Ackello-Ogutu and Echessah (1997) who concluded that policies aimed at promoting inspection of goods were found to be the prime determinants of the trade performance.

Table 4.14: Summary of Hypothesis Testing

		P value	Verdict
H$_{01}$	There is no significant relationship between declaration of goods and trade facilitation in Kenya.	0.000 <0.05	Rejected
H$_{02}$	There is no significant relationship between documentation and trade facilitation in Kenya.	0.007<0.05	Rejected
H$_{03}$	There is no significant relationship between verification of goods and trade facilitation in Kenya.	0.000<0.05	Rejected

Source: Research Data (2021)

4.9 Discussion of the key Findings

The correlation results indicated that declaration of goods had a strong positive linear association with trade facilitation (r = 0.819, p = 0.000<0.05). This means that a rise in the number of commodities declared is linked to an increase in trade facilitation. According to the model results, declaring products had a positive and substantial influence on trade facilitation (= 0.416, p = 0.000<0.05). This implies that declaration of goods contributes significantly to changes in trade facilitation. The finding concurred with Wanjala (2004) who indicated that declaration of goods has the effect of trade creation.

The results further indicated that documentation had a strong positive linear association with trade facilitation in Kenya (r = 0.766, p = 0.000<0.05). This implies that an

increase in documentation is significantly associated with increase in trade facilitation. Documentation had a positive and substantial effect on trade facilitation (= 0.200, p = 0.007<0.05), according to the regression results. This means that changes in trade facilitation are largely influenced by documentation. These findings corroborated Biljan and Trajkov's (2012) conclusions that document simplicity, standardization, and unification improve trade performance.

In addition, the findings indicated that verification of goods had a strong positive linear association with facilitation in Kenya (r = 0.787, p = 0.000<0.05). This implies that an increase in verification of goods is significantly associated with increase in trade facilitation. Verification of goods had a favorable and substantial influence on trade facilitation (= 0.314, p = 0.000<0.05), according to the regression results. This implies that products verification has a substantial impact on changes in trade facilitation. These findings corroborated those of de Sá Porto, Canuto, and Morini (2015), who stated that having a commodities verification program and a single-window program will improve a country's trade performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the main findings, and provides conclusions and recommendations in accordance with the research objectives. The chapter also provides suggestions for further studies.

5.2 Summary of Findings

5.2.1 Declaration of goods and trade facilitation

The first objective of the study was to determine the effect of declaration of goods on trade facilitation in Kenya. The correlation revealed a significant positive linear link between declaring items and trade facilitation. Declaring products had a positive and significant influence on trade facilitation, according to the regression results. Based on the regression results, the null hypothesis that there is no significant relationship between declaration of goods and trade facilitation in Kenya was rejected.

5.2.2 Documentation and trade facilitation

The second objective of the study was to determine the effect of documentation on trade facilitation in Kenya. Documentation has a substantial positive linear relationship with trade facilitation, according to the correlation data. Documentation had a favorable and significant effect on trade facilitation, according to the regression results. The null hypothesis that there is no significant association between documentation and trade facilitation in Kenya was rejected based on the regression results.

5.2.3 Verification of goods and trade facilitation

The third objective of the study was to determine the effect of verification of goods on trade facilitation in Kenya. Verification of goods has a substantial positive linear

relationship with trade facilitation, according to the correlation data. Verification of goods has a favorable and significant influence on trade facilitation, according to the regression results. Based on the regression results, the null hypothesis that there is no significant relationship between verification of goods and trade facilitation in Kenya was rejected.

5.3 Conclusion

The study indicated that customs administration procedures had a considerable impact on trade facilitation in Kenya based on the data. The study concluded, in particular, that declaring products had a favorable and considerable impact on trade facilitation. The implication is that declaring goods makes a major contribution to improving trade facilitation in Kenya.

The study also concluded that documentation had a positive and significant effect on trade facilitation. The implication is that documentation contributes significantly towards enhancement of trade facilitation in Kenya. Further, the study concluded that verification of goods had a positive and significant effect on trade facilitation. The implication is that verification of goods contributes significantly towards enhancement of trade facilitation in Kenya.

5.4 Recommendations

The study found that declaring commodities aided trade facilitation in a positive and significant way. The study recommended that the KRA should enhance declaration of goods as a customs administration procedure. In particular, KRA should ensure that declaration of goods follows the international standards.

Documentation had a favorable and considerable impact on trade facilitation, according to the study. According to the research, the KRA should improve paperwork as a

customs administration practice. KRA should, in particular, verify that required export documentation is completed accurately, that import/export documentation requirements are met, and that documents such as invoices for items are produced.

The study further established that verification of goods had a positive and significant effect on trade facilitation. The study recommended that the KRA should enhance verification of goods as a customs administration procedure. In particular, KRA should ensure thorough inspection of the goods, conduct complete inventory inspection and application of scanners in verification of goods.

5.4.1 Implication to Theory, Policy and Practice

This research is expected to play a critical role in supporting theory, policy, and practice in customs administration and trade facilitation. The study found a significant link between customs administration methods and trade facilitation in principle. As a result, the study adds to the theoretical and empirical framework around the link between customs processes and trade facilitation. On practice, the study advises policy makers, especially KRA, on areas of improvement in relation to customs policy. The focus should be on declaration of goods, documentation and verification of goods that were found to have a significant predictive ability to influence trade facilitation. In practice, this study informs customs management on the best approaches to strengthen customs administration procedures in order to facilitate commerce.

5.5 Limitation of the Study

The study scope was limited to investigating the link between customs administration procedures and trade facilitation in Kenya. Further, the study only focused on three components of customs administration procedures, that is, declaration of goods, documentation and verification of goods. Furthermore, several respondents were

unwilling to offer requested information out of fear of being intimidated. However, the researcher told them that the information would be kept private and would only be used for academic purposes.

5.6 Areas for Further Studies

The current study investigated the effect of customs administration procedures on trade facilitation in Kenya. Other studies could focus on customs administration procedures and trade facilitation in within the EAC states for comparison purposes. Additionally, customs administration procedures - declaration of goods, documentation and verification of goods explained seventy four percent of changes in trade facilitation. Future studies could consider focusing on other factors that can explain the remaining twenty six percent.

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APPENDICES

Appendix I: Research Questionnaire

SECTION A: GENERAL INFORMATION

1. Kindly state your gender

   Male   [ ]   Female   [ ]

2. Kindly indicate your Age

   18-25 years   [ ]   26 – 35 years   [ ]

   36– 45 years   [ ]   46- 55 years   [ ]

   56 and Above   [ ]

3. What is your level of education?

   College   [ ]

   Bachelor   [ ]

   Masters   [ ]

   Doctorate   [ ]

SECTION B: DECLARATION OF GOODS

Kindly indicate your level of agreement or otherwise with statements relating to declaration of goods. Use the scale: Strongly Disagree (1), D – Disagree (2), Neutral (3), Agree (4), Strongly Agree (5).

NO.	STATEMENTS	1	2	3	4	5
1	Cargo declaration depends on the documentation					
2	The invoice, bill of lading, packing list have to be submitted together with the declaration to Customs					
3	Key trade facilitation solution with regard to the goods declarations is to follow international standards					
4	Efficiency in customs procedures aid for trade facilitation					
5	The aid for trade facilitation positively affects the level of efficiency of customs procedures which in turn leads to reduced smuggling					
6	Levels of corruption in both importing and exporting countries significantly reinforce tariff evasion in the region					

SECTION C: DOCUMENTATION

Kindly indicate your level of agreement or otherwise with statements relating to documentation. Use the scale: Strongly Disagree (1), D – Disagree (2), Neutral (3), Agree (4), Strongly Agree (5).

NO.	STATEMENTS	1	2	3	4	5
1	One of the most crucial components of a successful international business transaction is the accurate completion of required export documentation					
2	Business owners can be subject to fines or incarceration for failing to comply with import or export documentation requirements					
3	Businesses typically need to produce documents such as invoice for the goods in order to ship products outside the country					
4	The packing list provides a detailed list of the components of the shipment					
5	Commercial invoice is the most important piece of import/export tax documentation because it serves as an official record of the financial transaction between the exporter and importer					
6	An invoice should have a complete name and address of the consignee or designated recipient.					
7	Commercial invoice contains a formal list of each product purchased along with purchase price and quantity ordered					

SECTION D: VERIFICATION OF GOODS

Kindly indicate your level of agreement or otherwise with statements relating to verification of goods. Use the scale: Strongly Disagree (1), D – Disagree (2), Neutral (3), Agree (4), Strongly Agree (5).

NO.	STATEMENTS	1	2	3	4	5
1	During a customs inspection, the goods are inspected by customs officers, to check their quantity, true nature of goods and value					
2	Customs verification is an official measure carried out by the customs office and is an important part of customs procedures					
3	Partial inspection of goods may be carried out.					

4	The entire inventory of goods may be reviewed during the inspection.					
5	There is application of scanners in verification of goods					
6	There is manual verification of goods by clearance officers.					

SECTION E: TRADE FACILITATION

Kindly indicate your level of agreement or otherwise with statements relating to trade facilitation. Use the scale: Strongly Disagree (1), D – Disagree (2), Neutral (3), Agree (4), Strongly Agree (5).

NO.	STATEMENTS	1	2	3	4	5
1	Cooperation with neighboring countries could facilitate trade.					
2	There is improved cooperation between various border agencies					
3	There is cooperation in regard to payment of fees and charges imposed on imports and exports					
4	There is enhanced exchange of data through automation of border procedures					
5	There is improved simplification and harmonization of trade documents					
6	There is increase in consultations with stakeholders, especially with traders					
7	There is increase in publication of trade information through channels such as internet.					

Appendix II: Authorization Letter from Moi University

KENYA REVENUE AUTHORITY

Kenya School of Revenue Administration

ISO 9001:2015 CERTIFIED

REF: KESRA/NBI/036

25th November, 2020

TO WHOM IT MAY CONCERN

RE: REQUEST FOR RESEARCH PERMIT;
LORRAINE WANJERI WANJAO- REG. NO. KESRA/105/0082/2017

This is to confirm that the above named is a student at Kenya School of Revenue Administration (KESRA) Nairobi Campus pursuing Masters in Tax & Customs Administration.

The named student is undertaking Research on "Effects of Customs Administartion procedures on trade facilitation: A case of Kenya Revenue Authority ."

The purpose of this letter is to request your good office to assist the above student with the information to enable her work on her project.

Thank you.

Dr. Marion Nekesa PHD,
Head Academic Research
KESRA

2 5 NOV 2020

P. O. Box 48240 – 00100, Nairobi   Email: kesratraining@kra.go.ke   Tel: +254715877535/9

Tulipe Ushuru Tujitegemee !

2030

Appendix III: NACOSTI Research Permit

Ref No: 685056

Date of Issue: 02/February/2021

RESEARCH LICENSE

This is to Certify that Miss. Lorraine Wanjeri Wanjao of Moi University, has been licensed to conduct research in Nairobi on the topic: EFFECT OF CUSTOMS ADMINISTRATION PROCEDURES ON TRADE FACILITATION. A CASE OF KENYA REVENUE AUTHORITY for the period ending : 02/February/2022.

License No: NACOSTI/P/21/8755

685056

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Director General
NATIONAL COMMISSION FOR
SCIENCE,TECHNOLOGY &
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Appendix IV: Plagiarism Report

EFFECT OF CUSTOMS ADMINISTRATION PROCEDURES ON TRADE FACILITATION IN KENYA

ORIGINALITY REPORT

19%	14%	5%	8%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	ir-library.ku.ac.ke Internet Source	1%
2	Submitted to Asia e University Student Paper	1%
3	www.iiste.org Internet Source	1%
4	iprjb.org Internet Source	1%
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8	www.gov.uk Internet Source	1%
9	Submitted to Kenyatta University Student Paper	1%