EFFECT OF TRADE FACILITATION ON CUSTOMSREVENUE COLLECTION:

A CASE OF ISEBANIA-SIRARE BORDER STATION

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A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE, SCHOOL OF BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR AWARD OF POSTGRADUATE DIPLOMA IN CUSTOMS ADMINISTRATION AT JOMOKENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

2019

DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than Kenya School of Revenue Authority for academic credit.

Signed: **Date:**

_____ _____

Reg No. HDB335-C016- 1844/2017

This projecthas been presented for examination with my approval as the appointed course supervisor.

Signed: **Date:**

_____ _____

Supervisor: Dr. Marion Nekesa

DEDICATION

This research projectis dedicated to my family members who have always believed in my potential and encouraged me to join the Customs Administration at the Kenya School of Revenue Administration,thanks for your prayers. To my parents who always sacrificed, supported and inculcated relentless virtues in me. It was always your desire I be fruitful mentally and in all depths of life. To my supervisor, lecturers and fellow students for their undying support throughout my studies.

ACKNOWLEDGEMENT

I wish to acknowledge all resource persons from the various institutions who lecture at KESRA, for their Invaluable Insights and encouragement, and last, I wish to thank my family for their support and understanding while undertaking this study.

ABSTRACT

Trade facilitation aims at making International trade easier by eliminating administrative delays, simplifying trade procedures, increasing transparency, security and incorporating Technology in trade processes. There is a tendency of reluctance to take on additional legal obligations that may expose countries within East Africa to Dispute Settlement Mechanisms (DSM). However, this fear has been dispelled by the best endeavor clause in the text and the benefits that trade facilitation brings to the economies of East Africa Taking into consideration the pace of integration of East African countries and their resolve to deal with outstanding issues towards fully fledged customs union and free market economy, there is no doubt that there exists an underlying problem that requires urgent attention. This study sought to examine the effect of trade facilitation on customs revenue collection. The study was guided by the following specific objectives:- to determine the effect infrastructure on customs revenue collection on trade facilitation at the Isebania border station, to find out the effect of simplification of rules on customs revenue collection at the Isebania Border Station, to establish the effect cross agency dialogue on Customs revenue collection at Isebania Station. This study useda descriptive research design with the aim of determining and reporting the way things are and it guides in determining the current status of the population under research. The study targeted 158 traders operating across the Kenya Uganda border as well as 10 key informants who included customs officers, clearing agents and immigration personnel. The studyused both primary and secondary data. A closed structured questionnaire wasused. Descriptive statistics was used to summarize the outcomes for each of the main variables. These included mean and standard deviation. While measures of central tendency showed points of consensus, standard deviation shows the degree of variability of responses on each of the objectives.Thestudy foundthatinfrastructure development, simplification of rules and cross agency dialogue significantlyinfluencescustoms revenue collection.Basedonstudyfinding,thisstudyrecommendsthere is need for Kenya Revenue Authority to simplified rules and encourage cross agency dialogue at the border stations, this will improve customs revenue collection.

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LIST OF ABBREVIATIONS AND ACCRONYMS

DSM	Dispute Settlement Mechanisms
NTB	Non-Tariff Barriers
OECD	Organisation for Economic Co-operation and Development
RADDEX	Revenue Authorities' Digital Data Exchange
SME	Small and Medium Scale Enterprises
UNCTD	United Nations Conference on Trade and Development

DEFINITION OF TERMS

Infrastructure:is the fundamental facilities and systems serving a country, city, or other area including the services and facilities necessary for its economy to function (Holliday & Adrian. 2007).

Simplification of rules:are measures used incontrolling the flow of goods, including animals, transports, personal, and hazardous items, into and out of a country (Kagira& Bernard, 2011).

Customs documentation: are documentations issued by a carrier or its agent to the shipper as a contract of goods (Koopman& Laney, 2012).

Trade Facilitation: is the simplification, modernization and harmonization of export and import processes (Nilsson &Evelina, 2014).

CHAPTER ONE

INTRODUCTION

1.1: Background of the Study

According to WCO 'Trade Facilitation is the avoidance of unnecessary trade restrictiveness by applying modern techniques and technologies while improving the quality of controls in an internationally harmonized manner'. Trade facilitation includes Streamlining and harmonizing the activities, practices and formalities required for international trade and associated payments and border logistics while safeguarding legitimate regulatory and policy objectives. Thus, trade facilitation—reducing the transaction and operational costs associated with moving goods and providing services across borders—has moved to the forefront of the global and World Bank Group's trade agenda. Trade facilitation reforms are especially beneficial to poor countries — the WTO estimated that it could reduce trade costs by 15percent for low- and middle-income countries.Zaki (2017) defines trade facilitation as making trade easier. This calls for Harmonization and simplification of trade rules. Trade facilitation aims at making International trade easier by eliminating administrative delays, simplifying trade procedures, increasing transparency, security and incorporating Technology in trade processes.

1.1.1. Global perspective

Trade Facilitation has become increasingly a subject of interest globally due to the need for freedom of movement of goods and services resulting from growth in trade volumes that is directly attributed to worldwide liberalization of trade. The origin of Trade Facilitation and the prominence the topic received as subject of negotiations at WTO discussions was at the Singapore Ministerial Conference of 1996 and in Doha, where the Doha Development agenda

was adopted by the ministers as a framework of the Agreement (Hoek et al (2012) From the outset, it must be pointed out that promotion of trade, removal of restrictions and provision of transport does not primarily lead to trade facilitation as we know it today. Trade facilitation is the tendency to minimize costs of doing business that come into play in the process of enforcing of regulations and policies (Staples, 2002).

In East Africa, the quest for efficiency in port operations, professionalism in customs procedures that allow for faster clearance of goods is now a matter of concern. In the pursuit of a fully-fledged customs union, a common market, single currency and finally a political federation, East African Customs Union has been able to eliminate all tariffs on intra- East African trade and agreed on a Common External Tariff (CET) for goods that do not originate from East Africa. This considerably contributed towards cutting a proportion of costs of up to € 300 million to the taxes foregone by partner states in their Preferential Trade Arrangements. Nevertheless, the costs to trade attributed to non-tariff barriers (NTBs) have more far-reaching repercussions than those attributable to tariffs, Hoekman et al, (2013).

East Africa's trade would have recorded higher level of growth than it has now had several factors that heavily affect Trade Facilitation been looked into and addressed. These are insufficient and bad roads, technology and bad governance. According to Lima, (2014). The degree of infrastructural challenges rise to approximately 40% of transport costs and to a high of 60% for landlocked countries. Costs attributable to border inefficiencies are, low resource compatibilities where document processing systems are not perfectly compatible. For instance, Kenya has the Simba System 2004, while Uganda has the ASYCUDA World. Such challenges limit the extend one can explore the market that has widened as a result of the East African Community trade in the region, Yang & Gupta, (2017) an attempt has been made to have

Revenue Authorities' Digital Data Exchange (RADDEX) as a platform for exchange of data from the two systems but this has not fully been exploited.

High costs of doing business constitute a major barrier to East Africa's competitiveness and attainment of millennium goals. Transport costs have been attributed to prevalence of uncoordinated multiplicity of institutions at borders, repetitive processes and documentation in the cargo clearance, right from the port of Mombasa in Kenya to the landlocked countries of Uganda, Rwanda, Burundi, Democratic Republic of Congo (DRC) and South Sudan. The presence of numerous uncoordinated government agencies forms a fertile breeding ground for integrity issues due to redundancy of processes. The WTO (2015) reports that there is broad appreciation among WTO Members of themagnified benefits of cooperating on simplifying trade procedures, and this made forthe most successful negotiations in the history of GATT/WTO in terms of inclusivenessand transparency.

Trade facilitation necessarily includes a multitude of private and public actors formingdifferent parts of the trading chain or network because it impinges on the operational interface between these players (WTO 2015). Private stakeholders include traders, logistics and insurance providers, and customs brokers. These agents may be operating in different national territories and responsibilities of each party also shift depending on the agreed Incoterms (Grainger 2011b). Public actors involve not just agencies with border operations such as customs, but also ministries of agriculture, environment, and health, that usually have the mandates for public health and safety; and public works that may be responsible for port facilities. In this context, it is useful to organize trade facilitation measures along typologies depending on the main set of trade transactions being targeted. Arranged along thechain sequence of a trade transaction, this

can be madeto coincide with the organizing framework of the World Bank's IEG portfolio of trade facilitation activities summarized.

However, the categories are not mutually exclusive. A trade facilitation measure nearly always has cross-cutting impacts on several outcomes. For example, conformity assessment procedures for sanitary and phytosanitary (SPS), and technical regulations usually undergo documentary and possibly physical verification on reaching the border of the importing country. A trade facilitation reform that puts in place a mutual recognition agreement (MRA) between regulatory agencies in the importing and exporting countries involves cross-agency dialogue and coordination but will also simplify trade-related rules and procedures at the border.Thebroadest scopes develop general indicators for different aspects of trade facilitation. For example, infrastructure indicators can be constructed from information on the length or quality of road networks, mobile telephony uptake, and so on.; while institutional quality indexes are constructed from indicators of governance transparency, democracy, and so on. Limaoand Venables (2001) employ the mean of the normalized components as aninfrastructure indicator for trade facilitation. Francois and Manchin (2013) and Portugal-Perez and Wilson (2012) develop their trade facilitation metric using principal components and factor analyses to capture the main elements driving variations in each indicator. All three studies confirm infrastructure access and good quality institutions have significant positive effects on trade flows. Developing facilitation measurements in this manner has the advantage of wide country and temporal coverage. Nonetheless, the aggregation of information limits the possibility of disentangling the effects of specific 3 This approach is closely related to a class of literature that estimates border effects and homebias, which infers trade costs in terms of the tendency of a country to trade within itselfcompared with other countries. An example of this is Anderson and Yotov (2010).

measures of interest for policy makers. Moreover, Moïséand Le Bris (2013) caution that this approach implicitly assumes substitutability between subcomponents of each indictor which may not be the case in reality. Many of the specific TFIs of interest to policy makers are not routinely nor systematically collected in most developing countries. Ideally, aoutright survey solves this data gap. Wilson, Mann, and Otsuki (2003, 2005a, 2005b) are some of the earlier studies that conducted surveys to develop indicators on port efficiency, customs environment, regulatory environment, and e-business usage for economies of the Asia and Pacific Economic Cooperation, and later on, to a larger set of countries. Over time, the recognition of the importance of these indicators gave rise to the development ofinstitutionalized, regular, and internationally comparable indicators compiled by the World Bank, World Economic Forum (WEF), and later by the OECD. Since 2007, the World Bank has been conducting the surveys behind the LPI every two years, covering 160 countries by 2014. The LPI has six components that can be groupedaccording to trade facilitation inputs – customs, infrastructure, ease of arranging shipments; and outcomes – international shipments, timeliness, and tracking and tracing (WTO 2015). The respondents are mainly agents engaged in trade logistics.

The Enabling Trading Index (ETI) of WEF comprises seven pillars from 56 indicators collected from international organizations complemented by information from the responses of CEOs and top business leaders through the WEF Executive Opinion Survey (WEF 2016). The ETI covers 138 countries and has been updated annually since 2010. Finally, the OECD launched the Trade Facilitation Indicators (TFIs) in 2012 (Moïsé and Sorescu 2013), which was updated in 2015 to cover 152 countries.

The TFIs have 16 indicators based on 97 variables collected from surveys of government and private sector stakeholders. It adopts a narrow definition of trade facilitation that is focused on capturing the main provisions of the WTO TFA.

Bureaucracy and red tape has been said to cost traders in the East Africa Region a whooping US$7 million annually, PADECO Company Study, (2009). The study blames delay on axle load and gross vehicle load limits and their lack of harmonization in the five East African countries. Rwanda and Burundi moving towards a limit of 48 tons down from Rwanda's initial 53 tons, whilst Tanzania and Uganda have 56 tons as their maximum load .The challenge emanates from the fact that weigh bridges are primarily managed by government authorities with occasional intervention by police forces. The uncoordinated system of management results in creation of loopholes.

Additionally, numerous presences of weigh bridges along the northern corridor and at short intervals excruciate the problem. It is noted that between Rwanda and Dar–es-Salaam there are 9 weigh bridges and 7 between Mombasa and Malaba border. Stoppages at these weigh bridges result in delay. The lack of verification sheds at borders also results in delays especially when the weather is unfavorable.

The reluctance of transporters to embrace technological enforcement tools such as the use of complementary tracking devices such as the Electronic Cargo tracking system (ECTS) increases the time to physically monitor the movement of goods. Container Freight Stations' demurrages add to costs being transferred to the consumer encouraging inflationary trends. In order to attain desired positive impacts of Trade Facilitation. There is need for a more integrated and holistic approach when addressing these challenges. Kenya Customs for instance has undertaken considerable reforms in clearance processes.

However, more needs to be done in addressing trade restrictive non-tariff barriers (NTBs) that impinge on the benefits that can accrue from trade facilitation.

1.1.2 The regional perspective

While several of the above challenges cut across the border posts of East Africa there has been little effort and enthusiasm made to substantively make Trade facilitation a priority subject of debate in the Multilateral Trade Negotiations and especially the issue of commitment for technical Assistance and support for capacity building in this area as agreed by Ministers in the Doha Development Agenda to significantly allow for the positive impact of Trade Facilitation to be felt in promotion of East African Trade.

East Africa has been characterized by poor institutional, communication, and transport related infrastructure. These attributes impact negatively on the movement and growth of trade in East Africa, and thus limiting the full benefits of interregional trade. The World Country study (2005), Action plan indicates that entrepreneurs face more business obstacles in East Africa than any other Regions, United Nations Conference on Trade and Development, (2004). The study indicates further that a combination of 'high regulatory costs, policy uncertainty, corruption, unfair competition and ineffective judiciary system account for 20-40% above other developing regions'.

This study examines challenges which impact negatively on Trade Facilitation and recommended reforms that enhance trade Facilitation such as increased port efficiency, improved Customs regulatory environment, upgrading service infrastructure and administrative measures which will result in benefits to East African countries. The project also considered how regional trade agreements influence trade flows in East Africa. Using secondary data

available the project has shown that regional trade agreements influence and impact positively on trade flows.

1.1.3 Trade Facilitation and Multilateral Trade Negotiations

Trade Facilitation has become increasingly a subject of interest globally due to the needfor freedom of movement of goods and services resulting from growth in trade volumes that is directly attributed to worldwide liberalization of trade. The origin of Trade Facilitation and the prominence the topic received as subject of negotiations at WTO discussions was at the Singapore Ministerial Conference of 1996 and in Doha, where the Doha Development agenda was adopted by the ministers as a framework of the Agreement (Hoek Aet al (2002) From the outset, it must be pointed out that promotion of trade, removal of restrictions and provision of transport does not primarily lead to trade facilitation as we know it today. Trade facilitation is the tendency to minimise costs of doing business that come into play in the process of enforcing of regulations and policies (Staples, 2002).

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1.1.4Modernization of Border Operations

Modernization of border operations aim to lower trade costs by adopting procedures hinged on automation, incorporation of information and communication technology systems, and use of modern equipment such as scanners. This has implications on the ease with which border agencies can coordinate, and the transparency of trade regulations and procedures that are discussed in Section 4.2. Empirical work on the area is still lacking, and most of the discussions of the review draws from qualitative work. The limited empirical findings suggest that reforms in this area lead to reduction of trade costs, and thereby encourage trade flows. The most immediate impact is on trading times. Hillberry and Zhang (2015) predict that automation can reduce the time to import by 30 percent. Among TFIs, formalities relating to automation are also found to be among one of the most important predictors of trade costs and trade flows for low and middle-income countries (Moïsé and Sorescu 2013). In terms of regions, the largest effects are foreseen in Asia and Sub-Saharan Africa.

A channel by which ICT can reduce trade costs is by making information that areelectronically encoded simultaneously accessible to multiple parties. This induces a virtuous effect in

facilitation measures that encourage cross-agency dialogue, coordination, and integration. Moreover, ICT has implications on the ability to track a shipment's progress along the trading chain possibly in real time. In this sense, it helps firms plan and manage inventory arrangements. In some cases, the negative effects oflong border procedures can be even mitigated if ICT improves information availability.

As the WTO (2015) pointed out, long lead times are not necessarily a problem if it is predictable. This is most important for firms engaged in GVC trade. Countries can develop their own customs ICT systems such as TradeNet in Singapore.This has the benefit of being tailored to a country's specific needs and priorities (UNCTAD 2017). But these can also be expensive to implement. Instead, there are several off-the-shelf customs software management systems that are available. The most widely used is Automatic System for Customs Data (ASYCUDA), installed in over 90 countries as of 2017 (UNCTAD). The system was developed by United Nations Conference on Trade and Development (UNCTAD) to lodge information on manifests and customs declarations, accounting procedures, transit, and suspense procedures. Because of the broad coverage of countries, the adoption ASYCUDA and other systems can also possibly function as a resource network of best practices that can be shared. Modernization of border operations often represents a hugely expensive undertaking. Data from implementation costs collected by the WTO (2015) reveal the median expenditure of an automation project to be close to USD 9 million in real terms and are often incurred upfront. Moreover, the cost estimates of past projects exhibit wider variation than expenditures in other areas of reform (WTO 2015). The cost of installing an electronic data interchange system is $1.6 million in Afghanistan, $5.5 million in Jamaica, but as much as $32 million in Turkey (World Bank 2009). The costs of

modernization are also often inflated by the need to fulfill a priori requirements thatdictate the absorption capacity of a country's customs institutions and its private sector. For example, aside from having the skills and manpower to sustain the automated operations, reorganization of customs processes and reallocation of manpower are necessary. In some cases, legislation reforms granting legal status to electronic documents may also be needed (OECD 2009).

Despite being expensive and complicated, case studies often suggest that benefits from automation outweigh the costs (WTO 2015). Moreover, the burden of costs can be attenuated by charging user fees. The benefits most broadly documented include time savings in border procedures and improved customs revenue collection. In Rwanda, the introduction of the electronic single window reduced release times by 50 percent from over two days to one over a span of two years (Nizeyimana and De Wulf 2016). A similar experience is associated with the adoption of Orbus – an electronic single window system—in Senegal in 2004 (Diagne 2010). According to Diagne (2010), Orbuscoincided with a significant cut in the time associated with formalities and clearance from more than four days to as little as half a day, and also increased total revenue collection. In Korea, the completion of a comprehensive electronic single window project is estimated to translate to savings of $2 billion per annum. Most of the cost savings accrue to expenditures of firms on freight storage and inventory (World Bank 2009).

In all these case studies, the introduction of automation was far from a smooth process as resistance and adjustments often needed to be overcome. In Rwanda, the introduction of the electronic single window was preceded by extensive consultations with public and private stakeholders. The involvement of the latter was critical in ensuring that commercial instruments,

such as electronic payment arrangements with commercial banks are in place in time for the roll out of the single window (Nizeyimana and De Wulf 2016).

The evidence on cross-agency dialogue, coordination and integrationrelies on bothcase studies and empirical evidence. Existing empirical works suggest information availability enhances trade flows and is particular favorable to SMEs. But empirical evidence is most developed in terms of the effect of SPS and TBT regulations on trade. The general finding is that they reduce trade flows as well as variety in trade. However, harmonizing them with international standards can help overcome the negative effects. Moreover, a reversal of the negative effect is possible when harmonization help exporters overcome reputational asymmetries about their products.Meanwhile, what can be known about other types of coordination and integration rely mostly on case studies such as those relating to the establishment of single windows or the operation of OSBPs

1.1.4 Trade Facilitation in Kenyan Context

Kenya is a founding member of WTO and therefore, commitment to WTO principles is integral to its economic policies. It accords Most Favoured Nation (MFN) treatment to all its trading partners. Kenya is also a member of COMESA, EAC, OAU, IGAD, and ACP/EU and pursues preferential trade agreement as a means of increasing the flow of trade. The country has amended some pieces of legislation, including anti-dumping, countervailing and intellectual property to bring them into conformity with the WTO Agreements. The 2002 development plan spells out a trade policy to be implemented, the continued reduction and eventual elimination of tariffs and government role way from control and regulation toward the facilitation of private sector development. Kenya now relies on the tariff as its main trade policy instrument Kenya

also recognises the importance of trade facilitation and considers it to KAM: A Study to Analyze Kenya's Trade Facilitation Systems 22 be a significant component of its trade policy especially with the major developments happening in the various trade agreements. Kenya is implementing all the WTO Agreements which relate to trade facilitation. These include the Customs Valuation Agreement, and Agreements on Pre-shipment Inspection, Rules of Origin, Import Licensing Procedures, Technical Barriers to Trade and Sanitary and Phytosanitary measures. At the same time, Kenya is a member of the World Customs Organisation (WCO) and participates in negotiations towards accession to customs agreements with international application (such as the Harmonised System Convention that forms the basis for tariff classification of goods traded in the international market). Membership to WCO assists in developing best international practices through benchmarking, training of customs officers and networking with other members and organisations that have a stake in international trade, including the WTO, the International Chamber of Commerce, and UNCTAD among others. Further to this, Kenya has embarked on a Customs Services Department Reform and Modernization Project (CRM). The aim of this project is to transform customs into a modern customs administration by 2008/09, in accordance with internationally accepted conventional standards and best practices as outlined in WTO agreements and the WCO Revised Kyoto Convention on Simplification and Harmonisation of Customs Procedures. Kenya has not yet ratified the Revised Kyoto Convention. To date, trade facilitation in Kenya remains a challenge despite the signing of the various multilateral trade agreements that have been highlighted above. The prevailing inadequacy of a legal and regulatory framework, institutional and human capacity, poor ports, rail and road infrastructure and the inefficiency of trade documentation processes continue affecting the trade community by inflicting delays in the movement and

clearance of goods at the various entry and exit points. This has resulted in the entire process being associated with high transaction costs which reduces the competitiveness of Kenyan products in the global market.

In Kenya ,Mombasa port has been characterized by congestion due to inefficiency in themanagement of cargo, multiple inspections by different stakeholders, poor rail transport, power outages that interferes with seamless electronic process of customs documents, police road blocks and long convoys of trucks along the northern corridor, multiplicity of institutions and processes at the borders, all impose avoidable costs on business McKinnon(2005)

1.2 Statement of the Problem

The challenge emanates from the fact that weigh bridges are primarily managed by government authorities with occasional intervention by police forces. The uncoordinated system of management results in creation of loopholes. Additionally, numerous presences of weigh bridges along the northern corridor and at short intervals excruciate the problem. It is noted that between Rwanda and Dar–es-Salaam there are 9weigh bridges and 7 between Mombasa and Malababorder. Stoppages at these weigh bridges result in delay. The lack of verification sheds at borders also results in delays especially when the weather is unfavourable.

Traders in the Isebania Border face numerous challenges in doing business. These challenges hinder positive impacts of Trade Facilitation to be fully realized, (Policy Brief 2012). These include unnecessary and excessive data and documentation requirements, lack of transparency, inadequate legal redress, delayed release and clearance, absence of co-ordination between Customs and other Government agencies (OGAs), little use of modern customs technology

techniques and all are compounded by unchecked corruption. Although the Customs environment has changed due to reforms and the entire East African Customs Union is working to address these problems through multilateral, regional and bilateral initiatives, the process is slow and ineffective. It is also notable that non-tariff regulatory barriers deter trade development. While there is across-the- board agreement on the necessity of trade facilitation, not all East African countries have shown enthusiasm in ongoing negotiations of a multilateral nature under the pretext of inability to afford the modern technology required.

1.3: Research Objectives

1.3.1: General Objective

The study will seek to investigate theeffect of TradeFacilitation on customs revenue collection at Isebania border station.

1.3.2: Specific Objectives

i. To determine the effect infrastructure on customs revenue collection on trade facilitation at the Isebania border station,
ii. To find outthe effect of simplification of rules on customs revenue collection at the Isebania Border Station
iii. To establish the effect cross agency dialogue on Customs revenue collection at Isebania Station

1.4: Research Questions

i. How does infrastructure affect customs revenue collection at the Isebania Border Station?
ii. How doessimplification of rules affect customs revenue collection at the Isebania Border Station?

iii. How does cross agency dialogue affect customs revenue collection at the Isebania Border Station?

1.5 Significance of the study

1.5.1 Policy Makers

A majority of economists agree that trade facilitation leads to growth in trade and benefits accrue that improve the welfare of all involved. However, other schools of thought feel that costs attributable to implementation of trade facilitation are huge and beyond the capability of developing and least developed countries. The research finding will provide recommendations that will help the policymakerts to enhance knowledge on trade facilitation.

1.5.2 Future researchers

Understanding the relationships among various variables relating to trade facilitation will be a step forward in global research and has built understanding of capacity of multilateral trade negotiators in the region. It is expected that the outcome of the study will assist policy and decision makers in various government institutions and agencies involved in the global supply chain in understanding the positive impact that trade facilitation can contribute towards reduction of costs to trade and growth of the economy. The findings are expected to also increase the stock of the theoretical and empirical knowledge on Trade Facilitation and related aspects of trade. The study is expected to form a point of reference and a basis for further research

1.5.3 Importers and Exporters

Several research studies have confirmed that a better trade facilitation environmentincreases import and export volumes. Wilson et. Al. (2003) estimated the impact of tradefacilitation on trade flows using a gravity model methodology. Their results indicate largepotential increases in trade and growth rates from trade facilitation reform in countriesthat have above average trade transaction costs. Djankov et al, (2006), found that onaverage, each additional day that a product is delayed prior to being shipped reducestrade by at least 1 percent as well as the effect on trade volumes. It has been shown that areduction in customs clearance times can have a significant influence on attractingforeign investment. Nordas et al, (2000) analyzed the relation between time for exportsand imports, logistics services and international trade and found that time delays result inlower trade volumes and reduce the probability that firms will enter export markets for time sensitive products.The findings are expectedto help importers and exporters with l knowledge on Trade Facilitation and related aspects of trade.

1.4 Scope of the study

Isebania borderwas used as the sample frame for the study. Isebania concludes the selected border postsbetween Kenya and Tanzania famous for the Masai Mara game reserve .On the Kenyan side Isebania borders the agricultural divisions of Asumbi, Rangwe and Oyugis and Morogoro National park on the Tanzania side.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of studies on effect of trade facilitationon customs revenue collection atIsebanie Border station.The review of the literature will help in identifying research gaps that need further research. The chapter also discusses the relevant theories that will anchor the study and the conceptual frameworks reflecting on the identified variables.

2.2.1 Ricardos theory

Recardo reasoned in his theory of comparative advantage that the growth of trade among countries depended on specialization in areas where countries had comparative advantage so specialization was key. Ricardo argued that 'there is mutual benefit from trade (or exchange) even if one party (e.g. resource-rich country, highly skilled artisan) is more productive in every possible area than its trading counterpart (e.g. resource-poor country, unskilled labour), as long as each concentrates on the activities where it has a *relative* productivity advantage'. Ricardo, (1817) assumed a two country bilateral trade scenario between England and Portugal, where factors are perfectly mobile, two goods to be traded exist and a scenario of no trade barriers. He was a proponent of Accumulation of capital to form a stock of wealth.

As a country continues to utilise capital, the stocks reduce. In the growth of the global economy therefore, the first-world countries, he states, will begin to lose value per trade, even to the purely theoretical extent of drawing from the capital base.

2.21 Romer's Growth model

Romer, (1993) demonstrates in this model the benefits of an open trade orientation. This could be potentially higher than the static gains. In his growth model, Romer shows that a greater variety of inputs does more for production than higher quantities from a limited range. Results confirm that gains are realised in trade liberalization when trade facilitation improvements are incorporated.

In the study in Middle East and North Africa (MENA) region, trade with the European union(2007) increased welfare gains from $913 million to $3 billion (0.1% increaseto base GDP) The study highlights improvement in welfare and Gross Domestic Product. Krugman (1979) argues that tremendous growth in trade among countries in the 20th century is difficult to explain by the theory of comparative advantage. Krugman's explanation of trade between similar countries was proposed in the Journal of International Economics,(1979) and involves two key assumptions: that consumers prefer a diverse choice of brands, and that production goes with economies of scale, therefore he models a 'preference for diversity' for production and assumes a utility function for the consumers commonly referred to as the "new trade theory".

The theory takes into account transportation costs, a key feature in production, and demonstrates that these costs have an impact on movement of goods and on trade in general . The country with the larger demand for a good shall, at equilibrium, produce a more than proportionate share of that good and becomes a net exporter. He argued that trade between similar countries remains beneficial in general,, because it permits firms to save on costs by

producing at a larger, more efficient scale, and because it increases the range of brands available. Paul Krugman asserted that the theory behind comparative**advantage** does not predict the relationships in the gravity model. According **to**Krugman, variety and consumer preference contributes to growth in trade.

2.3: Conceptual Framework

To achieve the study objectives, the various aspects under study can be conceptualized as being in association as presented in figure 2.1 below. The independent variables includes infrastructure, simplification of rules and customs agency dialogue and dependent variable is customs revenue collection

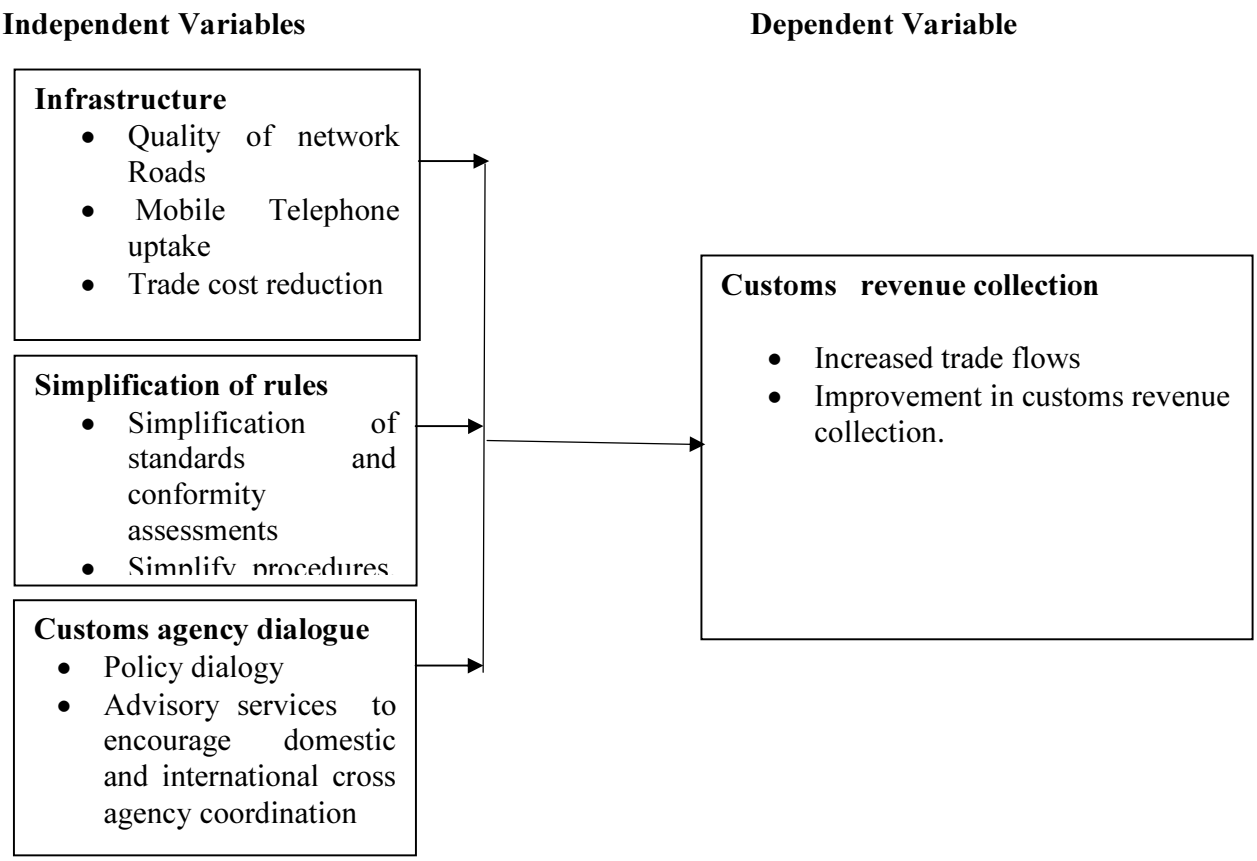

Figure 2.1: Conceptual Framework

2.4: Empirical Literature Review

Empirical research is research using empirical evidence. It is a way of gaining knowledge by means of direct and indirect observation or experience (Hoek et al., 2012). Empiricismvalues such research more than other kinds. Empirical research is based on observed and measured phenomena and derives knowledge from actual experience rather than from theory or belief.

This covered what other studies have found in relation to the current study through investigation of the body of knowledge that has relevance to the topic of research and highlights motivations, initiatives/strategies that have been employed by economists factors influencing trade facilitation, its advantages and an appreciation of challenges.

2.4.1: Infrastructural Development and Trade Facilitation

Port efficiency, proper customs environment, regulations that are prominently published after consultation with parties concerned and consolidated costs that are commensurate with services rendered by government agencies form the basic frame work of Trade facilitation that result in immense benefits as reiterated by UNCTAD,(2004).The benefits range from 'overall increase in trade flows'(Hertel, Wansley and Itaura,2001) Electronic commerce has been found to reduce in the time spent doing business which results in savings Global Economic Prospects (2004), clearly outlines the links between trade reform measures that address factors affecting trade facilitation to poverty reduction. Because most poor people live in rural areas and engage in agricultural production. Cutting trade barriers in agriculture is among the effective strategy to combat poverty. A relatively simple program to cut tariff peaks in rich countries to 10 percent in agriculture and 5 percent in manufacturing, reciprocated with cuts upto 15 percent and 10 percent respectively in transition and developing countries.

At a micro-economic level, trade facilitation has a direct impact on total logistical costs, the sum of time and money involved in moving traded goods. (UNCTAD, 2004). Trade Facilitation benefit small and Medium scale Enterprises (SME) have been found to be 'the engines of economic development in many transitional countries' (World Bank, 2002)

Reduction in the costs associated with the movement of goods across borders and regulatory environment, Reforms have been cited as drivers to economic growth (University of Manchester, 2009). 'The reductions of tariff barriers in successive rounds of international trade negotiations, the continued expansion of world trade, and the growth in global supply chain management practices have resulted in a heightened interest in the impact of on-the-border and inside-the-border trade transaction costs on international trade.' Clarke (2015) illustrates that export performance of manufacturing enterprises in African countries that manufacturing enterprises are less likely to export in countries with 'poor customs administrations and restrictive trade and customs regulation'. Landlocked countries such as Uganda, Burundi and Rwanda face particular problems with Kenya and Tanzania transit arrangements, and have proposed changes to EAC rules which would help address their difficulties.

Investments in border-related infrastructure are empirically shown to contribute to lower trade costs, which manifest in larger trade flows both in terms of volume and product variety. Nonetheless, studies that inform on the particular infrastructure aspects that is most important for improving port efficiency are still very limited. It is easy to appreciate that actual port infrastructure has direct effects on the ability of ports to deal with trade flows and also dwell time in ports. The lack of facilities to handle containers, and port congestion often lead to higher dwell times (Arvis et al. 2010). Dwell time in ports account for over 50 percent of the time required to transport cargoes from ports to hinterland urban centers in landlocked countries of

Sub-Saharan Africa (Arvis et al. 2010). Average cargo dwell time is over two weeks in Sub-Saharan Africa compared with less than one week in major ports in Asia, Europe, and Latin America (Raballand et al. 2012). Raballand et al. (2012) explain that this in turn increasescongestion in port terminals that adversely impact port efficiency.

One of the key port infrastructure that is seen to be behind global expansion of trade is containerization and the ability of ports to operate them. Using the temporal variation of container adoption across countries and product-level variation in 'containerizability' and container usage, Bernhofen et al. (2016) confirm containerization to be a major driving force of globalization. In particular, the improved cargo transport interface between land and sea was identified as the main channel of cost reduction. Bernhofen et al. (2016) calculate a huge increase of dock labor productivity from 1.7 tons per hour to 30 tons per hour with container adoption. This reduced cargo handling time drastically and encouraged investment in scales through larger ship sizes. There are also dynamic effects on insurance costs and firm liquidity with reduction of capital locked up as inventory in transit. The authors also find that concurrent effects of containerization are larger for the sample that includes developing countries, although the lagged effects are larger when only trade between high income countries are considered. Modeling shipping charges through a firm's cost and mark -up function, Clark et al. (2004) find that port efficiency is a key determinant of maritime shipping costs. Their definition of port efficiency is based on a survey of the WEF on port facilities and inland waterways. Improving port efficiency from the fourth to the first quartile in the sample of US trading partners predicts a 12 percent decrease in shipping costs. The key determinants of port efficiency are found to be excessive regulation, prevalence of organized crime, and state of a country's general infrastructure (Clark et al. 2004).

At the same time, the authors also reveal a systemic inverse relationship between handling costs and port efficiency. Blonigen and Wilson (2007) extend this study into panel setting, and moreover derive port efficiency measures using US bilateral trade data at the port level. They find that a 1 percent increase in containerization reduces US port charges for imports by 0.05 percent, with larger cost reducing effects for higher value products. Wilmsmeier et al. (2006) also confirm the importance of port infrastructure and efficiency as a determinant of intra Latin American maritime trade costs. The authors find port infrastructure and port efficiency have the greatest downward influences on maritime charges with elasticities of 0.24 percent and 0.38 percent respectively. Port connectivity is also an important factor, reducing costs by 0.11 percentfor every 1 percent increase in the frequency of liner services between two ports. The extent of private participation in port operations have opposing effects for import and export freight costs – it increases import freight but reduces charges on exports.

2.4.2. Simplification of Border Procedures

Among the trade facilitation typologies, empirical literature is most developed for measures aimed at simplifying border procedures. Simpler border procedures are empirically linked to trade costs reduction and increase in export and import flows. At the same time, they also lead to greater participation of smaller firms in international trade. Trade-related procedures are in place to ensure that legitimate border protection objectives such as collection of customs duties, compliance of shipments with safety and regulatory requirements, and national security are met. But poorly-targeted and executed rules and procedures can disproportionately inflate trade costs by adding delays and administrative burdens without improving efficiency in meeting these objectives. Worse, they can contribute toward an opaque regulatory environment that encourages illegal rent-seeking.

In the context of burdensome regulations, trade facilitation reforms can improve the achievement of risk management objectives while at the same time significantly lowering compliance costs.

One of the concrete ways by which border procedures can be simplified is through the adoption of single windows. A single window is a physical and potentially virtual facility that enables traders to submit all documentary requirements for release of goods as well as receive notifications of decisions regarding their shipments (WTO 2015). A spillover advantage of this mechanism is that its implementation necessarily imposes a minimum degree of coordination among domestic border agencies to reduce duplication (and/or eliminate any contradictions) of requirements. Empirical work remains limited, although preliminary work from de Sa Porto et al. (2015) indicate that trade flows increase substantially when importing countries have single windows. While thepotential gains may be considerable, it is also challenging and costly to implement such that the WTO TFA Database (2017) reveals it to be the most commonly notified area under Category C. These refer to trade facilitation measures that require technical assistance of donors for implementation. In general, available empirical evidence show that measures aimed at simplifying border procedures have positive effects on trade flows through a negative influence on trade costs. Employing the 'trading across borders' components of the Doing Business Indicator as an aggregate indicator of trade facilitation, Iwanow and Kirkpatrick (2009) find that a 1 percent improvement in this index score increases trade flows by 20 percent. The elasticity is even higher for African countries. A comprehensive work by Moïsé and Sorescu (2013) using the TFI in a gravity framework identify formalities relating to procedures, and formalities in documents, exhibit among the highest and most robust impacts on trade flows and trade costs for developing countries.

3.4.3 Cross-Agency Dialogue

Measures under this typology aim to improve information availability as well as make information easier to follow through a greater degree of harmonization and integration.In general, information availability is empirically linkedto greater trade flows. Similar effects are observed with greater of harmonization in the implementation of SPS measures, and technical regulations formally termed as technical barriers to trade (TBT). Facilitation measures for coordinating and integrating rules and procedures minimize duplications in requirements and the time spent complying with them. At its simplest, such measures take the form of improving transparency by making information available readily and electronically available. The WTO (2017) suggests that this is one of the areas most notified under Category A. Moreover, 70 percent and 50 percent of the existing regional trade agreements already cover 'exchange of customs-related information,' and 'publication and availability of information' respectively (WTO 2015). The natures of these information transparency measures are such that in general the marginal costs of extending these multilaterally should be minimal. For example, once information about customs procedures, SPS and TBT measures are organized and shared with regional trade agreement partners, sharing these with other trading partners will not be very costly. Information availability is a potent factor in reduction trade costs. For example, a nationally representative survey of international freight forwarding firms in Serbia reveal that the largest cause of unexpected delays in the border is due to inadequate documentation, accounting for 29 percent of delays (Alcantara et al. 2015). The findings of Moïsé and Sorescu (2013) suggest that information availability is one of the TFI areas that has the strongest impact for exports globally, with particularly strong effects for low and middle-income countries.

Looking at firm-level data, Fontagné et al. (2016) show that information availability and advance rulings on the product classification and origin of a good, have among the largest and consistent effect on the exports of small firms in both volume and product variety, but tend not to alter the exporting behavior of larger firms. While the study involves exports of French firms, it is easy to appreciate that the findings can also apply to firms in developing countries since information availability affects the fixed cost component of trade. But beyond information sharing, there is an observed reluctance to commit to deeper levels of information coordination. For example, the establishment of a dedicated enquiry point—an institutionalized mechanism for stakeholders and trading partners to comment on rules affecting trade and to inquire about them—is one of the least notified measures under

2.5: Critique of the Literature Review

The overview of related literature on trade facilitation indicates that though the topic of trade facilitation has attracted a lot of attention, there is limited academic research on the topic. This study addressed this gap by adding to the existing scarce literature by bringing out the factors affecting Trade facilitation in East Africa. The literature review has brought an understanding of the relationship between Trade facilitation and trade flows which may appear complex. Trade facilitation has centered the checklist of issues affecting trade facilitation in four categories (Otsuki et al, 2002 namely, port efficiency, Customs environment, Regulatory environment and the use of technology in the process of trade.

The economists allude to the fact that measures to address trade facilitation for each country will enhance trade for these countries even with their unique trade facilitation measures and patters of trade. The review has shown that using augmented gravity model resulted in confirming that Trade facilitation enhances trade. Survey of information was used with care and the transparent

secondary data with respect to data sample questions was investigated and yielded desired results. This study benchmarked with the World Forum, Global competitiveness Report 2001-2002 for authenticity.

Otsuki et al, (2003) analyzes the relationship between Trade Facilitation, Trade Flows and GDP in the Asia Pacific Region for the goods sector in the area of port efficiency, Customs environment and the use of technology. Results of their study relate very much to the expectations of the study in East Africa. The study reveals that there is a tendency for trade to grow with port efficiency. The authors use the gravity model. The study in Asia Pacific region showed growth in the area by 21% ($ 254 Billion). By using Kraay's estimate of effect of trade on average per capita GDP showedimprovement of up to 4.3%. The economists argue that the 'relationship between trade flows, income growth and human development is simple in theory but complex and challenging in empirical design and estimation of the economic theory generates relatively simple chain of causality. Human development is influenced by growth in incomes which is brought about by growth in cross border trade which is increased by trade facilitation. Though some schools of thought have brought this analogy to scrutiny, this analogy has been proved in Otsuki et al, (2003).

Sohn (2001) defined trade facilitation as "All activities or policies which reducetransaction costs arising from eliminating or simplifying excessive and complex procedures, practices and processes increases efficiency and results in increased trade."

Staples (2002) pauses a question, 'but what is Trade Facilitation'? And states that although transport infrastructure, trade liberalization and trade promotion do in a sense facilitate trade, they do not constitute what is known today as Trade facilitation 'He argues that trade facilitation involves reducing all the transactions cost associated with the enforcement, regulation, and

administration of trade policies which can be referred to as 'plumbing' of international trade." The simplification and harmonization of International procedures where procedures have been defined as 'activities, practices, and formalities involved in collecting, presenting communicating, and processing data required for movement of goods in international trade'(World Trade Organization :Singapore Ministerial Conference Declaration, 1996) OECD simply puts it as 'The Simplification and Standardization of procedures while UNECE defines it as 'Comprehensive and integrated approach to reduce costs and environment for trade

The General Agreement on Tariffs and Trade (GATT, 1994) which has given the legal framework for Trade Facilitation summarized in Articles v, viii and x namely, Freedom of Transit, fees and charges and publication and administration of trade rules is the basis of trade facilitation and reforms directed toward trade facilitation will accrue benefits to countries involved. The World Bank's 'Doing Business' report (2009) on regulatory reforms gave guidance on the treatment of non-tariff barriers to trade. The literature reviewed converged on the fact that elimination of non-tariff barriers enhances trade which leads to economic well-being due to increased trade flows.

2.6: Summary

The related literature on trade facilitation indicates that though the topic of trade facilitation has attracted a lot of attention, there is limited academic research on the topic. This study addressed this gap by adding to the existing scarce literature by bringing out the factors influencing cross border trade facilitation at the Namanga Border station. The literature review has brought an understanding of the relationship between Trade facilitation and trade flows which may appear complex. Trade facilitation has centered the checklist of issues affecting trade facilitation in four

categories (Otsuki et al, 2002 namely, port efficiency, Customs environment, Regulatory environment and the use of technology in the process of trade.

The study allude to the fact that measures to address trade facilitation for each country will enhance trade for these countries even with their unique trade facilitation measures and patters of trade. The review has shown that using augmented gravity model resulted in confirming that Trade facilitation enhances trade. Survey of information was used with care and the transparent secondary data with respect to data sample questions was investigated and yielded desired results.

2.7 Research Gaps

While there is across-the- board agreement on the necessity of trade facilitation, not all East African countries have shown enthusiasm in ongoing negotiations of a multilateral nature under the pretext of inability to afford the modern technology required. There is a tendency of reluctance to take on additional legal obligations that may expose countries within East Africa to Dispute Settlement Mechanisms (DSM). However, this fear has been dispelled by the best endeavor clause in the text and the benefits that trade facilitation brings to the economies of East Africa Taking into consideration the pace of integration of East African countries and their resolve to deal with outstanding issues towards fully fledged customs union and free market economy, there is no doubt that there exists an underlying problem that requires urgent attention. It is in this spirit that this study has attempted to assess factors affecting Trade Facilitation and make specific recommendations based on the conclusions drawn from the study

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used to carry out the research. It presents the research design, the target population, sampling procedure data collection procedures instruments and data collection procedures instruments and data analysis.

3.2 Research Design

According to Yin (2009), research design is the arrangement of the structure for collection and analysis of data in a way that is aimed to bring together relevance to the research objectives with economy in the research procedure. This study employed a descriptive design. Descriptive study is concerned with finding out the what, where and how of a phenomenon (Creswell, 2008).

3.3 Sampling Frame

Saunders, Lewis, & Thornhill (2007) characterize examining outline as the entire rundown of all cases in the population from which a likelihood test was drawn. A testing outline is a far reaching rundown of all inspecting units, from which a specimen can be chosen (Mugenda&Mugenda, 2009). The testing outline for this examination comprised of traders operating across the Kenya Tanzania border. The information was obtained from the Human Resources Manager.

3.4Target Population

The studytargeted158 traders, customs officers, clearing agents and immigration personnel operating across the Kenya Tanzania border. The research wascarried out at the Isebania border, which is an important transport and trade conduit linking Kenya and Tanzania.

Table 3.1: Sample Size

	target population
Traders	120
Customs officers	18
Clearing Agents	12
Immigration Personnel	8
Total	**158**

3.5: Sample and Sampling Technique

In order to establish the sample size, the study adoptedpurposive and stratified random sampling technique. Purposive sampling is where the researcher selects what he/she is a "typical" sample based on specialist knowledge or section criteria. The study employedpurposive random sampling technique in coming up with a sample size of 47 respondents which is 30% of the total 158 staff targeted. According to Mugenda and Mugenda (2011), a good sample should be between 10- 30% of the accessible population. Also, sampling within each stratum was carried out through simple random sampling. Stratified random sampling is unbiased sampling method of grouping heterogeneous population into homogenous subsets then making a selection within the individual subset to ensure representativeness.

Table 3.2: Sample Size

	Sample size 30%
Traders	36
Customs officers	5.4
Clearing Agents	3.6
Immigration Personnel	2.4
Total	**47**

3.5 Data Collection Instrument

The study used primary data by use of questionnaires to carry out the study. Questionnaires will include structured questions that were administered to the sampled population of the study. The closed ended structured questions was used in an effort to conserve time and money as well as to facilitate analysis as they are in immediate usable form; while the unstructured questions were used as they encourage the respondent to give an in-depth and felt response without feeling held back in revealing of any information (Mugenda&Mugenda, 2003).

3.6 Data Collection Methods

The study employed primary data collection. Primary data was collected through a self-administered questionnaire. The questionnaire adopted closed structured ended questions. The responses in the questionnaires helped gain an in-depth understanding.

A questionnaire were gathered statistically meaningful data on the perspectives of respondents on an issue of interest based on a set of predetermined questions. According to Kothari (2008), a questionnaire is the most appropriate instrument for this study due to its ability to collect a large amount of information in a reasonably quick span of time.

3.61 Primary Data

These are the data which are collected from some primary sources i.e., a source of origin where the data generate. These are collected for the first time by an investigator or an agency for any statistical analysis.

3.6.2 Secondary Data

These are the data which are collected from some secondary source i.e. the source of reservation storage where the data is collected by one person and used by other agency. Secondary data involves data that was collected by use of the library, internet and books. Secondary data wasdrawn from the library, websites, newspapers, journals, books, financial publication, and magazines such as the frequency analysis relating to our study.

3.6 Data Collection Procedure

The researcher usedquestionnaires to collect data. The questionnaires weredistributed to the respondents by the researcher or the research assistant. A grace period of 3 days weregiven to the respondents to respond to the questionnaires after which the research assistant collected the questionnaires from the respondents. To increase the response rate, the researcher made a follow up with the respondents to fill the questionnaire by telephone calls.

3.7 Pilot Testing

Before visiting the targeted employees for data collection a pre-testing of the questionnaires will be conducted in Busia border. The aim of the pilot study was determined accuracy, clarity and suitability of the research instruments and to check their validity and reliability.

3.7.1 Reliabilityof the research instrument

Reliability is the extent to which the measurements of a test remain consistent over repeated tests of the same subject under identical conditions (Wood & Haber, 2014).

A measure is considered reliable if a score on the same test given twice is similar. Prior to the actual data collection, a pretest data collection was carried to ascertain reliability of the questionnaire. The pre-testing of questionnaires was carry out pilot test of data collection to double-check the data collection instrument and techniques, to allow ratification of problems arising in the tools, so that in the actual data collection the instrument can be relied to collect data that is reliable and valid (Mugenda&Mugenda, 2003). This pilot study involved (10%) of the sample population. The respondents will be conveniently selected since statistical conditions are not necessary in the pilot study (Cooper & Schindler, 2003). The purpose will be to refine the questionnaire so that respondents in the major study had no problem in answering the questions. To determine the reliability the Cronbach's alpha co-efficient of reliability used. Cronbach's alpha above 0.7 indicates that the instrument is reliable.

3.7.2 Validityof the research instrument

The validity of a study refers to the accuracy of indicators to measure characteristics in each problem and therefore impacts the relevance of the research (Bryman& Bell, 2007). The study instrument was consistent with the objectives of the study to ensure that the validity of the outcomes can be gauged. To ensure validity of data, a pilot study of the research instrumentwas carried out to measure the truth or falsity of the assumed effect of excise duty reforms on revenue collection. The instrument's validity can be regarded as the extent to which the instrument actually reflects the abstract construct being examined (Burns & Grove 2001).

Content validity was established through consultation with the supervisor, the researcher preparedthe instrument which helps in improving the content validity.

3.8 Data Analysis and Presentation

Before processing the responses, the completed questionnaires were edited for completeness and consistency. The data was then be coded to enable the responses to be grouped into categories. Descriptive statistics and inferential statistics was used to analyze the collected qualitative and quantitative data. To determine the effect of infrastructure, technology and cooperation on trader facilitation, multivariate regression was used.The data was analyzed using the IBM Statistical Program for Social Sciences (SPSS) version 21. Descriptive statistics used to summarize the data. This includes percentages and frequencies. Tables, pie charts and other graphs will be used to present the data collected for ease of understanding. Measures of central tendency will also be used (mean, standard deviation median, mode and percentages). While inferential statistics comprises of correlation statistics, multi regression model, and ANOVA

The regression model was:

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

Where: Y = Customs revenue collection
X_1 = Infrastructure
X_2 = Simplification of rules
X_3 = Cross agency dialogue
ε = Error term

3.9 Diagnostic tests

To ensure that there is no violation of the assumptions, this study will be tested for multicollinearity, autocorrelation and normality test. The following tests were undertaken.

a) Multicollinearity test

Multicollinearity or excessive correlation amount explanatory variables can complicate or prevent the identification of an optimal set of explanatory variables for a statistical mode.

Cohen et al, (2013)'s definition of variance inflation factor (VIF) is that it provides an index of the amount that the variance of each regression coefficient is increased relative to a situation in which all of the predictor variables are uncontrolled" and suggest VIF to be too large hence not suitable.

c) Autocorrelation test

Autocorrelation was tested using Durbin Watson test. This tested whether there is a (linear) correlation between the error term for one observation and the next. A Durbin Watson test value (d) takes on values between 0 and 4. A value of d = 2 means there is no autocorrelation. A value substantially below 2 (and especially a value less than 1) means that the data is positively auto correlated, i.e. on average a data element is close to the subsequent data element. A value of (d) substantially above 2 means that the data is negatively auto correlated.

d) Normality test

The Shapiro-Wilk Test was carried out to test whether the score of the samples were normally distributed with the same mean and standard deviation. If the test is significant ($P<0.05$) then the distribution is not significantly different from a normal distribution, but if the test is non – significant ($P>0.05$) then the distribution of the sample is significantly different from a normal distribution (Kilungu et al., 2015).

The tests results in table 4.21 showed that the p-values for the variables > 0.05. The tests f reject the hypothesis of normality when the p-value is greater than 0.05 (Sharpiro& Wilk, 1965) therefore the data was normally distributed.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter shows response rate, the results of data reliability, and descriptive statistics of the study variables, regression analysis and an interpretation of the study findings.

4.2 Response Rate

The researcher administered a total of 47 questionnaires and 45 were completed and returned. This represents a response rate of 96 % as shown in Table 4.1. This response rate was adequate to allow the researcher to continue with the analysis. The questionnaires were composed of questions that addressed the objectives of the study.

Table 4.1 Response rate

Category	Frequency	Percentage
Completed and returned	45	96
Not returned	2	4
Total	**47**	**100**

4.3 Reliability test results

Reliability is measure of the degree to which a research instrument yields consistent result after repeated trials (Mugenda&Mugenda, 2003). The results are depicted in tale 4.2 below.

Table 4.2: Reliability tests results

Constructs	Reliability Cronbach's alpha	Comment No of Items	
Infrastructure	0.7116	Accepted	
Simplification of rules	0.8116	Accepted	
Cross agency dialogue	0.7136	Accepted	
Customs revenue collection	0.715	6	Accepted

The results of the reliability test produced an overall Cronbach Alpha correlation coefficient of 0.701 while specific findings indicated that, Infrastructurehad a coefficient of 0.711, Simplification of ruleshad a coefficient of 0.811, Cross Agency dialogue had a coefficient of 0.713 and Customs Revenue Collectionhad a coefficient of 0.715. Table 4.2 shows that all the study variables yielded Cronbach alpha coefficients values of more than 0.7, which is the recommended value. This indicates that the instrument was reliable to obtain data on determinants of residential rental income tax compliance by property owners.

4.4. Descriptive statistics

4.4.1 Infrastructure

This section sought to evaluate several statements on infrastructure to determine its effect on customs revenue collection. Table 4.6 shows the results obtained.

Table 4.3 Infrastructure development

Statement	Mean	Std. deviation
a) Infrastructural development results in reduced costs associated to movement of goods	2.22	1.172
b) Infrastructure results in overall increase in trade flows'	2.35	1.251
c) trade facilitation has a direct impact on total transportation costs	2.24	1.214
d) Manufacturing enterprises are less likely to export in countries with poor infrastructure.	1.83	1.102

According to the results on table 4.6 show that, highest mean values were 2.35, 2.24 and 2.22, which correspond to the likert scale value of 2. This indicates that the respondents agree that Infrastructural development results in reduced costs associated to movement of goods, Infrastructure results in overall increase in trade flows, trade facilitation has a direct impact on total transportation costs, Manufacturing enterprises are less likely to export in countries with poor infrastructure. 'The lowest mean value was 1.83, which indicates that the respondents strongly agreed that Manufacturing enterprises are less likely to export in countries with poor infrastructure..The study findings are supported by a number of studies which includes Otsuki et al, (2003).

4.4.1 Simplification of rules

This section sought to evaluate several statements on simplification of rules to determine its effect on customs revenue collections.

Table 4.4Simplification of rules

	Mean	Std. deviation
Proper valuation of goods and services has a significant influence on trade facilitation	3.20	1.344
Maintaining and operating automated customs systems procedures are essential in enhancing trade facilitation	2.61	1.468
Transparency, predictability and access to trade regulations and procedures enhance trade facilitation	2.39	1.085
Non- discriminatory and uniformly administered customs rules and procedures influence trade facilitation	2.11	1.080
Trade procedures play a role in implementing effective controls that secure revenue.	3.28	1.259

According to the results on table 4.7 the highest mean values were 3.28 and 3.20 which corresponds to the scale value of 3. The results indicate that the respondents were indifferent on Proper valuation of goods and services has a significant influence on trade facilitation. The results also established that the respondents agreed that Maintaining and operating automated customs systems procedures are essential in enhancing trade facilitation, Transparency, predictability and access to trade regulations and procedures enhance trade facilitation. The results also established that respondents strongly agreed that Non- discriminatory and uniformly administered customs rules and procedures influence trade facilitation. The study findings are supported by a number of studies which includesKrugman (1979).

4.7 Cross agency dialogue

Cross agency dialogue seeks to assess the cross agency dialogue on customs revenue collection.

Table 4.5Cross agency dialogue

	Mean	Std. deviation
Customs administrations are faced with ever-rising volumes of trade documents	2.39	1.085
Adoption of intergrated customs management systems enhances trade facilitation..	2.11	1.0801
Cordination of trade aids in expediting trade flow by simplifying trading formalities and procedures	3.20	1.344
Integration at the Isebania Border station has facilitated trade.	2.61	1.468

According to the result in table 4.5 the highest mean values were 3.20 and 2.61.Meaning respondents were indifferent in Coordination of trade aids in expediting trade flow by simplifying trading formalities and procedures andIntegration at the Isebania Border station has facilitated trade..The study findings are supported by a number of studies which includesWilmsmeier et al. (2006).

4.5 Correlation Analysis

4.5.1 Correlation results on independent variables

Correlation shows the relationship existing between variables in the study. The study's dependent variable is Customs revenue collection and the independent variables consist of infrastructure, simplification of rules and cross agency dialogue.

The results depicted in table 4.6 below

Table 4.9: Correlation between independent variable and dependent variable

Variables		**Customs revenue collection**	**Infrastructure development**	**Simplification of rules**	**Cross agency dialogue**
Customs revenue collection	Pearson Correlation	**1**			
	Sig. (2-tailed)				
Infrastructure development	Pearson Correlation	0.456	1		
	Sig. (2-tailed)	0.002			
Simplification of rules	Pearson Correlation	0.431	.3421	1	
	Sig. (2-tailed)	0.001	.0014		
Cross agency dialogue	Pearson Correlation	0.458	.1240	.0621	1
	Sig. (2-tailed)	0.003	.0120	.0043	

In an attempt to show the relationship between the study variables and their findings the study used the Karl Pearson's coefficient of correlation (r). According to the findings as indicated in table 4.9, it was clear that there was a positive correlationbetweencustoms revenue collection and infrastructure development as depicted by a correlation value of 0.456.This implies that infrastructure development was linearly related to customs revenue collection. The study also depicted that there is a positive correlation between simplification of rules and customs revenue collection with a correlation value of 0.431. Another positive correlation was between cross agency dialogue andcustoms revenue collection with a correlation value of 0.458. This shows that there was a positive correlation betweeninfrastructure development, simplification of rules and cross agency dialogueand customs revenue collection . The findings of this study agreed with the study conducted by Nordas et al, (2000)

4.6 Regression Analysis

A multiple regression analysis was conducted to investigate the joint causal relationship between the independent variables and dependent variable customs revenue collection. This is represented by the overall model $Y=\beta_0+ \beta_1 \mathbf{x_1}^{\mathbf{z}}+\beta_2 x_{2z} + \beta_3 x_{3z} + \beta_2 x_{2z}$ …

The coefficient of multiple determinants denoted by R Squares is a measure of proportion of the variation of the regress and explained and by the corresponding explanatory variables.

The values of R squared lies between zero and unity, $0 < R^2 > 1$. A value of unity implies that 100% of the variation of Y has been explained by the explanatory variables.

a) Infrastructure development

To evaluate the effect infrastructure development and customs revenue collection in Kenya.

Table 4.10: Model Summary of Infrastructure development

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.437[a]	.197	.186	.87526	1.987

a. Predictors: (Constant), Infrastructure development

b. Dependent Variable: Customs revenue collection

The R square value in table 4.10 in this case is 0.197which clearly suggests that there is a strong relationship between infrastructure development and customs revenue collection as indicated in table above. This indicates that infrastructure development share a variation of 19.7% of customs revenue collection

Table 4.11: ANOVA of Infrastructure development

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.892	1	10.892	14.162	.000[b]
	Residual	42.767	45	.767		
	Total	54.648	46			

a. Dependent Variable: Customs revenue collection

b. Predictors: (Constant), Infrastructure development

The ANOVA result in Table 4.11 showed that the overall model was a good fit since (F-value =14.162 and p-value=0.000<0.05).

Table 4.12: Coefficients of infrastructure development

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.258	.115	-	2.257	.028
	Infrastructure development	.403	.107	.446	3.765	.000

a. Dependent Variable: Customs revenue collection

Table 4.12 indicates that the regression weight for infrastructure was positive and significant (β= 0.403, t= 3.765, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that infrastructure development has a significant relationship with Customs revenue collection The regression estimate for infrastructure development was 0.403; this indicates that a unit increase in infrastructure development would result in 40.3% increase in customs revenue collection.

b) Simplification of rules

To find out the effect of simplification of rules on customs revenue collection in Kenya.

Table 4.13: Model Summary of Simplification of rules

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.478[a]	.217	.207	.85515	2.006

a. Predictors: (Constant), Simplification of rules
b. Dependent Variable: Customs revenue collection

The R square value in Table 4.13 was 0.217 which clearly suggested that there is a strong relationship between simplification of rules and customs revenue collection. This indicates that simplification of rules share a variation of 21.7% of customs revenue collection.

Table 4.14: ANOVA of simplification of rules

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.886	1	11.987	16.033	.000[b]
	Residual	42.643	45	.749		
	Total	54.648	46			

a. Dependent Variable: Customs revenue collection

b. Predictors: (Constant), Simplification of rules

The ANOVA Table in 4.14 indicates that the overall model was a good fit since (F-value=16.033 and p-value=0.000<0.05).

Table 4.15: Coefficients of Simplification of rules

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.221	.104	-	2.041	.047
	Simplification of rules	.451	.114	.468	4.001	.000

a. Dependent Variable: Customs revenue collection

Table 4.15 indicates that the regression weight for simplification of rules was positive and significant (β= 0.451, t= 4.001, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that simplification of rules has a significant relationship with Customs revenue collection. The regression estimate simplification of rules was 0.451; this indicates that a unit increase in simplification of rules would result in 45.2% increase in customs revenue collection in Kenya.

c) Cross agency dialogue

To investigate the effect of cross agency dialogue on Customs revenue collection inKenya.**Table 4.16: Model Summary of Cross agency dialogue**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.421[a]	.174	.170	.87898	1.995

a. Predictors: (Constant), Cross agency dialogue
b. Dependent Variable: Customs revenue collection

The R square value in Table 4.16 is 0.174 which clearly suggests that there is a strong relationship between cross agency dialogueand customs revenue collection as indicated in table above. This indicates that cross agency dialogue share a variation of 17.4% of customs revenue collection.

Table 4.17: ANOVA of Cross agency dialogue

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.617	1	10.608	11.732	. 00[b]
	Residual	44.035	45	.754		
	Total	54.647	46			

a. Dependent Variable: Customs revenue collection
b. Predictors: (Constant), Cross agency dialogue

The ANOVA able in 4.17 indicates that the overall model was a good fit since (F-value=11.732 and p-value=0.000<0.05).

Table 4.18: Coefficients of Cross agency dialogue

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**t**	**Sig.**
1	(Constant)	.258	.115	-	2.235	.028
	Cross agency dialogue	.408	.108	.442	3.708	.000

a. Dependent Variable: Customs revenue collection

Table 4.18 indicates that the regression weight for cross agency dialogue was positive and significant (β= 0.408, t= 3.708, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that cross agency dialogue has a significant relationship with customs revenue collection in Kenya. The regression estimate for cross agency dialgoue was 0.408 this indicates that a unit increase in cross agency dialogue would result in 40.5% increase in customs revenue collection in Kenya. .

Table 4.19: Model Summary for independent and dependent variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.707[a]	.505	.453	.71722	2.001

a. Predictors: (Constant), Infrastructure development, simplification of rules and cross agency dialogue
b. Dependent Variable: Customs revenue collection

From the model summary The R square value in Table 4.19 is 0.502 which clearly suggests that there is a strong relationship betweenInfrastructure development, simplification of rules and cross agency dialogueand customs revenue collection as indicated in table above.

This indicates that infrastructure development, simplification of rules and cross agency dialogueshare a variation of 50.5% of value added tax compliance in Kenya .

The overall goodness of fit was obtained through regressing the goodness of fit for all the independent variables. The results of the multiple regression indicate R^2= .505 and adjusted R=.453 as shown in Table 4.19. This is an indication that there is a strong relationship between independent variables and customs revenue collection.

Table 4.19: ANOVA for independent and dependent variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.376	1	5.466	11.338	.000[b]
	Residual	28.262	155	.513		
	Total	45.629	155			

a. Dependent Variable: Customs revenue collection
b. Predictors: (Constant), infrastructure development, simplification of rules and cross agency dialogue

The overall model significance was presented using the ANOVA test table. The results in Table 4.19 shows that the overall model was a good fit since (F-value=11.338 and p-value=0.000<0.05) for all independent variables meaning that null hypothesis is rejected and concludes that there is a relationship between different independent and dependent variables. The findings there imply that all independent variables were statistically significant in explaining customs revenue collection in Kenya. ANOVA was used to test whether the regression analysis model used is fit or the relationship of the variable just occurred by chance.

Significance of F ratio is used to determine whether model used was fit or not. If the F ratio is significant the model used is considered fit and vice versa. A P - value of less than 0.05 indicates that the F statistics is high and that the null hypothesis of independent needs to be

rejected since it's not true. In this case the F ratio (F=11.338, P=.000[b]) was found to be significant hence the model used for analysis was fit

Table 4.20: Coefficients of Overall Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.195	.096	-	2.054	.044
	Infrastructure development	.312	.096	.234	2.266	.016
	Simplification of rules	.241	.098	.355	3.560	.043
	Cross agency dialogue	.296	.096	.314	3.061	.022

a. Dependent Variable: Customs revenue collection

$Y=\beta_0+ \beta_1 x_1+\beta_2 x_2 + \beta_3 x_{3+\beta_4 x_4} + \ldots\ldots\ldots$

$Y = 0.195 +0.312X_1 +0.241X_2 +0.296X_3+ 0.315$ were significant with p- values of 0.044, 0.0.16, 0.043 + 0.014, respectively.

The regression equation above has established that taking all factors into account (Infrastructure development, simplification of rules and cross agency dialogue) the findings reveals that assuming other variables are at zero a unit change (increase) in infrastructure development will lead to a 0.312 increases customs revenue collection; a unit increase in simplification of ruleswill lead to a 0.241 increases customs revenue collection; a unit increase in cross agency dialogue will lead to a 0.296 increasescustoms revenue collectionThis infers that infrastructure development affectscustoms revenue collection to a great extent followed by cross agency dialogue then simplification of rules.

The regression coefficient results indicate a positive significant effect between infrastructure development, simplification of rules and cross agency dialogueand customs revenue collection.

4.7 Discussion of key Findings

The key findings of the study are discussed in this section as per study objectives.

4.7.1 Infrastructure development and customs revenue collection

Infrastructure development was assessed using five measures and the overall mean score or responses regarding infrastructure development were 2.2 on a 5-point scale which indicates that majority of the respondents agreed that infrastructure development on customs revenue collection in Kenya. The average overall standard deviation of 0.7 infers that 68% of the response was spread within one standard deviation of the overall mean.

Further collinearity analysis was done and the results showed that infrastructure development had positive and significantly related to customs revenue collection (r = 0.456, p-value=0.00<0.05).

4.7.2 Simplification of rulesand customs revenue collection

Simplification of rules was assessed using five measures and the overall mean score or responses regarding simplification of rules were 1.6 on a 5-point scale which indicates that majority of the respondents agreed thatsimplification of rules affects the customs revenue collection in Kenya. The average overall standard deviation of 0.0.66 infers that 68% of the response was spread within one standard deviation of the overall mean. Further collinearity analysis was done and the results revealed thatsimplification of rules had a positive and significantly related to customs revenue collection (r = 0.431, p-value=0.00<0.05).

4.7.3 Cross agency dialogue

Customs revenue collection was assessed using four measures and the overall mean score or responses regarding cross agency dialogue were 2.5 on a 5-point scale which indicates that majority of the respondents agreed that cross agency dialogue affects the customs revenue collection in Kenya. The average overall standard deviation of 0.74 infers that 68% of the response was spread within one standard deviation of the overall mean. Further collinearity analysis was done and the results showed that cross agency dialogue had a positive and significantly related to customs revenue collection compliance (r = 0.458, p-value=0.00<0.05).

CHAPTERFIVE

SUMMARY,CONCLUSIONSAND RECOMMENDATIONS

Introduction

Chapterfiveoutlinesthesummary ofthisresearch,conclusionsandrecommendations basedonresearchfindingsandsuggestionofareaswhichmay require furtherconsideration as far asfutureresearch is concerned.

5.1 Summary of the findings

The findings of the study have been summarized below as per the study objectives. The findings were supported by the frequencies of the responses

5.1.1 Infrastructure development

The first objective of the study was to evaluate the effect of infrastructure development on customs revenue collection in Kenya. Methods used to arrive at the findings included descriptive statistics, analysis of variance and regression analysis. The study found out that infrastructure development had a significant positive influence on customs revenue collection. The overall mean score of responses regarding tax compliance cost indicated that majority of the respondents agreed that infrastructure developmentaffects the customs revenue collection in Kenya.

The reliability analysis results showed that all the coefficients of the constructs were positive and significant.

5.1.2 Simplification of rules

The second objective of the study sought to find out` the effect of simplification of ruleson customs revenue collection in Kenya.

Descriptive statistics, regression analysis and analysis of variance were conducted. The study found out that simplification of rules had a significant positive influence on customs revenue collection.

The overall mean score of response regarding simplification of rules and customs revenue collection compliance collection indicated that majority of the respondents agreed that simplification of rules affects the customs revenue collection in Kenya. Correlation results indicated that there was a positive and significant relationship between simplification of rules and customs revenue collection. It was therefore concluded that simplification of rules has significant positive effect on customs revenue collection.

5.1.3 Cross agency dialogue

The third objective of the study sought to investigate the effect of cross agency dialogueon customs revenue collection compliance in Kenya. Descriptive statistics, regression analysis and analysis of variance were conducted. The study found out that cross agency dialogue had a significant positive influence on customs revenue collection.

The overall mean score of response regarding cross agency dialogue and customs revenue collectionindicated that majority of the respondents agreed that cross agency dialogue affects the customs revenue collectionin Kenya. Correlation results indicated that there was a positive and significant relationship between cross agency dialogue and customs revenue collection. It was

therefore concluded that cross agency dialogue has significant positive effect on customs revenue collection.

5.2 Conclusions

The aim of the study was to determine effect of factors affect value added tax compliance in Kenya. Data collected and analyzed through both descriptive and inferential statistics established that all independent variables had significant effects on customs revenue collection.

5.2.1 Infrastructure development

The study found out that infrastructure developmenthad a significant positive influence on customs revenue collection. The overall mean score of responses regarding infrastructure development indicated that majority of the respondents agreed that infrastructure development affects the customs revenue collection in Kenya. The reliability analysis results showed that all the coefficients of the constructs were positive and significant.

5.2.2 Simplification of rules

The study found out that simplification of rules had a significant positive influence on customs revenue collection. The overall mean score of response regarding simplification of rules and customs revenue collection indicated that majority of the respondents agreed that simplification of rules affects the customs revenue collection in Kenya. Correlation results indicated that there was a positive and significant relationship between simplification of rulesand customs revenue collection. It was therefore concluded that simplification for rules has significant positive effect on customs revenue collection.

5.2.3 Cross agency dialogue

The study found out that cross agency dialogue had a significant positive influence on customs revenue collection. The overall mean score of response regarding cross agency dialogue indicated that majority of the respondents agreed that cross agency dialogue affects the customs revenue collectionin Kenya.

Correlation results indicated that there was a positive and significant relationship between cross agency dialogue and customs revenue collection. It was therefore concluded that tax rate has significant positive effect on customs revenue collection.

5.3 Recommendations.

5.3.1 Managerial recommendations

Thestudy foundthatinfrastructure development, simplification of rules and cross agency dialogue significantlyinfluencescustoms revenue collection.Basedonstudyfinding,thisstudyrecommendsthere is need for Kenya Revenue Authority to simplified rules and encourage cross agency dialogue at the border stations, this will improve customs revenue collection.

5.4 Suggestions for Further Research

Thestudyrecommends anadditionalstudy ontheotherfactors thatinfluencecustoms revenue collection,

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APPENDICES

Appendix I: Questionnaire

Dear Sir/Madam,

RE: RESEARCH PROPOSAL

I am a postgraduate student of JomoKenyattat University of Agriculture and Technology in Tax and Customs Administration. As a requirement for the award of this degree, I am required to carry out a research project. I am carrying out a survey on **"EFFECT OF TRADE FACILITATION ON CUSTOMS REVENUE COLLECTION: A CASE OF ISEBANIA BORDER".** The success of this study will substantially depend on your willingness and co-operation to provide the information required. I kindly request you to fill this questionnaire for data gathering. The enclosed questionnaire is specifically considered for the purpose of this study only; and all answers will be treated in absolute confidence and anonymity.

Thank you for your cooperation.

Yours Faithfully,

LinetAkinyiOjiambo

APPENDIX I: QUESTIONNAIRE

SECTION A: General Information

In order to ensure confidentiality do not put down your name on the questionnaire but please answer the questions as honestly and objectively as possible. Tick the following questions where it's appropriate.

1 Gender Male [ ]

Female [ ]

2 Age 18 – 23 [ ]

24 – 29 [ ]

30 – 34 [ ]

35 - 39 [ ]

40 – 44 [ ]

Above 44 [ ]

3 Number of years worked

Less than 1 year – 5 years [ ]

6-10 years [ ]

11 and Over [ ]

4. Level of Education

Primary [ ]

Secondary [ ]

Diploma [ ]

Degree [ ]

Section B: Infrastructure Development and trade Facilitation

Please indicate the extent to which you agree with the following statements on infrastructural development and trade facilitation. The scale below will be applicable:

Key 1= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Infrastructural development	**1**	**2**	**3**	**4**	**5**
Infrastructural development results in reduced costs associated to movement of goods					
Infrastructure results in overall increase in trade flows'					
trade facilitation has a direct impact on total transportation costs					
Manufacturing enterprises are less likely to export in countries with poor infrastructure.					

Section C: Simplification of rules

Please indicate the extent to which you agree or disagree with the following statements on custom procedures. The scale below will be applicable:

Key 1= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Simplification of rules	**5**	**4**	**3**	**2**	**1**
Proper valuation of goods and services has a significant influence on trade facilitation					
Maintaining and operating automated customs systems procedures are essential in enhancing trade facilitation					
Transparency, predictability and access to trade regulations and procedures enhance trade facilitation					
Non- discriminatory and uniformly administered customs rules and procedures influence trade facilitation					

Trade procedures play a role in implementing effective controls that secure revenue.					

Section D: Cross agency dialogue

Please indicate the extent to which you agree or disagree with the following statements on customs documentation and trade facilitation. The scale below will be applicable

Key 1= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Cross agency dialogue	**5**	**4**	**3**	**2**	**1**
Customs administrations are faced with ever-rising volumes of trade documents					
Adoption of intergrated customs management systems enhances trade facilitation.					
Cordination of trade aids in expediting trade flow by simplifying trading formalities and procedures					
Integration at the Isebania Border station has facilitated trade.					

Thank you for your cooperation!

APPENDIX 111: BUDGET

DESCRIPTION	COST PER ITEM	TOTAL AMOUNT (Kshs)
Stationery Photocopying papers Pens, pencils, rubbers Ink cartridge (Printer) Files (12 rim binders)	10 reams @600/=	**20,000.00**
Personnel Questionnaires administrators Stastician		**10,000.00**
Transport and subsistence Vehicles Subsistence allowance		**10,000.00**
Communication Telephone Internet		**10,000.00**
Other Services Library services Purchase of periodicals and books		**20,000.00**
Total expected cost		**70,000.00**

APPENDIX 1V: WORK PLAN

ACTIVITY (2018)	DECEMBER(2018)	MAY (2019)	AUGUST (2019)
Draft proposal			
Proposal presentation			
Designing the research instrument			
Proposal defense			
Field work & data Collection			
Data Entry / Analysis			
Report Writing			
Presentation of 1st draft			
Presentation of 2nd draft			
Submission of final report			