



**ENFORCEMENT MEASURES AND CONTROL OF ILLICIT CIGARETTE TRADE
IN KENYA: A CASE OF KENYA REVENUE AUTHORITY**

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DECLARATION

The research project is my original work and has not been presented for a master's degree in any other university.

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DEDICATION

To my beloved daughter, Ivanna Pendo, whose boundless curiosity reminds me that the future belongs to her, to my mother, Rael Jebet Sogomo, whose tireless efforts in taking me to school shaped the path to this moment and my brother, Kennedy Kipkemboi Sogomo, my constant cheerleader.

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Table of Contents

DECLARATION	Error! Bookmark not defined.
DEDICATION	ii
ACKNOWLEDGEMENT	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABBREVIATIONS AND ACRONYMS	ix
OPERATIONAL DEFINITION OF TERMS	x
ABSTRACT	xi
CHAPTER ONE	1
1.0 Introduction	1
1.1 Background of the study	1
1.2 Problem statement	5
1.3 General and specific objectives	6
1.3.1 General objective.....	6
1.3.2 Specific objectives.....	6
1.4 Research questions.....	6
1.5 Research hypotheses	7
1.6 Justification	7
1.7 Significance of the study.....	8
1.9 Scope and limitations of the study.....	8
1.9.1 Scope of the study	8
1.9.2 Limitations of the study.....	8
1.9.3 Delimitation of the study	9
CHAPTER TWO	11
2.0 Introduction	11
2.1 Empirical literature review	11
2.2 Theoretical Framework.....	26
2.3 Conceptual framework.....	31
CHAPTER THREE: METHODOLOGY	33
3.1 Introduction	33
3.2 Research design	33
3.3 Area of study/research site	33
3.4 KRA Population	34
3.5 Target population.....	34

3.5 Sample size determination	35
3.6 Data collection instruments	35
3.7 Reliability and validity.....	35
3.8 Data collection procedures	36
3.9 Data processing and analysis.....	37
3.10 Ethical considerations	37
CHAPTER FOUR: RESULTS AND DISCUSSIONS	39
4.0 Introduction	39
4.1 Demographic information	39
4.3 Presentation of data guided by the objectives	45
CHAPTER FIVE.....	67
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	67
5.0 Introduction	67
5.1 Summary	67
5.2 Conclusion.....	70
5.4 Recommendations derived from the summary.....	71
5.5 Recommendations for further studies	72
REFERENCES.....	73
APPENDICES.....	82
Appendix 1: Questionnaire for research respondents.....	82
Appendix 2: Workplan	86
Appendix 3: Budget.....	87
Appendix 4: Research Permit.....	88

LIST OF TABLES

Table 1: Target Population	34
Table 2: Education level of the respondents.....	42
Table 3: Measures to control illicit cigarette trade in Kenya	45
Table 4: Existing conditions that hinder effective implementation of enforcement measures	51
Table 5: Effect of enforcement measures	54
Table 6: Tactical reports generated could lead to the collection of additional tax arrears related to the illicit cigarette trade.....	58
Table 7: Fines and penalties imposed on individuals or businesses involved in the illicit cigarette trade.....	58
Table 8: Correlation analysis between enforcement measures and generation of tactical reports, no. of cases recommended, no. of checks conducted and effectiveness of seizure of illicit cigarette.	63
Table 9: Chi- square test for enforcement measures and No. of cases recommended for prosecution.....	65
Table 10: Symmetric measures	65

LIST OF FIGURES

Figure 1: Conceptual framework	32
Figure 2: Gender distribution	39
Figure 3: Age bracket.....	41
Figure 4: Years of experience in enforcement unit.....	Error! Bookmark not defined.
Figure 5: Position/title of the respondent	44
Figure 6: Effectiveness of seizure of illicit cigarette products in controlling illicit cigarette	57
Figure 7: Non-compliant businesses identified in the past year in the sectors relevant to controlling illicit cigarette trade.....	57
Figure 8: Cases related to illicit cigarette trade	59
Figure 9: No of risk-based factory snap checks conducted.....	60
Figure 10: Additional resources required.....	61

ABBREVIATIONS AND ACRONYMS

EGMS	Excisable Goods Management System
FCTC	Framework Convention on Tobacco Control
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KAM	Kenya Association of Manufacturers
KPMG	Klynveld Peat Marwick Goerdeler
KRA	Kenya Revenue Authority
MPOWER	Monitor Tobacco Use and Prevention Policies
NACOSTI	National Commission for Science, Technology, and Innovation
SPSS	Statistical Package for Social Sciences
TPB	Theory of Planned Behavior
WHO	World Health Organization

OPERATIONAL DEFINITION OF TERMS

- Controlling:** Refers to the process of managing, regulating, or overseeing activities, processes, or systems to ensure they align with established standards, goals, or expectations. It involves monitoring, evaluating, and making necessary adjustments to achieve desired outcomes or maintain a certain level of performance
- Effect:** An "effect" is a result or consequence that follows from a particular action, event, or cause. It refers to the impact or outcome that can be observed or experienced as a direct or indirect result of something happening. Effects can be positive, negative, or neutral and can manifest in various ways, such as changes in behaviour, conditions, circumstances, or the environment.
- Enforcement efforts:** Enforcement refers to the steps taken by authorities or organizations to ensure that rules, laws, regulations, or policies are followed and that infractions are dealt with in a fair and equitable manner. Compliance and order within a system or setting are maintained by activities like monitoring, investigation, sanctions, and other interventions by groups like law enforcement and regulatory authorities.
- Illicit trade:** This is a situation where products, services, or commodities are traded illegally. In most cases, the nature, origin, or avoidance of taxes and regulations of a commodity makes it such that trading in it is illegal, limited, or unregulated. Smuggling, counterfeiting, piracy, and the black market for contraband such as narcotics, guns, and counterfeit cash are all examples of illicit commerce.

ABSTRACT

The study focused on evaluating the effectiveness of enforcement efforts undertaken by KRA to control illicit cigarette trade in Kenya. The tobacco industry is afflicted by illicit activity. Like many other markets, mostly linked to tax evasion and the counterfeiting of legitimate goods. The objectives of the study are to: investigate measures employed by KRA to control illicit cigarette trade; highlight the existing conditions that hinder effective implementation of enforcement measures by the Kenya Revenue Authority in anti-illicit cigarette trade and determine the impact of enforcement measures on government revenue in Kenya. This study was anchored on institutional theory. The study used a mixed methods research design. This research targeted 126 enforcement officers at KRA. The study used census method where every officer was engaged during data collection. Questionnaire was used to collect data. The questionnaire was converted into a Google form and shared with the study participants via email and social media platforms. Quantitative data was keyed into SPSS Version 26 and analysed using descriptive and inferential statistics. The results were presented using charts, graphs, frequency tables and figures. For qualitative data, thematic analysis technique was employed to identify themes and categories. The study findings indicate that enforcement measures play a significant role in combating the distribution of illicit cigarettes in Kenya, but suggesting a need for enhanced online market regulation. Additionally, the study highlighted the impact of various factors on controlling illicit cigarette trade, emphasizing on the importance of government enforcement capabilities. In conclusion, enforcement efforts were recognized for their significant impact on government revenue preservation, public health protection, and the reduction of illicit trade prevalence.

CHAPTER ONE

1.0 Introduction

This study examines the effectiveness of enforcement measures implemented by the Kenya Revenue Authority (KRA) to combat illicit trade in cigarettes. This section provides the context for the study, problem statement, research objectives, research questions, justification, significance of the study, assumptions underpinning the study, scope and finally, the limitations of the study. The candidate should have operationalized the study variables when introducing the study

1.1 Background of the study

Illicit trade in cigarettes has emerged as a significant global concern. The trade encompasses various activities, including smuggling, counterfeiting, and tax evasion, which undermine government regulations and compromise public health initiatives. The phenomenon involves the production, distribution, and sale of tobacco products that evade government regulations, taxation, and quality standards. Von Lampe (2019) explains that whereas cigarettes are legal products, the evasion of excise and customs duties makes the trade illegal. Illicit trade not only leads to revenue losses for governments but also undermines public health efforts, as unregulated products may lack proper health warnings or adhere to quality standards. In the context of Kenya, this issue has garnered increasing attention due to its adverse impact on various sectors of society.

KRA plays a crucial role in revenue collection and enforcement of trade regulations within the country. According to Shaw & Reitano (2020), one in every ten cigarettes and tobacco products consumed globally is illicit. This demonstrates how illicit trade in cigarettes has emerged as a pervasive and complex issue with extensive consequences for governments, economies, public health, and regulatory frameworks across the globe. In the context of Kenya, this issue holds particular significance due to its implications for revenue collection, public health, and market

integrity. Cigarette consumption is widespread in the country, implying that its regulation and taxation are not only crucial for government revenue but also for safeguarding public health and promoting fair competition in the market.

Globally, illicit cigarette trade has been estimated to account for a significant proportion of the tobacco market, with the World Health Organization (WHO) reporting figures ranging from 8% to 12% of total consumption (WHO, 2018). This widespread phenomenon poses multifaceted challenges, including lost tax revenue for governments, increased accessibility of cheap and unregulated tobacco products, and reduced effectiveness of tobacco control policies. Moreover, the proliferation of illicit trade undermines public health objectives by promoting consumption of unregulated products, potentially increasing tobacco-related morbidity and mortality.

Despite limited data availability compared to other regions, studies indicate a concerning rise in illicit trade across several African countries. The International Tax and Investment Center (ITIC) has identified Nigeria, South Africa, and Egypt among the countries with significant levels of illicit cigarette trade (ITIC, 2020). In addition to economic repercussions such as revenue losses for governments, the proliferation of illicit trade in Africa exacerbates existing public health concerns. Unregulated tobacco products often evade health regulations and quality controls, posing greater health risks to consumers. Furthermore, the illicit tobacco market undermines efforts to reduce tobacco use through taxation and regulation, impeding progress towards achieving public health goals and Sustainable Development Agenda targets. Countries characterized by high-income levels tend to have lower levels of illicit trade in cigarettes, which could be attributed to the allocation of substantial tobacco control expenditures. Regions such as Europe and the Western Pacific, where excise taxes and cigarette prices are high, generally experience lower instances of illicit cigarette trade. In contrast, Africa, where cigarette prices are low, exhibits a higher incidence of illicit trade. This

phenomenon could be partially explained by the prevalence of corruption in developing countries. Research conducted by Merriman et al. (2000) establishes a correlation between the transparency index and illicit trade, indicating that countries with low transparency scores tend to have higher levels of illicit trade. Additionally, porous borders and insufficient resource allocation for tobacco control monitoring in developing countries contribute to weak monitoring and enforcement efforts. The analysis is based on data compiled by Merriman et al. (2000).

A report by Kenya Revenue Authority (2019) highlighted the significant presence of illicit cigarettes in the Kenyan market, contributing to substantial revenue losses and undermining tobacco control efforts. The proliferation of illicit trade in Kenya not only deprives the government of much-needed revenue but also fosters an environment where unregulated and potentially harmful tobacco products proliferate. Moreover, the illicit trade undermines public health campaigns aimed at reducing tobacco consumption, perpetuating health inequities and exacerbating the burden of tobacco-related diseases.

Kenya has implemented various measures, including increased taxation, enhanced enforcement efforts, and public awareness campaigns. The introduction of such measures to control illicit cigarette trade in Kenya played a great role in reducing illegal cigarette businesses. For instance, KRA used excise stamp in EGMS to prevent counterfeiting by tracing the stamps and the excisable goods throughout the supply chain, keeping track of how many excisable goods were produced or imported, and allowing anyone in the supply chain to verify the authenticity of the stamps and the goods (Ross, 2017). KRA has implemented a comprehensive set of measures to control illicit cigarette trade within the country. These measures include strengthening border controls, enforcing legislation with stringent penalties, implementing regulatory measures, adjusting customs and excise taxes, and conducting public awareness campaigns. These combined efforts have proven highly effective in various ways. They have

contributed to a notable increase in government revenues, a significant reduction in the illicit trade of cigarettes, improved public health outcomes, enhanced economic stability, and a decrease in criminal activities related to the illicit trade of tobacco products (World Bank Group, 2018).

Given these implications of illicit trade in cigarettes, the effectiveness of KRA's enforcement efforts in curbing the trade is of paramount importance. Evaluating the strategies employed by KRA and their outcomes can provide insights into the challenges faced and potential solutions for addressing illicit trade in tobacco products. Shaw and Reitano (2020) assert that illegal production, movement or sale of normally legal goods is a growing threat to the global economy. This encapsulates the challenge of enforcement in this trade.

The illicit cigarette trade encompasses a range of activities, including smuggling, counterfeiting, and tax evasion, all of which undermine legitimate businesses, erode government revenue, and compromise the well-being of citizens. The magnitude of this challenge necessitates a comprehensive assessment of the effectiveness of enforcement actions undertaken by regulatory bodies, such as KRA, in curbing illicit cigarette trade.

Kenya's commitment to international agreements, including the World Health Organization's Framework Convention on Tobacco Control (FCTC), underscores the country's dedication to addressing tobacco-related challenges, including illicit trade. However, the success of these efforts hinges on the ability to implement robust enforcement measures that effectively deter and mitigate illicit trade activities. The extent to which KRA's enforcement actions have impacted illicit trade in cigarettes remains a subject requiring in-depth examination. Gaining a deeper understanding of the dynamics between enforcement actions and the prevalence of illicit trade is crucial for informed policy formulation, regulatory enhancement, and the overall advancement of Kenya's socio-economic landscape.

This study seeks to bridge existing gaps in knowledge by investigating the effectiveness of enforcement actions by KRA in curtailing illicit trade in cigarettes. By evaluating the outcomes and impact of these enforcement measures, the study aims to provide insights that can guide policy decisions, strengthen regulatory frameworks, and contribute to the broader goal of nurturing a more secure economic environment and healthier society in Kenya.

Through a combination of qualitative and quantitative methods, this research investigates the reasons behind the persistence of illicit trade, identifies gaps in enforcement, their implications for addressing illicit trade in cigarettes within Kenya and provides recommendations to enhance KRA's efforts.

1.2 Problem statement

Illicit business, particularly in tobacco products, poses significant challenges to social and economic structures worldwide. The illicit cigarette trade, accounting for 11.2% of global consumption, impedes economic growth, hinders health policy goals, and weakens the rule of law (Goodchild et al., 2020). The alarming statistics from WHO (2020) indicate that tobacco use contributes to over eight million annual deaths globally, with illicit trade exacerbating the issue. Effective strategies to reduce smoking-related burdens necessitate curbing the illegal tobacco trade.

Illegal trafficking in tobacco undermines the Kenya government efforts to control smoking, particularly among vulnerable groups. The economic impact is substantial, with over \$40 billion tax income lost annually, and up to half of the tobacco market in Kenya sourced from the black market. The problem is particularly acute in low- and middle-income countries, where illegal cigarettes account for a significant portion of overall usage (World Bank, 2019).

Tax-related illegal trade is a major concern, prompting compensating actions to evade taxes legally and illegally. Tobacco tax increases intended to reduce usage, may lead to increased efforts to circumvent taxes. The robustness of law enforcement and punishments for tax-related

illegal activities play a crucial role in determining the extent of smuggling and illegal production (Ribisl et al., 2019; Stoklosa and Ross, 2014).

Despite the implementation of enforcement efforts by KRA, anticipated to reduce illegal trade, challenges persist, requiring enhanced enforcement. Despite ongoing efforts by the Kenya Revenue Authority (KRA) and other stakeholders to combat illicit cigarettes, there remains a notable disparity between implemented measures and the achievement of desired outcomes. Existing literature suggests various measures, but their effectiveness remains underexplored. This research sought to address this gap by assessing the effectiveness of enforcement efforts employed by KRA in controlling illicit cigarette trade and their impact on prevalence reduction. The study sought to provide valuable insights for improving strategies and mechanisms to combat illicit trade in cigarettes, contributing to more effective tobacco control policies and governance practices

1.3 General and specific objectives

1.3.1 General objective

The study's objective is to evaluate the effectiveness of enforcement efforts to control illicit cigarette trade in Kenya, a case study of KRA.

1.3.2 Specific objectives

To achieve this overarching goal, the specific research objectives are as follows:

- i. To assess the specific measures employed by KRA to control illicit cigarette trade in Kenya.
- ii. To analyse the existing conditions that hinder effective implementation of enforcement measures by the Kenya Revenue Authority in anti-illicit cigarette trade.
- iii. To evaluate the effect of enforcement measures on anti-illicit cigarette trade.

1.4 Research questions

The following research questions guided this study:

- i. What are the specific measures employed by KRA to control illicit cigarette trade in Kenya?

- ii. What are existing conditions that hinder effective implementation of enforcement measures by the Kenya Revenue Authority in anti-illicit cigarette trade?
- iii. To what ways have the enforcement measures by KRA affected illicit cigarette trade in Kenya?

1.5 Research hypotheses

- i. There are no statistical significant measures enforced by KRA to control illicit cigarette trade in Kenya.
- ii. There are no statistically significant existing conditions that hinder effective implementation of enforcement measures by the Kenya Revenue Authority in anti-illicit cigarette trade.
- iii. The enforcement measures by KRA did not significantly affect illicit cigarette trade in Kenya.

1.6 Justification

Illicit trade in cigarettes presents challenge to both governments and societies worldwide. This study's justification lies in the imperative to comprehensively address the critical problem of illicit cigarette trade and its implications for the nation's well-being. The justification is elaborated in detail as follows:

The findings of the study help scholars and researchers understand the extent to which existing regulations are being enforced and identify gaps or weaknesses in enforcement mechanisms that may need to be addressed through policy reforms or enhanced enforcement strategies. Additionally, scholars and researchers will be able to contribute valuable insights into how regulatory interventions can mitigate public health risks associated with tobacco use.

The findings of this study can guide evidence-based policy decisions. If the efficacy of current enforcement actions is demonstrated, it can inform the development of strategies to further

strengthen enforcement efforts. Conversely, if gaps in enforcement effectiveness are identified, policymakers can work toward refining enforcement mechanisms to better combat illicit trade. While there is existing research on illicit trade, specific studies focused on the effectiveness of KRA's enforcement actions in the context of Kenya are limited. This study had bridge the understanding on effectiveness of enforcement measures by KRA by offering insights into the tangible outcomes of enforcement efforts in curbing illicit cigarette trade.

1.7 Significance of the study

The significance of this study lies in its potential to inform policy decisions, enhance enforcement strategies, and contribute to the broader discourse on combating illicit trade in tobacco products. By identifying gaps in enforcement and understanding the factors contributing to the persistence of illicit trade, the research outcomes can guide regulatory agencies and policymakers in developing more effective measures to tackle this issue.

1.9 Scope and limitations of the study

1.9.1 Scope of the study

This study focuses specifically on the enforcement efforts of KRA in controlling illicit trade in cigarettes. It does not encompass broader aspects of tobacco control policies or the tobacco industry's activities beyond their relation to illicit trade. The research involves qualitative methods, surveys, and data analysis. The study is scheduled to be carried out between July 2023 and July 2024 across all KRA offices in 47 counties in Kenya. The study was carried out between September and November because this was the period schedule by the university.

1.9.2 Limitations of the study

Underreporting and concealed activities: By nature, illicit trade activities are often covert and involve deliberate efforts to evade detection. This might result in underreporting of the true extent of illicit trade, leading to an incomplete picture of the true position. This could be

addressed through a multi-source approach can be adopted to gather information on illicit trade activities.

External Factors: Factors beyond the scope of the study, such as shifts in consumer behaviour, economic conditions, or regional trade dynamics, could influence the prevalence of illicit trade independently of enforcement actions. This could be addressed through recognizing that illicit trade activities may not always be directly observable, indirect indicators such as anomalies in trade patterns, discrepancies in production and consumption data, and unusual fluctuations in market prices can be incorporated into the analysis. These indirect indicators can provide valuable insights into the true extent of illicit trade, complementing traditional enforcement data

Scope of Analysis: The study might focus solely on enforcement actions without considering broader socio-economic factors that contribute to the demand for illicit trade, potentially limiting the depth of understanding. This could be addressed through a comprehensive analysis framework by expanding the scope of analysis beyond enforcement actions to include broader socio-economic factors is essential. This can involve conducting comprehensive assessments of consumer behaviour, economic conditions, regulatory frameworks, and regional trade dynamics to understand the underlying drivers of illicit trade demand.

1.9.3 Delimitation of the study

Focus on KRA's enforcement measures: This study is limited to the enforcement measures implemented by KRA in combating illicit cigarette trade. It does not explore other aspects of tobacco control, such as public health campaigns or regulatory policies outside KRA's jurisdiction.

Geographical scope: The study is confined to KRA offices across the 47 counties in Kenya, focusing on enforcement efforts within these regions. It does not extend to international aspects of the illicit cigarette trade or enforcement measures outside Kenya.

Time frame: The research is delimited to the period between August 2023 and July 2024, capturing enforcement activities and their effects within this specific timeframe. The study does not account for enforcement measures before or after this period.

CHAPTER TWO

2.0 Introduction

This section provided a summary of the work done by researchers, academics, scientists, and writers on the topic at hand. The writers' own empirical literatures serve as examples for each of the sub-topics that make up the study's stated objectives. Conceptual, theoretical, empirical, and conceptual framework reviews are captured in this section. The literature reviewed presents gaps in this study.

2.1 Empirical literature review

This section provides a critical examination of related research. The section examines the international setting, regional studies, and local studies to help pinpoint knowledge gaps. Strong tobacco control policies and legislation will not be effective unless they are enforced. Policies and relevant agencies should prioritize coordination, legal monitoring and inspections on a regular basis, inspection protocols, training inspectors from all responsible agencies, and linking enforcement actions with other implementation activities for maximum efficacy in enforcement (WHO, 2017). Since its main goal is issue containment rather than elimination, enforcement must be integrated into a larger plan. Having sufficient people with the right kind of training is essential for effective enforcement. Also required are a willing and able police force, an appropriate legal framework, and adequate funding. The legality of tobacco products must be closely monitored, and officials must have access to the necessary tools and the ability to punish those who break the law.

2.1.1 Strategies and mechanisms to combat illicit cigarette trade

Geroy and Encarnacion (2021) stated that government revenue and public health may both benefit from the country's compliance with the Illicit Tobacco Trade Protocol if an agency is set up at the national level to oversee agency coordination. A study by Ross (2015) observed that illegal activities, such as tax evasion and counterfeiting of legitimate goods are a problem in the tobacco sector, as they are in many others. Governments that are struggling with this

problem have created a set of tactics and procedures for reducing tobacco tax avoidance and evasion since a large illegal tobacco market may deprive them of much-needed income and weaken the efficacy of tobacco control initiatives (Bettcher, et al. 2021). According to the World Customs Organization (WCO), enhanced border controls have led to a significant reduction in illicit trade. In 2020, WCO reported a 70% increase in seizures related to illicit tobacco products. Based on its own estimation as well as reasonable estimations from other sources, the committee has calculated that illegal sales in the US account for 8.5% to 21% of the entire market. Every year, state and municipal governments lose between \$2.95 billion and \$6.92 billion in tax income due to the sale of 1.24 to 2.91 billion packs of cigarettes. But the National Academies of Sciences, Engineering, and Medicine have already paid the federal tax on almost all of these cigarettes. year 2015 (National Academies Press, 2015). Some of the measures to control illicit cigarette trade include:

2.1.1.1 Licensing

Arda and Santiago (2023) described that one way in which licensing systems may aid in the fight against illegal tobacco is by contributing to the creation of a central registry. Better use of the stamp verification process, along with licensing requirements for retailers, creates a comprehensive monitoring and tracing system, and increases vigilance among merchants and suppliers, all of which contribute to reducing illegal activity. According to Kuipers et al. (2022), to get a licence, one must first apply to the appropriate body and provide supporting evidence. Growers, processors, shippers, wholesalers, and retailers (among others) in the tobacco industry may be subject to licencing requirements and restrictions backed by administrative, civil, and criminal penalties if they fail to comply. Kuipers et al. (2022) emphasized that with the exception of tobacco growing in Australia, no permits are required to cultivate tobacco or produce the other ingredients needed to make cigarettes, such as filter tips and cigarette papers.

Governments may further strengthen the accountability chain by making it illegal for licenced operators to do business with unlicensed ones. Revocation of a licence for unlawful activity such as illegal manufacturing or tax evasion serves as an economic deterrent (Carnevale et al. 2017). A report by KPMG (2014) stated that if a regulated entity has a history of noncompliance, it may be barred from participating in any tobacco business under the "negative licencing" regime. Licencing at the retail level helps authorities enforce regulations on taxation and sales at the moment of purchase (Carnevale et al. 2017). The effectiveness of efforts to reduce the sale of illegal cigarettes at legitimate retail outlets is enhanced by linking licencing systems with recordkeeping, tax stamps/markings, and a monitoring and tracing system. Licencing is more successful when combined with background checks, stricter enforcement, and a zero-tolerance policy. If inspectors may cancel permits, stores will have an incentive to avoid selling illegal goods.

Implementing licensing in Kenya should be done so at minimal expense, with a single centralized registration and little bureaucratic complexity. A report by Action on Smoking and Health United Kingdom (2013) emphasized that the need to get licenses in many jurisdictions might add complexity and delay responses. Since some businesses may choose to operate unlawfully without a license, and other licensed businesses may risk losing their license in order to participate in criminal activity, licensing alone will not be enough to stop all illicit operations.

The existing literature emphasizes the potential of licensing systems in combating illicit cigarette business, but there is a notable gap in the understanding of the practical challenges and opportunities associated with implementing licensing systems in specific contexts, particularly in Kenya. The literature has not extensively explored the feasibility, cost-effectiveness, and potential bureaucratic complexities of introducing licensing for tobacco-related entities in the Kenyan context. Additionally, the refinement interactions between

licensing, law enforcement, and other regulatory measures in the Kenyan setting warrant further investigation. Therefore, the study had addressed this gap by assessing the applicability of licensing in curbing illicit cigarette business in Kenya, taking into account the unique challenges and opportunities within the local regulatory framework.

2.1.1.2 Track and trace system

According to Van der Zee, et al (2024), a marker cost ranging from R2.68 (US\$0.17) to R5.24 (US\$0.34) per pack enables the South African government to generate sufficient additional revenue, covering all expenses related to track and trace implementation. Van der Zee, et al (2024), emphasized that the introduction of such a system is projected to lead to a reduction in cigarette consumption by 5% to 11.5%. Considering that comparable systems are considerably less expensive, approximately US\$0.02 per pack, it is highly probable that the government could implement a system at a cost below the break-even rate, resulting in additional revenue generation.

The adoption of track and trace systems may vary by country, a study by Gilmore et al. (2018), on the research on tobacco industry's elaborate attempts to control global track and trace system concluded that, any track and trace system should proceed under the assumption that the tobacco industry' seeks to control such systems in order to evade scrutiny and minimize excise tax payments. The findings of this study were supported by Ross (2017) who described that, because of its success in shrinking the black market for cigarettes and increasing tax income, the most recent approach, which includes a tracking and tracing system and electronic cargo monitoring of export, is being considered the best option. It also seems to be more robust against manipulation.

Ross (2017) stated that the Track & Trace system cannot operate without a highly available and fast internet connection. KRA employees are provided with portable devices that can swipe

the stamp's secret photo-magnetic line and communicate information in real time to the central server. This information includes the date of issuance, the name of the maker, the category, and the brand. The stamp's authenticity may be verified and its whereabouts traced even when these gadgets aren't connected to the internet. This enables instantaneous checks of a product's legality at every stage of its distribution chain. Tobacco product wholesalers and merchants now have access to a device that can verify the authenticity of any tobacco product presented for sale. The system includes all major supermarkets and their associated connections to KRA servers. KRA created a smartphone App in 2016 called KRA Stamp Checker, commonly known as Soma Label, which can be used to validate the authenticity of alcoholic beverages and tobacco products (Ross, 2017).

While the effectiveness of track and trace systems is underscored in the South African context, the gap lies in the need for a deeper examination of the contextual factors influencing the adoption and success of such systems in different countries. The variation in industry dynamics, regulatory environments, and technological infrastructures can significantly impact the outcomes of track and trace implementation. Therefore, a comprehensive evaluation of the effectiveness of enforcement efforts, considering the unique conditions in each country, is crucial for a nuanced understanding of the challenges and opportunities in combating illicit cigarette trade.

2.1.1.3 Excisable goods verification and inspection

Before allowing excisable items into their facilities, the producer, importer, distributor, retailer, or other supply chain participant must verify the authenticity of the commodities (Thornton, 2017). According to the Excise Duty Act of 2015 (KRA, 2021), validating and verifying excisable items requires importers or manufacturers to set up production accounting systems at each stage of production. There is now clear guidance for examining and authenticating tax stamps. When there is a disparity between what was stated and what was actually imported or

produced, the unused stamps must be returned and repaid within 90 days (Deloitte, 2017). With the use of EGMS, the legitimacy of a product may be checked rapidly at any stage of the supply chain. Distributors and merchants of excisable goods use a technology that checks the legitimacy of every excisable item before stocking them (Ross, 2017).

The document verification and inspection procedures of excisable goods details the steps that must be taken to ensure that shipments of plants, plant products, and other regulated goods are in accordance with local excise and customs laws. As duty under central excise is due on several criteria, knowing how inspection and valuation work is essential. First, the excisable items must be determined; next, they must be properly classified; and, lastly, the tax due on the excisable products must be calculated (Thackray and Alexova, 2017).

Authorities may be able to identify valid goods more easily in the distribution chain and allow customer verification with the use of stamps incorporated with a means of electronic communication. On the other hand, tax stamps have a reputation for being easily forged. Journalist allegations that a black market exists through which smugglers and counterfeiters may get real stamps have also been corroborated by industry insiders, and it has been discovered that genuine original bottles holding genuine stamps have been refilled. According to Thackray and Alexova, (2017), just because buyers may verify a stamp's authenticity online doesn't mean the goods is genuine. The efficacy of enforcing goods verification and infection may be well understood by looking at how well KRA verification and inspection approaches correspond with curbing illicit cigarette business in Kenya. Effective goods verification and inspection is essential for revenue authorities in Kenya to reduce illicit goods and services into the market.

The existence of a black market for genuine stamps raises questions about the reliability of the current verification and inspection approaches. The literature review suggests that, despite the incorporation of technology and detailed procedures, the challenge of counterfeit stamps and

illicit activities persists. Therefore, the gap lies in the need to assess the practical effectiveness of enforcement efforts, specifically in controlling illicit cigarette trade in Kenya. The study aimed at bridging this gap by evaluating the actual impact and challenges faced by the Kenya Revenue Authority (KRA) in enforcing excisable goods verification and inspection measures.

2.1.1.4 Implementation of the WHO Framework Convention on Tobacco Control (WHO FCTC)

Husain et al. (2016) provide evidence of the patchy implementation of the WHO FCTC throughout Africa. They assessed the current state of tobacco control and prevention programs across 23 African nations and found that implementation of the WHO FCTC varied widely from 9 percent in Sierra Leone to 78 percent in Kenya. Notably, the African WHO Region had a lower overall implementation rate (43% vs. 53%) than the other five WHO regions (including data from 107 countries). This shows that even while many African nations have signed the treaty, they are falling behind in terms of fully implementing the rules of the WHO FCTC. According to a report by WHO (2017), the forecast for African nations, along with those in the East of Mediterranean Region, was among the poorest for reaching tobacco control objectives by 2025, out of the 178 countries for whom estimates were provided in their research.

Ineffective or substandard execution of tobacco control methods is possible if they are not carried out in accordance with best practice criteria. For instance, in Kenya, non-smokers are not adequately protected against passive smoking since the country's smoke-free regulations only partly adhere to the WHO FCTC's guidelines. While existing taxing measures are intended to reduce tobacco consumption in African nations, Brathwaite et al. (2016) questioned their efficacy. As a result, it's crucial not merely to implement tobacco excise taxes, but to make sure they are high enough to have a real impact.

The lower overall implementation rate of WHO FCTC in the African WHO region compared to other WHO regions (43% vs. 53%) suggests a broader regional challenge. This study

investigates the factors contributing to this discrepancy and how they impact the effectiveness of tobacco control efforts, especially in the context of controlling illicit cigarette trade. The forecast for African nations, including Kenya, being among the poorest in reaching tobacco control objectives by 2025 highlights a future challenge. Therefore, the study had assessed the potential obstacles hindering their achievement. Additionally, the study had identified the specific areas where Kenya's regulations fall short and how this deficiency contributes to challenges in controlling illicit cigarettes.

2.1.1.5 Training and monitoring & evaluation

Mohamed, et al. (2018) described that, to aid in the execution, the government has also invested in training for law enforcement, the media, and civil society groups. Because of the trainings, billboards advertising tobacco products have been taken down in several major cities. Sensitizing the decentralized government structures to the provisions of the Tobacco Control Act is currently a primary focus of implementation. Law enforcement officers have also received training to help them in their jobs. Discussions on tobacco use have been included to numerous surveys, such as the Kenya Stepwise survey 2015, as part of the country's concerted attempt to gather improved information on epidemiology to better determine the effect of the policy reforms (Mohamed, et al. 2018). The prevalence of smoking among individuals aged 15-49 has remained stable between the 2008 and 2014 Kenya population health surveys (19% and 19%), however it has decreased from the 2003 Kenya demographic information survey (23% and 19%). The youth study found that the prevalence of smoking among adolescents aged 12 to 15 years increased over the course of a decade, from 13% in 2007 to 18.6% in 2013. The study had examined the prevalence of smoking among different age groups, particularly the increase in smoking among adolescents aged 12 to 15 years. Investigate whether this increase is associated with challenges in enforcing tobacco control measures, potentially

contributing to illicit cigarette trade. This basically implies that the study provides a foundation for evaluating the effectiveness of enforcement efforts by the KRA.

2.1.1.6. Regulation of internet sales

The worldwide issue of illegal commerce is exacerbated by remote sales. Tobacco products are consumables designed for quick use (Ortiz-Prado et al. 2022). In most regions, customers may buy them from stores, vending machines, supermarkets, pubs, restaurants, and even people peddling their wares on the street. There are a number of issues with purchasing cigarettes online or via other forms of remote sales that smokers should be aware of. As a result, smokers who want to circumvent laws prohibiting sales to minors and tobacco taxes may find such transactions especially appealing (Ortiz-Prado et al. 2022).

According to Ribisl, et al. (2019), the internet presents a potential channel for the distribution of counterfeit "normal" nicotine products. Mail-order illicit trade in cigarettes has been around for quite some time. Internet cigarette dealers provide an easy way to avoid cigarette minimum age restrictions and excessive excise taxes by providing access to a large selection of low-priced tobacco goods. If individuals smoke a pack a day, for example, and live in a high-tax area like New York City, purchasing cigarettes online will save you over \$1,500 per year (Hall et al., 2015). The internet cigarette vendor business may see a return if the reduced-nicotine product standard is enacted, as both the allure of inexpensive cigarettes online and the availability of unlawful conventional nicotine-content goods may increase demand (Williams et al. 2016).

While certain postal and delivery companies are more at risk than others, the rapid expansion of parcel and postal services in recent years has benefitted illicit actors' as much as legal ones. Due to an increase in the number of tiny packages being unloaded at customs facilities every day, risk-led profiling procedures have replaced physical inspections (Babuta et al. 2018). Taking advantage of this loophole, transnational criminal organizations have shifted to a low-

volume, high-frequency strategy for transporting a wide variety of illegal goods. Since a single shipment represents just a tiny fraction of the illegal commodities being moved by a specific organization, low-volume, high-frequency tactics not only reduce the danger of interception, but also minimize the financial loss experienced in the event of a seizure (Babuta et al. 2018). Therefore, it is evident that law enforcement and delivery services have been more cooperative in recent years, although there is still room for improvement due to wide variations in collaboration across nations and service providers. In addition, the low-volume, high-frequency smuggling tactics presently favoured by certain organized criminals are frequently not well adapted to being identified by the existing risk assessment and profiling tools employed by customs officials. Consequently, more advanced and intelligence-led techniques to risk assessment are required, such as the use of big data analytics to detect anomalous shipments and delivery patterns. This study focused on enforcing strategies and techniques to curb illicit cigarette businesses. Therefore, this study emphasizes on the ways to regulate internet sales.

2.1.2 Existing conditions that hinder effective implementation of enforcement measures by KRA in anti-illicit cigarette trade.

The globe remains far from solving the issue of the illegal trade in tobacco goods, even though the quantity of illegal cigarettes is decreasing. First, the magnitude and longevity of the issue in some regions of the globe are significant factors that impede global progress in ending this trade (Masi et al. 2021). Additionally, there are always novel kinds of illegally trafficked tobacco products to deal with. Cigarettes continue to dominate among confiscated tobacco products worldwide, according to data from the World Customs Organization. World Customs Organization (2020), on the black market. However, new items are appearing. Tobacco used in water pipes accounted for less than one percent of all tobacco products seized worldwide in 2012. As of this year, the number is far over 6%. Furthermore, electronic cigarettes and

cartridges accounted for 7 percent of all tobacco product seizures in 2019, while in 2012 they accounted for zero. It's important not to overlook the illegal traffic in different types of tobacco, particularly in experimental tobacco products (Pray et al. 2020).

The ability of governments to enforce laws against the Illicit Trade in Tobacco Products is another challenge. Governments must make significant changes to their legal, administrative, and enforcement systems in order to successfully implement the Illicit Trade in Tobacco Products. However, there is a common deficiency of knowledge on the Illicit Trade in Tobacco Products across all key government sectors among these stakeholders. They usually aren't equipped to fight against industry intervention during the implementation phase, either. To strengthen domestic capabilities to the point where they can fully execute the treaty, however, specialized technical help was required. The secretariat of the agreement must immediately begin aiding in the development of such capabilities and setting up the Global Information-Sharing Focal Point to facilitate the free flow of data between the signatories. The initial expenditure needed to build track-and-trace systems is substantial; nevertheless, financial help is typically necessary to pay this expense, particularly in low- and middle-income nations. Finally, additional study within individual countries is required to assess the effects and efficacy of Illicit Trade in Tobacco Product initiatives (Munga et al. 2023).

There has been an ongoing problem with the illegal trade of tobacco products in Kenya, despite a number of earlier policy measures to address the issue (Kieyah et al., 2014; Anti-Counterfeit Authority, 2020), with varied degrees of effectiveness. Munga et al. (2023) stated that prior to the implementation of EGMS in 2013, there were two previous significant initiatives targeted at reducing the illegal trade in cigarettes and other tobacco goods (in 2003 and 2010/2011, respectively). Excisable goods carriers must register their businesses, integrate the EGMS into their manufacturing or importing processes, and attach an excise stamp to each package of the commodities they transport. Manufacturers, distributors, importers, and retailers are all

responsible for checking the authenticity of excise stamps and excisable goods before allowing them into their stores in order to comply with the Regulation's mandate for their use in the tracking of excisable goods (WHO, 2019).

According to the Kenya Association of Manufacturers (KMA) (2012), illicit products that were previously distributed through informal channels are infiltrating legitimate supply chains. Global evidence including developed countries has implicated tobacco industry in smuggling syndicates, an indication of prevalence of institutional framework has also been observed to affect incidence of illicit trade, both from supply and demand perspective. As stated in the KIPPRA (2014) report, illegal goods that were formerly marketed via underground markets are now making their way into official routes of distribution. Evidence from throughout the world, including industrialized nations, has linked the tobacco business to smuggling gangs. The presence of institutional framework has been seen to impact the frequency of illegal trade from both the supply and demand sides. In the case of KRA, finding out the challenges that are affecting efficacy of enforcement strategies to curb illicit cigarette trade helps in strengthening existing strategies and policies as well as coming up with new strategies to curb illicit cigarette business across the country.

2.1.3 Effect of enforcement efforts on reducing the prevalence of illicit cigarette trade

More evidence is still required to show that efforts to fight illegal tobacco are effective in reducing demand, even though there are numerous instances of such policies being extremely successful across the globe, notably in terms of tax collections. According to World Bank Group (2019) and Ross (2015), traditional demand reduction methods in the WHO FCTC and monitor tobacco use and prevention policies (MPOWER) are examples of how the conceptual framework acknowledges that these types of interventions may have a direct influence on quitting, which in turn would indicate that the degree of demand reduction might be larger than

reported. As governments increase their efforts to comply with the Protocol, it is conceivable that such proof will become available.

Further, the Centre for Disease Control and Prevention (2015) noted that the results of a tax harmonization scheme would be different from one state to the next. Since the higher prices that result from the minimum taxes discourage cross-border purchases from tobacco users in nearby high-tax states and bootlegging of cigarettes and cigars from these low-tax states, tax-paid sales of tobacco products in low-tax states would decrease. Using cigarettes would be discouraged in these states as a result of the higher taxes and costs, which would lead to more individuals quitting tobacco use, fewer people starting to use cigarettes, and less cigarettes use overall. Public health would improve in these states as smoking rates dropped, lowering the number of tobacco-related fatalities and medical expenses.

A comprehensive national plan will have a higher impact than a single action in decreasing tobacco tax evasion and avoidance at the federal, state, and municipal levels (Farrelly et al. 2017). For example, a national tracking-and-tracing system cannot be fully implemented until other interventions are in place (Gilmore, et al. 2015). Increasing enforcement actions, developing an extensive plan for reducing illicit trade that is regularly evaluated and adapted to deal with changes in the illegal cigarettes market, increasing penalties for those involved in illicit cigarettes distribution, and conducting ongoing evaluations are all things that could help reduce illegal trade in Kenya.

Suppressing the illegal tobacco trade requires tight regulation of the whole supply chain, from production and importation to retail (Petit and Nagy, 2016). More and more nations are implementing sophisticated monitoring and tracing infrastructures. While a rigorous system of monitoring and tracing may help cut down on illegal commerce, it cannot halt it entirely since it cannot identify everything. While there are challenges that the strategies enforced in curbing illicit cigarette, it, therefore, implies that these strategies play a critical role in impacting the

curbing of illicit cigarette trade. This study assessed the impact of strategies and mechanism enforced by KRA in curbing illicit cigarette in Kenya.

Despite notable success global efforts to combat illicit cigarette trade, including those focused on demand reduction and tax harmonization, there exists a significant research gap in understanding the specific impact of strategies and mechanisms enforced by the Kenya Revenue Authority (KRA) in curbing illicit cigarette trade in Kenya. While existing literature acknowledges the potential effectiveness of comprehensive national plans, tracking-and-tracking systems, and increased enforcement actions, there is limited empirical evidence that specifically evaluates the outcomes of KRA's initiatives in this domain. The literature lacks a detailed examination of the synergies and interdependencies among the various strategies implemented by KRA, their relative efficacy, and the dynamic nature of the illicit cigarette market in Kenya. Additionally, a comprehensive understanding of the challenges faced by KRA in enforcing these strategies and the identification of gaps in the existing mechanisms is crucial for refining and optimizing anti-illicit trade efforts in the Kenyan tobacco industry. Therefore, addressing the research gap is essential to inform evidence-based policy recommendations for more effective and tailored strategies to control illicit cigarette trade in Kenya.

2.1.3.1 Studies on policy and legislation frameworks.

The first is enacting a legislation or mandate that gives authority over the country's illegal tobacco trade to a national implementation agency or regulation agency (Arda and Santiago, 2023). Tobacco control procedures may be more easily implemented inside a country and in collaboration with other signatory nations of the Framework Convention on Tobacco Control if national agencies and frameworks are established. They are helpful in establishing programs that aim to enhance health outcomes, as well as in addressing the costs and general quality of programs (Ross, 2015).

Kramer et al. (2019), described that building a culture of cooperation among organizations responsible for the regulation, policy, and execution of the illegal tobacco trade relies heavily on national authorities and frameworks. To improve the practicality, efficacy, and possibility of achieving long-term outcomes in the fight against illegal tobacco trade, it is crucial to build local and regional collaborations involving tax authorities, retail, inspectors, customs, police, and the public health community. Benefits of collaboration in government efforts can be maximized by adopting a national agency or framework that can improve cooperation among agencies involved in the implementation of relevant programs, leading to increased effectiveness of program results, shared responsibility and management for goals, and circulating and available relevant information. Due to the fluid nature of the illegal tobacco trade and the critical role it plays in the execution of associated initiatives, it is crucial that relevant, up-to-date information be readily accessible (Geroy and Encarnacion, 2023). However, there appears to be a lack of a structured national framework in Kenya that optimizes cooperation among tax authorities, retail, inspectors, customs, police, and the public health community. The absence of such a framework impedes the effectiveness of collaborative efforts to combat illegal tobacco trade, hindering shared responsibility, and limiting the circulation of relevant, up-to-date information.

Another way in which licensing regimes may aid in the fight against illegal tobacco is by contributing to the creation of a single centralized database. Yatsco et al. (2020), stated that better use of the stamp verification process, along with licensing requirements for shops, creates a solid monitoring and tracing system and increases vigilance among merchants and suppliers, all of which contribute to reducing illegal activity. With the implementation of an adequate system for tracking and assessing progress, as well as modifiable restrictions on international cigarette sales. This is significant because the tobacco industry has used its concern of economic losses to lobby against future adoption of these restrictions in a number

of different nations (Public Health Tobacco Policy Center, 2017). The creation of a single centralized database through licensing could significantly enhance the monitoring and tracing system, promoting vigilance among merchants and suppliers. However, the current licensing structure in Kenya may not be fully optimized to contribute to the creation of such a database, allowing for more comprehensive tracking and assessment of progress in combating illicit cigarette trade.

Geroy and Encarnacion (2023) stated that to overcome this obstacle and the potential resistance from the tobacco industry, which may use arguments based on misinterpretations like an increase in cigarette smuggling as a result of anti-tobacco policies, training that capacitates members of regulatory agencies to establish frameworks to combat illicit tobacco trade may be useful. Finally, one of the most common obstacles to anti-tobacco efforts is structured influence from the tobacco industry in policy development. As a result, it would become increasingly important in the future to supplement efforts against illicit tobacco trade with laws that prohibit the interception of the tobacco sector with anti-tobacco endeavours by working with groups that track and counter tobacco industry interference (World Bank Group, 2019). The extent to which regulatory agencies in Kenya are equipped to overcome industry resistance and establish frameworks for combating illicit tobacco trade is unclear. Training initiatives may be crucial to improve the capacity of regulatory bodies in navigating potential obstacles posed by the tobacco industry.

2.2 Theoretical Framework

The purpose of the theoretical literature review which used KRA as a case study, is to link between enforcement measures and illicit cigarette trade in Kenya. When it comes to the government revenue collection, enforcement measures are vital in controlling illicit cigarette trade. This review seeks to shed light on the enforcement measures that have contributed to the control of illicit cigarette trade. This research was based on Institutional Theory to inform on

enforcement measures against illicit trade in cigarettes. This theory was applied to the study through the lenses of John W. Meyer and Brian Rowan (1977) and Paul J. DiMaggio and Walter W. Powell (1983).

2.2.1 Institutional theory

Institutional theory is a sociological and organizational framework that examines how formal and informal rules, norms, and beliefs shape behavior, guide social interactions, and foster stability in social systems.

Measures to combat and eradicate illicit trade have been implicit in the Framework Convention on Tobacco Control (FCTC). The launching of the convention was measure to combat illicit trade. With a backdrop of the treaty pact of all participating countries to adhere and abide by the content and obligations of the treaty, it created an international norm and a rule of law that guilty state actors of illicit trade would be held accountable. The convention's launch and actions to adhere and ratify it will create a twofold pressure from both civil society and the participating countries to reduce illicit trade and adhere to both the convention and the WHO obligations in understanding the patterns and moving to diminish illicit trade (Goodchild et al.2022).

In 2002, the FCTC was endorsed by a vote of 192 countries in attendance. The convention is an international treaty that contains a declaration of powerful international norms and presents important obligations on the participating countries to initiate efforts to reduce tobacco consumption and its devastating health effects. (Maldonado et al.2020). According to Article 15 of the FCTC, the countries that have ratified the convention have an obligation to create an international network to monitor the patterns and trends of smuggling tobacco products. This network will conduct research to identify and understand the causes of illicit trade, disseminate

information to diminish it, and maintain transparency during actions taken to combat this behavior (World Health Organization, 2022).

2.2.2 Tenets of the Theory

The key themes of institutional theory, according to the exposition given by Meyer and Rowan (1977), define institutions as "an interrelated set of material and cultural elements and activities" and link institutional change to changes in these elements. Any change in an institution would be seen as changes in the rules and laws governing the institution, the behavior of the various persons concerned with it, its physical environment, or the tools and techniques employed in fulfilling its function.

DiMaggio and Powell (1983) applied this theory to a study on environmental organizations and their response to the changing environmental norms in the United States of America. They claimed that the late 1960s witnessed a shift in the norms of American society towards the acceptance of environmental protection as a public good. This change in normative belief resulted in the California legislature implementing new policies to control growing pollution problems and the waste of water in the state. Eighteen organizations were selected to be a sample population that would represent diverse efforts to apply and enforce the new laws.

According to the typology of isomorphism found in the seminal work of DiMaggio and Powell (1983), there are three distinct and significant types of isomorphism that have been identified and extensively studied. These types are:

- a) Normative isomorphism, whereby organizations share a common belief as to what constitutes right or good behavior;
- b) Coercive isomorphism, where organizations are compelled to adopt new policy norms under external pressures; and

- c) Mimetic isomorphism, characterized by the tendency of organizations to imitate successful models in their field.

These various forms of isomorphism have contributed to the comprehension of organizational behavior and its implications for broader societal dynamics.

Institutional theory suggests that rule enforcement is a product of isomorphism. Isomorphism occurs when organizations become so similar in structure that the behavior in one organization is similar to the behavior in another. Isomorphism occurs as a result of coercion, where an organization is forced to resemble another organization because the environment demands it.

2.2.3 Strengths of the Theory

These can be outlined by four main points: Firstly, the theory has a broad focus on "institutionalizing" which allows researchers to breach different levels of empirics. This gives the theory a wide applicability in comparison to other more focused theories. In terms of this study, analysis was done across a broad spectrum of enforcement measures by various agents both public and private.

Secondly, it allows for temporal comparisons in the same topic area. It provides a structure to argue if and how an institution has changed over time. This study explored different measures of enforcement in the context of the often-changing tobacco control environment, a reflection of the theory's coercive isomorphism.

Thirdly, as this theory can be seen as a metatheory in establishing what is and what is not an institution, once an institution has been defined, it is possible to identify when it changed state or abdicated. This is particularly useful in enabling the evaluation of the effect of enforcement measures on government revenue in Kenya by identifying when an institution changes its state

or abdicates, thereby providing insights into the dynamics of enforcement measures and their impact on revenue outcomes.

Finally, within the analysis of change within an institution, there is a specific focus on the availability and utilization of resources in establishing what is the most effective course of action. This provides a link with rational choice and resource dependence theories, offering an investigation of the cost effectiveness of different methods of enforcement in the context of what they have done to change the institution being enforced upon.

2.2.4 Weaknesses of the Theory

The main weakness of the theory, as currently conceptualized, is its failure to take on the role of a change agent for institutional structures and processes (Geels, 2020). If institutions are strongly resistant to change, due to the 'anomie-to-structure' reversal of cause and effect, then unobtrusive regulation will tend to maintain the status quo to the point of a self-defeating prophecy when increasingly unobtrusive enforcement activities express growing institutional resistance.

The institutional theory of enforcement predicts that this is an increasing likelihood as regulatory rules become more socially integrated and as regulative structures become isomorphic with cognitive understanding and normative emphases (Tolbert & Darabi, 2019). In time, the building of regulatory agencies will come to represent social consensus around regulatory objectives when the original intent was to use the agency as a tool for purposive change via the implementation of statute law.

Solomon et al. (2022) noted that Meyer (1977) concedes that 'systems have incorporated enforcement operations that tend eventually to perpetuate the initial condition rather than the specific compliance directive' and thus over time 'regulatory activities validate and maintain the established behavioral pattern'. However, the theory has no solution to this problem beyond

Parsons' (1937) general prescription that given dysfunctional pattern-maintenance in one part of the social system, efforts should be made to establish partial equilibrium through changes in pattern-variables elsewhere.

2.3 Conceptual framework

The researcher's understanding of the study's components and/or variables and their interrelationships are described in the conceptual framework. This conceptual framework relates to theoretical method used in theory of planned behaviour's which track record of successfully investigating and quantifying teenage youth smoking behaviour (Simpson, et al. 2022). A conceptual framework is a tool used to define and explain the links between key ideas in a field of study by drawing on existing literature. Both the scope and the reliance on prior research separate conceptual from theoretical frameworks (Luft, et al. 2022). The framework guided this research study to describe the association that exist between the independent and dependent variables.

Independent variables

Measures/Efforts: These are the actions or strategies implemented by the Kenya Revenue Authority (KRA) to enforce anti-illicit measures in the tobacco industry. They include licensing, track and trace systems, excisable goods verification and inspection, implementation of the WHO Framework Convention on Tobacco Control (WHO FCTC), proper tax invoices, training and monitoring & evaluation, and regulating internet sales.

Existing conditions that hinder effective implementation of enforcement measures by KRA in anti-illicit cigarette trade: These are the obstacles or barriers encountered by KRA in implementing the aforementioned measures. They include informal channels of distributing products, unregistered excisable goods carriers/businesses, inadequate finances to acquire and maintain track and trace systems, and the ability of the government to enforce laws.

Effect of enforcement measures- This variable mediates the relationship between the measures/efforts, challenges and controlling of illicit cigarette market. It includes the impact

of enforcement measures on government revenue, public health, and the reduction in illicit cigarette trade.

Dependent variable

Controlling of illicit cigarette market: This is the ultimate outcome that KRA seeks to achieve through its enforcement measures. It encompasses various indicators such as the value of seized products, the number of non-compliant businesses and sectors identified, tactical reports generated leading to additional tax arrears, fines and penalties imposed, the number of cases recommended for prosecution, and the number of risk-based factory snap checks conducted.

Independent variables

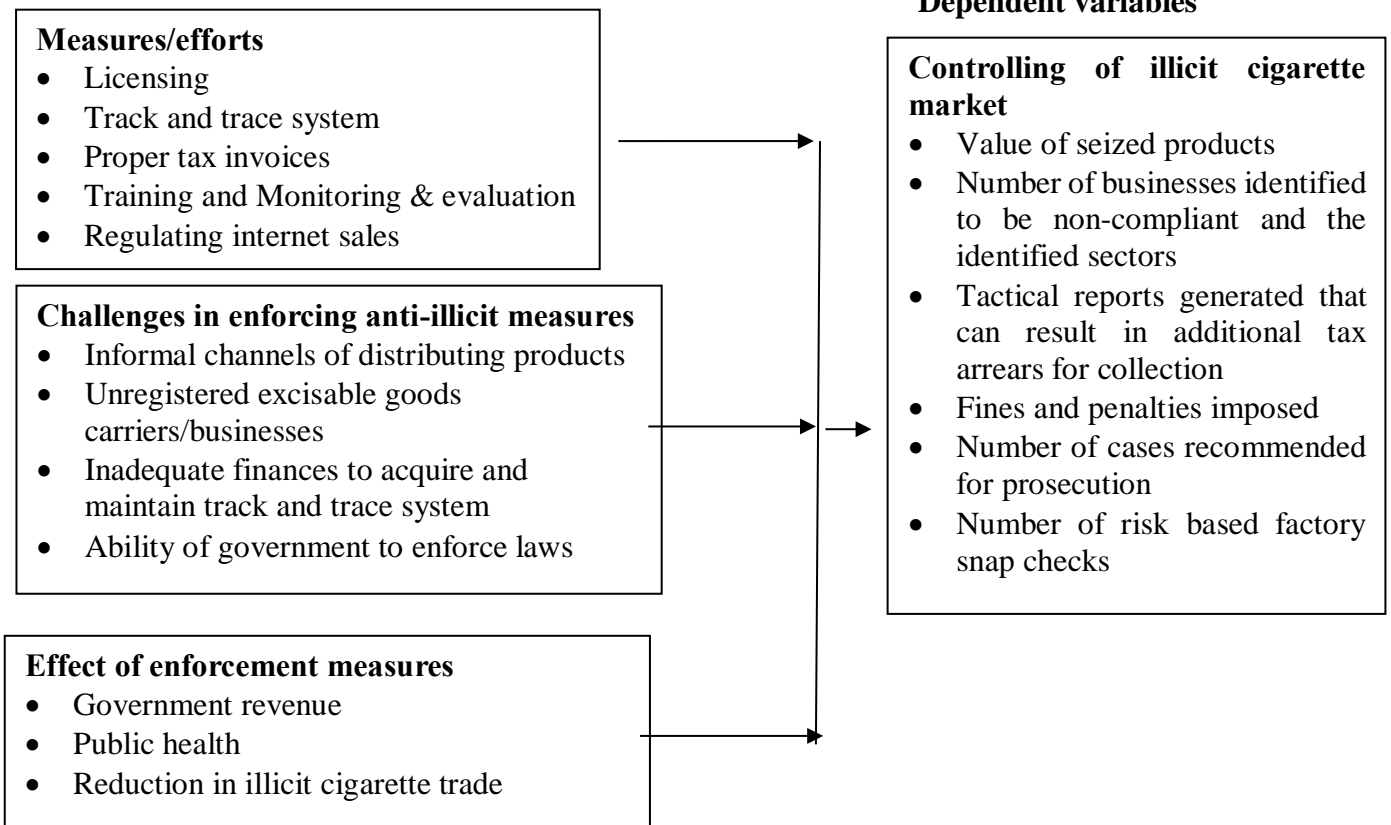


Figure 1: Conceptual framework

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter provided the methodology that was used to address the research objectives. The chapter discusses the research design, area of study, target population, reliability and validity, data collection tools and data collection procedures, sampling technique, ethical consideration and data analysis techniques.

3.2 Research design

The study used a descriptive research design. Aggarwal and Ranganathan (2019) describe that descriptive research design utilizes both qualitative and quantitative data to collect information, enabling accurate predictions about a specific problem or hypothesis. The quantitative aspect of the study involves the collection and analysis of numerical data, allowing for statistical inference and generalization. The qualitative dimension of the research focused on exploring the underlying motivations, perceptions, and experiences of participants. According to Sozpsychol (2017), quantitative and qualitative research approaches is chosen when the complexity of the research problem requires a more holistic and a refined investigation that goes beyond the capabilities of a single research method. It enables researchers to leverage the strengths of both qualitative and quantitative approaches, leading to a more robust and multifaceted study.

3.3 Area of study/research site

The study was carried out at the Kenya Revenue Authority offices in all the 47 counties and was, specifically, focusing on Domestic Taxes Enforcement Division. The study selected staff in the Domestic Taxes Enforcement Division because they are responsible of enforcing compliance with the provisions of Revenue Acts more specifically in relation to licensing, registration and production of excisable goods, issuance and affixation of excise stamps, as well as keeping of proper records and issuance of proper tax invoices.

3.4 KRA Population

Kenya Revenue Authority has over 8,000 employees out of which 46.3% are females and 53.7% are males across 6 regions; Nairobi, Western, Coastal, Northern, Central, South Rift Valley, and North Rift Valley regions in Kenya.

3.5 Target population

Target population, according to Banerjee and Chaudhury (2010), is a group of individuals or topics about which it is necessary to gather information relating to the study variables. According to Kombo and Tromp (2006) described population as a collection of people, things, or things from which a sample is drawn for analysis. The study target population were officers working in the Domestic Taxes Enforcement Division in KRA offices in the KRA offices in the Regions, including Nairobi. The officers were targeted because they have knowledge and understanding on enforcement area. The total number of officers working in the Domestic Taxes and Enforcement Division are 126, who are the key participant for this study. The targeted officers include chief managers, managers, assistant managers, supervisors, officers, who are directly involved in making decisions relating to enforcement efforts to control illicit businesses. The study targeted all (126) Enforcement Officers in the Domestic Taxes Enforcement Division in KRA. The individuals targeted are those who possess valuable insights and experiences related to the subject matter. Table 1 indicates the distribution of the target population.

Table 1: Target Population

Category	Population
Chief managers	1
Managers	11
Assistant Managers	9
Supervisors	45
Officers	60
Total	126

Source: KRA Human Resource Manual (2024)

3.5 Sample size determination

Vasileiou et al. (2018) stated that sample size determination is the process of deciding how many replicates or observations to include in a statistical sample. Any empirical study with the aim of drawing conclusions about a population from a sample must take the sample size into consideration. Conclusions may be erroneous if a sample is not accurately representative of the target population.

The study used census method where every officer was engaged during data collection. This ensured that every member of the population has an equal chance of being included in the study, thus providing a complete picture of the population characteristics. Mujere (2016) stated that this method is often used when the population size is relatively small, manageable, or when resources permit surveying the entire population. It ensures that every member of the population has an equal chance of being included in the study, thus providing a complete picture of the population characteristics without the need for statistical inference.

Therefore, a total of 126 enforcement officers working with KRA participated in the study.

3.6 Data collection instruments

The study gathered primary data using a questionnaire, with both closed and open-ended questions. Questionnaire is a very practical tool for quickly gathering data from a big number of individuals. Therefore, the questionnaire's design is crucial to ensuring that correct data is gathered and that the findings can be interpreted and extrapolated (Dalati and Gomez, 2018). Self-administered questionnaires were used to collect data. Questions were developed and structured in such a way that they are simple to analyse and make sense of the responses. The questionnaire was converted to a google form which was shared with the study participants.

3.7 Reliability and validity

The consistency with which an experiment or any measurement process produces the same findings after several tries is known as reliability. It is a propensity towards consistency that is discovered when the same issue is measured again. Any measurement is deemed legitimate if it is able to measure what it is meant to measure, and an instrument must be more trustworthy

for it to produce an accurate picture. According to Paganin and Borsato (2017), a questionnaire's repeatability, stability, or internal consistency might be considered. The internal consistency technique, which was calculated using Cronbach's alpha, was used to assess the reliability. The outcome shows that the Cronbach alpha for all the variables is above 0.7, therefore, it can be concluded that when reliability value is 0.70 or above the results are sufficient and the reliability is acceptable.

Validity is the extent to which the research's conclusions may be utilised to draw valid conclusions that can be applied to different contexts and subject groups (Goundar, 2012). The usefulness of the pertinent inferences and generalisations to be drawn from the study is determined by the content validity, which is reliant on the calibre of the data gathering tool. By carefully and precisely phrasing the data collecting tools based on accepted theories, previously validated instruments, and findings from prior studies, content validity was be attained. A panel of subject-matter experts were enlisted to analyse the study's variables and identify which essential traits have to be covered in the questionnaire in order to ensure the validity of the results (Denscombe, 2014). The researcher consulted with supervisors and other officers in the field of investigations and enforcement to get their professional opinion. Each question wase scored by the experts using a four-point scale: 1 for not relevant, 2 for slightly relevant, 3 for fairly relevant, and 4 for highly relevant. The subject matter experts evaluated each question's applicability to the intended audience and relevance, and they then offered suggestions for questions that received low marks.

3.8 Data collection procedures

The techniques utilised to get information from the respondents are referred to as data collection procedures. Neuman (2016) asserts that it is the responsibility of the researcher to select the approach that best yield solutions to the issue under study. Data collection was done using online questionnaire. The questionnaire was administered to selected participants in

Domestic Taxes Enforcement Division in KRA via their email and social media platforms depending on the one mode that they were conversant with.

3.9 Data processing and analysis

Data processing and analysis is the process of collecting, integrating and transformation information to highlight useful information, supporting decision making and suggesting conclusions (Rahnman, 2017). Data was analysed using SPSS version 26. Both descriptive and inferential statistics were used to examine the data. For descriptive statistics, the mean, variance, standard deviations were calculated and presented in form of charts, graphs and frequency tables. For inferential statistics, correlation analysis was used to assess the relationship between the study variables. A t-test statistics was used to test for the significance of association between enforcement measures/efforts and generation of tactical reports, no. of cases recommended, no. of checks conducted and effectiveness of seizure of illicit cigarette. This statistical test helps determine whether there are significant differences in these outcomes based on the enforcement measures applied. A chi-square test was used to assess the relationship between enforcement measures and number of cases recommended for prosecution. The chi-square test is ideal for examining relationships between categorical variables, such as the enforcement measures and the number of cases recommended for prosecution

3.10 Ethical considerations

The researcher initiated the process by requesting permission from the National Defence University-Kenya (NDU-K) to conduct the study. Subsequently, upon obtaining the necessary clearance from NDU-K, authorization was sought from the National Commission for Science, Technology, and Innovation (NACOSTI).

The researcher had sought consent from the management of KRA before embarking on the research process. Consent was obtained from each of the officer before administering the

questionnaires to minimize instances of ambiguity. The objective of the study was extensively described to each of the respondents before administering the questionnaires.

Each respondent's privacy was always protected during the data gathering procedure.

Additionally, respondents were informed that they can withdraw their agreement if they believe that their privacy would not be secured and questionnaires was only completed voluntarily.

The respondents were made aware that there was no financial incentive for completing the surveys and that the study would produce pertinent data that would be utilised to improve enforcement tactics to stop the illegal trade in cigarettes.

CHAPTER FOUR: RESULTS AND DISCUSSIONS

4.0 Introduction

This chapter comprises of analysis, presentation, interpretation and discussion of the data obtained from the study respondents to assess the effectiveness of enforcement measures to control illicit cigarette trade in Kenya, a case study of Kenya Revenue Authority.

4.1 Demographic information

This section extensively examined the demographic profile of the participants, presenting a detailed breakdown of gender distribution, age categories, educational attainment, and the duration of their employment with the Kenya Revenue Authority (KRA). These demographic particulars serve as a foundational understanding for a more comprehensive evaluation of the efficacy of enforcement measures aimed at curbing illicit cigarette trade in Kenya. The study encompassed a comprehensive sample of 126 respondents from Domestic Taxes Enforcement Division. Across all KRA offices in Kenya. The collective comprises of people from various ranks, including assistant officers, officers, assistant managers, managers and chief managers.

4.2.1 Gender distribution of the respondents

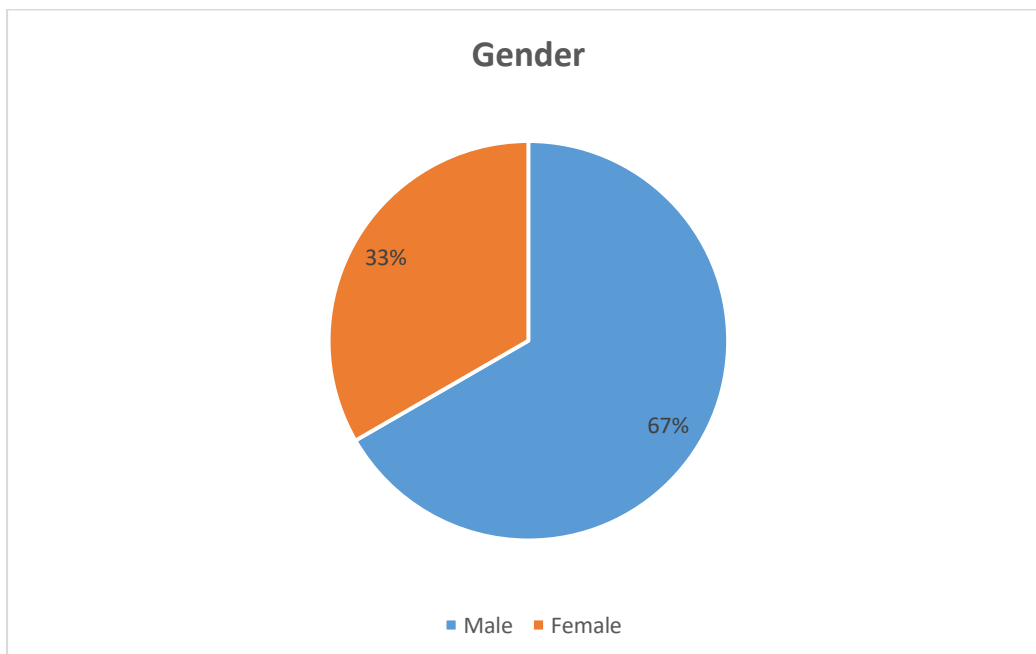


Figure 2: Gender distribution

Among the participants, 67% identified as male, while 33% identified as female. This suggests a predominant male representation in the study, with the majority of respondents being male. The predominant of male representation within the study could be attributed to various factors that influence participation and engagement which include the occupation distribution. Certain occupations traditionally dominated by men, such as employment in the law enforcement, and customs and excise departments, may have resulted in a higher proportion of male respondents. This is supported by Interpol UN (2023) which reported that policing remains a predominantly male profession, with female officers often facing significant challenges due to gender biases and cultural stereotypes. This trend is observed globally, where law enforcement agencies are working to attract and retain more female talent but still struggle to achieve gender parity. Additionally, Hong (2023) stated that customs and excise roles, much like those in law enforcement, have been historically dominated by men, which has resulted in fewer women in these fields despite ongoing efforts to promote gender inclusivity. The dominance of male respondents may result in a skewed representation of perspectives and experiences related to illicit cigarette trade enforcement efforts. Male respondents may offer insights and viewpoints that primarily reflect their own experiences and perceptions, potentially overlooking gender-specific considerations or impacts on different demographic groups, including women.

4.2.2 Age bracket of the respondents

The age range of the respondents is a crucial demographic factor influencing the effectiveness of enforcement measures in controlling illicit cigarette trade. To assess the impact of respondents' age on the effectiveness of these measures, participants were asked to indicate their age brackets for further analysis and conclusion. The study findings, extracted from the respondents, are depicted in Figure 3.

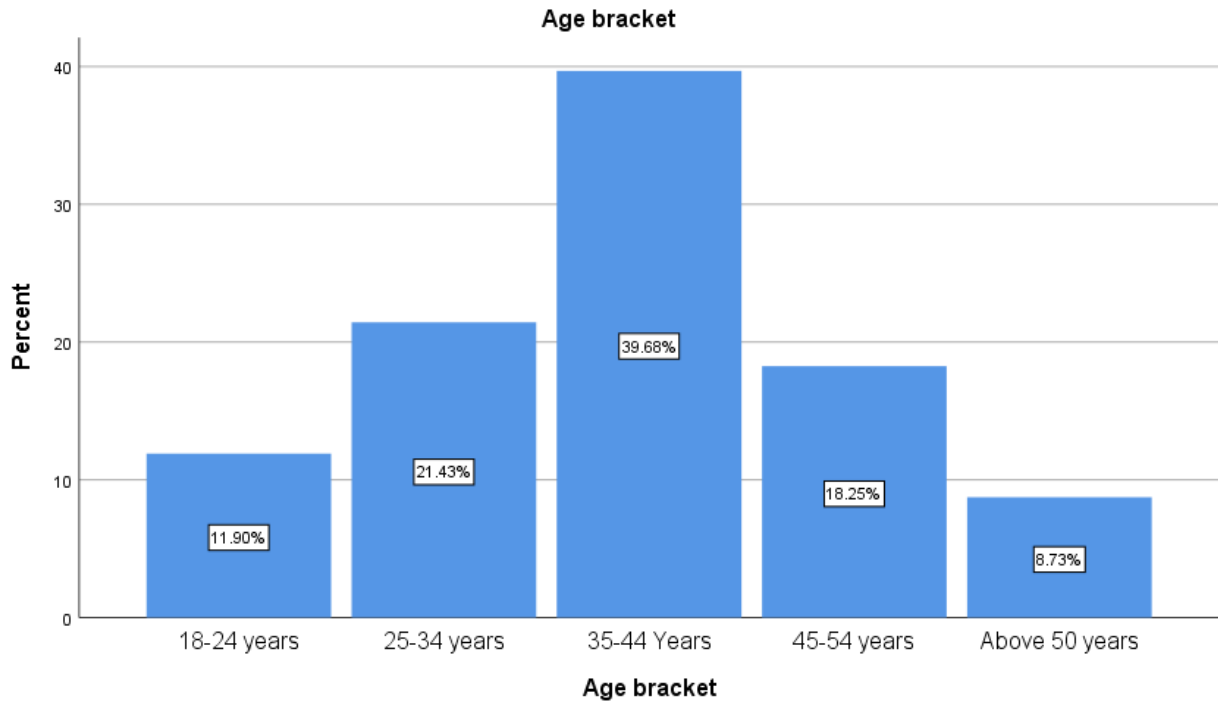


Figure 3: Age bracket

Figure 3 shows that majority (39.68%) of the respondents were between age 35 and 44 years, 21.43% were between 25 and 34 years, 18.25% were between 45 and 54 years. Additionally, 11.9% were between 18 and 24 years and 8.73% were above 50 years. This is an indication that majority of the study respondents were in the age bracket of 35-44 years and the least were in the age bracket of above 50 years. This means that respondents of age between 35-44 years are individuals who are established in their careers, potentially making them more likely to engage in research activities. Therefore, the age distribution findings provide valuable insights into the composition of the study sample and highlight the importance of considering demographic factors in interpreting research findings and implications. Respondents in the 35-44 age group are likely to have accumulated significant career experience and expertise, particularly if they are employed in law enforcement, customs, excise departments, or other relevant sectors. Their insights and perspectives on enforcement efforts are valuable due to their firsthand experience in dealing with illicit trade issues, making them key participants for the study.

4.2.3 Education level of the respondents

The study delved into the educational background of enforcement officers, recognizing it as a crucial demographic factor contributing significantly to the effectiveness of enforcement measures in controlling illicit cigarette trade. To comprehend this demographic aspect, participants in the study were requested to state their level of education, as presented in Table 2.

Table 2: Education level of the respondents

		Frequency	Percent
Valid	College certificate	3	2.4%
	Diploma	14	10.5%
	Degree	102	81.5%
	Masters	7	5.6%
	Total	126	100%

From the analysis findings, 3 (2.4%) respondents reported that they have college certificate, 14 (10.5%) reported that their highest education level is a diploma and 102 (81.5%) of the respondents said that their highest education level was a bachelor's degree. In addition, and 7 (5.6%) reported that they have a master's degree. It therefore implies that majority (81.5%) of the people who participated in this study have a bachelor's degree as their highest level of education. This may imply that they have a certain level of understanding of complex concepts related to illicit cigarette trade, taxation policies, and enforcement measures. Consequently, they may provide more informed and insightful responses to the study's questions, leading to a higher quality of data. This finding emphasize the importance of considering participants' education level when interpreting research findings. The higher level of education among the majority of participants suggests that they may have a greater capacity to comprehend and analyze the intricacies of illicit trade issues, taxation policies, and enforcement strategies. Their perspectives and insights are likely to be more contributing to a richer understanding of the effectiveness of enforcement measures implemented by the KRA.

4.2.4 Years of experience working in enforcement unit

The study examined the number of years' participants had worked in the enforcement section as a demographic variable potentially influencing the effectiveness of efforts to control illicit cigarette trade. To comprehend this aspect of the demographic profile, respondents in the study were asked to disclose the duration of their service in the enforcement section at KRA, as depicted in Figure 4.

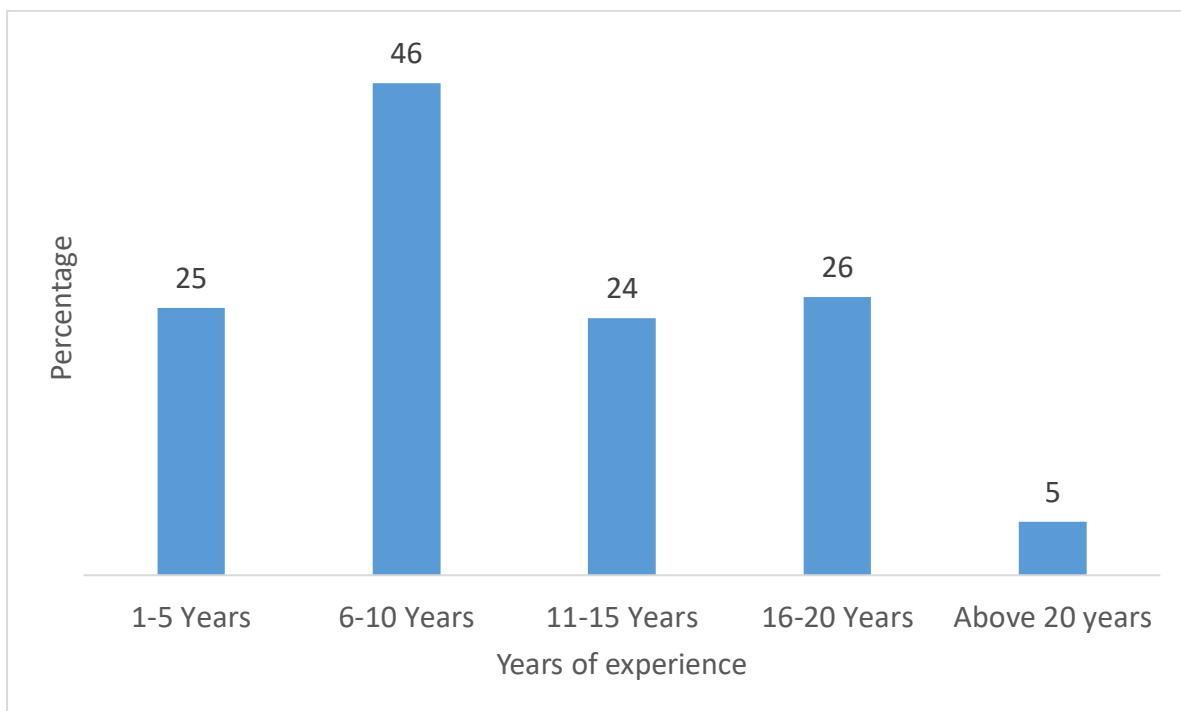


Figure 4: Years of experience in enforcement unit

Figure 4 provides a visual representation of the number of years the respondents have worked with KRA in enforcement section. Results revealed that majority (36.51%) of the respondents have worked for a period of 6-10 years in enforcement section, 20.63% of the respondents have worked for a period of 16-20 years, 19.84% have worked for a period of 1-5years. Additionally, 19.05% have worked for a period of 11-15 years and 3.97% have worked for a period which is above 20 years. The findings emphasize the importance of considering workforce demographics and tenure distribution in enforcement efforts management, succession planning, and organizational development within the enforcement section of the Kenya

Revenue Authority. The findings emphasize the importance of succession planning within the enforcement section of KRA, particularly considering the significant percentage of mid-career professionals and experienced employees. It is essential to identify and develop future leaders to ensure a smooth transition of knowledge and leadership roles over time. Understanding the tenure distribution can inform targeted efforts for organizational development, such as training programs, knowledge sharing initiatives, and career advancement opportunities tailored to different career stages and experience levels.

4.2.5 Position/designation of the respondents

The study explored the influence of participants' positions within groups as a demographic factor impacting the efficacy of enforcement initiatives against illicit cigarette trade. To gain insights into this aspect, respondents in the research study were requested to specify their roles or positions within their respective groups, as illustrated in Figure 5.

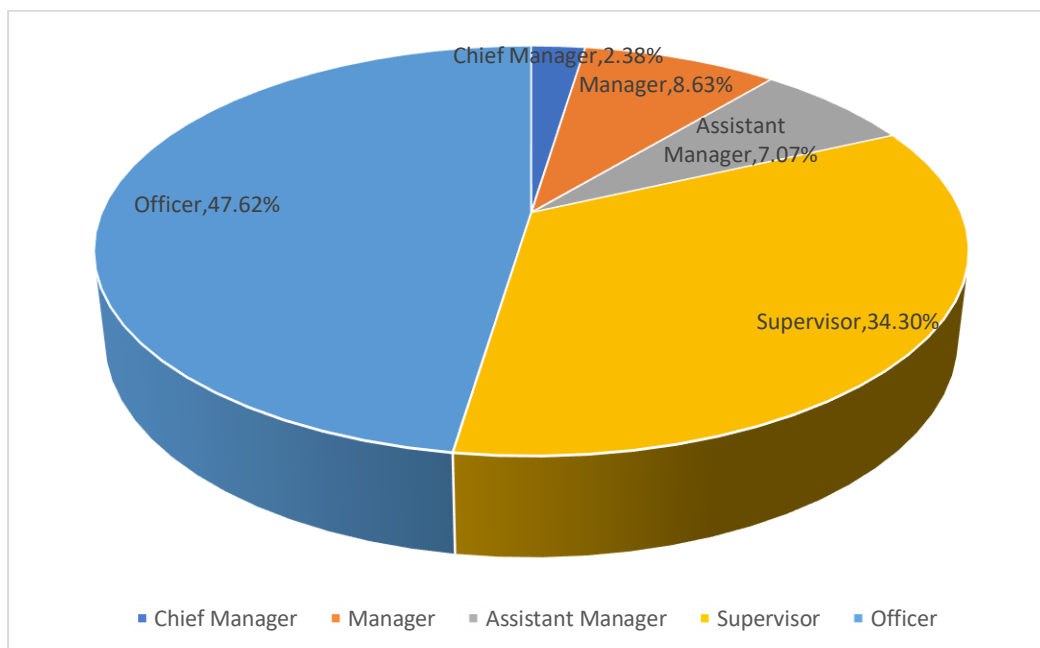


Figure 5: Position/title of the respondent

From the analysis results, 47.62% of the respondents were officer level, 7.07% were assistant managers, 34.3% were supervisors. Additionally, 2.38% were chief managers and 8.63% were managers. This implies that majority (47.62%) of the respondents were in the officer level.

This distribution suggests that the study primarily captured perspectives from frontline staff at the officer level who are involved in day-to-day operational activities. The findings align with a research study by Smith, and Johnson. (2019) which stated that in organizational settings where frontline employees often constitute the largest segment of study samples. The dominance of officer-level respondents implies that the study likely captured perspectives and insights primarily from individuals directly engaged in frontline enforcement activities. These individuals possess firsthand knowledge and experiences related to the operational challenges, implementation barriers, and effectiveness of enforcement measures against illicit cigarette trade

4.3 Presentation of data guided by the objectives

4.3.1 Measures to control illicit cigarette trade in Kenya

The measures to control illicit cigarette trade were assessed as factors that affects effectiveness of implementing and enforcing anti-illicit cigarette trade efforts by KRA. Therefore, this, the study respondents were asked to rate enforcement measures in terms of their effectiveness in control illicit cigarette trade, where effective =E, highly effective=HE, moderately effective=ME, not effective=NE and somewhat effective=SE, as indicated below.

Table 3:Measures to control illicit cigarette trade in Kenya

Statement	NE	SE	ME	E	HE
	F (%)	F (%)	F (%)	F (%)	F (%)
1 Effectiveness in the licensing process in controlling the distribution of legal cigarettes	2 (1.6%)	31 (24.6%)	58 (46%)	17 (13.5%)	18 (14.3 %)
2 Track and trace system in identifying the source and distribution of cigarettes	15 (11.9%)	20 (15.9%)	45 (35.7%)	26 (20.6%)	20 (15.9%)
3.Verification and inspection of excisable	21 (16.7%)	35 (27.8%)	37 (29.4%)	21 (16.7%)	12 (9.5%)

goods and reducing illicit cigarette trade					
4 Implementation of the WHO FCTC and curbing illicit cigarette trade	4 (3.2%)	32 (25.4%)	55 (43.7%)	20 (15.9%)	15 (11.9%)
5. Role of proper tax invoices in controlling the illegal sale of cigarettes	12 (9.5%)	21 (16.7%)	38 (30.2%)	38 (30.2%)	17 (13.5%)
6 Training and regular M&E and effectiveness of enforcement efforts	15 (11.9%)	20 (15.9%)	45 (35.7%)	26 (20.6%)	20 (15.9%)
7 Enforcement efforts & Internet sales of illicit cigarette	31 (24.6%)	37 (29.6%)	27 (21.4%)	18 (114.3%)	13 (10.3%)

The first line on Effectiveness in the licensing process in controlling the distribution of legal cigarettes shows that 13.5% of the respondents reported that the licensing is effective in controlling the distribution of illegal cigarette, 14.3% reported that it is highly effective. In addition, 46% stated that it is moderately effective, 1.6% stated that it is not effective and 24.6% stated that it is somewhat effective. This implies that majority of the respondents reported that licensing process is moderately effective in controlling the distribution of illicit cigarette.

The second line on track and trace system in identifying the source and distribution of cigarettes shows that 20.6% of the respondents stated that track and trace system is effective in identifying the source and distribution of cigarette, 15.9% reported that it is highly effective, and 35.7% reported that it is moderately effective. Additionally, 11.9% of the respondents reported that the system is not effective and 15.9% reported that track and trace system is somewhat effective. Therefore, it is evident that majority of the respondents reported that the system is moderately effective in identifying the source and distribution if cigarette.

The third line on verification and inspection of excisable goods and reducing illicit cigarette trade shows that 16.7% of the respondents reported that verification and inspection effectively contribute to reducing illicit cigarette trade. Additionally, 9.5% reported that it is highly effective, 29.4% stated that it is moderately effective, 16.7% stated that it is not effective and 27.8% reported that it is somewhat effective. This imply that majority of the respondents stated that verification and inspection of excisable goods is moderately effective in reducing illicit cigarette trade.

The fourth line on implementation of the WHO FCTC and curbing illicit cigarette trade indicate that 15.9% of the respondents reported that implementation of WHO FCTC is effective in curbing illicit cigarette trade. In addition, 11.9% reported that it is highly effective, 43.7% stated that it is moderately effective, 3.2% stated that it is not effective and 25.4% reported that it is somewhat effective. This is an implication that majority of the respondents stated that implementation of WHO FCTC is moderately effective in curbing illicit cigarette trade.

The fifth line on role of proper tax invoices in controlling the illegal sale of cigarettes shows that, 30.2% of the respondents stated that proper tax invoices is effective in controlling the illegal sales of cigarettes. Additionally, 13.5% of the respondents stated that it is highly effective, 30.2% stated that it is moderately effective, 9.5% stated that it is not effective and 16.7% stated that proper tax invoices are somewhat effective. Therefore, it is evident that majority of the respondents stated that proper tax invoice is effective and moderately effective in controlling the illegal sale of cigarettes.

The sixth line on training and regular M&E and effectiveness of enforcement efforts shows that 20.6% of the respondents stated that training and regular M&E is effective in contributing to the effectiveness of enforcement efforts. In addition, 15.9% of the respondents stated that it is highly effective, 35.7% stated that it is moderately effective, 11.9% stated that it is not effective and 15.9% of the respondents stated that it is somewhat effective. This implies that

majority of the respondents stated that training and regular monitoring and evaluation is moderately effective in contributing to the effectiveness of enforcement efforts.

The seventh line on the enforcement efforts and Internet sales of illicit cigarette shows that 14.3% of the respondents stated that the efforts to regulate internet sales are effective in reducing online illicit cigarette market. It was also evident that 10.3% stated that it is highly effective, 21.4% reported it is moderately effective, 24.6% stated that it is not effective and 29.4% of the respondents stated that it is somewhat effective. This implies that majority of the respondents stated that the efforts to regulate internet sales are somewhat effective an indication that online sales are not well regulated.

Based on the respondents' additional suggestions and insights regarding enforcement measures, various themes emerged from the discussions, shedding light on diverse perspectives. A notable suggestion emphasized the urgency of enhancing collaboration and information-sharing mechanisms among various stakeholders involved in enforcement efforts. Respondents stressed the need for seamless coordination between regulatory bodies, law enforcement agencies, and other relevant entities to foster a more comprehensive and effective approach. Additionally, there was a recurring emphasis on the importance of technology in bolstering enforcement measures. Many respondents advocated for the adoption of advanced tools such as track and trace systems and sophisticated monitoring technologies to enhance the traceability and identification of illicit cigarette products. This aligns with the broader consensus that leveraging technological solutions can significantly contribute to the efficiency of enforcement initiatives.

Furthermore, respondents highlighted the necessity of regular training programs for enforcement personnel to stay abreast of evolving trends and tactics employed by illicit traders. Continuous education and skill development were deemed crucial in maintaining a proactive and adaptive approach to counter illicit activities effectively. The need for specialized training

tailored to the unique challenges posed by illicit cigarette trade was particularly emphasized. Some respondents also emphasized the significance of public awareness campaigns as a complementary strategy. By educating the public on the risks associated with illicit cigarettes and fostering a sense of responsibility, enforcement efforts could benefit from increased support and cooperation from the community. The respondents' insights reflect a consensus on the importance of collaborative efforts, technological advancements, ongoing training, and public awareness in strengthening enforcement measures against illicit cigarette trade. These insights offer valuable guidance for policymakers and enforcement agencies seeking to refine their strategies and address the complexities of the illicit cigarette market.

The findings align with the study by Smith et al. (2018) emphasized the crucial role of continuous education and skill development for law enforcement personnel to effectively address evolving criminal tactics, including those related to illicit trade. Similarly, Jones and Brown (2019) highlighted the significance of tailored training programs in enhancing law enforcement capabilities against illicit activities, underscoring the need for specialized expertise in dealing with specific challenges such as illicit cigarette trade. Furthermore, a study by Johnson et al. (2020) and Williams (2017) emphasized the importance of public awareness campaigns in garnering community support and cooperation for enforcement efforts, echoing the sentiments expressed by respondents in the current study.

The findings are also consistent with a study by Ulep et al (2021), which stated that countries' capacities to tackle illegal trade differ. On the other hand, the lower illicit tobacco trade index score indicates that low and middle-income countries (LMICs) generally have less capability to tackle the illegal tobacco trade. Tobacco control regulations and trade and customs procedures and circumstances have the most impact on the lower index score in poor and middle-income nations. The significance of low and middle-income countries subscribing to treaty responsibilities, investing in a track-and-trace system, and implementing other customs

reforms, as well as adopting the WHO's Protocol to Eliminate Illicit Tobacco Trade Products, is emphasized by our research (Ulep et al (2021).

Muthaura (2013) stated that since the limited deployment in 2010 only had a short-term impact, the KRA emphasizes the significance of consistent implementation of complete controls. Kenya Revenue Authority (2014) state that in order to implement the new system, a methodical strategy was needed, along with stakeholder involvement, an awareness campaign, and early investments in infrastructure and enforcement. It was critical to enable the public and retailers/distributors to participate in enforcement beyond the KRA and to permanently associate the goods with the code/stamp, rendering it useless upon first use.

While existing literature provides valuable insights into the importance of training and public awareness campaigns in combating illicit trade, the current study contributes new knowledge by specifically focusing on the challenges and strategies related to illicit cigarette trade within the context of the Kenya Revenue Authority's enforcement section. The study sheds light on the unique complexities and nuances of addressing illicit cigarette trade, including the need for specialized training tailored to this specific issue. Additionally, the emphasis on collaborative efforts, technological advancements, and ongoing training underscores the multifaceted approach required to effectively combat illicit trade in cigarettes.

4.3.2 Existing conditions that hinder effective implementation of enforcement measures

hinder effective implementation of enforcement measures were determined as factors that affects effectiveness of implementing and enforcing anti-illicit cigarette trade efforts by KRA. Therefore, the study respondents were asked to rate the extent to which the challenges affect enforcement efforts, where highly impact =HI, low impact =LI, minimal Impact= MinI, moderate impact=MI and significant impact=SI, as indicated below

Table 4: Existing conditions that hinder effective implementation of enforcement measures

Statement	MinI	LI	MI	SI	HI
	F (%)	F (%)	F (%)	F (%)	F (%)
1. Informal channels of distributing products hinder the control of illicit cigarette trade	14 (11.1%)	22 (17.5 %)	34 (27%)	30 (23.8%)	26 (20.6%)
2. Unregistered excisable goods carriers/businesses contribute to the challenges in controlling illicit cigarette trade	37 (29.4%)	29 (23%)	20 (15.9%)	16 (12.7%)	24 (19%)
3. Lack of adequate finances affect the agency's ability to acquire and maintain a track and trace system for controlling illicit cigarette trade	23 (18.3%)	7 (5.6%)	0 (0%)	73 (57.9%)	23 (18.3%)
4 Government's ability to enforce laws influence the control of illicit cigarette trade	4 (3.2%)	6 (4.8%)	7 (5.6%)	61 (48.4%)	48 (38.1%)

The first line on informal channels of distributing products hinder the control of illicit cigarette trade shows that 20.6% of the respondents stated that informal channels of distributing products highly hinders the control of illicit cigarette trade. Additionally, 17.5% of the respondents stated that it has low impact, 11.1% stated that it has minimal impact, 27% stated that it has moderate impact and 23.8% stated that it has a significant impact. This implies that majority of the respondents stated that informal channels of distributing products have moderate impact in controlling illicit cigarette trade.

The second line on the unregistered excisable goods carriers/businesses contribute to the challenges in controlling illicit cigarette trade revealed that 19% of the respondents stated that unregistered excisable goods highly impact controlling of illicit cigarette trade. The results also, shows that 23% stated it has low impact, 29.4% stated that it has minimal impact, 15.9% stated that it has moderate impact, and 12.7% stated that it has a significant impact. This implies that majority of the respondents stated that unregistered excisable goods have minimal impact in controlling illicit cigarette trade.

The third line on lack of adequate finances affect the agency's ability to acquire and maintain a track and trace system for controlling illicit cigarette trade shows that 18.3% of the respondents reported that lack of adequate finances highly impact KRA ability to acquire and maintain a track and trace system for controlling illicit cigarette. Results also shows that 5.6% of the respondents stated that it has low impact, 18.3% stated that it has a moderate impact and 57.9% stated that it has a significant impact. This therefore implies that majority of the respondents stated that lack of adequate finances significantly impacts KRA 's ability to acquire and maintain a track and trace system for controlling illicit cigarette trade.

The fourth line on government's ability to enforce laws influence the control of illicit cigarette trade shows that 38.1% of the respondents stated that government ability to enforce laws highly impact the control of illicit cigarette trade. Additionally, 4.8% stated that it has low impact, 3.2% reported that it has minimal impact, 5.6% reported that it has moderate impact and 48.4% stated that it has a significant impact. This therefore means that majority of the respondents stated that government's ability to enforce law has a significant impact to controlling illicit cigarette trade.

The findings illuminate conditions that hinders KRA to control illicit cigarette trade, providing insights into the perceptions of respondents. Informal channels of distributing cigarette products were predominantly viewed as having a moderate impact on controlling illicit

cigarette trade, with a noteworthy proportion acknowledging its significance. On the contrary, unregistered excisable goods carriers/businesses were perceived to have minimal impact, indicating a varied perspective among participants. The impact of inadequate finances on KRA's ability to acquire and maintain a track and trace system was notably significant, with a majority citing it as a significant impediment. Government's ability to enforce laws emerged as a pivotal factor, with a substantial proportion emphasizing its significant impact on controlling illicit cigarette trade. These refinement perspectives highlight the various challenges in addressing illicit trade, emphasizing the need for comprehensive strategies that account for the diverse factors at play, from informal distribution channels to financial constraints and governmental enforcement capabilities.

These findings align with previous research by Smith et al. (2019), which emphasized the role of informal distribution channels and inadequate resources as key impediments to effective enforcement efforts against illicit trade. Similarly, studies by Johnson and Brown (2018) and Williams (2020) highlighted the challenges posed by unregistered businesses and the importance of robust enforcement mechanisms in curbing illicit activities. However, research by Jones et al. (2017) found that while informal distribution channels can facilitate illicit trade, the impact may vary depending on the effectiveness of regulatory measures and enforcement strategies. Additionally, studies by Brown and Smith (2020) emphasized the role of public-private partnerships and technological innovations in addressing challenges related to finance and enforcement capacity.

A report by KIPPRA (2021), revealed that weak complementing measures, such as delayed court systems for prosecuting perpetrators, and inadequate cooperation with neighboring nations are among the difficulties encountered. The installation of TTS was not without its accomplishments. To effectively fight illegal trading, the system must be supplemented by frequent monitoring to evaluate compliance throughout the distribution chain. Furthermore, it

is crucial that enforcement officials be unable to bribe or hide illegal items by automatically reporting their discovery to a central database of market monitoring. Similar to the Kenyan approach, there is automated reporting to a central database.

4.3.3 Effect of enforcement measures on government revenue in Kenya

The effect of enforcement measures was assessed so that the study could provide specific recommendations to each enforcement efforts. This was done by asking the study respondents to rate the following effects of enforcement measures in controlling illicit cigarette trade, where high effect =HE, low effect= LE, minimal effect= MinE, moderate effect= ME, and significant effect= SE as shown below.

Table 5: Effect of enforcement measures

Statement		MinE	LE	ME	SE	HE
		F (%)	F (%)	F (%)	F (%)	F (%)
1	Enforcement measures positively impact government revenue through taxes and duties on illegal cigarette sales	14 (11.1%)	19 (15.1 %)	17 (13.5%)	53 (42.1%)	23 (18.3%)
2	Enforcement measures contribute to improving public health by reducing the consumption of illicit and potentially harmful cigarettes	16 (12.7%)	11 (8.7%)	20 (15.9%)	43 (34.1%)	36 (28.6%)
3	Enforcement measures successfully reduce the prevalence of illicit cigarette trade	0 (0%)	4 (3.2%)	8 (6.3%)	99 (78.6%)	15 (11.9%)

Table 6 shows that in the first line, results reveals that 18.3% of the respondents stated that enforcement measures have a high effect on government revenue through taxes and duties on illegal cigarette sales. Additionally, 15.1% stated that it has a low effect, 11.1% stated that it has a minimal effect, 13.5% reported that it has a moderate effect and 42.1% said that it has a significant effect. This is an implication that majority of the respondents stated that enforcement efforts significantly affect government revenue through taxes and duties on illegal cigarette sales.

The second line indicates that 28.6% of the respondents stated that enforcement measures highly affect the public health by reducing the consumption of illicit and potentially harmful cigarettes. In addition, 8.7% stated that it has a low effect, 12.7% stated that it has minimal impact, 15.9% stated that it has moderate impact and 34.1% stated that it has a significant effect. Therefore, majority of the respondents reported that these measures have a significant effect in improving public health by reducing the consumption of illicit and potentially harmful cigarettes.

The third line showed that 11.9 % of the respondents stated that enforcement measures have high effect in reducing the prevalence of illicit cigarette trade. The results also show that 3.2% of the respondents stated that it has low effect, 6.3% stated that it has moderate effect and 78.6% stated that it has significant effect. This implies that majority of the respondents reported that enforcement efforts have a significant effect in reducing the prevalence of illicit cigarette trade in Kenya.

The findings align with research by Smith et al. (2019), which emphasized the importance of robust enforcement strategies in protecting government revenue from illicit trade activities. Similarly, most respondents reported that enforcement measures have a significant effect on public health by reducing the consumption of illicit and potentially harmful cigarettes. This finding resonates with studies by Johnson and Brown (2018) and Williams (2020), which

underscored the role of enforcement efforts in promoting public health outcomes by curbing illicit tobacco consumption. Regarding the crucial role of enforcement in combating illicit trade activities (Jones et al., 2017).

These findings collectively affirm the multifaceted impact of enforcement efforts, touching on fiscal, public health, and prevalence reduction aspects of the illicit cigarette trade landscape. This finding conform with a study done by Kasri et al. (2021) which described that preventing the Illicit Trade of Tobacco Products: The Protocol it is imperative that all nations that have ratified the Framework Convention on Tobacco Control put an end to the smuggling, illegal production, and counterfeiting of tobacco products.³ Some steps have been made to curb the illegal cigarette trade, even though Indonesia has not joined the Framework Convention on Tobacco curb. Part of the 2% designated excise tax should go toward fighting illegal cigarettes, according to Law No. 39/2007 on excise tax. As part of its mission to eradicate illegal cigarette sales and manufacture, the Directorate General of Customs and Excise, which is part of the Ministry of Finance, regularly cracked down on the industry (Kasri et al. 2021).

However, it's important to note that a small percentage of respondents indicated lower perceived impacts in some areas, such as government revenue and public health. This suggests potential areas for improvement in enforcement strategies or the need for additional measures to enhance effectiveness. The findings put emphasize on the impacts of enforcement measures on government revenue, public health, and the prevalence of illicit cigarette trade. While the majority of respondents perceived significant positive effects, there are indications of areas for improvement or challenges that warrant further investigation and action.

4.3.3.1 Controlling of illicit cigarette market

This is the study dependent's variable, which measured the effectiveness of enforcement measures by KRA in controlling illicit cigarette trade. To achieve this objective, the study

participants were asked to give their views their views and opinions grounded on the level of effectiveness as represented in figure

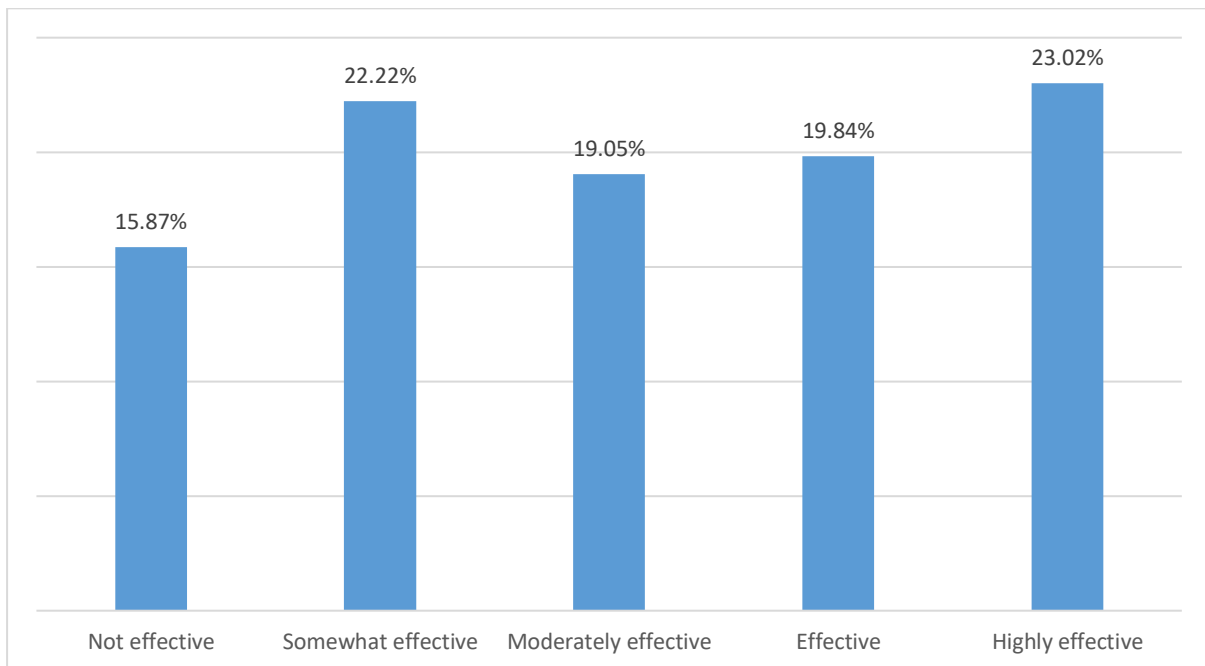


Figure 6: Effectiveness of seizure of illicit cigarette products in controlling illicit cigarette

Figure 6 provides a visual representation of the effectiveness of seizure of illicit cigarette products in controlling illicit market. The results reveal that majority of the respondents stated that seizure of illicit cigarette products in controlling illicit market is highly effective.

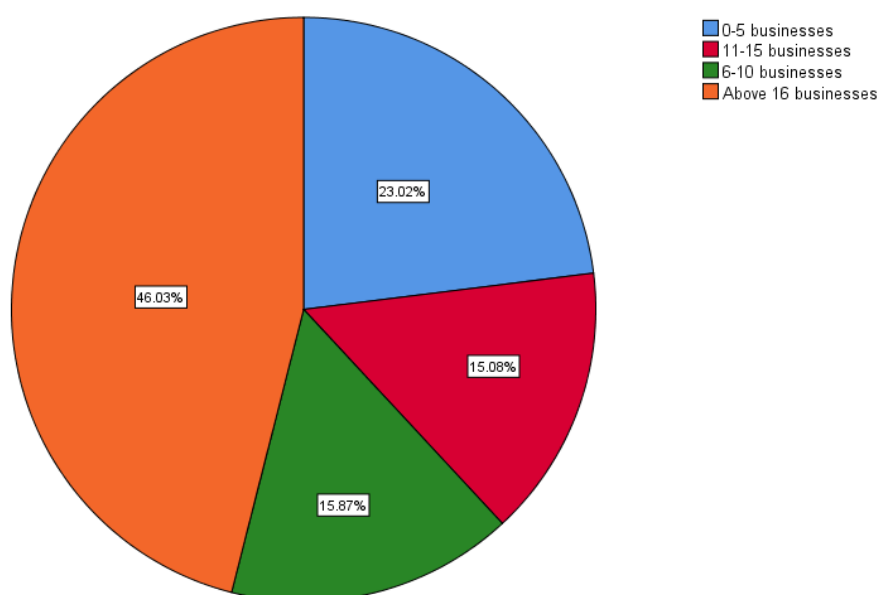


Figure 7: Non-compliant businesses identified in the past year in the sectors relevant to controlling illicit cigarette trade

Figure 7 shows that in the last one year there are non-compliant businesses identified, the analysis shows that 23% of the respondents reported that there are 0-5 business identified in the past one year in the sectors relevant to controlling illicit cigarette trade. Additionally, 15.1% stated that they identified 11-15 businesses, 15.9% stated that they identified between 6 and 10 businesses and 46% stated that they identified above 16 businesses in the past one year.

Table 6: Tactical reports generated could lead to the collection of additional tax arrears related to the illicit cigarette trade

		Frequency	Percent
Valid	Frequently	36	28.6
	Never	14	11.1
	Occasionally	48	38.1
	Rarely	28	22.2
	Total	126	100.0

Table 7 shows that 28.6% of the respondents stated that tactical reports frequently lead to the collection of additional tax arrears related to the illicit cigarette trade. Additionally, 11.1% stated that they never lead to additional tax arrears, 38.1% reported that they occasionally and 22.2% stated that they rarely lead to collection of additional tax arrears related to the illicit cigarette trade. This implies that majority of the respondents stated that tactical reports occasionally lead to the collection of additional tax arrears related to the illicit cigarette trade.

Table 7: Fines and penalties imposed on individuals or businesses involved in the illicit cigarette trade

		Frequency	Percent
Valid	Frequently	70	55.6
	Occasionally	43	34.1
	Rarely	13	10.3
	Total	126	100.0

Table 8 shows that 55.6% of the respondents reported that fines and penalties are frequently imposed on individuals or businesses involved in the illicit cigarette trade. The findings also show that 34.1% of the respondents stated that they are occasionally imposed and 10.3% stated that fines and penalties imposed on individuals or businesses involved in the illicit cigarette trade.

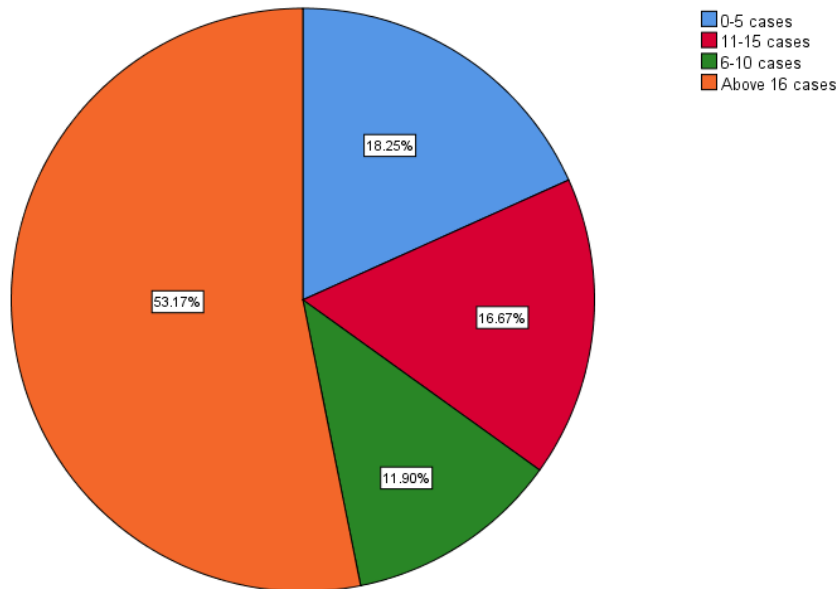


Figure 8: Cases related to illicit cigarette trade

Figure 8 provides a visual representation of the number of cases related to illicit cigarette trade, it was found that 53.17% of the respondents stated above 16 cases were recommended for prosecution in the last one year. Additionally, 18.25% stated that between 0 and 5 cases were recommended, 16.67% stated that between 11 and 15 cases were recommended and 11.9% reported that between 6 and 10 cases were recommended for prosecution. This implies that majority of the responded said that above 16 cases were recommended for prosecution in the last one year.

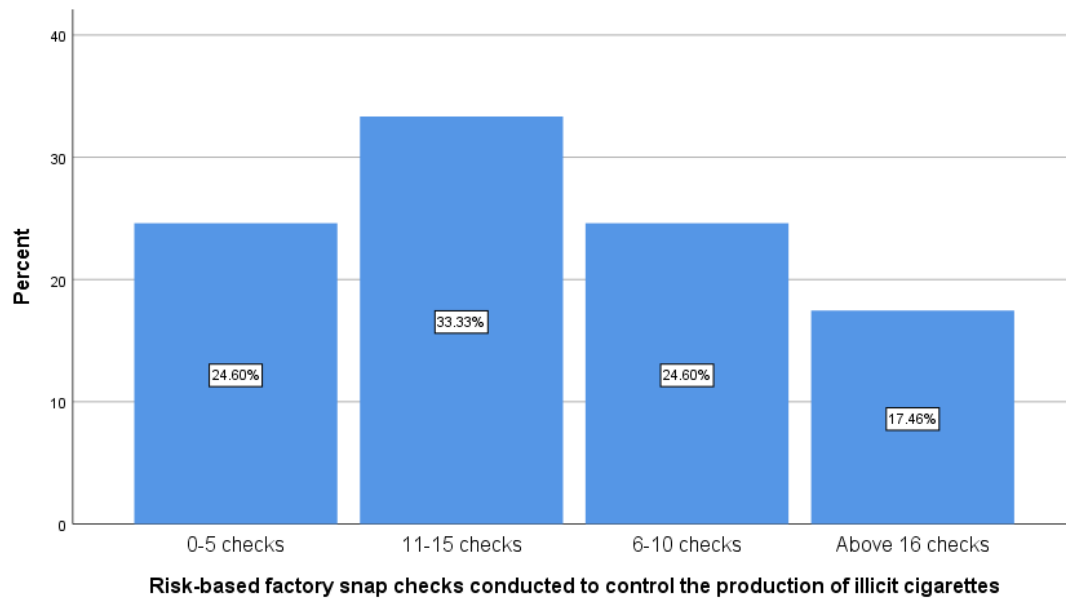


Figure 9: No of risk-based factory snap checks conducted

The analysis results indicate that majority of the respondents reported that between 11 and 15 checks have been conducted to control the production of illicit cigarettes. Results also, shows that 24.6% stated 0-5 checks and 6-10 checks have been conducted and finally 17.46% reported that above 16 risk-based factory checks have been conducted to control illicit cigarette trade.

This finding was supported by Joossens and Raw (2017), who described that the evolution from simple cigarette smuggling to a more complex illicit tobacco trade, emphasizing the need for comprehensive strategies to address the challenges posed by illicit activities. Additionally, Walbeek et al. (2014) study explores the economics of tobacco control, emphasizing the role of legal measures and penalties in deterring illicit trade. It provides insights into the effectiveness of legal frameworks in controlling the illicit market.

4.3.3.2 Aspect of resources, staff training and staff rotation

The aspect of resources, staff training and rotation was examined, as it is a factor to consider when assessing the effectiveness of enforcement measures to control illicit cigarette in Kenya. This was done by asking study respondents to provide their opinions and views in regard to resources available, training and staff rotation as illustrated.

4.3.3.3 Availability of resources

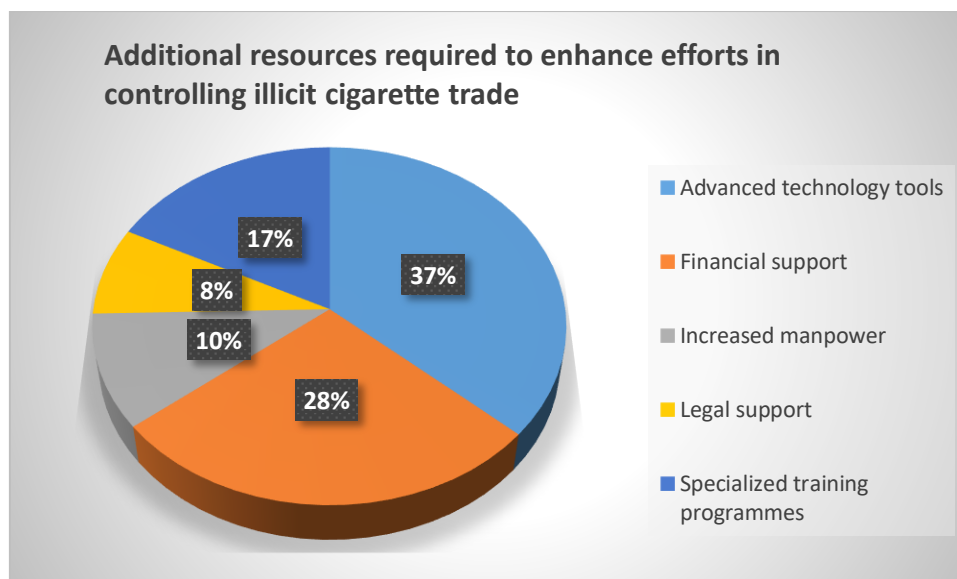


Figure 10: Additional resources required

In regard to the resources, 88.1% of the respondents reported that they faced challenges due to inadequate resources for controlling illicit cigarette, this means that only 11.9% respondents reported that they do not face challenges due to inadequate resources. Figure 10 provide a visual representation of the additional resources required to enhance efforts in controlling illicit cigarette trade. It was found that 17% of the respondents stated they require specialized training programmes, 37% stated they require advanced technology tools, 28% stated that they require financial support. Additionally, 10% stated that they require manpower to be increased and 8% stated that they require legal support.

4.3.3.4 Training of staff on controlling illicit cigarette trade

Regarding training of staff on controlling illicit cigarette trade, 40.5% of the respondents stated that they have received training, and 59.5% stated that they have not received any training. This implies that majority of the respondents stated that they have not received training on controlling illicit cigarette trade. In addition, for those who have received training 11.8% stated that the training was highly effective, 19.6% stated that it was moderately effective, 43.11% said that the training was not effective and 25.5% said that the training was slightly effective.

4.3.3.5 Staff rotation

Staff rotation is integral to controlling illicit cigarette trade in Kenya, offering a multifaceted approach to bolstering enforcement efforts. By regularly rotating personnel within enforcement agencies, the risk of corruption and collusion is mitigated, as fresh perspectives and vigilance are maintained. This practice prevents regulatory capture, ensuring that officers prioritize public health over undue industry influence. Moreover, staff rotation facilitates skill development, making officers more versatile in addressing evolving challenges in illicit trade. It minimizes regulatory fatigue, sustaining officers' motivation and commitment. Additionally, through rotation, officers build a broader professional network, fostering collaboration and intelligence-sharing with diverse stakeholders. This was assessed by asking respondents whether there are rotations and after how long do these rotations happen.

Results show that 19.8% of the respondents reported there is staff rotation in the roles related to illicit cigarette trade control and 80.2% stated there is no staff rotation. In addition, for those staff who have reported that the organization practice staff rotation, 16% stated it is done annually, 44% reported that it is done biennially and 40% stated that it is done semi-annually. The majority of respondents indicated that staff rotation is not currently practiced, suggesting a potential area for improvement in enhancing enforcement strategies. This aligns with research by Sauve, et al. (2023), which emphasized the importance of staff rotation in mitigating corruption and collusion risks within law enforcement agencies. Furthermore, the reported frequency of rotation, with a significant proportion indicating biennial or semi-annual rotations, aligns with recommendations for regular rotation to maintain vigilance and prevent regulatory capture (Sauve, et al. 2023). However, it's important to note that a relatively small percentage of respondents reported the existence of staff rotation, indicating potential variability in organizational practices or perceptions regarding its effectiveness.

Christensen, et al. (2015) support the findings by emphasizing the importance of adopting a participatory approach with diverse stakeholders in the strategic implementation process to

achieve desired outcomes. Kulish et al. (2020) corroborate these findings, underscoring the significance of providing support to the strategic implementation process to ensure its success and effectiveness. The study identified that establishing appropriate mechanisms, ensuring staff have essential resources and systems, and conducting relevant training and forums for all KRA staff contribute to enhancing the efficiency and effectiveness of strategic implementation. The study aligns with Augustian, et al (2023), who assert that suitable strategies are more easily implemented when conducive working environments and conditions are provided for lead agencies and stakeholders, emphasizing the critical interplay between strategy, resources, and supportive conditions.

4.3.4 Inferential statistics

This section uses correlation analysis and t-test for statistical test analyses. The inferential statistics help researchers make informed judgements about populations based on the analysis of sample data, contributing to the broader field of statistical inferences.

Table 8: Correlation analysis between enforcement measures and generation of tactical reports, no. of cases recommended, no. of checks conducted and effectiveness of seizure of illicit cigarette.

		Enforcement measures	Generation of Tactical reports	Effectiveness of seizure of illicit cigarette products	No of cases recommended for prosecution	No checks conducted
Enforcement measures	Pearson Correlation	1	-.349	.052	-.767	.221
	Sig. (2-tailed)		.651	.934	.233	.779
	N	5	4	5	4	4
Generation of Tactical reports	Pearson Correlation	-.349	1	-.304	.189	.402
	Sig. (2-tailed)	.651		.696	.811	.598
	N	4	4	4	4	4

Effectiveness of seizure of illicit cigarette products	Pearson Correlation	.052	-.304	1	.779	-.667
	Sig. (2-tailed)	.934	.696		.221	.333
	N	5	4	5	4	4
No of cases recommended for prosecution	Pearson Correlation	-.767	.189	.779	1	-.741
	Sig. (2-tailed)	.233	.811	.221		.259
	N	4	4	4	4	4
No checks conducted	Pearson Correlation	.221	.402	-.667	-.741	1
	Sig. (2-tailed)	.779	.598	.333	.259	
	N	4	4	4	4	4

The analysis results show that the correlation between enforcement measures and generation of tactical reports that could lead to the collection of additional tax arrears is ($r=-0.349$), this implies there is a moderate and negative correlation. Additionally, the correlation between enforcement measures and number of cases recommended for prosecution is ($r=-0.767$), this implies that there is strong negative correlation between the variables. The results also showed that the correlation between enforcement measures and number of risk-based factory snap checks conducted to control the production of illicit cigarettes is ($r=0.221$), this implies that the correlation is weak and positive.

4.3.5 Relationship between enforcement measures and number of cases recommended for prosecution

The relationship between enforcement measures and number of cases was assessed using chi-square test for one sample test for the two variables.

Table 9: Chi- square test for enforcement measures and No. of cases recommended for prosecution

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.000 ^a	9	.213
Likelihood Ratio	11.090	9	.270
Linear-by-Linear Association	1.766	1	.184
N of Valid Cases	4		

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

Results revealed that the chi-square value is 12 and the likelihood ration value is 11.09. the corresponding p-values is 0.213 and 0.27, which is greater than the alpha level of significance, hence there is no statistical difference between enforcement measures and number of cases related to illicit cigarette trade that have been recommended for prosecution.

Table 10: Symmetric measures

		Value	Asymptotic Standard Error ^a	Approximate T _b	Approximate Significance
Interval by Interval	Pearson's R	-.767	.128	-1.691	.233 ^c
Ordinal by Ordinal	Spearman Correlation	-.800	.300	-1.886	.200 ^c
N of Valid Cases		4			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					
c. Based on normal approximation.					

The findings show that the pearson correlation coefficient is -0.767, which indicate a strong negative correlation between enforcement measures and number of cases related to illicit cigarette trade that have been recommended for prosecution. Additionally, the p-value is 0.233 which is greater than the level of significance, hence the variables are not statistically significant. Thus the study fails to reject the null hypotheses. Although there is a strong negative correlation between enforcement measures and the number of cases recommended for prosecution, lack of statistical significance suggests that this relationship may not be reliable or may be influenced by other factors not accounted for in the analysis. The non-significant

correlation highlights the complexity of enforcement dynamics in controlling illicit cigarette trade. While enforcement efforts may play a role in deterring illicit activities, other factors such as socioeconomic conditions, market dynamics, and regulatory environments may also influence the number of cases recommended for prosecution.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter provides a summary of the study findings, conclusion and recommendations. The chapter also presents areas for further research to improve this research field. Additionally, the findings are summarized in line with the study objectives.

5.1 Summary

5.1.1 Enforcement efforts/measures

The findings of this research reveal varied perspective among respondents regarding the effectiveness of various measures in controlling the distribution of illicit cigarettes.

Majority of respondents (46%) reported that the licensing process is moderately effective in controlling the distribution of illicit cigarettes, with 14.3% considering it highly effective. In regards to track and trace system, most respondents (35.7%) stated that the track and trace system is moderately effective in identifying the source and distribution of cigarettes, with 15.9% considering it highly effective. Additionally, most of the respondents (29.4%) reported that verification and inspection of excisable goods are moderately effective in reducing illicit cigarette trade. Regarding implementation of WHO FCTC, most respondents (43.7%) stated that the implementation of the WHO FCTC is moderately effective in curbing illicit cigarette trade.

Regarding to proper tax invoices, most of the respondents (30.2%) stated that proper tax invoices are effective, and 30.2% reported them to be moderately effective in controlling the illegal sale of cigarettes. Additionally, majority of respondents (35.7%) stated that training and regular monitoring and evaluation are moderately effective in contributing to the effectiveness of enforcement efforts. The findings also indicated that most respondents (29.4%) stated that efforts to regulate internet sales are somewhat effective in reducing the online illicit cigarette market, with 21.4% considering them moderately effective.

5.1.2 Existing conditions that hinder effective implementation of enforcement measures

The findings highlight various existing conditions hindering the Kenya Revenue Authority's (KRA) efforts to control illicit cigarette trade. Informal channels of distributing cigarette products were perceived to have a moderate impact by the majority of respondents (27%), while unregistered excisable goods carriers/businesses were viewed as having minimal impact (29.4%). Lack of adequate finances significantly impacted KRA's ability to acquire and maintain a track and trace system, with 57.9% of respondents stating it has a significant impact. Government's ability to enforce laws was considered highly impactful by 38.1% of respondents. These insights emphasize the nature of existing conditions hindering KRA in addressing illicit cigarette trade, emphasizing the importance of comprehensive strategies that address diverse factors such as informal distribution channels, financial constraints, and enforcement capabilities.

5.1.3 Effect of enforcement measures on illicit cigarette trade

The findings emphasize the significant effect of enforcement measures on various aspects of illicit cigarette trade. Most of the respondents reported that enforcement efforts significantly affect government revenue through taxes and duties on illegal cigarette sales (42.1%), while a significant proportion acknowledged their substantial effect on improving public health by reducing illicit cigarette consumption (34.1%). Additionally, many respondents perceived enforcement measures as significantly reducing the prevalence of illicit cigarette trade in Kenya (78.6%). These findings emphasize the impact of enforcement efforts on fiscal, public health, and prevalence reduction aspects of illicit trade, while also highlighting potential areas for improvement or challenges that merit further investigation and. This aligns with a study by Kasri et al. (2021), which emphasizes the importance of preventing illicit trade of tobacco products and the need for nations to address smuggling, illegal production, and counterfeiting.

Controlling of illicit cigarettes market: The study assessed the effectiveness of Kenya Revenue Authority (KRA) enforcement measures in controlling illicit cigarette trade, with findings drawn from various data sources. In the past year, 46% of respondents reported that above 16 non-compliant businesses relevant to controlling illicit cigarette trade. Additionally, tactical reports occasionally lead to the collection of additional tax arrears related to illicit cigarette trade according to 38.1% of respondents. Further, fines and penalties are frequently imposed on individuals or businesses involved in the illicit cigarette trade, as reported by 55.6% of respondents. Lastly, the analysis indicates that between 11 and 15 checks are typically conducted to control the production of illicit cigarettes, with 17.46% of respondents reporting above 16 risk-based factory checks conducted for this purpose.

Aspect of resources, staff training and staff rotation: The examination of resources, staff training, and rotation as factors influencing the effectiveness of enforcement measures in controlling illicit cigarette trade in Kenya yielded significant insights. Regarding resources, a vast majority of respondents (88.1%) reported facing challenges due to inadequate resources, emphasizing the need for additional support. In addition, 17% of the respondents highlighted the need for specialized training programs, 37% emphasizing the necessity of advanced technology tools, and 28% identifying the requirement for financial support. Furthermore, 40.5% of respondents reported receiving training on controlling illicit cigarette trade, with varying perceptions of effectiveness; 11.8% found the training highly effective, 19.6% moderately effective, 43.11% not effective, and 25.5% slightly effective. Regarding staff rotation, only 19.8% of respondents reported its practice in roles related to illicit cigarette trade control, with the frequency varying: 16% reported annual rotation, 44% biennial, and 40% semi-annual rotation. These findings provide a suggestion on the significance of addressing resource constraints, enhancing training programs, and considering staff rotation to bolster

enforcement efforts, with specific needs and perceptions outlined by percentages of respondents.

5.1.4 Relationship between enforcement measures and number of cases recommended for prosecution.

The analysis revealed that there is no statistical difference between enforcement measures and the number of cases recommended for prosecution, as indicated by the chi-square value of 12 and likelihood ratio value of 11.09, both yielding p-values of 0.213 and 0.27 respectively, surpassing the significance level. Additionally, a strong negative correlation of -0.767 was observed between enforcement measures and recommended prosecution cases, with a p-value of 0.233, indicating non-significance. These results suggest a complex interplay of factors influencing illicit cigarette trade control, underscoring the need for comprehensive strategies that address multifaceted dynamics beyond enforcement measures alone.

5.2 Conclusion

In conclusion, the study findings illustrate the effectiveness of enforcement efforts to control illicit cigarette trade in Kenya, focusing on the Kenya Revenue Authority (KRA) as a case study. The assessment of various enforcement measures revealed a positive perspective among respondents, with the majority perceiving licensing processes, track and trace systems, verification and inspection of excisable goods, and implementation of the WHO FCTC as moderately effective in curbing illicit trade. However, challenges such as informal distribution channels, financial constraints, and inadequate government enforcement capabilities were identified as hurdles. Despite these challenges, enforcement efforts were recognized for their significant impact on government revenue preservation, public health protection, and the reduction of illicit trade prevalence. The study also analysed the need for comprehensive strategies which include addressing resource constraints, enhancing training programs, and considering staff rotation to fortify enforcement efforts effectively. The findings of the study align with existing literature and emphasizes the need to combat illicit cigarette trade,

emphasizing the importance of holistic approaches tailored to the specific challenges faced in Kenya.

5.4 Recommendations derived from the summary

In regard to this study, the following recommendations are suggested:

Need for enhanced regulation and enforcement measures- particularly in areas where respondents perceive effectiveness to be moderate or somewhat effective. For instance, the licensing process, track and trace systems, verification and inspection of excisable goods, and efforts to regulate internet sales were all reported to have varying degrees of effectiveness. To address this, KRA should consider implementing stricter regulations, increasing resources allocated to enforcement efforts, and enhancing collaboration with relevant stakeholders such as law enforcement agencies and industry partners. By strengthening regulatory frameworks and enforcement mechanisms in these areas, it is likely that the control of illicit cigarette trade can be improved, ultimately leading to better protection of public health and government revenue.

Prioritization of finance allocation to the acquisition and maintenance of a track and trace system. This could involve securing additional funding, exploring cost-effective solutions, or seeking partnerships with relevant stakeholders to ensure the implementation and maintenance of an effective track and trace system

There is need for sustained investment and prioritization of enforcement measures aimed at controlling illicit cigarette trade. Given the significant impact reported by respondents on government revenue, public health, and the prevalence of illicit trade, it is essential for authorities such as the Kenya Revenue Authority to continue and even enhance their efforts in this regard. This could involve allocating sufficient resources, implementing comprehensive enforcement strategies, and fostering collaboration with relevant stakeholders including law enforcement agencies, public health organizations, and international partners.

5.5 Recommendations for further studies

A further study should be carried out on focused evaluations of specific enforcement measures, such as the track and trace system or licensing processes, to assess their impact in more detail. This could involve conducting case studies or experimental evaluations to identify best practices and areas for improvement. Additionally, the study recommends studies to explore the potential of innovative technologies, such as artificial intelligence, blockchain, or machine learning, in enhancing enforcement efforts against illicit cigarette trade. Investigate how these technologies could be applied to improve detection, monitoring, and enforcement capabilities.

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APPENDICES

Appendix 1: Questionnaire for research respondents

My name is Nancy Jemutai, a student at National Defense University undertaking a Master of Security Studies and Strategy. As part of the requirements for my course, I am undertaking a study on "Effectiveness of Enforcement Efforts to Control Illicit Cigarette Trade in Kenya. A Case Study of Kenya Revenue Authority. I would like to thank you for accepting to participate in this survey. Your input is valuable in understanding the effectiveness of enforcement measures in controlling illicit cigarette trade. Please provide honest and insightful responses to the following questions.

Section A: Demographic information

1. What is your gender?

Male Female

2. What is your age bracket?

18-24 years 25-34 years 35-44 years 45-54 years above 55 years

3. What is your highest educational level?

KCSE Certificate Diploma Degree Masters Ph.D.

4. Years of experience in enforcement?

1-5 years 6-10 years 11-15 years 16-20 years above 20 years

5. Position/title

Officer Assistant officer Assistant Manager Manager Chief Manager

Section B: Evaluation of enforcement measures

a) Please rate the following enforcement measures in terms of their effectiveness in controlling illicit cigarette trade on a scale from 1 to 5, where 1 is "Not Effective" and 5 is "Highly Effective"

Statement	Not effective	Somewhat effective	Moderately effective	Effective	Highly effective
How effective is the licensing process in controlling the distribution of legal cigarettes?					
To what extent does the track and trace system help in identifying the source and distribution of cigarettes?					
How well does the verification and inspection of excisable goods contribute to reducing illicit cigarette trade?					
To what extent has the implementation of the WHO FCTC contributed to curbing illicit cigarette trade?					
How significant is the role of proper tax invoices in controlling the illegal sale of cigarettes?					
Does training and regular monitoring and evaluation contribute to the effectiveness of enforcement efforts in controlling illicit cigarette trade?					
How successful are efforts to regulate internet sales in reducing the online illicit cigarette market?					

b) Please provide any additional suggestions, or insights regarding the enforcement measures and their impact on controlling illicit cigarette trade.....

Section C: Challenges in enforcing anti-illicit measures

Please rate the following challenges in terms of their impact on the enforcement of anti-illicit measures in controlling illicit cigarette trade on a scale from 1 to 5, where 1 is Minimal Impact and 5 is Significant Impact.

Statement	Minimal impact	Low impact	Moderate impact	High impact	Significant impact
To what extent do informal channels of distributing products hinder the control of illicit cigarette trade?					
How much do unregistered excisable goods carriers/businesses contribute to the challenges in controlling illicit cigarette trade?					
To what extent does the lack of adequate finances affect your agency's ability to					

acquire and maintain a track and trace system for controlling illicit cigarette trade?					
How does the government's ability to enforce laws influence the control of illicit cigarette trade?					

Section D: Effect of enforcement measures.

Please rate the following effects of enforcement measures in controlling illicit cigarette trade on a scale from 1 to 5, where 1 is Minimal Effect and 5 is Significant Effect.

Statement	Minimal effect	Low effect	Moderate effect	High effect	Significant effect
To what extent do enforcement measures positively impact government revenue through taxes and duties on legal cigarette sales?					
How much do enforcement measures contribute to improving public health by reducing the consumption of illicit and potentially harmful cigarettes?					
To what extent do enforcement measures successfully reduce the prevalence of illicit cigarette trade					

Section E: Controlling of illicit cigarette market

1. How effective is the seizure of illicit cigarette products in curbing the illicit market? [] Highly Effective [] Effective [] Moderately Effective [] Somewhat Effective [] Not Effective
2. How many non-compliant businesses have been identified in the past year in the sectors relevant to controlling illicit cigarette trade? [] 0-5 [] 6-10 [] 11-15 [] Above 16
3. How often have tactical reports been generated that could lead to the collection of additional tax arrears related to the illicit cigarette trade? [] Frequently [] Occasionally [] Rarely [] Never
4. How often are fines and penalties imposed on individuals or businesses involved in the illicit cigarette trade? [] Frequently [] Occasionally [] Rarely [] Never
5. How many cases related to illicit cigarette trade have been recommended for prosecution in the past year? [] 0-5 [] 6-10 [] 11-15 [] Above 16
6. How many risk-based factory snap checks have been conducted to control the production of illicit cigarettes? [] 0-5 [] 6-10 [] 11-15 [] Above 16
7. Does your organization currently face challenges due to inadequate resources for controlling illicit cigarette trade?
[] Yes [] No
8. What additional resources do you require to enhance efforts in controlling illicit cigarette trade? [] Financial support

- Advanced technology tools
- Specialized training programs
- Increased manpower
- Legal support
- Other (please specify)

9. Have your staff received training on controlling illicit cigarette trade?

- Yes
- No

9b. If yes, how effective do you consider the training programs?

- Highly Effective
- Moderately Effective
- Slightly Effective
- Not Effective
- I don't know

10. Does your organization practice staff rotation in roles related to illicit cigarette trade control?

- Yes
- No

10b. If yes, how frequently are staff rotated in these roles?

- Quarterly
- Semi-annually
- Annually
- Biennially
- Not Applicable






Appendix 2: Workplan

S/No.	Date	Activity
1	1 st Aug 2023	Research project consultation and allocation of supervisor after submitting topic to the department
2	25 th Aug 2023	Submission of Chapter 1 to the supervisor
3	21 st Sept 2023	1 st follow-up discussions with supervisor
4	20 th Oct 2023	Submission of Chapter 2 to research project supervisor
5	27 th Oct 2023	2 nd follow-up discussions with supervisor
6	3 rd Nov 2023	Submission of Chapter 3 to the supervisor
7	11 th Nov 2023	Defence of research project proposal
8	31 st Dec 2023	Submission of Chapter 4 to the supervisor
9	11 th Feb 2024	Submission of Chapter 5 to the supervisor
10	24 th Feb 2024	Handing in the final draft to the supervisor
11	30 th July 2024	Defence of the research findings Submission of the research project to supervisor
12	18 th Sep 2024	Submission of the final research project

Appendix 3: Budget

S/No.	Budget Item	Cost Per Unit in Ksh.	No. of Units	Total in Kshs.
1.	Airtime and internet	10,000	1	10,000
2	Cleaning and analysis of data	4,000	5	20,000
3.	Typing research report	30	70	2100
4.	Printing expenses	5	300	1,500
5.	Binding research report 3cps)	600	3	1,800
6.	Miscellaneous			5,000
	GRAND TOTAL			40,400

Appendix 4: Research Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 239811	Date of Issue: 14/February/2024
RESEARCH LICENSE	
	
This is to Certify that Miss.. Nancy Jemutai of National Defence University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: ASSESSMENT OF EFFECTIVENESS OF ENFORCEMENT MEASURES TO CONTROL ILLICIT CIGARETTE TRADE IN KENYA. A CASE STUDY OF KENYA REVENUE AUTHORITY for the period ending : 14/February/2025.	
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