

**ANALYSIS OF SOCIO-ECONOMIC FACTORS AFFECTING REVENUE  
COLLECTION IN KENYA: A CASE OF SIAYA COUNTY**

**BY**

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## DECLARATION

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

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## **DEDICATION**

This project is a special dedication to my mother and daughter.

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## ABSTRACT

County Governments in Kenya have been depending largely on the National Treasury for financial support since their establishment in April, 2013. This is against the backdrop of their agitation to have more government functions including security to be devolved. After the senate passes the division of revenue Act and the national assembly passes the CARA, then counties are guaranteed of development expenditure. However, this isn't the only source of revenue used by the counties as there's the bit of own source of revenue that in turn determines how much of recurrent expenditure a county gets. The controller of budget evaluates a county's level of revenue collection to release recurrent expenditure; so if revenue collection is low, then the county is likely to have pending bills relating to recurrent expenditure. Consequently, this study sought to analyze the socio-economic factors affecting revenue collection in Kenya: A case of Siaya County. The study was guided by the following specific objectives: to establish the effect of legislation on rate of revenue collection in Kenya, to determine the effect of enforcement on rate of revenue collection in Kenya, to investigate the effect of automation on rate of revenue collection in Kenya; and to evaluate the effect of political goodwill on rate of revenue collection in Kenya. The findings of the study provide useful insights on revenue collection as the county government officials can gain comprehension on the factors affecting rate of revenue collection in Kenya. The social influence theory and optimal taxation theory anchored this study. This study adopted a cross sectional descriptive survey design and a correlational research design. The main focus of the study were the 1474 employees working under the Siaya County government. The study generally adopted stratified sampling whereby each group was sampled separately. However, Krecjie and Morgan (1970) formulae and simple random sampling were adopted to sample each department giving a sample size of 312. The study utilized a data collection form and a semi-structured questionnaire. Both descriptive and inferential statistics were used to analyze the data. Mean and standard deviations were used as measures of central tendencies and dispersion respectively. The study adopted both correlation and regression to test the relationship between the variables. The results showed that Legislation, Enforcement, Automation and Political goodwill jointly caused a significant deviation associated to rate of revenue collection in Kenya. In summary, the study established that Legislation, Enforcement, Automation and Political goodwill are indeed socio-economic factors affecting revenue collection in Kenya. In conclusion, legislation, enforcement, automation and political goodwill had a significant effect on rate of revenue collection in Kenya. The study recommends the creation and strengthening of an independent revenue body to strategically create strategies that advocate, administer and promote best practices for fostering sustainable and efficient revenue collection in County governments of Kenya. The study also recommends creation, adoption and strengthening of full-fledged revenue collection legislation. The study further recommends auxiliary scrutiny and improvement on current automation models utilized by county governments.



## **ACRONYMS AND ABBREVIATIONS**

<b>CRA</b>	-	Commission for Revenue Allocation
<b>EFs</b>	-	Executive functions
<b>FY</b>	-	Financial Year
<b>GoK</b>	-	Government of Kenya
<b>ICT</b>	-	Information and Communication Technology
<b>NOFBI</b>	-	National Optic Fibre Backbone
<b>SBP</b>	-	Single Business Permit
<b>SPSS</b>	-	Statistical Package for Social Science

## OPERATIONAL DEFINITION OF TERMS

<b>Automation-</b>	It refers to computerization and mechanization of revenue collection in county governments.
<b>Enforcement-</b>	The execution and implementation measures for revenue collection and administration in county governments.
<b>Legislation-</b>	Any county or national government law or rule targeting finance and revenue.
<b>Political goodwill-</b>	Any positive and supportive approach to revenue collection efforts by partisan entities such as elected officials in county and national governments.
<b>Rate of revenue collection-</b>	It refers to the proportion of proceeds obtained as compared to the targeted or planned collection

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# CHAPTER ONE

## INTRODUCTION

This section highlights the study background, statement of the problem, study objectives and concludes with a conceptual framework.

### 1.1 Background of the Study

Over the past two decades, there has been a paradigm change in the public sector accounting world wide, with accumulative emphasis on ethical governance and accountability progressions for government entities (Charles & Oluoch, 2017). This is all driven by economic rationalism and shifting expectations of what administrations can and should do (Brenda, Esther and Agnes, 2015). An important aspect of this accountability and governance process is revenue collection (Mburugu & Gekara, 2016; Brenda *et. al.*, 2015). Revenue collection is very imperative for every regime in the world as it enables the government to acquire assets which are not predisposed to debt and which the administration uses to improve its economy (Ngotho & Kerongo, 2014). However, revenue collection in Kenya has not always been as effective as it should be (Charles & Oluoch, 2017). The ineffectiveness is attributable to many factors (Ngugi & Kagiri, 2016). To ensure that Information Communication Technology adoption leads to an increase in revenue collection performance, the government should implement an effective ICT infrastructure in the country in order to allow easier accessibility of automated revenue collection systems by customers (Mburugu & Gekara, 2016).

According to Aizenman, Jinjarak, Kim & Park (2015), revenue from taxes to gross domestic product ratios in Asia and Latin America increased from the year 2000, but was still lower compared to European regions. Major tax reforms have been made throughout the world especially to enhance administration and compliance which act as locus for different states. The main methods have been developed by the European Commission, and jointly by the International Finance Corporation, Price Waterhouse Coopers, World Bank, International Monetary Fund and OECD's Centre for Tax Policy and Administration for the Forum on Tax Administration (Savić & Martić, 2015).

In Ghana, Gyamfi (2014) researched on effective revenue mobilization by districts assemblies and found that some of the problems undermining revenue mobilization are inadequate data on revenue sources, lack of enforcement of revenue mobilization by-laws, inadequate revenue collectors and their training. However, the study was limited in that it did not focus on the social factors affecting revenue collection. Another study by Muhaki (2009) focused on factors affecting revenue collection in local government in Uganda. Findings from the study showed that constraints both endogenous and exogenous to the existing local revenue generation in the district hinder the prospects for a significant increase in local revenue. However, the study did not focus on revenue automation. Fati (2014) carried out a study to eliminate or reduce to minimum the challenges in the process of revenue collection in Ghana property rate collection. The study used the interpretative case study approach to obtain study individuals in their natural settings and also obtain deeper understanding of the event. It was discovered that revenue trend has not been stable in revenue collection since the government did not have a full or comprehensive register of all taxable activities. Similarly, the study did not focus on revenue automation; a gap the current study sought to fill.

Ndunda (2015) concluded that, measures are required to improve the accountability of revenue collectors and elected officials. The foregoing, according to the scholars, can only be achieved through political goodwill from the national government. Zhou and Madhikeni (2013) undertook a study on systems, processes and challenges of public revenue collection in Zimbabwe. Matendera (2013) noted that organization policies, board management and government policies are the key corporate governance problems affecting effective execution of revenue collection activities. However, the study adopted a longitudinal research design; a methodological gap when compared to the current study.

Musya (2014) undertook a study to examine the part played by internal control system in the collection of revenue by county governments in Kenya. The research was conducted using both qualitative and quantitative approaches. The study established that weak internal controls activities and lack of proper information and communication systems have encouraged collusion to fraud, loss of revenue and embezzlement of collected revenue. The study therefore concludes that internal controls do function although with

hiccups and that there is a significant effect between internal controls and revenue collection in defunct local authorities in Kenya. However, the study was carried out in Municipal Council and hence it was limited in scope.

There are forty-seven (47) county governments in Kenya; whose structure, authority and mandate are as enshrined in the Constitution. The article on revenue funds for county governments as recorded in the Constitution of Kenya (2010) states that, there shall be established a Revenue Fund for each county government; into which shall be paid all money raised or received by or on behalf of the county government, except money reasonably excluded by an Act of Parliament (GoK, 2014). As specified in the Constitution, the Counties get their revenue from various sources. Taxation and single business permits constitute the core sources across all the Counties (Ngugi & Kagiri, 2016). Kenya pioneered a single business permit (SBP) licensing system which has become a model that has been emulated and adopted by other countries in the region (Ngugi & Kagiri, 2016). However, the Counties have been facing inadequacies of finances to fund their expenses regardless of the defined revenue sources amongst others. Consequently, there are factors that influence the revenue collection by County Governments; a gap that necessitates this study.

Article 209 (3) of the Constitution of Kenya (2012) provides that a County may impose property rates; entertainment taxes; and any other tax that it is authorized to impose by an act of parliament. Article 209(4) provides that the national and county governments may impose charges for services they provide. It is important to note that section 120 (1) of the county government's act, 2010 provides that a county government or any agency delivering services in the county shall adopt and implement tariffs and pricing policy for provision of public services. Section 120(2) further provides that a county government or agency delivering services through service delivery agreements, shall comply with the provisions of this section. Section 120(3) further provides the guidelines for the tariff policy. Thus, there is need to develop policies and enact specific legislation in order to justify and legalize the pricing of fees and charges levied for services offered. Article 209(5) of the constitution provides that the taxation and other revenue-raising powers of a county shall not be exercised in a way that prejudices national economic policies,

economic activities across county boundaries or the national mobility of goods, services, capital or labour.

According to report from Controller of Budget (2016-2017), during the first quarter of financial year (FY) 2017/18, Siaya County did not receive any money as equitable share of the revenue raised nationally; however, it received Kshs.99.26 million as total conditional allocations, raised Kshs.19.41 million from local revenue sources, and had a cash balance of Ksh.491.40 million from FY 2016/17. The available funds amounted to Kshs.610.07 million. The County incurred Kshs.564.97 million which was 56.1 per cent of the total funds released for operations. This was a decrease of 52.9 per cent from Kshs.896.83 million incurred in the first quarter of FY 2016/17. The expenditure excluded outstanding commitments as at September 30<sup>th</sup>, 2017 that amounted to Kshs.35.50 million for recurrent expenditure. The recurrent expenditure represented 12.2 per cent of the annual recurrent budget, a marginal decrease from 12.8 per cent incurred in a similar period of FY 2016/17.

## **1.2 Statement of the Problem**

The Constitution of Kenya 2010 stipulates that numerous public services should be devolved to the County Governments. Preferably, these governments should finance their processes and functions. Since the establishment of the County Governments in Kenya in April, 2013, they have been depending basically on the National Treasury for financial support. This is against the backdrop of their agitation to have more government functions as well as security to be devolved. The County Governments get their revenue from taxation, permit fees, cess, license fees and other sources. However, their over-reliance on the National Government for funds to a point of calling for a national referendum to have their allocation increased implies that there exists a myriad of challenges in revenue collection at County level. The total amount of revenue of any county government will invariably depend upon the size of the county revenue base, the levels of tax rates adopted within the county governments, administrative efficiency, and the compliance rate. The taxes introduced should be appropriate and sufficient to finance to a greater percentage the expenditure needs of the county governments over time.



Because of poor own revenue performance, most counties; Siaya not excluded; end up with huge fiscal gaps. These leads to the knowledge gaps that this study sought to fill.

### **1.3 Purpose of Study**

This study sought to analyze the socio-economic factors affecting revenue collection in Kenya: A case of Siaya County.

The study was guided by the following specific objectives:

- i. To establish the effect of legislation on rate of revenue collection in Kenya.
- ii. To determine the effect of enforcement on rate of revenue collection in Kenya.
- iii. To investigate the effect of automation on rate of revenue collection in Kenya.
- iv. To evaluate the effect of political goodwill on rate of revenue collection in Kenya.

### **1.4 Research Hypotheses**

The study focused on the following research hypotheses:

Ho<sub>1</sub>: Legislation does not have a significant effect on rate of revenue collection in Kenya.

Ho<sub>2</sub>: Enforcement does not have a significant effect on rate of revenue collection in Kenya.

Ho<sub>3</sub>: Automation does not have a significant effect on rate of revenue collection in Kenya.

Ho<sub>4</sub>: Political goodwill does not have a significant effect on rate of revenue collection in Kenya.

### **1.5 Significance of the Study**

The findings of the study provide useful insights on revenue collection as the county government officials can gain insight on the factors affecting rate of revenue collection in Kenya. The governors and senior managers of county governments can specifically gain from the findings of this study. The committee in charge of revenue collection in any

county government could co-opt the findings of this study into their reports or recommendations.

The results of the study can provide insight to the Ministry of Devolution with regard to policy formulation on the importance of effective revenue collection legislation. By highlighting different factors affecting rate of revenue collection, the findings of the study should help pioneers of revenue collection within the executive wing of county governments. In addition, the county assembly can highly benefit from the study findings with regard to formulation of policies and legislation touching on revenue collection.

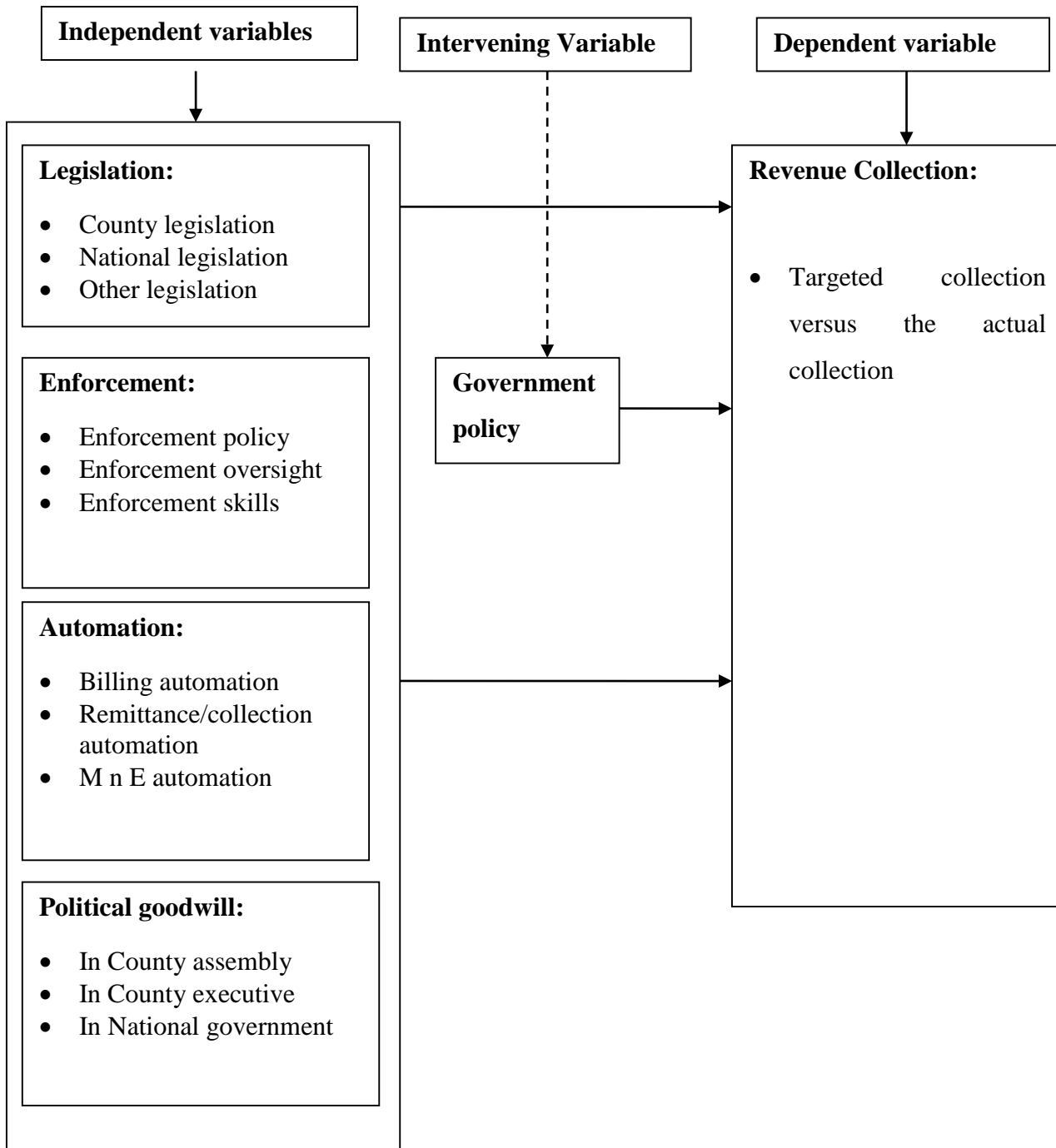
The study may not only contribute to the existing body of knowledge on revenue collection generally; but also to the body of knowledge on factors affecting rate of revenue collection in Kenya. It may also stimulate prospective researchers to replicate the study in other parts of Africa. Different theories such as theories focusing on rate of revenue collection can be advanced from the findings of this study.

#### **1.6. Scope of the Study**

The study focused on Kenya but narrowed down to only one case of Siaya County; which is just one out of forty-seven counties in Kenya. There are several factors that could affect rate of revenue collection but this study's focal point was four factors namely: legislation, enforcement, automation and political good. This study sought to collect data from all the departments within Siaya County. Moreover, the study focused on primary data collection using questionnaires and interview guides.

## 1.7 Conceptual Framework

The study focused on the following framework:



*Figure 1.1: Conceptual Framework on socio-economic factors affecting revenue collection in Kenya*

*Source: Self conceptualization(2019)*

Socio-economic factors were thought to affect revenue collection. The socio-economic factors included: legislation, enforcement, automation and political goodwill; which were the independent variables while revenue collection was the dependent variable. Government policy was the intervening variable since it was perceived to be interfering with the relationship between factors mentioned (legislation, enforcement, automation and political goodwill) and rate of revenue collection.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This section explores various related literature to the current study as written by other scholars in regard to factors affecting rate of revenue collection.

#### **2.1 Theoretical Literature**

##### **2.1.1 Social Influence Theory**

The social influence theory by Kelman (1958) is acclaimed to have evolved from the economic deterrence and social psychology models. It is premised upon the existence of a social, relational or psychological contract between the government and the taxpayers (McKerchar & Evans, 2009). This theory suggests that government expenditures are the main motivate of tax compliance and the governments has the ability to ensure that its citizen comply by offering more improved public goods and services with the little they collect in form of tax (Ali, Fjeldstad & Sjurson, 2013).

Another major proposition of this theory is that of tax bargaining between taxpayers and the government, which is considered as fundamental to building a relation of accountability and obligations between state and society (Fjeldstad, et al., 2012). This theory affirms that government expenditures serves as a motivating factor for taxpayer compliance, especially when the taxpayers value the goods and services they perceive to be receiving from the government (Ndunda, Ngahu & Wanyoike, 2015). Thus, the taxpayers will be more willing to comply when they are satisfied with provision of services from government, even in the absence of detection and punishment. Conversely, they are also likely to adjust their terms of trade, by reducing compliance when they are dissatisfied with services provision from the government, or even when they dislike the way their taxes are spent (Scott, 2018).

The relevance of this theory to this study is that the common citizens of a county may be willing to pay tax since they value the services being offered by their county government and believe that the more they pay taxes, the more they will be offered more improved and better goods and services. Conversely, the citizens may not be willing to comply if

they feel that they do not derive any benefit from the taxes collected by the county government or that there is wasteful spending and looting in public coffers.

### **2.1.2 Theory of Optimal Taxation**

The central element in the theory of optimal taxation by Slemrod (1990) is information. Optimal tax theory began with Ramsey (1927), who solved the problem of raising revenue by commodity taxes from a single consume. It has been assumed that lump-sum taxation, as it happens quite unnecessarily, looks at optimal pricing by public enterprises subject to a budget constraint. Work on discount rates for public investment during the sixties often implicitly assumed imperfections, such as absence of lump-sum taxation. Many-consumer economy has been introduced without lump-sum taxes, stated, and proved the efficiency theorem. Optimal tax theory or the theory of optimal taxation is the study of designing and implementing a tax that reduces inefficiency and distortion in the market under given economic constraints. Generally, this criterion consists of individuals' utility and the optimization problem involves minimizing the distortions caused by taxation. A neutral tax is a theoretical tax which avoids distortion and inefficiency completely. Other things being equal, if a tax-payer must choose between two mutually exclusive economic projects that have the same pre-tax risk and returns, the one with the lower tax or with a tax exemption would be chosen by a rational actor. Thus economists argue that taxes generally distort behavior.

In the tradition established by the classical political economists, normative analysis of tax policy tended to follow a principles-oriented approach according to which a good tax system should satisfy certain desirable criteria. For example, Lord Overstone, who served as President of Britain's Royal Statistical Society from 1851 to 1853, thought that a tax should be productive, computable, divisible, frugal, non-interferent, un-annoyant, equal, popular, and un-corruptive, see the discussion by Jang and Eger (2018). The classical economists rarely discussed the trade-offs between the various goals of tax policy. In particular, they did not pay much attention to the trade-off between re-distribution and economic efficiency, since they typically ruled out redistributive progressive taxation as a matter of principle, seeing it as a fundamental threat to property rights. The denouncement of any deviation from proportional taxation was vividly expressed by

McCulloch (2018) who argued that the moment you abandon the cardinal principle of exacting from all individuals the same proportion of their income or of their property, you are at sea without rudder or compass, and there is no amount of injustice and folly you may not commit (Creedy, 2009). Following the neoclassical revolution in economic theory, Edgeworth (1897) argued that taxation should involve an equal marginal sacrifice of utility for each individual taxpayer in order to minimize the aggregate utility loss imposed on taxpayers. When combined with the neoclassical assumption of declining marginal utility of income, this utilitarian principle of equal marginal sacrifice did provide a rationale for progressive income taxation.

Edgeworth (1897) was aware that redistributive taxation involves a trade-off between equity and efficiency, but the development of a rigorous coherent framework for analyzing this trade-off had to await the seminal work by Mirrlees (1971). This theory informs this study since it offers robust results on the importance of county government tax policy on optimal taxation as being of practical relevance in promoting businesses hence increasing revenue collection.

### **2.1.3 Revenue Collection**

Passage of the County Finance Bill gave a legal backing to County government to collect revenue (Ngugi & Kagiri, 2016). It also outlined the various taxes, fees, and charges for service and other revenue raising measures the county governments can engage in (Ngugi & Kagiri, 2016). Edward (2009) did a study that showed that revenue collection is a major challenge facing many countries worldwide but the difficulties are more in developing countries in comparison to developed countries. Developed nations such as USA and Canada have effective revenue collection systems hence minimizing revenue collection challenges (Beekes, Brown & Zhang, 2014). According to USA Treasury Department (2015), the government revenue in the United States, was approximately \$5.98 trillion; which was about 33 percent of Gross Domestic Product in revenue.

Mugo (2011) identified that effective integration of information communication technology with revenue collection functions is major problem hindering most entities from expanding their revenue collection activities. Christopher (2005) posits that corporate governance challenges affects strengthening of revenue collection activities. On

the contrary, Kimutai (2017) asserted that compliance with tax regulatory framework hinders achievement of the revenue collection objectives. Gachanja (2012) did a study using time series data on economic growth and revenue collection in Kenya from 1971 to 2010. The study reveals a relationship which is positive between the growth of economy and taxes. All taxes show a correlation which is positive to GDP. He also tests for the direction of causation of the variables using Granger Causality test and finds reversal causality on excise tax and economic growth. Gachanja points out that different uses of tax revenue affect growth differently. The model however fails to capture variables which cause inefficiency in tax administration and collection. Korsu (2015) evaluated the Effectiveness of Revenue Mobilization in the Public Sector of Ghana: The Case of Cape Coast Metropolitan Assembly. The study found out that collecting revenue in Municipal Council of Nyeri (MCON) is riddled with inefficiency and ineffectiveness.

Zhou (2013) carried out a study on systems, processes and challenges of public revenue Collection in Zimbabwe. Research findings indicated that the revenue collection sector has over the decades gone through milestone reforms, notable ones being the establishment of a sole national revenue authority in 2001, the shifting from cumbersome Income Tax Return Forms to Final Deduction Systems, the adoption of VAT in 2004 and Toll Gate systems in 2009. Mohammed and Muturi (2018) study conducted in Kisii County, Kenya indicated that competence measures are used to improve the accountability of revenue. Kayaga (2010) in her study of tax policy challenges in Uganda as one of developing countries opined that, new technology alone is not sufficient if the government does not recognize the need for skilled tax officials. The scholar further avers that, effective tax administration requires qualified tax personnel with requisite skills to maintain these systems and operate them to their full potential.

### **2.1.3.1 Automation and Revenue Collection**

Automation of revenue collection system involves investing in modern technologies for example: ICT in order to upgrade the revenue system to achieve integration and information sharing in so as to enhance efficiency and effectiveness of the system. Automation is empowered in administration of revenue collection and also other many non-governmental and governmental institutions. This is to gain maximum on the major



objectives and still have a run that's smooth in terms of other operations as well as discourage any risks (Mohammed & Muturi, 2018),

In providing advice on revenue enhancement for the counties, the Commission for revenue allocation sites poor revenue forecasting of own source revenue; low uptake of revenue automation management systems and inadequate capacity in revenue management from natural resources as main contributors to counties not meeting revenue targets. The use of technology in Kenya has advanced in the last three years. Between 2012 and 2015, internet users increased by 125 per cent and mobile phone subscription also grew from 31 million to 38 million. On its part, the government has constructed national ICT infrastructure by laying a network of fibre optic cables linking the 47 counties through the NOFBI initiative. This infrastructure has provided a platform for easier communication to the public on government's plans and policies. It has also enhanced access to government services by citizens. The ICT infrastructure has also supported automation of public financial management by both levels of government including revenue collection. However, against the back bone of this underlying infrastructure, most counties have still failed to meet revenue targets.

#### **2.1.3.2 Enforcement and Revenue Collection**

One major administrative problem today for many governments is their inability to collect the revenue (Ngugi & Kagiri, 2016). This is responsible for the huge gaps between reported and projected revenues. This can be attributed to lack of capacity by the enforcement staff to assess the revenue base, enforce the payment of taxes, handle explicit and intentional tax evasion or resistance from taxpayers, corruption, including embezzlement of revenues, external pressure from political offices on the finance department to provide optimistic projections against sums of not remitted to the County Revenue Fund accounts (Ngugi & Kagiri, 2016).

### **2.1.3.3 Legislation and Revenue Collection**

These are laws considered collectively that upon implementation govern collection of revenue collection. The main piece of legislation (Money Bill) supporting revenue collection within the Counties is the Finance Bill. This Bill documents all the revenue streams within the County and attaches monetary value to all revenue streams including property and entertainment taxes; business and liquor licenses; tourism levies; outdoor advertising fees; and, several decentralized user charges.

In drafting these policies it's important to ensure that county governments' taxation and other revenue-raising powers are not prejudicial to national economic policies, economic activities across county boundaries or the national mobility of goods, services, capital or labour. However County governments are sited to have faced challenges of identification of all revenue streams within the County governments and further; a few among the ones identified have no legislation supporting collection of revenue, or the laws supporting such were enacted within the days of the defunct local authorities and so the cost implications attached to them don't factor in inflationary levels between then and now. It's also important to know that upon enactments of some of these bills, a money bill should emanate to further guide rates to be charged against specific line items within the Act.

### **2.1.3.4 Political Goodwill and Revenue Collection**

Kenyan counties are political units set to offer services to the citizens within the region. As such it would be impossible to extract the influence of politics towards service provision within the devolved units. In several instances however it has been noted that political goodwill has been used by politicians at all levels of government to cause incitements against payment of taxes or rates pending some service provision by the respective level of government. A study focused on ascertaining the impact of adopting automated revenue collection system and its effects on governance and service delivery in Kiambu County, showed that for the period of May-June 2014, an upsurge in revenue realization and granular visibility of county revenues and trends.

There was an increase of 60% improvement in revenue collection within the first of the implementation of CountyPro system, an automation model. The study also revealed that 74% of respondents were satisfied with the automated revenue collection. The main contributor to this success was good political goodwill by all levels of government. Political goodwill in any government setup, works towards creating a change in management and user acceptance which are key to successful implementation of any aspect in any economy, including automation of revenue collection, acceptance to pay taxes and involvement of members of the public in formulation of legislation through public participation.

## **2.2 Empirical Literature**

### **2.2.1 Legislation and Rate of Revenue Collection**

A study on factors influencing tax revenue growth at KRA was done by Nyaga and Omwenga (2016). The study focused on the following variables; Information Communication Technology, Tax Administration, Tax Payers' awareness and staff ethics. Descriptive research design was used. The scope of the study was Kenya Revenue Authority Meru Station where total of 32 employees were interviewed in the office. The researcher used census method since the target population was less than one hundred persons. Data was collected using questionnaires which were both closed ended and open ended. Descriptive statistics were utilized to organize and describe the data while excel computer package was used to present the analysis in tables, pie charts and bar graphs. The study found that legislation through modernized tax administration policies have seen KRA sealing all the possible loopholes and that management of taxes by the Authority had become efficient and effective. However, the study focused on revenue collection by KRA and not county governments, a gap the current study sought to fill.

A study aiming to establish how public participation, competency, legislation and technology influence optimal revenue collection was undertaken in Kiambu County government by Ngugi and Kagiri (2016). The target population comprised of 100 respondents. The study adopted descriptive research design. A sample of 44 respondents was drawn from the target population using stratified random sampling. The study grouped the population into strata. From each stratum, the study used simple random

sampling to select respondents. The researcher used both secondary data as well as semi-structured questionnaires to gather the relevant information needed. The questionnaire was divided into two parts; the first part was mainly on the demographics which enabled the researcher to get demographic information of the respondents while the other was to evaluate the study variables. A pre-test of the questionnaire was conducted on some employees of the County government of Nakuru. The questionnaires were designed to reflect the main objective of the study. Quantitative research was used to provide numerical measurement and analysis. Survey questionnaires were used for standardization purposes. The study revealed that public participation had a significant influence on optimal revenue collection. The results indicate that skills level in the county staff strongly influence revenue collection. The study concluded that legislation framework played a significant role on optimum revenue collection. However, the study specifically focused on optimal revenue collection in Kiambu county government, a gap the current study sought to fill.

### **2.2.2 Enforcement and Rate of Revenue Collection**

A study by Ngotho and Kerongo (2014) sought to examine the determinants of revenue collection in Kenya. The study employed a case study research design since only one institution was involved in the study. A questionnaire was used for data collection. The study targeted senior and middle management staff working in the case tax institution. A total of one hundred (100) respondents formed the sample; 82 responded to the questionnaires. Data analysis was carried out using descriptive statistics. The findings showed that compliance levels and tax rates were factors that mainly affected revenue collection from an administrative perspective. Inflation and foreign direct investment influenced revenue collection though to some extent were beyond administrative control due to varying market forces. The study recommends the government to initiate tax compliance campaigns to sensitize citizens on the importance of tax to the life and self-sustenance of a nation. However, the study focused on inflation alongside enforcement factors, a gap the current study sought to fill.

A study done by Muli (2016) provides a theoretical analysis of the factors on failure to achieve full potentiality on tax administration and collection in Kenya in a case study of

the Kitui County located in Eastern part of Kenya. The study intends to identify the main resources of tax available in Kenya and investigate the major obstacles that hinder performance of tax administration and collection process in Kitui County (KC). The study used primary data and secondary data. Primary data involves the use of questionnaire and secondary data involved the use of published records of KC. This study consists a total sample size of 70 respondents. The study revealed that Kitui County (KC) was facing hindrances in administration and collection of tax due to tax exemptions, tax evasion, tax avoidance and cash transactions. This study highlighted KC tax administration and its effect on tax collection. The study determined factors behind Kitui County's failure to raise adequate tax collected for economic and social developments. The researcher recommended that further research is required in other counties of Kenya to know factors that cause inefficiency in tax administration and collections. The findings of the study provided directions in determining the factors that lead to inefficiency in administration and collection of tax in Kitui County. The management of Kitui County should understand that proper tax administration and collection is necessary in order to raise adequate tax for social and economic development of the county. Therefore, Kitui County Management needs to determine what factors are causing inefficiency in administration and collection of tax in the county.

### **2.2.3 Automation and Rate of Revenue Collection**

The purpose of a study done by Maina (2013) was to establish the factors affecting revenue collection in local authorities. The study narrowed on effects of government policies and regulations, local authority information financial and operations management systems, revenue enhancement plans and employee skills on revenue collection. Relevant literature was reviewed. Employing a descriptive research design, the study targeted civic leaders, public officers and chief officers in Municipal Council of Nyeri who totaled to 354. Using disproportionate stratified sampling, the researcher selected 130 civic leaders, public officers and chief officers to participate in the study. Data was collected using a structured pre-tested questionnaire. Data analysis was done with the help of SPSS version 20 and presentation done in terms of frequencies and percentages in the form of figures and tables. The study found that Local Authority Information Financial and Operations Management Systems (LAIFOMS) was picked by most (27%) respondents as the factor

with the highest influence on revenue collection while according to 24% of the study participants, government policies had the least influence on revenue collection. Regression analysis revealed that LAIFOMS (sig. = 0.017) and employee skills (sig. =0.038) explained up to 27% of local authority revenue collection. The study concluded that the revenue collectors appreciated the role of information technology in ensuring effective revenue collection however the availability and accessibility was a hindrance to effective LAIFOMS implementation. Among others, the study recommended that the effectiveness of the local Authority Information Financial and Operations Management Systems (LAIFOMS) can be bolstered by increasing the availability of computers and adding more staff to ensure efficiency in revenue collection. However, the study focused on the defunct municipal councils, a gap the current study sought to fill.

The purpose of a study done by Ngicuru, Muiru, Riungu and Shisia (2017) was to establish the factors affecting revenue collection in Nairobi City County Government. The specific objectives of the study were to: establish effect of revenue diversification on revenue collection, establish the effects of administration on revenue collection, assess the effects of tax structure on revenue collection and find out how different forms of revenues affects revenue collection. The study adopted a descriptive research design. The study population comprised of a total of 340 members and a sample size of 180 determined by using the Fischer's formula. Data collected was analyzed with the help of SPSS by both descriptive and inferential statistics. The study found that revenue diversification strategies increases the amount of revenue collected, with a good tax administration practices like competent staff and adoption of latest technology, the amount of revenue collected will increase. The study recommends the use of latest technology, and competent staff, and more innovations for diversified sources of revenues in Nairobi City County. However, the study focused on automation as a minor variable under revenue diversification strategies, a gap the current study sought to fill.

#### **2.2.4 Political Goodwill and Rate of Revenue Collection**

The purpose of a study done by Kamande (2014) was to examine the factors that affected, both positively and negatively, revenue collection in Kenya Revenue Authority (KRA) in

Nairobi County. More specifically, it examined the effects of the Political Situation on Revenue Collection, the effects of Policies put in place by the incumbent policymakers and the effects of the KRA Support Systems on Revenue Collection. A descriptive research design was adopted as it addressed the research questions through empirical assessment involving numerical measurement and statistical analysis. The target population was taxpayers that fell under the bracket of large taxpayers. Although there were 675 taxpayers under this description, a sample of these was taken for the purpose of the study. Simple random sampling technique was used to select a sample of 252 taxpayers. The empirical study was conducted in businesses across 12 different sectors within Nairobi County between January 2014 and March 2014. Data analysis was done using statistical package for social scientists (SPSS). First, data was collected, cleaned, sorted and collated. Descriptive statistics and measures of association were used to examine the relationship between the independent and dependent variables. This was followed by analysis using inferential statistics such as Pearson correlation to examine the relationship between revenue collection and political stability. The analytical results revealed that the prevailing political situation did in-fact affect business operations, security of the people, as well availability and distribution of resources and as a result, tax collection and administration of tax laws. It also revealed that the policies in place at a specific point in time did affect the revenue collection for the jurisdiction. The research argues that the KRA support system which comprised of among others, Information Technology Systems, Human Resources and Stakeholders all played a significant role in the process of Revenue Collection in KRA. However, the study focused on KRA and not county governments, a gap the current study sought to fill.

The main objective of a study done by Mburugu (2016) was to analyze determinants influencing revenue collection on the performance of Kenya Revenue Authority. The study specifically aimed to; determine the effect of organization resources; find out the effect of corporate governance practices; assess the effect of Information Communication Technology adoption and establish the effect of tax regulatory framework on revenue collection performance at KRA. The study adopted a descriptive research design and the target population comprised of a total of 262 staff working at the Kenya Revenue Authority head quarter offices in Nairobi. The study adopted a probability sampling

design by using a stratified random sampling technique to select a sample size of 126 respondents. The main data collection instruments were the questionnaires containing both open ended and close ended questions with the quantitative section of the instrument utilizing both a nominal and a Likert-type scale format. A pilot study was carried out to test the reliability and validity of the questionnaires. Descriptive statistics data analysis method was applied analyze data aided by Statistical Package for Social Sciences (SPSS) to compute responses frequencies, percentage mean and standard deviation results. Finally, Multiple Linear Regression model was employed to establish the significance of the independent variables on the dependent variable. The findings were presented using tables and charts. Findings from the study showed that organization resources, corporate governance, ICT adoption and tax regulatory framework were the key determinants influencing revenue collection performance at Kenya Revenue Authority. The study concluded that that political goodwill was very important for ICT adoption, tax regulatory framework, organization resources and corporate governance practices to positively influence revenue collection performance. The study recommendations were that; allocation of more human and financial resources in order to strengthen the organization capacity in revenue collection; appointment of board members who are competent and have political goodwill. However, the study focused adopted probability sampling and not stratified sampling, a gap the current study sought to fill.

### **2.3 Summary of Literature Review**

Research findings indicated that the revenue collection sector has over the decades gone through milestone reforms (Kimutai, 2017; Zhou, 2013). In addition, literature confirms that passage of the County Finance Bill gave a legal backing to County government to collect revenue (Ngugi & Kagiri, 2016). Empirical review revealed that studies either focused on different concepts alongside revenue collection (Ngugi and Kagiri, 2016; Maina, 2013), different agencies and not county governments (Ngotho and Kerongo, 2014; Nyaga and Omwenga, 2016) or different areas of the country (Ngicuru, Muiru, Riungu and Shisia, 2017; Muli 2016). Furthermore, the empirical review established that no particular study has been undertaken in Siaya County with a focus on revenue collection by the county government; a gap that the current study sought to fill.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This chapter highlights the methodological procedures that were applied while conducting the research. It contains research design, study area, target population, sample size and sampling procedures, instruments of data collection, data collection procedure, reliability, validity, data analysis and presentation and ethical considerations.

#### **3.1 Research Design**

According to Kothari (2007), research design is defined as framework that shows how problems under investigation will be solved. This study adopted a cross sectional descriptive survey design and a correlational research design. Descriptive survey design was adopted because it provides a clear outcome and the characteristics associated with it at a specific point in time. Correlational design on the other hand explores relationships between two or more variables (Cresswell, 2009). The combination of descriptive survey and correlational research designs in this study enabled the researcher to establish facts; examine relationships; describe, analyze and interpret data accordingly. The use of the correlational design maximizes the generalizability to situations because it measures variables in their natural settings (Steg, Buunk & Rothengatter, 2008). Descriptive design was suitable for this study because it involved collection of cross-sectional data at one point in time.

#### **3.2 Study Area**

The study was carried out in Siaya County. The main focus of the study were the officials and employees working under the Siaya County government. According to Office of the Controller of Budget (2017), Siaya County has eleven departments. The eleven departments are: county assembly, county executive, finance and economic planning, agriculture/ livestock/ fisheries, environment/ natural resources, education/ youth/ sports, health services, physical planning/ housing/ urban development, public works/ county roads/ water, trade/ tourism/ cooperative development and gender/ culture/ social services.

### 3.3 Target Population

According to Kothari (2007), population is an entire group of individuals, events or objects having a common observable characteristic. This study was carried out in Siaya County, targeting departmental officials. The total number of departments in Siaya County were eleven while the total number of staff in the county were 1474.

### 3.4 Sample Size and Sampling Procedures

A sample is a small proportion of a population selected for observation and analysis while sampling is a deliberate rather than a haphazard method of selecting subjects for observation to enable scientists infer conclusions about a population (Kothari, 2007). The study generally adopted stratified sampling whereby each group was sampled separately. However, Krecjie and Morgan (1970) formulae and simple random sampling were adopted to sample each department as shown in table 3.1. Therefore, the study sample size was 312.

**Table 3.1: Sample Frame.**

Department	N	Sample size	Comment
County Assembly	80	16	Simple random (20%)
County Executive:			
Finance, economic planning and vision 2030	263	53	Simple random (20%)
Agriculture, livestock, fisheries	138	28	Simple random (20%)
Tourism, and ICT	36	7	Simple random (20%)
Health services	763	169	Krecjie & Morgan
Land Physical planning, housing, urban development	38	8	Simple random (20%)
Public works, county roads,	30	6	Simple random (20%)
Enterprise, cooperative development	37	7	Simple random (20%)
Education, youth, sports Gender/ culture/ social services	56	11	Simple random (20%)
Water irrigation and natural resources	33	7	Simple random (20%)
Total	1474	312	

Source: Self conceptualization (2019)

### **3.5 Instruments of Data Collection**

Primary and secondary data was collected. The study utilized a data collection form and a semi-structured questionnaire. The study adopted a data collection form to gather secondary data on rate of revenue collection. However, a semi-structured questionnaire was used to collect primary data from the departmental officials and the key informants from the finance and economic planning department. The questionnaires are preferred in this study because respondents of the study are assumed to be literate and quite able to answer questions asked adequately. Kothari (2007) terms the questionnaire as the most appropriate instrument due to its ability to collect a large amount of information in a reasonably quick span of time. It guarantees confidentiality of the source of information through anonymity while ensuring standardization (Kerlinger, 1973). It is for the above reasons that the questionnaire was chosen as an appropriate instrument for this study.

The questionnaire contained a mix of questions, allowing for both open-ended and specific responses to a broad range of questions. The questionnaire was divided into two sections where section one dealt with the demographic information while section two dealt with the factors affecting rate of revenue collection. In addition, section two was subdivided into four subsections in line with the study objectives.

### **3.6 Data Collection Procedure**

An introductory letter to be used to collect data from the schools was obtained from the University. The researcher also obtained a research permit from NACOSTI. Self-administration approach of data collection was employed to ensure the questionnaires were filled properly and to monitor the process to ensure that unintended people were not interviewed. The researcher engaged data assistants on a contract basis to help with data collection.

### **3.7 Validity of Data Collection Instruments**

Validity is the degree to which a test measures what it is supposed to measure. For validity of any measuring instrument to be qualified it must be subjected to a pre-test (Mugenda and Mugenda, 2003). The researcher tested the validity of the instruments through a pilot study. The aim of the pilot survey was to test whether the design of questions was logical, if questions were clear and easily understood; whether the stated responses were exhaustive and how long it would take to complete the questionnaire. The

pre-testing was carried out on a sample consisting of 10% of the respondents from Kericho County.

The pre-test also allowed the researcher to check whether the variables collected could be easily processed and analyzed. Any questions found to be interpreted differently during the pre-testing was rephrased. Views given by the respondents during pre-testing were analyzed and used to improve the questionnaires before actual collection of data. The content validity and construct validity were also ascertained by supervisors; who constantly checked, evaluated and highlighted errors in this project.

### **3.8 Reliability of the Research Instrument**

Reliability is the ratio of the true score variance to the observed score variance. It also refers to the degree to which a test consistently measures whatever it is designed to measure (Patterson, Weaver, Fabio, Teasley, Renn, Curtis, Matthews, Kroemer, Xun & Bizhanova, 2018). Thus the reliability of a standardized test is usually expressed as coefficient where the reliability co-efficient reflects the extent to which a test is free of error variance. The study used 'split-halves' and 'internal consistency' method to measure reliability. 'Split-halves' method was used by comparing the two halves of the responses to each other and similarities identified. The more similarities between the two halves and each question, the greater the reliability. Internal consistency was tested using Cronbach's Alpha. Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. A high value of alpha is often used as evidence that the items measure an underlying (or latent) construct (Patterson *et. al.*, 2018). Reliability with a predetermined threshold of 0.7 is considered acceptable. In this case, a value of 0.786 was obtained thus indicating presence of reliability of the questionnaire.

### **3.9 Data Analysis and Presentation**

The process of data analysis involved several stages namely; data clean up and explanation. The primary data was coded and checked for any errors and omissions. Frequency tables, percentages and means were used to present the findings. Responses in the questionnaires were tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS) version 21. Both descriptive and inferential statistics were used to analyze the data. Mean and standard deviations were used as measures of

central tendencies and dispersion respectively. The study adopted correlation, simple linear regression and multiple linear regression to test the relationship between the rate of revenue collection (Y) and socio-economic factors (X). The multiple linear regression model was of the form;  $Y_i = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \epsilon$  where:

$Y_i$  = Rate of revenue collection;

$x_1$  = Legislation;

$x_2$  = Enforcement;

$x_3$  = Automation;

$x_4$  = Political goodwill

$\alpha$  = Constant;

$\epsilon$  = Error term which captures all other factors which influence the dependent variable  $y_i$  other than the regressors  $x_i$

### **3.10 Ethical Considerations**

This study observed confidentiality and privacy of respondents. Consent was sought from all respondents before data collection. Humane treatment was observed throughout the study. The researcher ensured nothing from the study findings was traced back to any of the respondents. Where possible, pseudonyms were used and not real names.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

This chapter presents the study findings in line with the study objectives. This study sought to analyze the socio-economic factors affecting revenue collection in Kenya: A case of Siaya County. It specifically sought to: establish the effect of legislation on rate of revenue collection in Kenya; to determine the effect of enforcement on rate of revenue collection in Kenya; to investigate the effect of automation on rate of revenue collection in Kenya; and to evaluate the effect of political goodwill on rate of revenue collection in Kenya.

#### **4.1 Response Rate**

Out of 312 questionnaires targeted by the study, a total of 204 questionnaires were fully filled and were considered for data entry and subsequent analysis. This represents a response rate of 65.38% which is above the minimum response rate of 50.10% as advanced by Fincham (2008). A response rate of 100% was not achieved due to spoilt or incomplete questionnaires that arose from skepticism and complete refusal by some respondents.

#### **4.2 Socio-Demographic Findings**

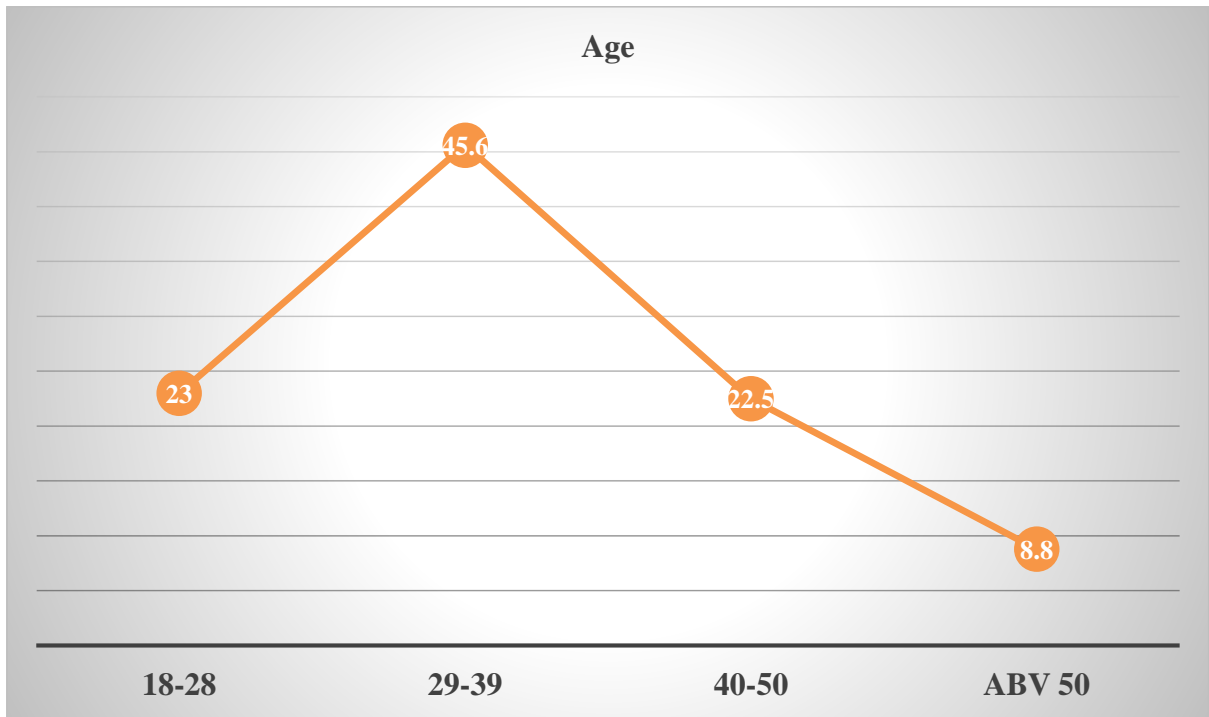
This sub-section contains distribution of respondents by age, distribution of respondents by gender, distribution of respondents by level of education and distribution of respondents by years of work.

##### **4.2.1 Distribution of Respondents by Age**

The study sought to discern the distribution of respondents by age. The feedback is as portrayed in table 4.1 and figure 4.1.

**Table 4.1: Distribution of respondents by Age**

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-28	47	23.0	23.0	23.0
29-39	93	45.6	45.6	68.6
40-50	46	22.5	22.5	91.2
ABV 50	18	8.8	8.8	100.0
Total	204	100.0	100.0	



**Figure 4.1: Distribution of respondents by Age**

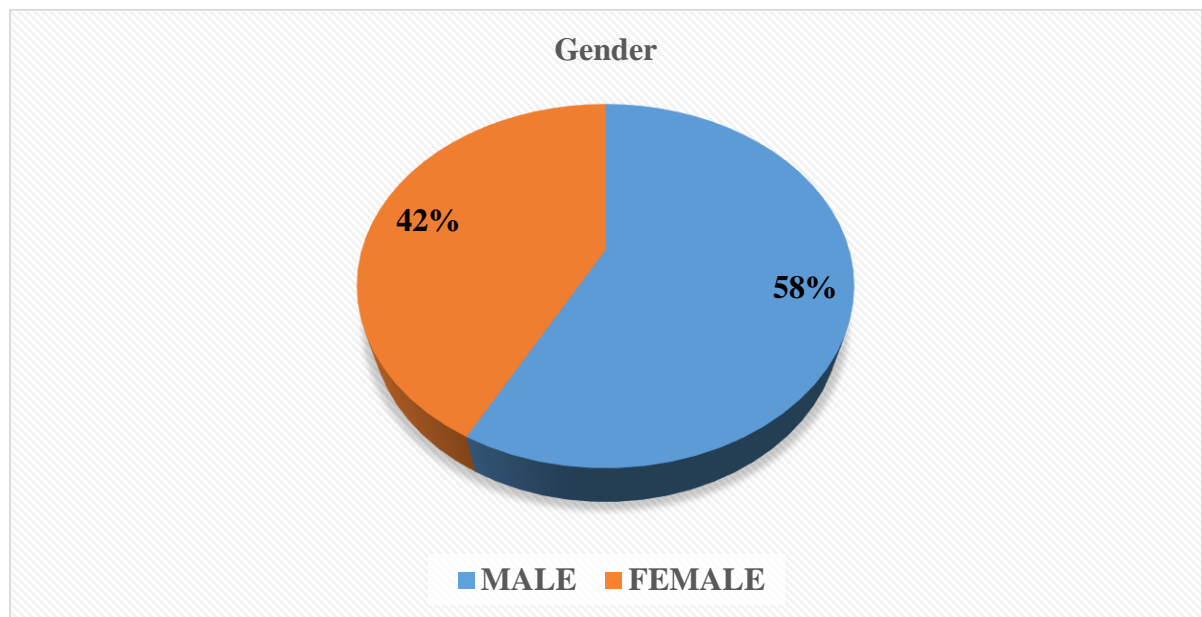
Majority (45.6%) of the respondents were aged between 29 to 39 years; trailed by 23% who were aged 18-28 years; then 22.5% who were aged between 40 to 50 years. The least age group (8.8%) were above 50 years. This basically means that majority of the respondents were still vibrant and with essential experience in revenue collection and county government operations.

#### 4.2.2 Distribution of Respondents by Gender

The study sought to know the distribution of respondents by gender. The findings are as portrayed in table 4.2 and figure 4.2.

*Table 4.2: Distribution of respondents by Gender*

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	118	57.8	57.8	57.8
Female	86	42.2	42.2	100.0
Total	204	100.0	100.0	



*Figure 4.2: Distribution of respondents by gender*

Majority (57.8%) of the respondents were male; closely trailed by 42.2% who were female. This basically implies that the study was not sexually biased since the difference in gender orientations was not wide. Moreover, this finding implies that more males as compared to females work in the departments under county assembly and the executive wing of county government of Siaya.

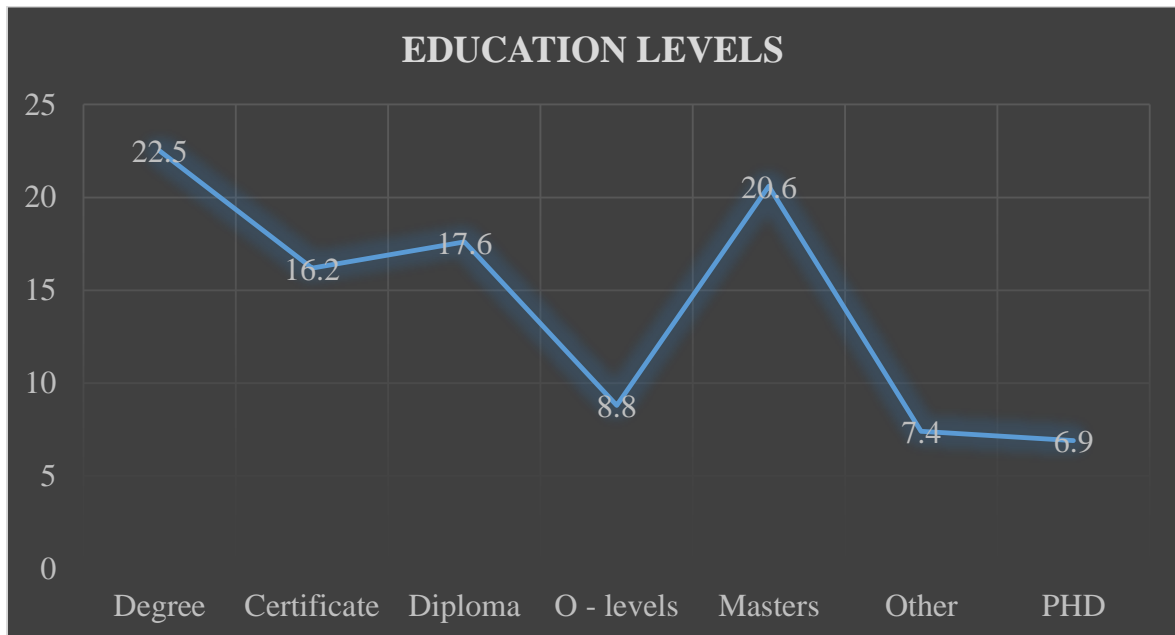


### 4.2.3 Distribution of Respondents by Level of Education

The study sought to know the distribution of respondents by level of education. The findings are as portrayed in table 4.3 and figure 4.3.

*Table 4.3: Distribution of respondents by level of education*

Level	Frequency	Percent	Valid Percent	Cumulative Percent
Degree	46	22.5	22.5	22.5
Certificate	33	16.2	16.2	38.7
Diploma	36	17.6	17.6	56.4
O - levels	18	8.8	8.8	65.2
Masters	42	20.6	20.6	85.8
Other	15	7.4	7.4	93.1
PHD	14	6.9	6.9	100.0
Total	204	100.0	100.0	



*Figure 4.3: Distribution of respondents by level of education*

Majority (22.5%) of the respondents had basic university degrees; trailed by 20.6% who had masters; then 17.6% who had diplomas. The least age group (6.9%) had PHDs. This

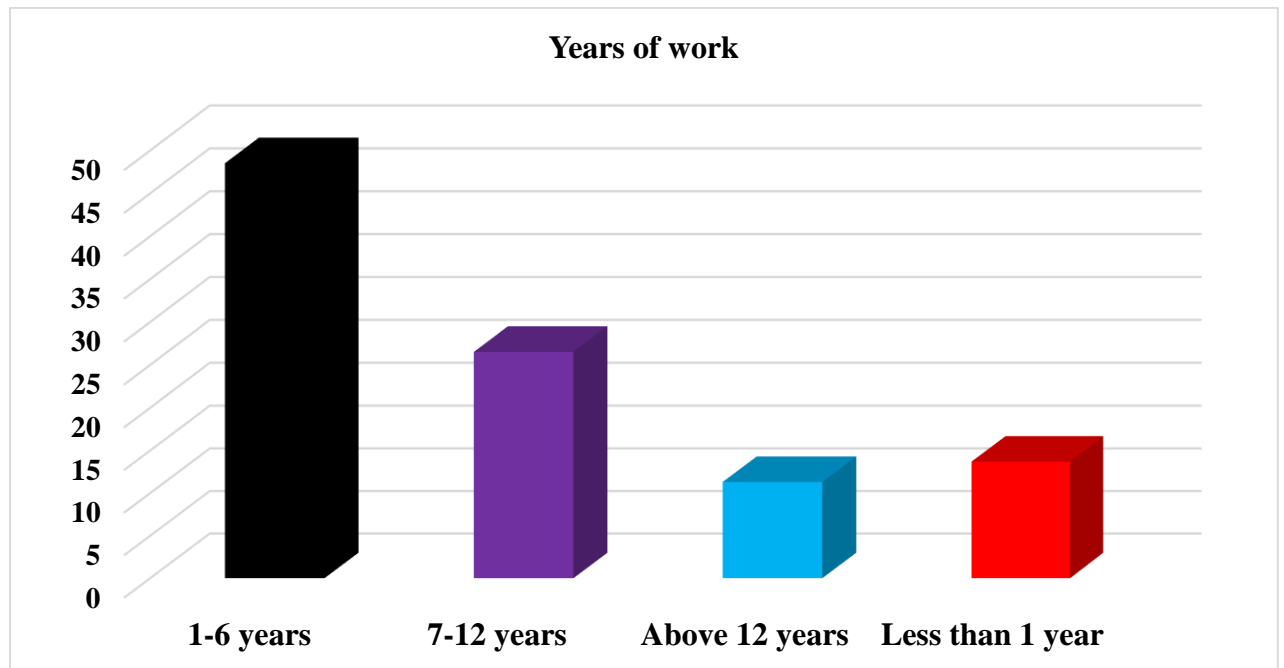
basically means that majority of the respondents were learned and with critical education necessary to articulate issues in revenue collection.

#### 4.2.4 Distribution of Respondents by Experience

The study sought to know the distribution of respondents by years of work. The findings are as portrayed in table 4.4 and figure 4.4.

*Table 4.4: Distribution of respondents by years of work*

Years of work	Frequency	Percent	Valid Percent	Cumulative Percent
1-6 years	99	48.5	48.5	48.5
7-12 years	54	26.5	26.5	75.0
Above 12 years	23	11.3	11.3	86.3
Less than 1 year	28	13.7	13.7	100.0
Total	204	100.0	100.0	



*Figure 4.4: Distribution of respondents by years of work*

Majority (48.5%) of the respondents had worked for 1-6 years; trailed by 26.5% who had worked for 7-12 years; then 13.7% who had worked for less than 1 year. Interestingly, the

least group (11.3%) had worked for more than 12 years. This finding implies that majority of the respondents had the basic work experience necessary to comprehend and analyze the effects of socio-economic factors on revenue collection.

### 4.3 Relationship between the Socio-Economic Factors and Revenue Collection

The study sought to determine the relationship of socio-economic factors and revenue collection. Therefore, a correlation and regression analysis were done as illustrated and explained in the following sub-sections.

#### 4.3.1 Correlation of the Socio-Economic Factors and Revenue Collection

*Table 4.5: Correlation of the Socio-Economic Factors and Revenue Collection*

		Legislation	Enforcement	Automation	Political goodwill	Revenue collection
Legislation	Pearson Correlation	1	.482	.596	.366	-.700
Enforcement	Pearson Correlation	.482	1	.153	-.496	.755
Automation	Pearson Correlation	.596	.153	1	.658	.752
Political Goodwill	Pearson Correlation	.366	-.496	.658	1	.063
Revenue collection	Pearson Correlation	-.700	.755	.752	.063	1

From table 4.5, it is evident that revenue collection is positively correlated to Enforcement, Automation and Political goodwill. However, revenue collection is negatively correlated to political goodwill. Hence, the study concluded that political goodwill is negatively correlated to revenue collection; a case of Siaya County.

#### 4.3.2 Regression of the Socio-Economic Factors and Revenue Collection

*Table 4.6: Regression of the Socio-Economic Factors and Revenue collection*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 <sup>a</sup>	.998	.991	.04103602

a. Predictors: (Constant), political goodwill, Automation, Enforcement Legislation

Table 4.6 displays the coefficient of determination for the overall model. The coefficient of determination ( $R^2$ ) obtained was 0.998 which is 99.8%. This implies that Legislation, Enforcement, Automation and Political goodwill caused a 99.8% deviation on revenue collection. Hence, the study concluded that Legislation, Enforcement, Automation and Political goodwill caused a major deviation on revenue collection; a case of Siaya County.

**Table 4.7: Model Summary of the Socio-Economic Factors and Revenue Collection**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.912	4	.228	135.339	.064 <sup>b</sup>
<sup>1</sup> Residual	.002	1	.002		
Total	.913	5			

a. Dependent Variable: Revenue collection

b. Predictors: (Constant), political goodwill, Automation, Enforcement, Legislation

Table 4.7 displays the model summary for legislation, enforcement, automation, Political goodwill and revenue collection. The F statistic obtained (135.339) is greater than the f-critical which is 7.71. This implies that the model was statistically significant. Therefore, the study concluded that the relationship of Legislation, Enforcement, automation, Political goodwill and revenue collection in Siaya County was statistically significant.

**Table 4.8: Regression Coefficients for the Socio-Economic Factors and Revenue Collection**

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
(Constant)	-10.698	1.496		-7.152.088
Legislation	1.857	.548	.384	3.387 .183
<sup>1</sup> Enforcement	3.282	.339	.838	9.678 .066
Automation	.794	.295	.350	2.696 .226
Political goodwill	-.307	.179	-.143	-1.716.336

a. Dependent Variable: Revenue collection

Table 4.8 displays the regression coefficients for legislation, enforcement, automation, political goodwill and revenue collection. From the findings, the resulting equation is:

$$Y=1.857X_1+3.282X_2+0.794X_3-0.307X_4-10.698$$

Therefore, the study concluded that enforcement had the biggest effect on revenue collection; a case of Siaya County. On the contrary, the study established that political goodwill had the least effect on revenue collection; a case of Siaya County. All the p values were more than 0.05, therefore, all the research hypothesis were rejected. In conclusion:

HO<sub>1</sub>: Legislation does not have a significant effect on rate of revenue collection in Kenya; was rejected and an alternative hypothesis stated; H<sub>1</sub>: Legislation has a significant effect on rate of revenue collection in Kenya.

HO<sub>2</sub>: Enforcement does not have a significant effect on rate of revenue collection in Kenya; was rejected and an alternative hypothesis stated; H<sub>2</sub>: Enforcement has significant effect on rate of revenue collection in Kenya.

HO<sub>3</sub>: Automation does not have a significant effect on rate of revenue collection in Kenya; was rejected and an alternative hypothesis stated; H<sub>3</sub>: Automation has a significant effect on rate of revenue collection in Kenya.

HO<sub>4</sub>: Political goodwill does not have a significant effect on rate of revenue collection in Kenya; was rejected and an alternative hypothesis stated; H<sub>4</sub>: Political goodwill has a significant effect on rate of revenue collection in Kenya.

#### **4.4 Effect of Legislation on Rate of Revenue Collection in Kenya**

The study sought to analyse the effect of legislation on rate of revenue collection in Kenya in Siaya County. A five point likert scale was adopted such that: Not at all=1; Small extent=2; Medium extent=3; Large extent=4; Very large extent=5. The findings based on descriptive analysis are illuminated in table 4.9.

**Table 4.9: Effect of Legislation on Rate of Revenue Collection**

Question item	1	2	3	4	5	N	Mean	Std. Dev.
County legislation on finance	3.9	21.1	40.7	29.9	4.4	204	3.0980	0.91522
County legislation on non-finance	4.9	18.1	48.0	26.5	2.5	204	3.0343	1.58102
National legislation on finance	5.4	22.5	42.2	27.0	2.9	204	2.9951	0.91241
National legislation on non-	2.9	17.6	36.8	39.2	3.4	204	3.2255	0.88119
International legislation	on2.9	18.6	45.1	30.4	2.9	204	3.1176	0.84567
Mix of different legislation	4.9	18.1	33.8	39.2	3.9	204	3.1912	0.94568
Composite Mean							3.1103	

The respondents were asked if County legislation on finance was effective for revenue collection, a mean of 3.0980 denoting medium extent was obtained. As a result, it can be concluded that County legislation on finance was effective to a medium extent; a case of Siaya County.

The respondents were queried if County legislation on non-finance was effective for revenue collection, a mean of 3.0343 denoting medium extent was obtained. Consequently, it can be concluded that County legislation on non-finance was effective to a medium extent; a case of Siaya County.

The respondents were questioned on whether National legislation on finance was effective for revenue collection, a mean of 2.9951 denoting medium extent was obtained. Subsequently, it can be concluded that National legislation on non-finance was effective to a medium extent; a case of Siaya County.

The respondents were probed on whether National legislation on non-finance on finance were effective for revenue collection, a mean of 3.2255 denoting medium extent was obtained. Therefore, it can be concluded that National legislation on non-finance were effective to a medium extent; a case of Siaya County.

The respondents were asked if International legislation on finance were effective for revenue collection, a mean of 3.1176 denoting medium extent was obtained. As a result,

it can be concluded that International legislation on finance were effective to a medium extent; a case of Siaya County.

The respondents were questioned on whether a Mix of different legislation were effective for revenue collection, a mean of 3.1912 denoting medium extent was obtained. Consequently, it can be concluded that Mix of different legislations were effective to a medium extent; a case of Siaya County.

In summary, the composite mean obtained was 3.1103; denoting medium extent. For that reason, it can be summarized and concluded that the effect of legislation on Rate of revenue collection was to a medium extent; a case of Siaya County.

#### **4.4.1 Correlation and Regression of Legislation on Rate of Revenue Collection**

Pearson’s correlation and regression of Legislation on Rate of Revenue Collection in Kenya was adopted in order to assess the relationship. The findings are demonstrated in tables 4.10, table 4.11, table 4.12 and table 4.13.

***Table 4.10: Correlation of Legislation on Rate of Revenue Collection***

		<b>Legislation</b>	<b>Revenue collection</b>
Legislation	<b>Pearson Correlation</b>	<b>1</b>	<b>.755</b>
	<b>Sig. (2-tailed)</b>		<b>.083</b>
Revenue collection	<b>Pearson Correlation</b>	<b>.755</b>	<b>1</b>
	<b>Sig. (2-tailed)</b>	<b>.083</b>	

Table 4.10 illustrates that Legislation recorded a Pearson’s correlation of 0.755 to revenue collection. Hence, the study concluded that Legislation is positively correlated to revenue collection; a case of Siaya County.

**Table 4.11: Coefficient of Determination for Legislation on Rate of Revenue Collection**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.755 <sup>a</sup>	.570	.462	.31337398

**a. Predictors: (Constant), Legislation**

Table 4.11 displays the coefficient of determination for Legislation on rate of revenue collection. The coefficient of determination ( $R^2$ ) obtained was 0.57 which is 57%. This implies that Legislation caused a 57% deviation on rate of revenue collection. Hence, the study concluded that Legislation caused a moderate deviation on rate of revenue collection; a case of Siaya County.

**Table 4.12: Model Summary for Legislation on Rate of Revenue Collection**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.772	1	.772	7.867	.083 <sup>b</sup>
<b>1</b> Residual	.223	4	.098		
Total	0.995	5			

**a. Dependent Variable: Revenue collection**

**b. Predictors: (Constant), Legislation**

Table 4.12 displays the model summary for Legislation and revenue collection. The F statistic obtained (7.87) is greater than the f-critical which is 7.71. This implies that the model was statistically significant. Therefore, the study concluded that relationship of Legislation and Rate of Revenue Collection was statistically significant.

**Table 4.13: Regression Coefficient for Legislation on Rate of Revenue Collection**

Model	Unstandardized		Standardized	t	Sig.
	B	Std. Error	Beta		
<b>1</b> (Constant)	-7.962	4.933		-	.182
Legislation	3.650	1.585	.755	2.302	.083

**a. Dependent Variable: Revenue collection**

Table 4.13 displays the regression coefficients for Legislation and rate of revenue collection. From the findings, the resulting equation is:  $Y=3.65X-7.962$



Therefore, the study concluded that there exists a positive relationship between Legislation and Rate of Revenue Collection in Kenya; a case of Siaya County.

#### 4.5 Effect of Enforcement On Rate of Revenue Collection

The study sought to assess the effect of enforcement on rate of revenue collection in Kenya. A five point likert scale was adopted such that: Not at all=1; Small extent=2; Medium extent=3; Large extent=4; Very large extent=5. The findings based on descriptive analysis are illuminated in table 4.14.

*Table 4.14: Effect of enforcement on rate of revenue collection*

<b>Question item</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>
Enforcement policy formulation	4.4	34.8	36.3	20.1	4.4	204	2.8529	0.94057
Enforcement policy application	2.0	33.3	37.7	25.0	2.0	204	2.9167	0.85841
Enforcement oversight strategy	2.5	28.4	35.8	28.9	4.4	204	3.0441	0.92210
Enforcement oversight team	5.4	30.9	31.9	28.9	2.9	204	2.9314	0.96500
Enforcement skills	4.4	28.4	37.3	28.9	1.0	204	2.9363	0.88827
Enforcement technology	2.9	27.0	28.9	33.8	7.4	204	3.1569	0.99995
Composite Mean							2.97305	

The respondents were asked if enforcement policy formulation has affected rate of revenue collection a mean of 2.8529 denoting medium extent was obtained. As a result, it can be concluded that enforcement policy formulation has affected rate of revenue collection to a medium extent in Siaya County.

The respondents were queried if enforcement policy application has affected rate of revenue collection, a mean of 2.9167 denoting medium extent was obtained. Consequently, it can be concluded that enforcement policy application has affected rate of revenue collection to a medium extent in Siaya County.

The respondents were questioned on whether enforcement oversight strategy has affected rate of revenue collection, a mean of 3.0441 denoting medium extent was obtained. Subsequently, it can be concluded that enforcement oversight strategy has affected rate of revenue collection to a medium extent in Siaya County.

The respondents were probed on whether Enforcement oversight team has affected rate of revenue collection, a mean of 2.9314 denoting medium extent was obtained. Therefore, it can be concluded that Enforcement oversight team has affected rate of revenue collection to a medium extent in Siaya County.

The respondents were asked if enforcement skills have affected rate of revenue collection, a mean of 2.9363 denoting medium extent was obtained. As a result, it can be concluded that enforcement skills has affected rate of revenue collection to a medium extent in Siaya County.

The respondents were questioned on whether enforcement technology has affected rate of revenue collection, a mean of 3.1569 denoting medium extent was obtained. Consequently, it can be concluded that enforcement technology has affected rate of revenue collection to a medium extent in Siaya County.

In summary, the composite mean obtained was 2.97305; denoting medium extent. For that reason, it can be summarized and concluded that the effect of enforcement on rate of revenue collection is to a medium extent in Siaya County.

#### **4.5.1 Correlation and Regression of Enforcement on Rate of Revenue Collection**

Pearson’s correlation and regression was embraced in order to assess the effect of enforcement on rate of revenue collection in Kenya. The findings are demonstrated in tables 4.15, table 4.16, table 4.17 and table 4.18.

***Table 4.15: Correlation of enforcement on rate of revenue collection***

		<b>Enforcement</b>	<b>Revenue collection</b>
Enforcement	Pearson Correlation	1	.752
Revenue collection	Pearson Correlation	.752	1
		Sig. (2-tailed)	.085

Table 4.15 illustrates that Enforcement recorded a Pearson’s correlation of 0.752 to revenue collection. Hence, the study concluded that Enforcement is positively correlated to revenue collection; a case of Siaya County.

**Table 4.16: Coefficient of determination for enforcement on rate of revenue collection**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.752 <sup>a</sup>	.566	.457	.31495685

a. Predictors: (Constant), Enforcement

Table 4.16 displays the coefficient of determination for Enforcement on Rate of Revenue Collection in Kenya. The coefficient of determination ( $R^2$ ) obtained was 0.566 which is 56.6%. This implies that Enforcement caused a 56.6% deviation on revenue collection. Hence, the study concluded that Enforcement caused a moderate deviation on revenue collection; a case of Siaya County.

**Table 4.17: Model Summary for enforcement on rate of revenue collection**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.817	1	.817	8.247	.085 <sup>b</sup>
<sup>1</sup> Residual	.096	4	.099		
Total	.913	5			

a. Dependent Variable: Revenue collection

b. Predictors: (Constant), Enforcement

Table 4.17 displays the model summary for Enforcement on Rate of Revenue Collection in Kenya. The F statistic obtained (8.25) is greater than the f-critical which is 7.71. This implies that the model was statistically significant. Therefore, the study concluded that relationship of Enforcement on Rate of Revenue Collection in Kenya; a case of Siaya County; was statistically significant.

**Table 4.18: Regression Coefficient for enforcement on rate of revenue collection**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-5.365	3.839		-1.397	.235
1 Enforcement	2.945	1.291	.752	2.282	.085

a. Dependent Variable: Revenue collection

Table 4.18 displays the regression coefficients for effect of enforcement on rate of revenue collection in Kenya. From the findings, the resulting equation is:  $Y=2.945X-5.365$

Therefore, the study concluded that there exists a positive relationship between enforcement and Rate of Revenue Collection in Kenya; a case of Siaya County.

#### **4.6 Effect of Automation on Rate of Revenue Collection in Kenya**

The study sought to examine the effect of automation on Rate of Revenue Collection in Kenya. A five point likert scale was adopted such that: Not at all=1; Small extent=2; Medium extent=3; Large extent=4; Very large extent=5. The findings based on the descriptive analysis are illustrated in table 4.19.

**Table 4.19: Effect of automation on rate of revenue collection**

	1	2	3	4	5	N	Mean	Std. Dev.
Billing automation	11.8	20.1	32.4	32.4	3.4	204	2.9559	1.06582
Manual billing	3.4	13.7	36.8	41.2	4.9	204	3.3039	0.89100
Collection automation	2.0	10.8	31.9	45.6	9.8	204	3.4975	0.88090
Manual collection	4.4	23.0	36.8	29.9	5.9	204	3.0980	0.96755
Automation of M & E	3.9	15.2	37.7	37.3	5.9	204	3.2598	0.92377
Mix of automation strategies	1.5	17.2	36.8	37.7	6.9	204	3.3137	0.88758
Composite Mean							3.238133	

The respondents were questioned on whether billing automation indeed affected Revenue collection in Siaya County, a mean of 2.9559 denoting medium extent was obtained. As a result, the study concluded that; billing automation indeed affected Revenue collection to a medium extent in Siaya County.

The respondents were queried if manual billing indeed affected Revenue collection in Siaya County, a mean of 3.3039 denoting medium extent was obtained. Subsequently, the study concluded that Manual billing indeed affected Revenue collection to a medium extent in Siaya County.

The respondents were questioned on whether Collection automation indeed influence Revenue collection in Siaya County, a mean of 3.4975 denoting medium extent was obtained. Subsequently, it can be concluded that Collection automation indeed influence Revenue collection to a medium extent in Siaya County.

The respondents were probed on whether manual collection have an effect on Revenue collection in Siaya County, a mean of 3.0980 denoting medium extent was obtained. Therefore, it can be concluded that manual collection affects Revenue collection to a medium extent in Siaya County.

The respondents were probed on whether Automation of M & E affect Revenue collection in Siaya County, a mean of 3.2598 denoting medium extent was obtained. Therefore, it can be concluded that Automation of M & E affect Revenue collection to a medium extent in Siaya County.

The respondents were probed on whether mix of automation strategies affect Revenue collection in Siaya County, a mean of 3.3137 denoting medium extent was obtained. Therefore, it can be concluded that mix of automation strategies affect Revenue collection to a medium extent in Siaya County.

In summary, the composite mean obtained was 3.238133; denoting medium extent. For that reason, it can be summarized and concluded that the effect of automation on Rate of Revenue Collection is to a medium extent.

#### 4.6.1 Correlation and Regression of Automation on Rate of Revenue Collection

Pearson's correlation and regression of effect of automation on Rate of Revenue Collection in Kenya; was adopted. The findings are revealed in tables 4.20, table 4.21, table 4.22 and table 4.23.

*Table 4.20: Correlation of Automation on Rate of Revenue Collection*

		<b>Automation</b>	<b>Revenue</b>
Automation	<b>Pearson</b>	<b>1</b>	<b>.063</b>
	<b>Sig. (2-tailed)</b>		<b>.905</b>
Revenue collection	<b>Pearson</b>	<b>.063</b>	<b>1</b>
	<b>Sig. (2-tailed)</b>	<b>.905</b>	

Table 4.20 illustrates that Automation recorded a Pearson's correlation of 0.063 to revenue collection. Hence, the study concluded that Automation is positively correlated to revenue collection; a case of Siaya County.

*Table 4.21: Coefficient of determination for Automation on Revenue Collection*

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.063 <sup>a</sup>	.094	-.245	.47687098

a. Predictors: (Constant), Automation

Table 4.21 displays the coefficient of determination for Automation and revenue collection. The coefficient of determination ( $R^2$ ) obtained was 0.094 which is 9.4%. This implies that Automation caused a 9.4% deviation on revenue collection. Hence, the study concluded that Automation caused a minimal deviation on revenue collection; a case of Siaya County.

**Table 4.22: Model Summary for Automation on Rate of Revenue Collection**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.710	1	.709	14.458	.905 <sup>b</sup>
<sup>1</sup> Residual	.204	4	.049		
Total	.913	5			

a. Dependent Variable: Revenue collection

b. Predictors: (Constant), Automation

Table 4.22 displays the model summary for Automation and revenue collection. The F statistic obtained (14.458) is greater than the f-critical which is 7.71. This implies that the model was statistically significant. Therefore, the study concluded that relationship of Automation and revenue collection was statistically significant.

**Table 4.23: Regression coefficients for Automation on Rate of Revenue Collection**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
<sup>1</sup> (Constant)	2.924	3.675			.796471
Automation	.144	1.133	.063		.127905

a. Dependent Variable: Revenue collection

Table 4.23 displays the regression coefficients for Automation. From the findings, the resulting equation is:  $Y=0.144X+2.924$

Therefore, the study concluded that there exists a positive relationship between Automation and revenue collection; a case of Siaya County.

#### **4.7 Effect of Political Goodwill On Rate of Revenue Collection in Kenya**

The study sought to investigate the effect of political goodwill on rate of revenue collection in Kenya. A five point likert scale was adopted such that: Not at all=1; Small extent=2; Medium extent=3; Large extent=4; Very large extent=5. The findings based on the descriptive analysis are illustrated in table 4.24.

**Table 4.24: Effect of political goodwill on rate of revenue collection**

	1	2	3	4	5	N	Mean	Std. Dev.
Political goodwill from MCAs	11.3	13.7	26.0	25.5	23.5	204	3.3627	1.28875
Political goodwill from speaker	5.4	8.8	26.5	35.3	24.0	204	3.6373	1.10341
Political goodwill from governor	2.5	12.7	23.0	35.3	26.5	204	3.7059	1.06986
Political goodwill from grassroots	2.5	6.9	22.1	33.8	34.8	204	3.9167	1.03053
Political goodwill from government	4.9	16.7	24.5	27.0	27.0	204	3.5441	1.19235
Political goodwill from handshake	3.9	13.7	17.2	26.0	39.2	204	3.8284	1.20138
Composite Mean							3.66585	

The respondents were examined on whether political goodwill from MCAs affected rate of revenue collection in Siaya County, a mean of 3.3627 denoting medium extent was obtained. As a result, the study concluded that; political goodwill from MCAs affected rate of revenue collection to a medium extent in Siaya County.

The respondents were questioned on whether political goodwill from speaker affected rate of revenue collection in Siaya County, a mean of 3.6373 denoting large extent was obtained. As a result, the study concluded that; political goodwill from speaker affected rate of revenue collection to a large extent in Siaya County.

The respondents were examined on whether political goodwill from governor affected rate of revenue collection in Siaya County, a mean of 3.7059 denoting large extent was obtained. Subsequently, the study concluded that; political goodwill from governor affected rate of revenue collection to a large extent in Siaya County.

The respondents were probed on whether political goodwill from grassroots affected rate of revenue collection in Siaya County, a mean of 3.9167 denoting large extent was obtained. As a result, the study concluded that; political goodwill from grassroots affected rate of revenue collection to a large extent in Siaya County.

The respondents were examined on whether political goodwill from government affected rate of revenue collection in Siaya County, a mean of 3.5441 denoting large extent was obtained. Subsequently, the study concluded that; political goodwill from government affected rate of revenue collection to a large extent in Siaya County



The respondents were probed on whether political goodwill from handshake affected rate of revenue collection in Siaya County, a mean of 3.8284 denoting large extent was obtained. As a result, the study concluded that; political goodwill from handshake affected rate of revenue collection to a large extent in Siaya County.

In summary, the composite mean obtained was 3.66585; denoting large extent. For that reason, it can be summarized and concluded that the effect of political goodwill on rate of revenue collection was to a large extent in Siaya County.

#### 4.7.1 Correlation and Regression of Political Goodwill and Revenue Collection

Pearson’s correlation and regression of political goodwill and revenue collection in Siaya County; was adopted in order to assess the relationship. The findings are revealed in table 4.25, table 4.26, table 4.27 and table 4.28.

**Table 4.25: Pearson’s correlation of political goodwill**

		Political goodwill	Revenue
Political goodwill	Pearson Correlation	1	-0.700
	Sig. (2-tailed)		.122
Revenue collection	Pearson Correlation	-0.700	1
	Sig. (2-tailed)	.122	

Table 4.25 illustrates that political goodwill recorded a Pearson’s correlation of 0.7 to revenue collection. Hence, the study concluded that political goodwill is negatively correlated to revenue collection; a case of Siaya County.

**Table 4.26: Coefficient of determination for political goodwill and revenue collection**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.700 <sup>a</sup>	.490	.362	.34132824

a. Predictors: (Constant), political goodwill

Table 4.26 displays the coefficient of determination for political goodwill and revenue collection. The coefficient of determination ( $R^2$ ) obtained was 0.49 which is 49%. This implies that political goodwill caused a 49% deviation on revenue collection. Hence, the

study concluded that political goodwill caused a moderate deviation on revenue collection; a case of Siaya County.

**Table 4.27: Model summary for political goodwill and revenue collection**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.787	1	.787	24.592	.122 <sup>b</sup>
<sup>1</sup> Residual	.126	4	.032		
Total	.913	5			

a. Dependent Variable: Revenue collection

b. Predictors: (Constant), Political goodwill

Table 4.27 displays the model summary for political goodwill and revenue collection. The F statistic obtained (24.592) is greater than the f-critical which is 7.71. This implies that the model was statistically significant. Therefore, the study concluded that relationship of political goodwill and revenue collection; a case of Siaya County. was statistically significant.

**Table 4.28: Regression coefficients for political goodwill and revenue collection**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
<sup>1</sup> (Constant)	2.112	2.812		-.751	.494
Political goodwill	-1.501	.766	.700	1.959	.122

a. Dependent Variable: Revenue collection

Table 4.28 displays the regression coefficients for political goodwill and revenue collection. From the findings, the resulting equation is:  $Y = -1.501X + 2.112$

Therefore, the study concluded that there exists a positive relationship between political goodwill and revenue collection; a case of Siaya County.

#### **4.8 Discussion of Findings**

The study established that Legislation, Enforcement, Automation and Political goodwill are indeed socio-economic factors affecting revenue collection in Kenya. These findings are similar to those of Nyaga and Omwenga (2016) study. In addition, a different study had similar results; Ngugi and Kagiri (2016) observed that legislation and enforcement coupled with automation were factors affecting revenue collection.

The study found out that the effect of legislation on rate of revenue collection in Kenya was to a medium extent. The study further revealed that the effect of enforcement on rate of revenue collection in Kenya was to a medium extent. Moreover, the study also established effect of automation on Rate of Revenue Collection is to a medium extent. These findings concur with those of Ngotho and Kerongo (2014) and Muli (2016).

The study disclosed that the effect of political goodwill on rate of revenue collection in Kenya was to a large extent. Similarly, a study by Ngicuru, Muiiru, Riungu and Shisia (2017) and Mburugu (2016) recorded similar findings of high influence associated with political goodwill on revenue collection.

## **CHAPTER FIVE:**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

This chapter covers the summary of findings which focuses on the purpose of the study which was to analyze the socio-economic factors affecting revenue collection in Kenya: A case of Siaya County. The findings focused on: the effect of legislation on rate of revenue collection in Kenya; the effect of enforcement on rate of revenue collection in Kenya; the effect of automation on rate of revenue collection in Kenya; and the effect of political goodwill on rate of revenue collection in Kenya. This chapter further presents discussion of outcomes which is outlined thematically. The chapter then presents the conclusions, recommendations of the study and recommendations for further research.

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

This study sought to analyze the socio-economic factors affecting revenue collection in Kenya: A case of Siaya County. The results showed that Legislation, Enforcement, Automation and Political goodwill jointly caused a significant deviation associated to rate of revenue collection in Kenya. In summary, the study established that Legislation, Enforcement, Automation and Political goodwill are indeed socio-economic factors affecting revenue collection in Kenya.

The study sought to establish the effect of legislation on rate of revenue collection in Kenya. The study established that the effect of legislation on rate of revenue collection in Kenya was to a medium extent. In addition, the study showed that there exists a positive relationship between legislation and rate of revenue collection in Kenya.

The study sought to determine the effect of enforcement on rate of revenue collection in Kenya. The study revealed that the effect of enforcement on rate of revenue collection in Kenya was to a medium extent. In addition, the study disclosed that there exists a positive relationship between enforcement and rate of revenue collection in Kenya. The study sought to investigate the effect of automation on rate of revenue collection in Kenya. The study disclosed that effect of automation on Rate of Revenue Collection is to

a medium extent. Additionally, the study revealed that there exists a positive relationship between automation and rate of revenue collection in Kenya.

The study sought to evaluate the effect of political goodwill on rate of revenue collection in Kenya. The study revealed that the effect of political goodwill on rate of revenue collection in Kenya was to a large extent. Furthermore, the study showed that there exists a negative relationship between political goodwill and rate of revenue collection in Kenya.

### **5.3 Conclusions of the Study**

This study sought to analyze the socio-economic factors affecting revenue collection in Kenya: A case of Siaya County. In conclusion, the study established that legislation, enforcement, automation and political goodwill are indeed socio-economic factors affecting revenue collection in Kenya.

The study sought to establish the effect of legislation on rate of revenue collection in Kenya. In conclusion, legislation has a significant effect on rate of revenue collection in Kenya.

The study sought to determine the effect of enforcement on rate of revenue collection in Kenya. In conclusion, enforcement has significant effect on rate of revenue collection in Kenya.

The study sought to investigate the effect of automation on rate of revenue collection in Kenya. In conclusion, automation has a significant effect on rate of revenue collection in Kenya.

The study sought to evaluate the effect of political goodwill on rate of revenue collection in Kenya. In conclusion, political goodwill has a significant effect on rate of revenue collection in Kenya.

#### **5.4 Recommendations of the Study**

The study made the following recommendations in line with the study findings:

The study recommends the creation and strengthening systems to strategically advocate, administer and promote socio-economic factors for fostering sustainable and efficient revenue collection in County governments of Kenya.

The study recommends creation, adoption and strengthening of full-fledged revenue collection legislation that propels rate of revenue collection in Counties. Moreover, equal emphasis should be put on legislation that focus on finance as well as those that are non-financial. Furthermore, theories should be advanced especially those that tend to link legislation to revenue collection.

The study recommends that stringent enforcement guidelines be adopted for revenue collection; in order to increase the inflow of revenue streams. In fact, creation of an IT enabled enforcement systems is highly recommended to utilize modern enforcement management systems for better revenue collection.

The study recommends auxiliary scrutiny and improvement on current automation models utilized by county governments with a focus on improved efficiency, cost effectiveness and timely interventions. Moreover, the efficacy of automation of revenue billing and collection in fostering revenue collection should be part and parcel of every government department.

The study recommends implementation of political goodwill gestures and mitigation mechanisms for economic politics in order to sustain and propel revenue collection. Moreover, the study recommends espousal of intervention models to separate County politics from development.

#### **5.5 Suggestions for Further Studies**

From the study and subsequent conclusions, the researcher recommends a further research on:

- i. The influence of financial interventions on revenue collection in Kenya.

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## APPENDIX

### Appendix I: Introduction Letter

Kevin Onyango Masawa,

Maseno University.

To: .....

Dear Sir/Madam,

#### **RE: NOTICE TO CARRY OUT RESEARCH.**

I am a Masters student at Maseno University. I am required to submit as part of my course work assessment a research project report. The title of my research is: **‘TO ANALYZE THE SOCIO-ECONOMIC FACTORS AFFECTING REVENUE COLLECTION IN KENYA: A CASE OF SIAYA COUNTY.’**

To achieve my objectives, you have been selected to participate in this study. The information will be used purely for academic purpose and your name will not be mentioned in the report. Findings of the study shall upon request, be availed to you. Thank you.

Yours faithfully,

.....

Kevin Onyango Masawa,

**MBA/BE/00006/016**

**Appendix II: Questionnaire**

**SECTION I: DEMOGRAPHICS**

1. Name (Optional)? -----

2. Work Category?

County Assembly	
County Executive:	

3. If you are a member of the County Executive in part 2 above; which is your department?

<b>Department</b>	
Finance, economic planning and vision 2030	
Agriculture, livestock, fisheries	
Tourism, and ICT	
Health services	
Land Physical planning, housing, urban development	
Public works, county roads,	
Enterprise, cooperative development	
Education, youth, sports Gender/ culture/ social services	
Water irrigation and natural resources	

4. How old are you? (Kindly tick)

<b>Age</b>	
18-28years	
29-39 years	
40-50 years	
Above 50 years	

5. Gender?

<b>Gender</b>	
Male	
Female	

6. What is you highest level of education?

<b>Level of Education</b>	
O-levels	
Certificate	
Diploma	
Degree	
Master's Degree	
PHD	
Other	

7. For how long have you been working at Siaya County?

<b>Duration</b>	
Less than 1 year	
1 to 5 years	
6 to 10 years	
11 to 15 years	
Above 15 years	

**SECTION II: Legislation**

8. Please indicate your honest opinion about the following descriptive statements (please tick appropriately) **Not at all=1; Small extent=2; Medium extent=3; Large extent=4; Very large extent=5**

<b>Descriptive statements</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
County government legislation on finance has affected collection of targeted revenue					
County government legislation on non-finance has affected collection of targeted revenue					
National government legislation on finance has affected collection of targeted revenue					
National government legislation on non-finance has affected collection of targeted revenue					
International legislation has affected collection of targeted revenue					
A mix of different legislation has affected collection of targeted revenue					

**SECTION III: Enforcement**

9. Please indicate your honest opinion about the following descriptive statements (please tick appropriately) **Not at all=1; Small extent=2; Medium extent=3; Large extent=4; Very large extent=5**

<b>Descriptive statements</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The enforcement policy formulation has affected collection of targeted revenue					
The enforcement policy application has affected collection of targeted revenue					

The enforcement oversight strategy has affected collection of targeted revenue					
The enforcement oversight team has affected collection of targeted revenue					
The enforcement skills has affected collection of targeted revenue					
Enforcement technology has affected collection of targeted revenue					

**SECTION IV: Automation**

**10.** Please indicate your honest opinion about the following descriptive statements (please tick appropriately) **Not at all=1; Small extent=2; Medium extent=3; Large extent=4; Very large extent=5**

<b>Descriptive statements</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Billing automation has affected collection of targeted revenue					
Manual billing has affected collection of targeted revenue					
The collection automation has affected rate of targeted revenue					
Manual collection has affected rates of targeted revenue					
The automation of monitoring and evaluation has affected collection of targeted revenue					
A mix of different automation strategies has affected collection of targeted revenue					

**SECTION V: Political Goodwill**

**11.** Please indicate your honest opinion about the following descriptive statements (please tick appropriately) **Not at all=1; Small extent=2; Medium extent=3; Large extent=4; Very large extent=5**

<b>Descriptive statements</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Political goodwill from members of county assembly has affected collection of targeted revenue					
Political goodwill from the county speaker has affected collection of targeted revenue					
Political goodwill from the governor has affected collection of targeted revenue					

Political goodwill from the grassroots has affected collection of targeted revenue					
Political goodwill from the national government has affected collection of targeted revenue					
General political goodwill from the handshake has affected collection of targeted revenue					

**SECTION VI: Rate of Revenue Collection**

12. Please indicate your honest opinion about the following descriptive statements (please tick appropriately) **Not at all=1; Small extent=2; Medium extent=3; Large extent=4; Very large extent=5**

<b>Descriptive statements</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The county has averagely registered an increase in revenue collection for the last five financial years					
The county achieved its targeted revenue collection in the last financial year					

**Appendix III: Interview Guide**

1. Do you think County government legislation has affected collection of targeted revenue?
2. What’s your view on national government legislation affecting collection of targeted revenue? How about international legislation?
3. What’s your view on the enforcement policy affecting collection of targeted revenue?
4. Do you think the enforcement oversight has affected collection of targeted revenue? How about the enforcement skills?
5. What’s your view on billing automation affecting collection of targeted revenue? How about the collection automation? What about the automation of monitoring and evaluation?
6. What’s your opinion about political goodwill from members of county assembly affecting collection of targeted revenue? Does political goodwill from the governor affect collection of targeted revenue? How about political goodwill from the national government?

7. Is it true that the county achieved its targeted revenue collection in the last financial year? Kindly explain.

**Appendix IV: Data Collection Form**

<b>Year</b>	<b>Targeted revenue</b>	<b>Actual revenue collected</b>
<b>2013-2014</b>		
<b>2014-2015</b>		
<b>2015-2016</b>		
<b>2016-2017</b>		
<b>2017-2018</b>		



### Appendix V: Budget

Item Or Activity	Description	COSTS (Ksh.)
Procurement of Research permit	1 day @ Ksh.5000	5,000
NACOSTI Fee	1,200	1, 200
Exploratory Survey of the study area	10days @ Ksh. 10,000	100,000
<b>Field Work Materials</b>		
Reams photocopying paper	20@ Ksh.500	10,000
Folders	10@ Ksh.350	3,500
Preparation of Interview Guides	30 @ Ksh.20	600
Preparation of Questionnaires	450 @ Ksh.20	9,000
Training of Research Assistants	10 pax@5 days @ 1,500	75,000
Per diem for principal researcher	10 days @ Ksh.2,500	25,000
Data collection costs	10 pax@10 days @ Ksh.1,000	100,000
Data entry analysis costs	5pax@10 days @ Ksh.1,000	50,000
Transportation costs	10 days @ Ksh.4,000	40,000
Sub-Total		419,300
Miscellaneous	10% of Sub-Total	41,930
<b>Total Cost (Ksh.)</b>		<b>461,230</b>

**Appendix VI: Work plan**

	<b>Activity</b>	<b>Jan – April, 2019</b>				<b>May– Aug, 2019</b>				<b>Sept – Dec, 2019</b>			
1	Proposal development	■	■										
2	Data collection		■	■	■	■	■						
3	Data analysis			■	■	■	■						
4	Chapter four and five				■	■	■	■	■	■	■	■	■
5	Project presentation				■	■	■	■	■	■	■	■	■

**Appendix VII: Krecjie and Morgan Table**

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note. —*N* is population size. *S* is sample size.

## Appendix VIII: Map of Study Area

