

**UNIVERSITY OF CAPE COAST**

**EFFECT OF INTERNAL CONTROL ON REVENUE COLLECTION  
IN KINTAMPO MUNICIPAL ASSEMBLY**

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BY

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## DECLARATION

### Candidate's Declaration

I hereby declare that, except for the references this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:..... Date:.....

Name: Alhassan Mohammed

### Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature..... Date.....

Name: Professor Daniel Agyapong

## ABSTRACT

Revenue Generation has received significant public and regulators attention in the Metropolitan, Municipal and District Assemblies in Ghana and the internal control has been identified as the most effective control mechanism that provides support in the revenue collection, eliminating income and resource loss, identifying and preventing fraud. This study was set to achieve three objectives namely; to assess the effect of controls activities on revenue collection, to examine the influence of control environment on revenue collection and to analyse how information and communication affect revenue collection in Kintampo Municipal Assembly. To achieve these objectives the researcher employed quantitative approaches. Questionnaires were used on a population of 63 respondents in gathering primary data for the study. The data collected was analysed by the use of SPSS version 20. The statistical data analysis tools used were; descriptive statistic, inferential statistic and test statistics. The findings revealed that internal controls had a significant influence on revenue collection in Kintampo Municipal Assembly. 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 Kintampo Municipal Assembly. The study recommends that major functional areas that are directly or indirectly related to revenue mobilization in the Assembly should be covered with explicit policies that are known by employees who will be affected by them. Management as a matter of policy should redesign internal control system that aimed at ensuring efficiency and effectiveness of operations, reliability of financial reporting and compliance with applicable laws and regulations.

## KEY WORDS

Kintampo Municipal Assembly

Revenue Collection

Internal Controls

Control Activities

Control Environment

Information and Communication

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## DEDICATION

To my wife, Fati Alhassan and children; Rayihana Mohammed, Saeed Mohammed, Alhassan Mohammed and Mariam Mohammed.

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## LIST OF ACRONYMS

BAR: Brong Ahafo Region

COSO: Committee of Sponsoring Organizations

DAs: District Assemblies

IGF: Internally Generated Fund

KiMA: Kintampo Municipal Assembly

LI: Legislative Instrument

MMDAs: Metropolitan, Municipal and District Assemblies

MLGRD: Ministry of Local Government and Rural Development

PFM: Public Financial Management

SPSS: Statistical Package for Social Science

## CHAPTER ONE

### INTRODUCTION

#### Background to the Study

It is an established fact that Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana are inundated with accounting and administrative control problems and these have direct bearing on revenue generation. District Assemblies (DAs) are responsible for the overall development of the districts (Local Government Act 936, 2016). In order to perform this function effectively, Kintampo Municipal Assembly (KiMA) would have to mobilise adequate revenue through the levying of rates, fees, licences and charges to finance re-current and capital expenditure.

For effective mobilization of revenue, there is the need to put in place a robust Internal Control System as cash is the most liquid asset that is vulnerable to loss if not properly controlled (Fight, 2002). The 2013 Auditor General's Report to the Parliament of the Republic of Ghana emphasised on the recurrence of weak internal controls in the MMDAs resulting to the loss of revenue totalling GH¢9.8million. With all the studies on the internal control in revenue collection and the recommendations in the Auditor General's Reports of the Republic of Ghana year-in-year out, the problem still persist (Auditor General's Department, 2013).

The Kintampo Municipal Assembly failed to achieve its revenue targets for five successive years. In 2012, the total Internally Generated Fund (IGF) budget was GH¢634, 250.00 but KiMA was able to collect GH¢309, 645.80. This represents 48.82% of the total IGF budget. The total IGF budget for 2013 was GH¢640,450.00 and the actual was

GH¢ GH¢375, 042.20 representing 58.55% of the total IGF budget. In 2014, the total IGF budget was GH¢998, 370.00 but was able to collect GH¢731, 799.90, representing 73.30%. In 2015 out of GH¢96, 270.80 budgeted, GH¢664, 490.50 was collected. This represents 83.45%. In 2016 out of GH¢916, 458.80 budgeted, GH¢668, 687.00 was collected, representing 72.96 %. (KiMA Annual Financial Statements, 2012-2016).

Mawanda (2008) defined Internal Controls as processes designed and effected by those charged with governance, management, and other personnel to provide reasonable assurance about the achievement of an entity's objectives with regard to reliability of the financial reporting, effectiveness and efficiency of operations and compliance with applicable laws and regulations. This means that they are measures instituted by an institution or an organization to ensure attainment of the entity's objectives, goals and missions. These measures instituted are a set of policies and procedures adopted by the entity in ensuring that the organization's transactions are processed in the appropriate manner to avoid waste, theft and misuse of organization' resources. The Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework look at internal control as a process, affected by an entity's board of directors, management and other personnel, designed to provide "reasonable assurance" regarding the achievement of objectives in the following categories: Effectiveness and efficiency of operations, reliability of financial reporting, compliance with applicable laws and regulations (COSO, 1992).

Reid and Ashelby (2002) argued that the definition of internal control should be divided into financial internal control and non-financial

(administrative) internal control. Financial internal control pertains to financial activities and may be exemplified by controls over an institution's cash receipts and payments, financing operations and an institution's management of receipts and payments. Non-financial internal control on the other hand deals with activities that are indirectly financial in nature i.e. controls over an institution's personnel section and its operations, fixed assets controls and even controls over laid down procedures (Reid & Ashelby, 2002). The COSO framework (1992) identifies five main elements of internal control systems against which the review should take place. These include control environment, risk assessment, control activities, information and communication and monitoring. There is a general expectation that institution and enforcement of proper internal control systems will always lead to improved financial performance.

The COSO framework also found out that properly instituted systems of internal control improve the reporting process and also give rise to reliable reports which enhances the accountability function of management of an entity. Internal controls are put in place to ensure safe custody of all institutional assets; to avoid misuse or misappropriation of assets and to detect and safeguard company's resources against probable frauds. A sound internal control helps an organization to prevent frauds, errors and minimize wastage. Custody of assets is strengthened; it provides assurance to the management on the dependability of accounting data eliminates unnecessary suspicion and helps in maintenance of adequate and reliable accounting records (Njeri, 2014). Financial Performance and Value for Money are used to assess whether or not a firm has obtained the maximum benefit from the goods and

services it acquires or provide, within the resources available to it (McNally, 2013).

Further, Kaplan (2008) argued that Internal control only provides reasonable assurance to the firm's leaders regarding achievement of operational, financial reporting and compliance objectives; promoting orderly, economical, efficient and effective operations; safeguarding resources against loss due to waste, abuse, mismanagement, errors and fraud. Internal controls lead to the promotion of adherence to laws, regulations, contracts and management directives and the development and maintenance of reliable financial and management data, and accurately present that data in timely reports (Kaplan, 2008). It is worth noting that internal controls only provide reasonable and not absolute assurance to an organization's management and board of directors that the organization's objectives will be achieved (Bongami, 2013).

The globalization of economy, technological advancements, complexity of business, businesses failures and allegations of fraudulent financial reporting have recently sharpened the ever-increasing attention to internal controls (Karagiorgos, Gotzamanis and Tampakoudis, 2009). Adeyemi, Babalola and Adesoji (2011) argued that an organization without internal control is just an organization designed not shortly to achieve objectives, under no circumstances have a prospect to detect fraudulent activities, and demonstrate poor revenue as confirmed. Papastathis (2003) revealed that poor revenue performance of an institution is the outcome of low level of service quality, absence of systems to create a long term relationship with the tax payer, increase of misuse of revenue or errors in operation, and

increase of financial abuses. In other to affirm this, Feng, Li, and McVay, (2009) revealed that institutions with ineffective internal controls system have larger tendency of experiencing management errors in their operation than those firms that report effective internal controls system. Moreover, effective internal controls provide an independent appraisal of the quality of managerial performance in carrying out assigned responsibilities for better revenue generation, reduce chance of loss of revenue, and it also help in meeting its revenue target level (Beeler, Hunton & Wier, 1999).

### **Statement of the Problem**

Within the context of above background, the presence of internal control system and its use is very vital to MMDAs in Ghana which are statutorily mandated to collect revenue in a bid to execute their development programmes. There is no doubt that every Assembly must have a strong and resilient internal control system in place, as the core functions of the District Assemblies (DAs) is to formulate and execute plans, programmes and strategies for the effective mobilization of resources necessary for the overall development of the Assemblies (MLGRD,1996) .

Kintampo Municipal Assembly continue to miss its revenue targets year-in-year-out for five consecutive years and this resulted in low levels of revenue generation most of which are artificial and therefore avoidable. Notwithstanding the numerous rules and regulations, low levels in revenue generation occur all these years in KiMA. No matter how well it is designed and operated, an internal control system can only provide a reasonable, not absolute assurance that the objectives of the establishments are achieved in terms of revenue collection.

This heightened interest in internal controls is, in part, a result of the desire to raise enough revenue to meet administrative and development expenditure. A fascinating question about the problems is whether there are effective internal control systems in place since such systems help in reducing if not preventing or enable early detection of the problems that led to the losses in revenue (Rezaee, 2002). In the 2013 Auditor General's Report on the Accounts of District Assemblies submitted to the Parliament of the Republic of Ghana, mention was made about the recurrence of weak internal control as the main causes of irregularities in the financial administration of the Assemblies. The report cited irregularities such as uncollected revenue among others resulting into loss of revenue totalling GH¢9.80million.

Various systems had evolved over the years and sub-district structures which are the vehicle for revenue mobilization have undergone transformation including outsourcing of revenue collection and general revenue administration issues to raise revenue. Internal controls also have been put in place to ensure safe custody of all cash and value books, and to discourage collusion, fraud, embezzlement and loss of cash, deliberate mistakes and corruption. Despite all these, KiMA still struggles with liquidity problems and a number of decisions made have not yielded the expected results. Hence, this study therefore aimed at assessing the effect of the internal controls on revenue collection in KiMA.

The fundamental problem of KiMA is the fiscal gap that subsists between the local financial resource mobilisation and servicing of re-current and capital expenditure. This gap has partially been triggered by low revenue mobilisation as a result of weak internal control systems as well as rising

demand for highway security, social and economic infrastructure and urban services such as construction of classroom blocks, markets, drilling and mechanization of boreholes, provision of sewer services, garbage collection and disposal to mention but a few.

In the 2013 Auditor General's Report on the Accounts of District Assemblies, Sixty-five (65) out of One Hundred and Eighty-Six (186) Assemblies whose 2013 Annual Financial Statements were validated ended the year with reductions in their Internally Generated Fund (IGF) collections by GH¢19,557,770.83. However, KiMA was among the 30 Assemblies who could not meet the deadline for submission of 2013 Annual Financial Statements for validation by the Auditor General's Department. Nonetheless, KiMA's actual IGF declined from GH¢399,310.97 in 2011 to GH¢309,645.80 in 2012 (Auditor General's Department, 2013). The report asserted that a major setback in the estimation, collection and accounting for IGF continued to be lack of interest on the part of some managements in exercising effective control over the issue and accounting for value books and other related activities.

For the 2013 financial year, total IGF collected by the 186 Assemblies amounted to GH¢108,669,147.44. For the past five years KiMA had not met its IGF targets. It is these reports among others that whipped up the interest of the researcher to assess the effect of internal control system on revenue collection in KiMA. Therefore this paper sought to investigate the influence of control activities, control environment and information and communication (internal control) on revenue collection in KiMA.

### **Purpose of the Study**

The main aim of this study was to assess the effect of Internal Control System on Revenue collection in the Kintampo Municipal Assembly.

### **Specific Objectives**

Specifically, the study sought to:

- i. Assess the effect of control activities on revenue collection in the Kintampo Municipal Assembly.
- ii. Examine the influence of the control environment on revenue collection in the Kintampo Municipal Assembly.
- iii. Analyse how information and communication affect revenue collection in the Kintampo Municipal Assembly.

### **Research Questions**

- i. What is the effect of control activities on revenue collection Kintampo in the Municipal Assembly?
- ii. To what extent does control environment influence revenue collection in the Kintampo Municipal Assembly?
- iii. How do information and communication affect revenue collection in the Kintampo Municipal Assembly?

### **Delimitation**

There are 216 MMDAs in Ghana, but the focus of the study is Kintampo Municipal Assembly. The study seeks to investigate the effect of internal control system on revenue collection in the Kintampo Municipal Assembly. The study focuses on elements such as; control activities, control environment and information and communication adopted and implemented by the Assembly in order to get outputs which would help in achieving their

objectives. The Assembly was chosen on the basis of its importance to national development and poverty reduction.

### **Limitations of the Study**

A study of this magnitude, always have limitations. Some of the respondents may not be willing to reveal true information needed for the study for fear of losing their positions or Jobs. This would be solved through explanation of the likely benefits of the study to the respondents and the municipality as a whole. The major limitation to this work is that it relies solely on the internal control systems on revenue collection in Kintampo Municipal Assembly. Since all the MMDAs draw their policies and procedures from the central government through the Ministry of Local Government and Rural Development (MLGRD), the external validity may be reduced if not eliminated.

### **Significance of the Study**

There is no doubt that MMDAs raise revenue, chiefly through fees, fines, licenses, rent and rent in order to finance their administrative and procurement expenditure. The result of the study will help identify gaps in the internal control in the Kintampo Municipal Assembly. Hence it is the fervent believe of the researcher that the study will benefit management of MMDAs, researchers and scholars and the general public/ratepayers on the importance of internal controls on revenue collection.

The study would provide various means through which management and people entrusted with revenue collection in KiMA on how to streamline the internal controls for the improvement of revenue collection. Strengthen its internal control activities and also develop a more pragmatic mechanism of

improving revenue collection. The study would further provide policy makers with alternative ways of strengthening control activities of the internal control system.

To researchers and scholars, the study will provide relevant information on internal control activities in relation to revenue collection and also adding to available literature in the area of internal controls in MMDAs in Ghana. From this study, those institutions which are seeking better ways of collecting and managing the revenue collected have the opportunity to acquire such knowledge. Also, general public and donors will be able to appreciate the role of internal controls in properly accounting for the revenue collected by MMDAs. Finally, the study would serve as reference document for Metropolitan, Municipal and District Assemblies in Ghana.

### **Organization of the Study**

This work is organised into five chapters. Chapter one presents the introduction, background to the study, statement of the problem, research objectives, research questions, and purpose of the study, scope of the study, limitations of the study and the organisation of the study. Chapter two presents a review of the applicable literature on the subject matter. Chapter three covers research method which invariably includes; introduction, study area, research design, population of the study, unit of inquiry, sample size and sampling procedures, variable and their measurement, data collection methods, data analysis methods, and validity and reliability measurement. Chapter four presents results, discussions and research findings arising from the study. Chapter five covers summary, conclusions and recommendations of the study.

## CHAPTER TWO

### LITERATURE REVIEW

#### **Introduction**

This chapter contextualised the subject of the study in respect of past research works and what other authors have written about internal controls and revenue collection. It reviewed the relationship between internal control system and revenue collection. The review also assessed the internal controls systems instituted by organizations, some theories (control theory, attribution theory, agency theory, and reliability theory) on the internal control systems, and the methods used by researchers in dealing with internal control systems.

#### **Theoretical Review**

##### **Control Theory**

Control theory is an interdisciplinary branch of engineering and mathematics that deals with the behaviour of systems with inputs or components. The external input of a system is called the reference. When one or more output variables of a system need to follow a certain reference over time, a manager manipulates the inputs to a system to obtain the desired effect on the output of the system. According to Mwachiro (2011), the objective of a control theory is to proffer solutions for corrective action from the manager that result in system stability, that is, the system will hold the set point and not waver around it. Setting objectives, budgets, plans and other expectations establish criteria for control. Control itself exists to keep performance or a state of affairs within what is expected, allowed or accepted. Control built within a process is internal in nature (Internal Control System). It takes place

with a combination of interrelated components such as control environment effecting behaviour of employees, information and communication necessary in control, and control activities (policies and procedures). Internal control structure is a plan determining how internal control consists of these elements.

### **Attribution Theory**

Attribution theory explains how people construe events and behaviours as and when they occur. The theory is about forming impression and attributing responsibilities based on ones feelings in terms of success or failure of an assignment. For example success on a test could be attributed to luck or hard work and failure could be attributed to fluke or laziness. Nungu (2013) discusses applications of attribution theory to internal controls. He contends that attribution theory advocates for auditors to report on the effectiveness of firm's internal control. Hence, auditors are expected to gain a better understanding of the internal controls put in place by management, assess the design and implementation and effectiveness of the internal controls, and test the operating effectiveness, reliability of reporting and compliance with the applicable laws, regulation and procedures . This is deemed necessary for the auditor's reliance and possibly scaling back of other substantive audit procedures for the required revenue generation.

It is opined that, when evaluators believe comparable persons acted in different ways in a given circumstance, they (evaluators) tend to ascribe responsibility for an outcome to the persons. Conversely, when evaluators believe comparable persons acted in similar fashion, the evaluators tend to attribute responsibility for the outcome to the situation (Reffet, 2007). Wilks

and Zimbelman (2004) refer the first case as internal or dispositional attributions and the second case external or situational attributions

This is to say that, when two or more persons acted similarly in a given situation, the causes of action are ascribed to the situation. However, when two or more persons acted differently in a given situation, the causes of action are attributed to the persons. Therefore, attribution theory seeks to explain reasons we give for our own and others behaviour in a given circumstance. To Schroth and Shah (2000) they believe that people are prone to ascribe others behaviour to internal attribution and to attribute their own behaviour to situational tendencies. This occurs, when the behaviour is negative. The general expectation is that, evaluators tend to assume the failure to detect deficiency in internal controls on revenue collection as a dispositional condition on the part of auditors and the conclusion is that auditors are negligent.

Bonner, Palmrose and Young (1998) established that auditors are more likely to be sued when they fail to detect common breach of financial discipline such as misappropriations, frauds, misallocation of fund among others that would result to decrease in revenues, and the evaluators believe that the fraud could have been detected by auditors. Reffetts (2007) predicted that auditors are more likely to be held accountable for negligent by evaluators when they fail to detect fraud after they had detected the fraud occurrence as a fraud risk. The result of Reffetts study shows an increase in auditors liabilities when an audit task fails, after the auditors had identified the perpetrated fraud as a fraud risk and performed procedures to investigate the identified fraud risk.

According to Bonner et al. (1998), evaluators can use the audit processes as a basis to determine auditors' negligence failure to detect the material error in internal control system and related breach of financial discipline that may occur. The attribution theory postulates that when fraud occurs, identified parties should be held accountable and auditors, being at the vanguard are most likely to be held accountable if it is established that substandard audit services were provided.

### **The Agency Theory**

Agency is a voluntary relationship between two or more parties in which one party is authorised by expressed or implied consent to act for and on behalf of the other, called the principal. The agent can thus affect or conduct the legal affairs of the principal with others as in the case of an agreement called "power of attorney". This theory is applicable to this study simply because internal control is one of numerous mechanisms used in both public and private organizations and businesses to address the agency problem by reducing agency costs that affects the overall performance of the relationship as well as the benefits of the principal Payne (2003). Ndungu (2013) opines that Internal Control enhances the provision of additional information to the principal about the behaviour of the agent, reduces information gap and reduces investor risk and low revenue.

According to Jensen and Meckling (1976), the agency theory postulates that a firm is a nexus of contracts between the owners of the economic resources also called principal and managers also called the agents who use and control the resource, the theory further suggests that agents have more information than principals and that this information asymmetry affects

the ability of the principal to monitor whether or not their interests are being properly served by the agents. The theory further describes firms as essential structure for contract maintenance; it is also possible to exercise control which curtails unscrupulous behaviour of agents. The theory posits that in order to harmonise the interests of agents and the principal, a contract is written to address the information gap that exist between the agent and the principal.

According to Jussi and Petri (2004), to cement the agent-principal relationship, the principal engages the services of an expert and system (auditor and control systems) to monitor the agent. The theory posits that inadequate information about the relationship, interests or work performance of the agent described could be adverse and a moral hazard. Moral hazard and adverse selection influence the output of the agent in two folds, lack of knowledge about what should be done and failure to do exactly what the agent is appointed to do. Jensen and Meckling (1976) submit that the agency theory works on the assumption that principals and agents act reasonably and depend on contract to maximise their wealth.

### **Reliability Theory**

According to Gavrilov and Gavrilova (2001), Reliability Theory simply describes the probability of a system completing its expected function within a given period of time. It was originally a tool used to help nineteenth century maritime insurance and life insurance companies to compute profitability rates in order to charge their customers. The Reliability theory postulates that, an internal control system comprises of components that are interrelated and each component has a defined measure of success. Therefore, the state of a component is determined by whether the

component is successful or not successful. The reliability of a component is being determined by its success. In addition, the reliability of the entire internal control system is a combination of two possible outcomes; success and failure. This study deciphers the part of the reliability theory which relates to internal control system in respect of control environment, control activities and information and communications.

According to Kinney (2000), the controllability of reliability theory to the evaluation and design of internal control systems have appeared in the professional literature but no applications have been reported that draw upon the substantial power of the theory of reliability. The two potential users of the reliability theory are the auditors and management. Kinney (2000) contends that in external audit procedure, evidence is gathered to support a professional opinion. Therefore primary purpose of internal control systems is to prevent assets loss and that failure to detect or prevent material error on a timely basis by the system may lead to losses. Weak internal control systems bring greater cost to an organization.

Gavrilov and Gavrilova (2001) upheld that the determination of the "weakness" of any internal control system is principally judgmental. Upon the formulation of the process and system reliability estimates, comparison with data from the organization's past performances or other firms may provide a more solid basis for judgment of the impact of an internal control system on the firm's income risk and hence provide for more rational allocation of the auditor's time and effort.

Messier Jr. and Austen (2000) on their part state that one of the primary advantages of the reliability theory is its close association to the

auditor's needs regarding understanding the internal control system and control risk assessment. According to Stratton (2007), recent developments have increased the value to management of objective methods for the evaluation of internal control systems. Firm managers are therefore required to assure the accuracy of these systems. Stratton (2007) adds that the process of evaluation of the internal control system by both management and external auditors is judgmental in nature. However, the few attempts at modelling internal control systems have not been implemented by firms due to lack of realism, difficulty of modelling behavioural systems, lack of cost effectiveness, and lack of understanding by practitioners.

### **Empirical Review**

Baltaci and Yilmaz (2006) in their study, “keeping an eye on sub national governments: internal control and audit at local levels” opined that Local governments in many developing countries need to highlight the necessity of transparent financial systems with effective internal control and audit structures. They concluded that internal control and audit are key components of public financial management systems (PFMS) for increasing efficiency and effectiveness in local government operations.

Ofozie (2010) assessed the impact of internal control system on revenue generation control at local government level using data analysis on descriptive and inferential statistical methods. The descriptive analysis involves the use of simple percentage, tabulation and chi-square inferential statistical method. The main finding of the study was that, internal control system plays a major role in prudently managing the resources and funds entrusted to public sector managers.

With Ochoge (2011) the study sought to establish a relationship between internal control and organizational performance of Limited Industries. The researcher used percentage, tabulation and counts techniques for the descriptive analysis method while inferential statistical method uses chi-square. It was revealed that there is a significant positive relationship between internal control system and management of public funds; hence an ineffective control system promotes fraud in organizations’.

Ewa and Udoayang (2012) examined the impact of internal control design on banks’ ability to investigate staff fraud and staff life style and fraud detection in Nigeria. The Data were collected from 13 Nigerian banks. They used a Four Point Likert Scale questionnaire and the analyses were done using percentages and ratios. The study established that Internal control design influences staff attitude towards fraud such that a strong internal control mechanism dissuade staff fraud, while a weak internal controls creates opportunity for staff to commit fraud. It was further established that, most Nigerian banks fail to pay serious attention to their staff life and that most staff members believe that effective and efficient internal control design could detect employee fraud schemes in the banking sector. The study established that effective and efficient internal control system is essential in curtailing the ills in the banking sector. The study therefore recommended that banks in Nigeria should upgrade their internal control designs and pay serious attention to their staff member’s life style since this could be a warning to identifying frauds.

According to Mwachiro (2013), internal controls played an important role in revenue collection. Mwachiro used both qualitative and quantitative

approaches. Questionnaires were used on a population sample of 38 respondents in gathering primary data for the study. The findings revealed that the control environment, control activities, information and communication, risk assessment and monitoring of control must be available for internal control system to work. The study further established that weak internal control system encourages embezzlement of collected revenue, collusion to fraud and loss of revenue. The conclusion drawn from the study was that there is a significant effect between internal control system and revenue collection in Kenyan Revenue Authority. He further opined that internal auditors should provide recommendations for improvement in those areas where strength or weakness in internal control system are identified.

Probably motivated by the findings of Ewa and Udoayang (2012), Ndungu (2013) in his study on effects of internal controls on revenue generation a case of University of Nairobi, Kenya concluded that internal controls played a key role in ensuring effective revenue collection. He indicated that management identified individuals who are responsible for coordinating the various activities within the entity.

Gyebi and Quain (2013), “Internal Control on Cash Collection, A Case of the Electricity Company of Ghana Ltd, Accra East Region” using inferential statistics concluded that there is direct correlation between Internal Control procedures and cash handling. Hence Internal Control can provide reasonable assurance that significant thefts of cash receipts and significant record-keeping errors will be prevented or detected.

Similarly, Vuai (2014) who researched on internal control activities on the revenues collection in Zanziba Zonal Council, Kenya used inferential

statistical method by using Statistical Package for Social Sciences (SPSS) computer software to analyse the relationship between the variables ( internal control as independent variable and revenue collections dependent variable) under study. The conclusion was that the formulation and implementation of adequate internal control system in the state revenue administration is a key element of the realisation of the set objectives and attainment of efficient and effective revenues collection.

More recently, Aduam (2013) “Assessing the effectiveness of Internal Controls Mechanism of the Techiman Municipal Assembly” using descriptive and inferential statistics in data analysis concluded that internal Control System is not effective at Techiman Municipal Assembly and that working conditions and wage related controls, promotions and transfers are some factors that influence management choice of Internal Controls.

In addition to this, in 2016, Oladimeji (2016) researched on the Impact of Internal Control System on Revenue Generation in Public Establishment on a sample of One Hundred (100) personnel selected across different levels of the Ogun State Water Corporation in Nigeria. The study revealed that the internal control system has some impact on service delivery and revenue generation. The study also revealed that an opportunity for collusion, fraud, loss of revenue, embezzlement, assets conversion and corruption arises as a result of weak internal control system.

In addition, Sarens and De Beelde (2006) in their study revealed that studies on internal controls in Belgium explain the importance of the control environment in internal auditing practices. They established that certain control environment characteristics like tone-at-the-top, level of risk and

control awareness, extent to which responsibilities related to risk management and internal controls are clearly defined and communicated are significantly related to the role of the internal audit function and fraud detection within an organization.

According to Onger (2010) to ensure strong control over their activities, organizations need five interconnected components of Internal Control Structure namely; control environment, risk assessment, control activities, Information and communication, and monitoring components.

### **Control Environment**

Control environment provides organizational discipline and structure. According to Walker (1999) control activities occur at all levels and functional areas of an entity. The control environment is the groundwork of the five elements in the internal control framework. Its operability not only affect the enterprise overall activity, but the other four elements. Therefore, control environment directly affects the implementation of internal control framework and both private and public organizations should put in place a suitable control environment. Control environment provides organizational discipline and structure.

### **Control Activities**

According to Messier (1997) control activities are the policies and procedures that help ensure that necessary actions are taken to address the risks involved in the achievement of the entity's objectives. Management should establish control activities to effectively and efficiently accomplish the organization's objectives and mission. Walker (1999) provided the following as control activities that occur at all levels and functions of an entity.

- Top level reviews of actual performance,
- Reviews by management at the functional or activity level,
- Management of human capital,
- Controls over information processing,
- Physical control over vulnerable assets,
- Establishment and review of performance measures and indicators,
- Segregation of duties,
- Proper execution of transaction and events,
- Accurate and timely recording of transactions and events,
- Access restrictions to and accountability for resources and records,
- Appropriate documentation of transactions

### **Information and Communication**

Information is needed at all levels of organization to enable management in meeting the organization's objectives. The information is needed both from within and from outside. Information is used by inside parties as well as outside parties. Information should be communicated from top to bottom levels that need it in a form and within a time frame that helps them to carry out their responsibilities. Information must be communicated according to need-to-know basis. This is to avoid sharing of strategic and confidential information to competitors. Information about an organization's plans, control environment, risks, control activities, and performance must be communicated up, down, and across an organization. Reliable and relevant and realistic information from both internal and external sources must be identified, captured, processed, and communicated to the people who need it in a form and timeframe that are useful.

### **Risk assessment**

The next major component of internal control is risk assessment. Risks are weaknesses and threats that disturb the achievement of objectives. If not subdue, they consequently affect an organization's ability to achieve its mission. Therefore, risk assessment is the process of detecting, evaluating and determining how to subdue these weaknesses and threats. Risks could be internal also called weaknesses and external also called threats. Risks could hinder the achievement of established objectives at every level in an organization. Therefore, management should take necessary actions to prevent or mitigate the influence if these risks on an organization. But, sometimes management cannot avoid the risk from occurring. In these situations, management should determine whether to accept the risk, reduce it up to the tolerable levels, or avoid. Accordingly, management should ensure each risk is assessed and handled properly to achieve its objectives.

### **Monitoring**

Monitoring is used to evaluate the quality of enterprise internal control performance by tracking the internal control frame and operational status and take the necessary actions to ensure that internal control operate effectively. Monitoring can be divided into continuous monitoring and individual assessment. In continuous monitoring activities management at every level of an organization inspect, analyze and evaluate the effectiveness and efficiency of operating activities of their respective departments. It is a kind of self-discipline method. The higher the level is, the less individual evaluation need. An individual assessment is to evaluate the internal control system regularly and is usually done by the internal audit unit.

Flowing from above considerations on the components five of internal control system, the researcher settled on three of the components for the study. These component even though not mutually exclusive from the others, they occupied a prominent position in the internal control structure. Information is needed at all levels of organization to assist management in meeting the organization's objectives. Hence control activities occur at all levels and functional areas of an entity. Information about an organization's plans, control environment, control activities and performance must be communicated up, down, and across an organization. Control Environment may be viewed as the foundation for other components of internal control. It provides organizational discipline and structure.

### **Summary of Literature Review**

The general conclusion on the various studies cited on Internal Control System is that there is the need for both private and public sector organizations to embrace and establish a strong and resilient internal control system. It was also revealed that internal control system provides reasonable assurance but not absolute assurance that objectives of organizations are achieved. The studies also indicated that there is positive relationship between internal control system and the achievement of general objectives and more specifically revenue collection. Researchers also agreed that, the implementers of internal control system should appreciate and understand the workings of the system.

### **A Research gap**

Jing and Avery (2008) argued that, in spite of increasing the number of research relating to the internal control systems, there is still a gap in relation

to this topic. Aduam (2015) who assessed the effectiveness of internal controls mechanism of the Techiman Municipal Assembly provided a significant contribution towards the need for a strong internal control. However, the study was more of administrative controls than accounting controls.

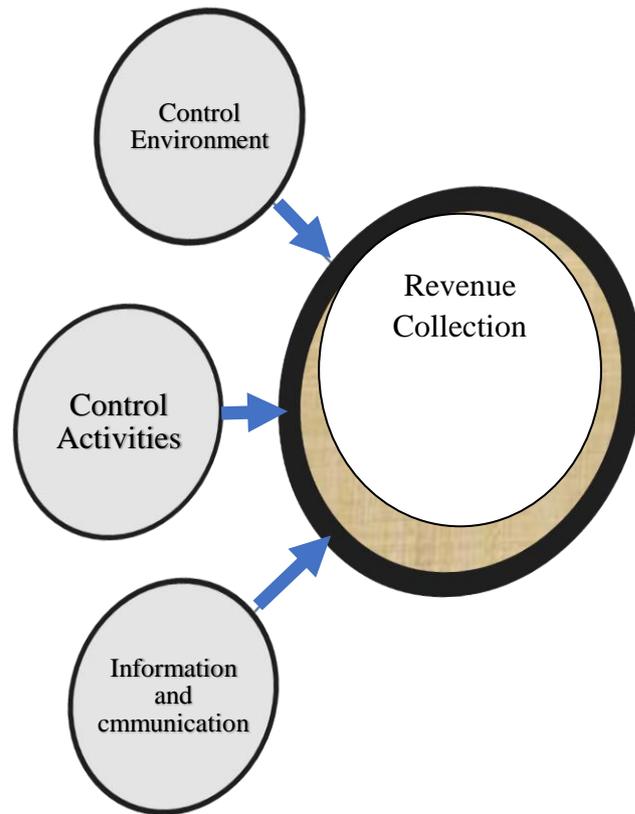
Again, Gyebi and Quain (2013) “Internal Control on Cash Collection, A Case of the Electricity Company of Ghana Ltd, Accra East Region also stressed the need for a robust internal control in cash collection, but unlike the MMDAs, Electricity Company of Ghana Ltd operates on commercial bases and also have different accounting environment.

Ndungu (2013) the effect of internal controls on revenue generation: A case study of the University of Nairobi Enterprise and Services Limited concluded that Internal Control contributes to revenue generation at the University of Nairobi Enterprise and Services Limited.

Templeman (2013) also provided evidence on the need for internal control in the public sector. Interestingly most of these were done on a different geographical environment. Hence, this study seeks to consider control activities, control environment and information and communication of the internal control systems in the context of District Assemblies in Ghana and specifically the Ki M A.

### **Conceptual Framework**

The conceptual framework of this study is focused on two main variables (Independent and dependent variables). The framework epitomises the conceived idea of how constructs in the study interrelate. The interrelationship of the model variables is conceptualized as shown in Figure 1 below:



**Figure 1. The conceptual Framework**

**Source: Researcher's Construct (2017)**

The above framework depicts the relationship between revenue collection as dependent variable and internal control system (control environment, control activities and information and communication as independent variables. In summation, the study seeks to establish the effect of internal control system (independent variable) on revenue collection (dependent variable)

## CHAPTER THREE

### RESEARCH METHODS

#### Introduction

This study sought to examine the effect of internal control on revenue collection in Kintampo Municipal Assembly. Hence this chapter presents the methods adopted by the researcher to achieve the objectives set for the study. It covers the following areas; introduction, research design, study area, population, sampling procedure, data collection instruments, data collection procedure and data processing and analysis.

#### Research Design

The study adopted descriptive style of research design, focusing on the Kintampo Municipal Assembly. In their submission, Gravetter and Forzono (2006) established that descriptive research typically involves measuring a variable or set of variables as they exist. To this end the researcher with a few constructed questions was able to obtain self-reported answers in respect of attitude, and other personal characteristics. Fraenkel and Wallen (1990) explained that, with the use of descriptive design it is convenient to use a population sample to make generalization of the study without compromising external validity threats.

#### Study Area

The study focuses on the Kintampo Municipal Assembly. The Kintampo North Municipal, one of the twenty seven (27) districts in the Brong Ahafo Region (BAR), was created by Legislative Instrument (LI) 1871 with Kintampo as its capital. It is located between latitudes 8°45'N and 7°45'N and Longitudes 1°20'W and 2°1'E and shares boundaries with five districts in the

Country:, namely; Central Gonja District to the North; Bole District to the West; East Gonja District to the North-East (all in the Northern Region); Kintampo South District to the South; and Pru District to the South- East (all in the Brong Ahafo Region). The Capital, Kintampo, is about 130km (80.78miles) away by road from the regional capital and lies east of the BAR Capital, Sunyani.

In terms of location and size, the Municipal is strategically located at the centre of Ghana and serves as a transit point between the northern and southern sectors of the country. The population of the district according to 2010 population and housing census stands at 95,480 with 47,302 males 48,178 females. There are four (4) zonal councils and one market complex namely; Kintampo Zonal Council, Babatokuma Zonal Council, Kadelso Zonal Council New Longoro Zonal Council and Kintampo Market Complex.

### **Population**

The target population of the study was the entire staff of the Kintampo Municipal Assembly who were directly or indirectly involved in the revenue administration and collection whose total number was seventy-five (75) as at December, 2016. The population was made up of people with different educational background ages, sex, and status in the organization.

### **Sampling Procedure**

The researcher used Krejcie and Morgan's sample size determination Table to determine the sample size of the study. To Krejcie and Morgan (1970) in a population of Seventy (75), the sample size of sixty-three (63) significantly represent the population. The sample size of the study was made up of 63 respondents. According to Saunders et al. (2007), to allow for a

margin of error of 5% out of a total population of 75 cases, the sample size of 63 was deemed appropriate. The Table 1 below indicating the sample size distribution based on the selection criteria in line with the nature of the study. The researcher selected the following category of respondents and made the distribution therefrom.

**Table 1: Sample Size Distribution**

<b>Sample size category</b>	<b>Frequency</b>	<b>Percentage</b>
Municipal Planning & Coordinating Unit	2	3.2
Finance Department	4	6.3
Budget Unit	2	3.2
Internal Audit Unit	2	3.2
Revenue Section	40	63.5
Environmental Health Unit	2	3.2
Human Resource Unit	2	3.2
Procurement Unit	2	3.2
F&A Subcommittee	4	6.3
Business Advisory Centre	1	1.5
Administration Class	2	3.2
<b>Total</b>	<b>63</b>	<b>100</b>

**Source: Field survey, Mohammed (2017).**

Purposive sampling technique was used by the researcher to select the respondents. The study consciously selected some staff of Kintampo Municipal Assembly, the sub-district structures and members of Finance and Administration Sub-Committee. This is used since it helped to reach targeted samples quickly and the opinions of the targeted population were easily

captured and ascertained. In addition, this sampling technique was used because not all respondents within the Assembly have the information related to this the objectives of this study. It is also less expensive and very quick in selecting a sample.

### **Data Collection Instruments**

Primary data collection method was used. Self-administered questionnaires were used to explore the effect of internal control on revenue collection. The study used questionnaire developed by Musya (2014). It has been revised to take into consideration the objectives of the study.

Questionnaires were constructed to collect data from Kintampo Municipal Assembly Revenue Staff, Internal Auditor, Finance Officer, and Management of sub-district structures, Finance and Administration Sub-Committee and Budget Officer. The questionnaires were constructed and administered using a scale from 1 least agreed to 5 strongly agreed to collect primary data from respondents who provided their own responses.

The questionnaire was made up of five (5) parts. The first part sought information about the personal background of the respondents. The second part was to collect information on the effect of control activities on revenue collection. The third part focused on the influence of the control environment on revenue collection. The fourth part concentrated on how information and communication affect revenue collection. The fifth (5) part was on revenue collection.

### **Validity and Reliability**

According to Harper (2002), for a questionnaire to produce useful results, it must have validity and reliability. If the questionnaire can actually

test what it is intended for, it refers to validity, whereas, reliability measures the relevance of the questions therein. To test the reliability and validity of the questionnaire, a pre-test was carried out. The questionnaire was administered to 12 respondents (representing 19.05%) of the sample size so as to establish whether the questionnaire measures what it expects to measure (Chandran, 2004).

Reliability of a scale gives an indication of how free it is from random error (Pallant, 2013) or the extent to which the scale produces consistent results if repeated measures are taken (Kent, 2007). Cronbach Alpha which measure internal consistency was used and it measures the degree to which all items on a scale measure an underlying construct (Pallant, 2013). The rule is that individual consistency reliability should be 0.7 or higher. The output as shown in Table I indicated that all categories meet the acceptable level of 0.7 or higher. The Cronbach alpha for the variables; Control Activities, Control Environment, Information and communication System and Revenue Collection ranged from 0.830 to 0.893, this implies a high level of internal consistency of all the scales used to measure the variables under study.

**Table 2: Reliability Test.**

Variable	Cronbach Alpha
Control Activities	0.830
Control Environment	0.910
Information and Communication System	0.883
Revenue Collection	0.893

**Source: Field Survey, Mohammed (2017)**

### **Data Collection Procedures**

The questionnaires were sent to the KiMA by the researcher who also made his intentions known to the head of the Assembly. The researcher, with the help of field assistant, visited the selected staff of the Kintampo Municipal Assembly to distribute the questionnaires to the respondents and allowed a period of seven days for collection. The researcher took advantage of the Assembly intention to evaluate its control mechanism relating to revenue collection. This facilitates the collection of data from the Assembly. The whole data collection took a period of three weeks. In this study questionnaire were administered to different people in managerial and operational positions and having the knowledge and experience in internal controls and revenue collection. The data collection instruments used in the study was questionnaire, using a scale of 1 least agree to 5strongly agree. This was to enable respondents to express their independent views.

### **Data Processing and Analysis**

The researcher reviewed the appropriate statistical data analysis tools namely; descriptive statistic, inferential statistic and test statistics before data analysis. Data collected was arranged, edited, coded, cleaned and entered in

computer using SPSS version 16.0 software program. Data was organised to confirm whether it representation to the target population in order to facilitate objective analysis. Also, the responses were screened for correctness and then assigned numerical values which represented various attributes being measured. Multiple linear regression model was used to ascertain the relationship between internal control and revenue collection in the Kintampo Municipal Assembly. The Model requires very little effort and sometimes even less thought to estimate very complicated models with large number of independent variables (Brant, 2007). The model for the study is based on a modified Ohlson (1995) earnings model of stock valuation. In line with this proposition, the model for the study is given as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots (1)$$

**Figure 2: Research Model**

Where  $Y$  is the revenue collection

$\beta_0$  is constant and  $X$  effects of internal control. Effects of internal control were measured using three data point namely; control environment, Control activities and information and communication

Where  $X_1$  is control environment. It was measured by the Accounting and Financial Management System, Management commitment to internal control, organizational structure and existence of mechanisms to correct error.

$X_2$  is information and communication. This was measured in terms of how information is identified, captured, and communicated in the appropriate form and within stipulated time frame.

$X_3$  is control activities that were measured by the number of effective policies, procedures, and mechanisms put in place to ensure directives of the management are properly well.

$\varepsilon$  is the error term for the model

### **Measurements of Variables**

In this section of the study, the measurement parameters of the variables were identified and that enabled the researcher to indicate the exact data needed for the research work. In this study, the variables for analysis were control activities, control environment and information and communication and revenue collection. Table 2 below illustrates the measurement of variables of the study.

**Table 3: Measurement of Variables of the Study**

Variables	Measurements
<p><b>Control Environment</b> <b>Independent variable</b></p>	<p>Accounting and Financial Management System, Management commitment to internal control, organizational structure and existence of Ofori (2011), Douglas (2011) mechanisms to correct error. , Millichamp (2002), Amudo&amp;Inanga (2009)</p>
<p><b>Control activities</b> <b>Independent variable</b></p>	<p>Performance review, information processing, physical control, segregation of duties, Ofori (2011), Douglas (2011), authorization procedures, independent checks, Millichamp (2002), Amudo &amp; adequate documentation, job rotation, Inanga (2009)</p>
<p><b>Information &amp; communication</b> <b>Independent variable</b></p>	<p>Information needs, information control, management communication, upstream communication, communication with outside Amudo &amp; Inanga (2009, parties, data base contents, introducing new Whittington&amp; Panky (2006), systems, Messier (1997)</p>

**Source: Gamage et al. (2014)**

## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### **Introduction**

This chapter covers results and discussions of the study findings. The study sought to evaluate the effect of internal controls on revenue collection in KiMA. The presentation of the results and discussions was based on the sequence of the study objectives and the questions in the questionnaire used to collect data. The study targeted 63 respondents from KiMA employees. Out of the 63 questionnaires administered by the researcher, 60 filled questionnaires were returned translating to 95.24% response rate. Any response of 50% and above is adequate for analysis (Babbie, 2002). Hence, response rate of 95.24% is excellent. According to Mugenda and Mugenda (2003), a response rate of 50% is adequate for analysis and reporting, 60% is good and a response rate of 70% and over is excellent.

#### **Socio demographics**

The socio demographic information of respondents was deemed necessary because the ability of the respondents to give satisfactory answer to the study questions and variables greatly depends on their background. From Table 4 below, males dominated in the study with 41 respondents which constitute 68.3% whiles 19 respondents were females which constitutes 31.7% of the respondents.

The Table also indicates that 37 of the respondents representing 61.7% were from revenue unit, followed by Zonal Councils with 5 respondents constituting 8.3%, 3 of the respondents each constituting 5% were from Finance and Administration Subcommittee and Finance Department, Whiles 2

each of the respondents constituting 3.3% was from Municipal Planning and Coordinating Unit, Environmental Health Unit, Procurement Unit and Budget Unit of KiMA respectively. Whereas 1 respondent each which constitutes 1.7% was from Human Resource Unit, Internal Audit Unit and Business Advisory Centre.

Regarding the level of education, majority of the respondents 25 (41%) were SHS Certificate Holders, while 9 of the respondent representing 16.7% were Middle School Leaving Certificate (MSLC) Holders. 4 each of the respondents had either Diploma or Higher National Diploma (HND) education and 10 of the respondents constituting 16.7% had Bachelor's Degree and 2 of the respondents representing 3.3% had Master's degree. It is clearly from the findings that most of the respondents have lower academic qualification in their unit, especially in revenue collection.

**Table 4: Social Demographics of Respondents**

<b>Variable</b>	<b>Description</b>	<b>Number</b>	<b>Frequency</b>	<b>Percent</b>
Gender	Male	60	41	68.3
	Female		19	31.7
Unit/Dept.	Finance Department	60	3	5.0
	Environmental Health Unit		2	3.3
	Human Resource Unit		1	1.7
	Mun. Planning& Coord. Unit		2	3.3
	Revenue Unit		37	61.7
	Budget Unit		2	3.3
	Business Advisory Centre		1	1.7
	Administration Class		1	1.7
	Zonal Councils		5	8.3
	F&A Subcommittee		3	5.0
	Procurement Unit		2	3.3
	Internal Audit Unit		1	1.7
	Education		MSLC	60
JHS		6	10	
SHS		25	41.7	
Diploma		4	6.7	
HND		4	6.7	
Bachelor's Degree		10	16.7	
Master's Degree		2	3.3	
Work Exp.	0-2years	60	1	8.3
	3-5years		19	25.0
	6-10years		22	36.7
	11-20years		13	21.7
	21years and above		5	8.3

**Source: Field Survey, Mohammed (2017)**

**Research Question 1: what is the effect of control activities on revenue collection in Kintampo Municipal Assembly?**

The main purpose of this research question is to ascertain whether or not control activities have any effect on revenue collection of KiMA. To achieve this regression analysis was performed to ascertain the statistical

significant of the effect of control activities on revenue collection. The result of this regression analysis is presented from Table 5 to Table 10

**Table 5: Descriptive Statistics**

	Mean	Std. Deviation	N
Revenue collection	13.2400	5.35295	60
PP	55.5600	22.10221	60
Supervision	3.4727	.38437	60
CM	1.9870	.37588	60
SI	22.345	1.3659	60
PR.	17.546	.98754	60
IRRC	33.987	2.0981	60
AoT.	25.876	.8762	60

**Source: Field Survey, Mohammed (2017)**

As illustrated in Table 5, the result showed that there is a positive correlation between revenue collection (RC) and control activities denoted by the existence of policies and procedures (PP), Supervision of junior staff, mechanisms to address weaknesses of controls (CM), restriction of sensitive information (SI), periodic rotation (PR), independent reconciliation of revenue collection (IRRC) and authorization and approval of transaction (AoT).

**Table: 6 Correlations**

		<b>RC</b>	<b>PP</b>	<b>Supervision</b>	<b>CM</b>	<b>SI</b>	<b>Periodic Rotation</b>	<b>IRRC</b>	<b>AoT</b>
RC	Pearson Correlation								
	Sig. (1-tailed)								
	N								
PP	Pearson Correlation	.597**							
	Sig. (1-tailed)	.000							
	N	60							
Supervision	Pearson Correlation	.470**	.396**						
	Sig. (1-tailed)	.000	.001						
	N	60	60						
CM	Pearson Correlation	.471**	.530**	.391**					
	Sig. (1-tailed)	.000	.000	.001					
	N	60	60	60					
SI	Pearson Correlation	.548**	.660**	.226*	.306**				
	Sig. (1-tailed)	.000	.000	.041	.009				
	N	60	60	60	60				
Periodic rotation	Pearson Correlation	.529**	.301**	.355**	.409**	.335**			

	Sig. (1-tailed)	.000	.010	.003	.001	.004		
	N	60	60	60	60	60		
IRRC	Pearson Correlation	.453**	.380**	.362**	.415**	.377**	.283*	
	Sig. (1-tailed)	.000	.001	.002	.000	.001	.014	
	N	60	60	60	60	60	60	
AoT	Pearson Correlation	.643**	.559**	.372**	.353**	.610**	.471**	.420**
	Sig. (1-tailed)	.000	.000	.002	.003	.000	.000	.000
	N	60	60	60	60	60	60	60

Source: Field Survey, Mohammed (2017)

From Table 6, it is clear that there is a relationship between the dependent variable (RC) and its explanatory variables.

Again, this relationship is positive and statistically significant (that is, all the P-values are less than 0.05). To determine whether or not these independent variables have any effects on the dependent variable, a regression analysis was carried out to ascertain the significance of the relationship between the dependent variable (RC) and its explanatory variables (PP, Supervision, CM, SI, PR, IRRC, AoT). The result of this regression analysis is shown from Table 7 through to Table 9.

**Table 7: Regression Model Summary (a)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.679 <sup>a</sup>	.845	.789	3.0505

a. Predictors: (Constant), PP, Supervision, CM, SI, PR, IRRC, AoT

b. Dependent Variable: Revenue collection

**Source: Field Survey, Mohammed (2017)**

With Control Activities as the independent variable (IV) and Revenue Collection as the dependent variable (DV), Table 7 gives the regression model summary of the output. This table displays R, R squared, adjusted R squared, and the standard error. R is the Pearson product moment correlation coefficient which indicates the strength and direction of the linear relationship between the dependent variable (revenue collection) and the independent variable (control activities). From Table 7, the R squared, the coefficient of determination, is the proportion of variation in the dependent variable explained by the regression model. Thus, about 84.5% of the variation in revenue collection is explained by control activities done. This indicates that the relationship between control activities employed and revenue collection is very high. Adjusted R<sup>2</sup> is reported when it substantially differs from R<sup>2</sup> (Green & Salkind, 2010). But since the difference (between the two is significant, the adjusted R<sup>2</sup> will be reported in this study. Thus, in a nutshell, as illustrated in Table 7, PP, Supervision, CM, SI, PR, IRRC, AoT collectively explained 84.5% (adjusted R squared=.789) of the variance in revenue collection. This suggests that the present regression model is a good predictor of revenue collection.

Table 8 is the ANOVA table which provides the test significance for R and R<sup>2</sup> using the F-statistic. The F statistic is the regression mean square (MSR) divided by the residual mean square (MSE). This F statistic tests the joint significance of all the independent variables in explaining the dependent variable. If the significance value of the F statistic is small (smaller than say 0.05) then the independent variables collectively do a good job in significantly explaining the variation in the dependent variable given that the level of significance for the model of 5%. In this analysis, the p-value is well below .05 ( $\rho < .000$ ). Therefore, it can be concluded that the R and R<sup>2</sup> between revenue collection and control activities is statistically significant, and control activities can significantly influence revenue collection.

**Table 8 :ANOVA (a)**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1 Regression	56.556	7	8.079	10.669	.000 <sup>a</sup>
Residual	39.378	52	.757		
Total	95.933	59			

a. Predictors: (Constant), PP, Supervision, CM, SI, PR, IRRC, AoT

b. Dependent Variable: Revenue collection

**Source: Field Survey, Mohammed (2017)**

**Table 9: Regression Model Coefficients**

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	5.722	.031		5.674	.000
PP	.216	.114	.196	2.404	.006
Supervision	.172	.012	.139	4.326	.000
CM	.080	.203	.064	3.556	.008
SI	.117	.019	.104	2.786	.007
PR.	.254	.013	.211	4.963	.000
IRRC	.107	.029	.095	5.006	.000
AoT.	.276	.116	.257	2.028	.004

a. Predictors: (Constant), PP, Supervision, CM, SI, PR, IRRC, AoT

b. Dependent Variable: Revenue collection

**Source: Field Survey, Mohammed (2017)**

The output of this multiple regression model from Table 9 using RC, PP, Supervision, CM, SI, PR, IRRC, AoT as predictors of RC produces the model as follows:  $RC = 5.722 + .216PP + .172Supervision + .080CM + .117SI + .254PR + .10IRRC + .276$ . In addition, Table 9 displayed the unstandardized (B) and standardized (Beta) regression coefficients, and the value of t statistic and its associated p-value for each variable that entered in the model. From Table 9, the respective T-values are bigger than 1.96 indicating the coefficients are significant. i.e. Policies and procedures exist to ensure critical decisions are made with appropriate approval (PP with B= .216): this value tells us that for every unit increase in Policies and procedures that exist to ensure critical decisions are made with appropriate approval, the Assembly’s revenue collection will increase by

0.216 implying that, these policies and procedures affect the Assembly's revenue collection positively. From the model, there is proper and close supervision of junior staff at KiMA (i.e., Supervision with  $B = .172$ ): this value informs us that for every unit increase in KiMA's proper and close supervision of junior staff, revenue collection will increase by 0.172 and the opposite is true. Still on control activities of KiMA, based on Table 9, it could be observed that, there are elaborate mechanisms put in place to address weaknesses of controls (i.e., CM with  $B = .080$ ): this figure also enlightens us that, for a point increase in KiMA's elaborate mechanisms put in place to address weaknesses its controls, revenue collection is likely to increase by .080 and the opposite case holds i.e. CM affect the Assembly's revenue collection positively.

Regarding the control activities (SI), it is obvious that for a point increase in the SI, the Assembly's revenue collection would increase by 0.117. This also implies that a positive relationship exist between SI and RC of the assembly. For the case of (periodic review), indeed the Table 9 proves that, for a unit improvement in periodic system review, KiMA's revenue collection base would increase by .254. This means there is a positive relationship between periodic review and RC. This relationship holds for, IRRC and APP with their respective values well observed under Table 9.

**Research Question 2: to what extent does control environment influence revenue collection in Kintampo Municipal Assembly?**

The main objective of this research question was to determine the extent to which control environment influences the revenue collection of the Assembly. To achieve this, a regression analysis was employed to examine the

influence of control environment on revenue collection within the Assembly. The regression model was evaluated by the coefficient of determination denoted by R-square ( $R^2$ ). This represents the proportion of variance in either variable which is linearly accounted for by the other (Cohen, 1992). From Table 10, the R-square ( $R^2$ ) coefficient obtained was 0.628 which denotes or represents that 62.8 % of the variance in revenue collection can be accounted for by control environment. The ‘ $R$ ’ (coefficient of correlation) is the measure of the quality of association between the dependent variable revenue collection and independent variable, control environment. The two variables, control environment (independent variable) and revenue collection (dependent variable) are correlated at 0.792 and this correlation is significant as seen in Table 10.

**Table 10: Model Summary (b)**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.792 <sup>a</sup>	.628	.569	.837

a. Predictors: (Constant), AFMS, CICSII, OS, System.

b. Dependent Variable: Revenue collection (RC)

**Source: Field Survey, Mohammed (2017)**

The model was significant at  $p < 0.05$  ( $F = 10.743$ ,  $p = 0.000$ ) as depicted in table 10. This makes the model significant since  $F$  is at a significant level of  $p \leq 0.05$ .

**Table 11: ANOVA(b)**

Model	Sum of Squares	df.	Mean Square	F	Sig.
1 Regression	60.206	8	7.526	10.743	.000 <sup>a</sup>
Residual	35.727	51	.701		
Total	95.933	59			

a. Predictors: (Constant), AFMS, CICS, OS, System,

b. Dependent Variable: Revenue collection (RC)

**Source: Field Survey, Mohammed (2017)**

The result of the study, as evidenced in the beta values in Table 11 showed that the study model was statistically significant. From the Table, control environment made a significant contribution to revenue collection at a significant level of  $\rho = 0.000$  ( $\beta = -0.229$ ,  $p < 0.05$ )

**Table 12: Regression Model Coefficients (b)**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	-2.103	.131		4.575	.000
AFMS	.843	.014	.301	3.611	.001
CICS	.762	.012	.231	5.242	.020
OS	.981	.003	.053	2.756	.000
SCAE.	.740	.021	.011	6.603	.000

a. Predictors: (Constant), AFMS, CICS, OS, SCAE.

b. Dependent Variable: Revenue collection (RC)

**Source: Field Survey, Mohammed (2017)**

In addition, Table 12 displayed the unstandardized (B) and standardized (Beta) regression coefficients, and the value of t statistic and its associated p-value for each variable that entered in the model. From Table 12, the respective t-values are bigger than 1.96 indicating the coefficients are significant. i.e. KiMA has good Accounting and Financial Management System in place (AFMS has  $B = .843$ ): this value tells us that for every unit increase in Accounting and Financial Management System that the Assembly put in place, revenue collection will increase by .843 implying that, these Accounting and Financial Management Systems affect the Assembly's revenue collection positively. From the model, it is clear that, KiMA Management are committed to the Internal Control System implementation (i.e., CICS has  $B = .762$ ): this value informs us that for every unit increase in KiMA's Management commitment to the Internal Control System implementation, revenue collection will increase by .762, otherwise it will decrease by the same margin. Still control environment of KiMA, based on Table 12, it could be observed that, there is a well elaborate organization structure in KiMA (OS has  $B = .981$ ): this value also indicates that, for a point improvement in KiMA's elaborate organization structure, revenue collection is likely to increase by .981 and the opposite case holds i.e. OS affects the Assembly's revenue collection positively.

Regarding the Systems that have been put in place to correct and avoid errors, it is obvious that for a point increase in the systems, the Assembly's revenue collection would increase by .740. This also implies that a positive relationship exists between the Assembly's systems and its revenue collection.

**Research Question 3: how do information and communication affect revenue collection in Kintampo Municipal Assembly?**

This research question sought to establish how information and communication of KiMA affect its revenue collection. Accordingly, a regression analysis was conducted under the null hypothesis that, information and communication do not affect revenue collection of the Assembly. The result of this regression is presented in Table 13 to Table 16.

Table 13 shows the model summary of the third objective which has five variables in it. Effective reporting of revenue targets to be achieved in a particular year (ERT), Established channels of communication for individuals to report suspected breaches of laws or regulation or other improprieties (ECC), Procedures put in place for complains by ratepayers (PC), Complains against staff handled in professional manner by management (HCM), Management receives timely, relevant, and reliable reports for decision-making (MRTRR) as the independents variables and revenue collection (RC) as the dependent variable. The relationship between the two variables are positive with the strength of the relationship being low at  $R = 0.743$ . The coefficient of determination ( $R^2$ ) which is 0.552 gives the view that 55.2% of the difference in revenue collection can be accounted for by information and communication system.

**Table 13: Model Summary(c)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.743 <sup>a</sup>	.552	.509	.900

a. Predictors: (Constant), AFMS, CICS, OS, System

b. Dependent Variable: Revenue collection (RC)

**Source: Field Survey, Mohammed (2017)**

From Table 14, the test of significance (F-test) for the model yielded  $F = 13.046$  degree of freedom ( $df = 5$ ), and  $p \geq 0.000$ . This means that at 0.05 level, the regression model was significant in establishing a relationship between revenue collection and information and communication system.

**Table 14: ANOVA(c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.854	5	10.571	13.046	.000 <sup>a</sup>
	Residual	42.943	53	.810		
	Total	95.797	58			

a. Predictors: (Constant), TICS

b. Dependent Variable: TRC

**Source: Field Survey, Mohammed (2017)**

The result of the study, as evidenced in the beta values in Table 15 showed that the study model was statistically significant. From the Table, information and communication system made a significant contribution to revenue collection at a significant level of  $p = 0.000$  ( $\beta = 0.714$ ,  $p \geq 0.5$ )

**Table 15: Regression Model Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.002	.601		4.502	.002
ERT	.376	.042	.201	3.101	.000
ECC	.892	.013	.642	2.701	.012
PC	.280	1.030	.013	4.661	.006
HCM	.721	.014	.551	3.430	.008
MRTRR	.654	.065	.013	4.661	.006

a. Predictors: (Constant), ERT, ECC, PC, HCM and MRTRR.

b. Dependent Variable: Revenue collection (RC)

**Source: Field Survey, Mohammed (2017)**

Table 15 displayed the unstandardized (B) and standardized (Beta) regression coefficients, and the value of t statistic and its associated p-value for each variable that entered in the model. From Table 15, the individual t-values are greater than 1.96 indicating the coefficients are significant. For instance, i.e. KiMA has effective reporting of revenue targets to be achieved in a particular year (ERT has B= .376): this value sends a signal that for every additional improvement in KiMA's effective reporting of revenue targets to be achieved in a particular year, revenue collection will increase by .376 and this is statistically significant at a p-value of 0.05. In addition, KiMA has established channels of communication for individuals to report suspected breaches of laws or regulation or other improprieties and that for every unit increase in KiMA's established channels of communication for individuals to

report suspected breaches of laws or regulation or other improprieties, revenue collection will increase by .892, otherwise it will decrease by the same margin. Still information and communication of KiMA, based on Table 18, it could be observed that, complains against staff handled in professional manner by management has a positive effect on KiMA's revenue collection and this is statistically significant at an alpha level of 0.05.

Table 16 displays the test for multicollinearity. As exposed in Table 16, the values under 'tolerance' in column 3 collectively are greater than 0.2. Once again, there is non-violation of the principle of multicollinearity as the values are not below 0.2 (Menard, 1995). Equally, under 'VIF' which is the variance Inflation Factor in column 3 of Table 16, again all the values are significantly less than 10. This is an indication that the test is free from multicollinearity (Bowerman & O'Connel, 1990)

**Table 16: test for multicollinearity**

Model		Collinearity Statistics	
		Tolerance	VIF
1	PP	.311	3.211
	Supervision	.557	1.795
	CM	.475	2.106
	SI	.280	3.575
	PR	.492	2.034
	IRRC	.535	1.868
	AoT	.352	2.843
	AFMS	.365	2.741
	CICSI	.440	2.274
	OS	.346	2.889
	System	.338	2.954
	ERT	.264	3.785
	ECC	.495	2.020
	PC	.420	2.378
	HCM	.315	3.176
	MRTRR	.425	2.354

a. Dependent Variable: RC

**Source: Field Survey, Mohammed (2017)**

### **Summary and Interpretation of Findings**

KiMA plays a number of roles in supporting the system of internal control by implementation of policies ensuring all documents are authentic, correct and confirm that the relevant officers have signed all documents

before processing to prevent misappropriation of revenues. Weaknesses identified within the system are addressed through relevant recommendations made.

Systems of internal control were functioning as per the intended plan thus enhancing efficiency and accurate data capturing. Internal controls are essential for a success and survival of any organization because it provides reasonable assurance on the achievement of objective in a number of categories including: effectiveness and efficiency of operations; reliability in financial reporting; and compliance with applicable laws and regulations (Chambers, 2009). Numerous audits are conducted in line with technological changes to ensure the systems sustainability. This enhances easy detection of few errors that have occurred. Frequent audits have helped in evaluating and improving the effectiveness of the systems. Checks and balances of the organizational form a basis for the authority functions to minimize the potential losses due to fraud, abuse and mismanagement (Sarens & De Beelde, 2006).

According to Aldridge and Colbert (1994), internal control requires that all pertinent information be identified, captured, and communicated in a form and time frame that enable people to carry out their financial reporting responsibilities. Management has identified individuals who are responsible for coordinating the various activities within the entity. The reporting system on the organizational structures spells out all the responsibilities of each section/unit in the organization. Information must be communicated throughout the entire organization to enable personnel to carry out their responsibilities with regard to objective achievement (Amudo and Inanga,

2009). All employees understand the concept and importance of internal controls, including the division of responsibility.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### Introduction

This chapter presents the summary of findings from the study. It further presents conclusion and recommendations for consideration and subsequent adoption by the Kintampo Municipal Assembly in particular and other public organisations in general.

#### Summary

Based on the results and discussion the main findings are as follows:

First and foremost, the study revealed that, control activities had significant effects on revenue collection at KiMA. Thus about 84.5% of variation in revenue collection was explained by control activities in KiMA. Control activities such as the use of policies and procedures, supervision, mechanisms for addressing weaknesses, restriction of sensitive information to critical staff, periodic system review, independent reconciliation of revenue collections regularly and authorization and approval of transactions have significant influence on revenue collection at KiMA.

Indeed, statistical significant positive relationship exists between control environment and the revenue collection in the Assembly. From the study, it was evident that control environment variables such as good accounting and financial management system, management commitment to internal control system implementation, organizational structure, policies for correcting and avoiding errors have a significant positive effect and this accounted for 62.8% variation in revenue collection in KiMA.

Another major finding was that, information and communication influenced revenue collection in KiMA. Effective reporting of revenue targets to be achieved in a particular year, channels of communication for individuals to report suspected breaches of laws or regulation or other improprieties, procedures put in place for complains by ratepayers, complains against staff handled in professional manner by management and timely, relevant, and reliable reports for decision-making contributes to 55.2% variation in revenue collections in KiMA.

### **Conclusion**

From the findings of this study, the following conclusions were made.

The present study, though limited in scope, clearly shows that, control activities play significant role on KiMA's revenue collection. The relationship between control activities and revenue collection is very high with a variance of 84.5% IGF that could be accounted for by the variable. The study further revealed that control activities were essential in revenue collection in ensuring that the gap between actual and budgeted revenue is reduced to the bearer's minimum. Indeed, regression analysis employed to determine the extent to which control environment influences revenue collection at KiMA established that 62.8 % variance of total IGF could be accounted for by the variable in KiMA. In fact, the strength of the relationship between information and communication and revenue collection was significant and could account for 55.2% of total IGF in KiMA.

### **Policy Recommendations**

Grounded on the preceding findings and the conclusions drawn, the following policy recommendations were made:

Firstly, it is recommended that management should ensure that control activities are enhanced so as to ensure attainment of objectives. Activities such as segregation of duties, rotation of jobs, authorization procedures and supervision of staff should be vigorously pursued. Management should be committed to operations of the system, establish policies and procedures for authorizations at an adequately high level, ensure the establishment of specific lines of authority and responsibility.

It is further recommended that code of conduct, human resource policies and performance reward systems should be enhanced.

Again, organizational structures with line of authority and responsibility should be well designed and strengthened.

Staff should be periodically trained on accounting and financial management procedures.

Additionally, the study recommended that to effectively attain revenue collection target, management should ensure that information and communication system are well managed in the Assembly so as to enable all parties within the Assembly freely access and utilize the official information on need-to-know basis.

The study recommends that major functional areas that directly or indirectly related to revenue mobilization in the Assembly should be covered with explicit policies that are known by employees who will be affected by them.

All-in-all, the study recommends that KiMA should redesign its internal control systems in respect of efficiency and effectiveness of

operations, reporting of financial and non-financial matters and compliance with the applicable laws and regulations.

### **Suggestions for further study**

It was revealed from the study that other factors other than internal controls affect revenue collection. This suggests that further research should be conducted on factors affecting revenue collection other than internal controls in public institutions such as MMDAs and other state institutions.

Firstly, it is suggested that further research should be conducted on the effect of public perception about Assemblies expenditure on revenue collection in the MMDAs.

The study further recommends that research should be done on the challenges to effective performance of internal control systems in the public sector in Ghana since public sector is inundated with myriad of internal control related challenges as evidenced in the Auditor General's reports year in-year- out.

Again, an area of research is the relationship between infrastructure development and Revenue performance in the MMDAs.

Last but not the least; further study should be conducted to determine the influence of political will on revenue collections in the Metropolitan, Municipal and District Assemblies in Ghana.

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APPENDIX

UNIVERSITY OF CAPE COAST

SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING

QUESTIONNAIRE ON THE ASSESSMENT OF THE EFFECT OF  
INTERNAL CONTROL ON REVENUE COLLECTION IN  
KINTAMPO MUNICIPAL ASSEMBLY

**Introduction:**

I am Alhassan Mohammed an MBA Accounting student of the University of Cape Coast, conducting a research on the topic “Assessment of the effect of Internal Control on Revenue Collection in the Kintampo Municipal Assembly”. It is strictly for academic purpose and information given will be kept confidential. The information provided will help analyse the work successfully.

Please read through the following questions and answer them accordingly. Your response will be needed and your anonymity will be ensured.

Please tick your answer where applicable

**PART 1: Personal Information**

1. Gender of respondent.

Male

Female

2. Job Title:

.....

3. Level of education

MSLC

Junior High School

Senior High School

Diploma

Higher National Diploma

Bachelor's Degree

Master's Degree

4. Years of working experience in revenue mobilization
- |                 |     |
|-----------------|-----|
| 0-2yrs          | [ ] |
| 3-5yrs          | [ ] |
| 6-10yrs         | [ ] |
| 11-20yrs        | [ ] |
| 21yrs and above | [ ] |

**PART 2**

Please rank the following statement on a scale of 1 least agree to 5 strongly agree by ticking [√] the appropriate box

**CONTROL ACTIVITIES**

		Assessment of effect of internal controls on revenue collection					Comments
		Least - Strong					
		1	2	3	4	5	
5.	Policies and procedures exist to ensure critical decisions are made with appropriate approval						
6.	There is proper and close supervision of junior staff at KiMA						
7.	There are elaborate mechanisms put in place to address weaknesses of controls						
8.	Sensitive information is restricted to certain employees only						
9.	There is a system in place to ensure that employees are rotated periodically.						
10.	Independent reconciliations of revenue collection on regular basis is done						
11.	Policies and procedures are adequate for authorizing and approving transactions						

**CONTROL ENVIRONMENT**

		A Assessment of effect of internal controls on revenue collection					Comments
		Least-Strong					
		1	2	3	4	5	
12.	KiMA has good Accounting and Financial Management System in place (AFMS)						
13.	KiMA Management are committed to the Internal Control System implementation (CICSI)						
14.	There is a well elaborate organization structure in KiMA (OS)						
15.	Systems have been put in place to correct and avoid errors (System)						

**INFORMATION AND COMMUNICATION**

		Assessment of effect of internal controls on revenue collection					comments
		Least -Strong					
		1	2	3	4	5	
16.	There is effective reporting of revenue targets to be achieved in a particular year (ERT)						
17.	There are established channels of communication for individuals to report suspected breaches of laws or regulation or other improprieties. (ECC)						
18.	Procedures have been put in place for complains by ratepayers (PC)						
19.	Complains against staff are handled in professional manner by management (HCM)						
20.	Management receives timely, relevant, and reliable reports for decision-making (RTRR)						

**REVENUE COLLECTION**

		Assessment of effect of internal controls on revenue collection					Comments
		Least – Strong					
		1	2	3	4	5	
21.	Revenue collection meets targets for the last 3 (three) years						
22.	Cash collections recorded immediately upon receipt in the cash register or cash receipt book						
23.	Revenue collection targets set by Assembly are realistic and achievable						
24.	There has been improved revenue collection each year for the last 3 (three) years						
25.	Cash collections balance to receipts daily						