

**INTERNAL AUDIT FUNCTION AND FRAUD DETECTION IN  
GOVERNMENT AGENCIES  
A CASE STUDY OF NAADS KUMI**

**BY  
AKOL PETWA  
BBA/32976/102/DU**

**A RESEARCH REPORT SUBMITTED TO THE SCHOOL OF  
BUSINESS AND MANAGEMENT IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF  
BACHELOR OF BUSINESS ADMINISTRATION OF KAMPALA  
INTERNATIONAL UNIVERSITY**

**MAY 2011**

**Declaration**

**Akol Petwa** do declare that this is my original work and it has never been submitted to any institution of higher learning for award of any professional qualification.

Signature..... *APGelle*

**Akol Petwa**

Date..... *30/ Sept /2011*

**Approval**

This research proposal has been prepared under my supervision and submitted to the School of Business and Management for examination with my approval.

Signature..... 

**Dr. Kinyata Stanley**

**Supervisor**

Date..... 30/9/2011

## **Dedication**

I dedicate this report to my dear husband Mr. Oselle Michael, for all his immeasurable support for the success of this work, my family and to all the lecturers of Kampala International University.

## **acknowledgement**

How does one thank someone yet there are so many people to thank for their efforts towards to my success. I want to thank my supervisor Dr. Kinyata Stanley senior lecturer of Kampala International University for his commendable efforts in the completion of this report and to all lecturers of school of Business and Management hurrah and thanks for the work done. You will always be remembered.

Thank my family, most especially my dear husband and parents for being my strength in moments when I almost gave up. To my dear son Samuel for always letting me go even in moments when you needed me most, thank you. My employers thanks for your support. To all those who were part of this work most especially Management of NAADS Kumi and to my fellow students; thank you for your support too, may the good Lord richly bless you all. And above all God Almighty for his special grace to me; Thank you God for the far you have brought me.

## **Abstract**

The study was undertaken with the aim of examining the relationship between internal audit and fraud detection in government agencies. The objectives of the study were to establish the nature of the internal audit function, to establish the level of fraud detection and to find out the relationship between the nature of the internal audit function and the level of fraud detection government agencies.

The study was carried out in National Agricultural Advisory Services Kumi District. The methodology of research was qualitative and quantitative, data was collected using questionnaire, analyzed and presented in simple tables interpreted using frequencies.

Findings show that motivation is an important element of personnel management and it is a key determinant of people's behavior at the workplace. It was also revealed that people choose how to behave from among alternative courses of action based on their expectations of what there is to gain from each action.

The researcher concluded that, internal audit function is effective in fraud detection in government agencies.

## **Table of contents**

Declaration.....	i
Approval.....	ii
Dedication.....	iii
Acknowledgement.....	iv
Table of contents.....	v
List of tables.....	vii
List of figures.....	viii
Abstract.....	ix
List of abbreviations.....	x

## **CHAPTER ONE**

### **INTRODUCTION**

1.0 Introduction.....	1
1.1 Background to the study.....	1
1.2 Statement of the Problem.....	4
1.3 The purpose of the study.....	4
1.4 Objectives of the study.....	4
1.5 Research Questions.....	4
1.6 Scope of the study.....	5
1.7 Significance of the study.....	5
1.8 Conceptual frame work.....	6
1.9 Organization of the study.....	6

## **CHAPTER TWO**

### **LITERATURE REVIEW**

2.0 Introduction.....	7
2.1 The nature of Internal audit function in NAADS.....	7
2.2 Fraud detection and prevention methods.....	12
2.3 Relationships between the internal audit function and fraud detection in NAADS.....	17

**CHAPTER THREE**

**PRESENTATION, ANALYSIS AND DISCUSSION OF STUDY FINDINGS**

- 3.0 Introduction..... 19
- 3.1 Research design..... 19
- 3.2 Population of the study..... 19
- 3.3 Sample size and selection..... 19
- 3.4 Data type..... 19
- 3.5 Data collection methods..... 19
- 3.6 Data processing and analysis..... 20
- 3.7 Limitation of the study..... 20

**CHAPTER FOUR**

**PRESENTATION, ANALYSIS AND DISCUSSION OF STUDY FINDINGS**

- 4.0 Introduction..... 21
- 4.1 Characteristics of the Respondents..... 21
  - 4.1.1 Response rate..... 21
  - 4.1.2 Gender..... 21
  - 4.1.3 Age..... 22
  - 4.1.4 Educational Level..... 22
  - 4.1.5 Period Worked..... 23
- 4.2 Nature of the internal audit function..... 23
- 4.3 Effectiveness of internal audit function in fraud detection in NAADS..... 25
- 4.4 Relationship between internal audit function and the level of fraud detection in NAADS..... 26

**CHAPTER FIVE**

**SUMMARY, CONCLUSION AND RECOMMENDATIONS**

- 5.0 Introduction..... 27
- 5.1 Summary of Findings..... 27



2 Conclusions.....28

3 Recommendations.....28

4 Areas for further research.....29

References.....30

**Appendix A: Research Instruments**

Questionnaire.....32

Interview Guide.....35

Appendix B: The time frame of the study.....36

Appendix C: Budget of the study.....37

**List of Tables**

Table 1: Gender of respondent.....21

Table 2: Age groups of respondents.....22

Table 3: Educational level of respondents ..... 22

Table 4: Period worked with NAADS.....23

Table 5: Showing whether internal audit is an independent body in NAADS..... 23

Table 6: Showing major issues focused by internal audit in NAADS..... 24

Table 7: Is IAF promoted as cornerstone upon which corporate governance is built.....27

Table 8: Showing the role of IAF NAADS.....24

Table 9: Showing methods of fraud detection in NAADS.....25

Table 10: Showing the effectiveness of IAF in fraud detection.....25

Table 11: Showing whether IAF is dependent and objective in fraud detection.....26

## List of Figures

Figure 1	Conceptual frame work.....	6
----------	----------------------------	---

**List of abbreviation**

**NAADS-** National Agricultural Advisory Services

**IAF-** Internal Audit Function

**IIA-** Institute of Internal Auditors

## CHAPTER ONE

### **Introduction**

This chapter will cover the background of the study, the statement of the problem, the purpose of the study, the objectives, the research questions, and the scope, the significance of the study and the structure of the report.

### **Background of the Study**

According to Hector Perela, (2009), Internal auditing function with other intervention mechanisms like financial reporting and external audit to help maintain cost-efficient contracting between owners and managers. It is designed by government agencies to add value and improve organizational performance. It helps organizations accomplish their objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.” Internal audit helps organizations to ensure that financial and other records are reliable and complete.

As well as ensuring that management adheres to policies and procedures for orderly and efficient conduct of the business, proper recording and safeguarding of assets and resources. The purpose of internal audit as far as the organization is concerned is to get accounting errors corrected and control weaknesses eliminated. The most testing time for the internal auditor is the report he/she writes to achieve this end.

No precise legal definition of fraud exists; many of the offences referred to as fraud are covered by the Theft Acts of 1968 and 1978. Generally, the term is used to describe such acts as deception, bribery, forgery, extortion, corruption, theft, conspiracy, embezzlement, misappropriation, false representation, concealment of material facts and collusion. For practical purposes fraud may be defined as the use of deception with the intention of obtaining an advantage, avoiding an obligation or causing loss to another part. (Internal Audit, University of Birmingham, Edgbaston, Birmingham, B15 2TT, UK)

On one hand, fraud detection in government agencies involves employees or managers of the victim organization (commercial angles news letters 2001), the most effective tools for fraud

detection are internal audit review, specific investigation by management, employee notification, and accidental discovery. Fraud detection helps Management to address its responsibility through development of an appropriate design of the system of internal control and the effective operation of that system. Numerous fraud prevention and detection techniques are now utilized to reduce the direct and indirect costs associated with all forms of fraud.

These various techniques include but are not limited to: fraud policies, telephone hot lines, employee reference checks, fraud vulnerability reviews, vendor contract reviews and sanctions, analytical reviews , password protection, firewalls, digital analysis and other forms of software technology, and discovery sampling (Thomas and Gibson, 2003).

Government departments implements the ideas and decisions of executive government in a particular area of governanco. Each dopartment is led by a minister in charge or commissioner, and the main work of the department is determined by legislation. Despite the internal audit function, many government agencies fail to detect fraud for example loss of huge monies in NAADS.

The National Agricultural Advisory Services (NAADS) is a Ugandan government agency created in 2001 to improve rural livelihoods by increasing agricultural productivity and profitability. With an annual budget of US\$97bn (\$51m), NAADS is funded by international donors (80%), such as the European Union and the UK's Department for International Development, the Ugandan government, local governments and farmer groups.

It is one of the seven pillars of the Plan for Modernization of Agriculture, which aims at replacing Uganda's predominantly subsistence farming with market-oriented agriculture.

Charles Aben, the NAADS coordinator for Soroti district, in which Katine is located, says that a key feature of the NAADS's strategy is providing demand-driven services. Farmers form groups of between 15 and 30 people and meet at parish and sub-county level to select agricultural activities for which they need information and advice. Farmers must select activities that will result in marketable, profitable goods, with low production costs and about which there is ample knowledge in the district.

One challenge for NAADS is that it spreads very slowly. It does not target whole villages, only groups of people, and then only a few members of a group get assistance initially, while other members wait sometimes for a up to a year before getting any much needed support.

When it began, the service was only offered to 24 sub-counties in six districts. It has since spread to all 79 operational districts, but is still only reaching a few farmers in a few sub-counties within them, which means many farmers are not served.

A 2007 study by the International Food Policy Research Institute (IFPRI) found that while NAADS had promoted the use of improved production technologies and high-yielding crop varieties, only a few farmers were using them even within sub-counties where there service was operating. As a result there was no difference in yield growth between NAADS sub-counties and those without its assistance.

In early 2009, a report by Uganda's auditor general concluded that 63% of money allocated to NAADS activities was wasted because farmers disliked classroom-style training given by contracted service providers. The Ugandan president, Yoweri Museveni, publicly condemned this approach to training as "theft".

NAADS has since revamped its approach. It now uses government extension workers for training, whose work plans must be approved by farmers before being implemented.

Other studies have found that because NAADS was favoring wealthier farmers as the poorest subsistence farmers in greatest need were unable to fully articulate their demands. A 2004 paper by Oxfam and the Forum for Women in Development said that only people with convertible assets (such as a cow) or external sources of funding were benefiting from NAADS.

The November 2008 Auditor General report castigated NAADS coordinators for spending most of the money on workshops not attended by farmers and doing little practical training in the field. The farmer's major contention was that NAADS trainers did not exude experience in

what they were training and that farmers emerged without adequate market knowledge to enable them select enterprises that have market value.

### **Statement of the Problem**

With efforts put in place by modern business enterprises all over the world, most agencies have established internal audit functions, never the less some have failed to detect fraud in their operations for instance in NAADS, according to November 2008 Auditor General report it castigated NAADS coordinators for spending most of the money on workshops not attended by farmers and doing little practical training in the field. However it's upon this that the research is intended to find out the effectiveness of internal audit functions in government agencies.

### **Purpose of the Study**

The purpose of the study is to examine whether the internal audit function has been effective towards fraud detection in government agencies.

### **Objectives of the study**

- i. To establish the nature of the internal audit function in NAADS and its effectiveness.
- ii. To establish the level of fraud detection in NAADS.
- iii. To find out the relationship between the nature of the internal audit function and the level of fraud detection in NAADS.

### **Research questions**

- i. What is the nature of the internal audit function in NAADS?
- ii. What is the level of fraud detection in NAADS?
- ii. Has the internal audit function been effective in NAADS?
- v. What is the relationship between the nature of the internal audit function and the level of fraud detection in NAADS?



## **Scope of the study**

### **Subject Scope**

The scope of study is to examine whether internal audit function has been effective on fraud detection in government agencies. The research will include analysis of fraud detection, methods and the relationship between internal audit function and fraud detection.

### **Geographical Scope**

This study was conducted in NAADS Kumi located in the Eastern region Kumi District and in selected sub counties.

### **Time Scope**

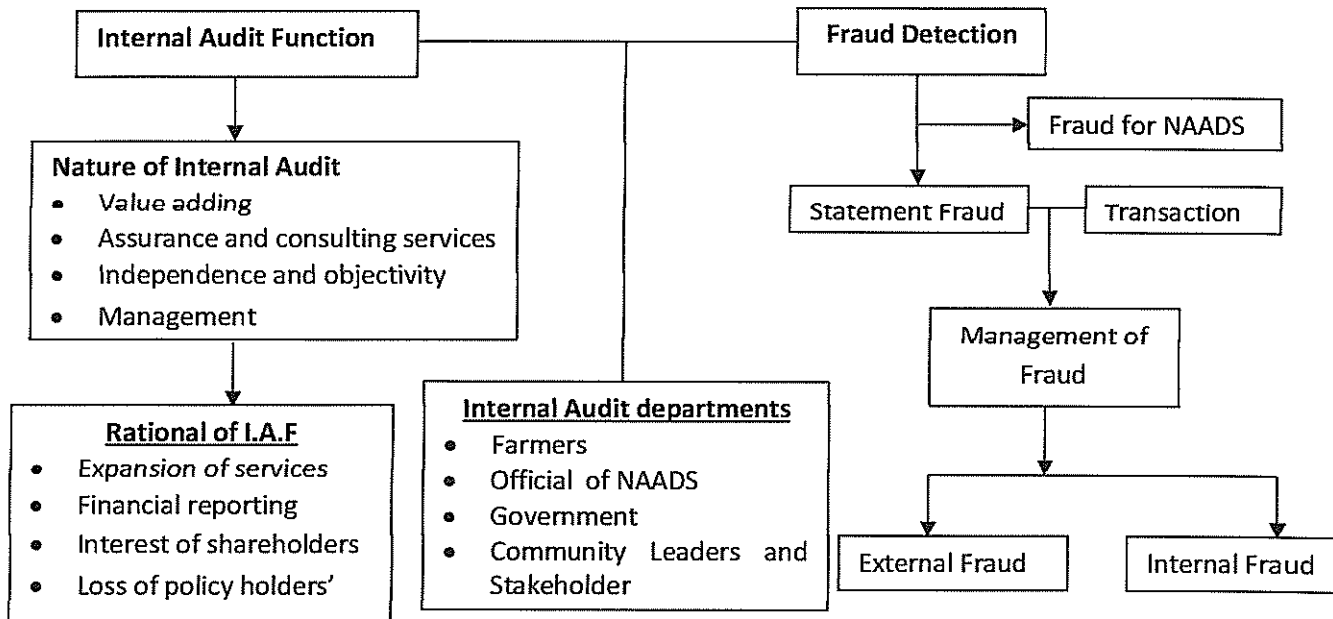
The study was restricted to a period of 5 years starting from 2006 to 2011. This period is selected because it is within that period that NAADS was started and therefore the interest of the research was to look at its effectiveness within this period.

### **Significance of the study**

The study will help policy makers, banks and business to improve on internal audit function and design an efficient fraud detection system.

The study is important to researcher since it will lead to the fulfillment of one of the requirement to award of a degree. Also it will increase on knowledge about the relationship between the study variables.

## The Conceptual Frame Work



Source: adapted from; Juszczak P, Adams N.M, Hand D.J, Whitrow, C, Weston, (2008), "Off-the-Peg and Bespoke Classifiers for Fraud detection" Vol. 59(9).

The above conceptual framework describes NAADS implementation programs, challenges and result. Where socio-economic factors were independent variables and farmers participation dependant variable and its success depended on farmer's involvement on NAADS programs.

### Organization of the Study

The study consisted of five chapters where,-

Chapter one covered the background, problem statement, purpose of the study, objective of the research, research questions, study scope, significance of the study and organization of the report.

Chapter two is literature review and consisted of the concept, the levels of fraud in government agencies and the relationship between audit function and fraud detection in government agencies. Chapter three is the research methodology. Chapter four included the summary of the findings and finally. Chapter five which covered conclusions, recommendations and area of further study.

## **CHAPTER TWO**

### **LITRATURE REVIEW**

#### **Introduction**

This chapter presented the literature of the study variables focusing on the study objectives amongst which includes, the internal audit function and its Rationale in government agencies, fraud detection and prevention methods and the relationship between the Internal audit function.

#### **The nature of the internal audit Function in NAADS**

##### **1 Internal Audit**

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (IIA, 1999). This definition suggests that internal audit has continued to move away from financial and compliance audits to a broader value-adding role, embracing both assurance and consulting activities and focusing on improving performance and effectiveness. Since the definition is designed to embrace organizations in both the private and the public sectors, it is both timely and interesting to identify similarities and differences between internal audits in the two sectors since its release.

It has been argued that there are important differences between internal audit in the private sector and its counterpart in the public sector. Carhill and Kincaid (1989), for example, suggest two reasons for these differences. First, public sector agencies operate in a rigid framework where activities are authorized by legislation. Second, these agencies are service-oriented and hence attach lower priority to cost factors and issues associated with profitability. Because of this, it is argued that public sector internal audit activities need to be of a much broader scope than in the private sector. Malan (1991) discusses two types of audit that are relevant to the public sector: financial-related audits and performance audits. Financial-related audits examine the degree to which public resources are used by the organization to achieve its objectives. As such, they extend beyond the normal attestation function of audit. Performance or value-for-

money audits focus on whether public resources are being used efficiently and effectively, with an objective of identifying and reducing wastage. Coupland (1993) argues that this type of audit has resulted in the adoption of a more sophisticated approach to internal audit work, requiring internal auditors in the public sector to broaden their skills and the techniques used.

## **2 Internal audit function**

Internal audit function has changed dramatically in recent years as it is increasingly acknowledged that the internal audit can foster a more proactive role within a continuous improvement philosophy. There is, however, a need for much greater enlightenment in this area of quality management activity.

## **3 Nature of Internal Audit Activities in NAADS**

As previously noted, the role of internal audit in recent times has moved away from a traditional focus on controls to a value adding function that includes risk management, operational audits and consultancy projects (IIA, 1999). The internal audit function spends on four categories of activity, financial audit and internal controls, Risk management, Operational and systems audits and Special projects and other work. There has been considerable research on external auditor reliance on the work of internal audit (Felix *et al.*, 2001) but this has generally been from the point of view of the external auditors. It is therefore interesting to explore internal audit interaction with external auditors from the perspective of the chief internal auditor.

(IIA) promoted the internal audit function as an independent function that provides value-added assurance and consulting services. Through this extended role, the function has been promoted as the cornerstone upon which effective corporate governance is built (IIA Professional Guidance, 2002). This view has been supported by academic and practitioner research. Ramamoorthi (2003), internal audit function, indicated that, over time, there has been a massive shift in focus to one that promotes and supports effective organizational governance. This has been supported by Ruud (2003) who noted that, in today's business environment, the internal audit function has become a major support function for management, the audit committee, the board of directors, and other stakeholders. This, in turn, would suggest an

expanded role for the internal audit function given that it comprises an integral component of the network of parties having corporate governance responsibilities (Gramling, 2004).

This expanded role essentially would involve the provision of additional services, which are initiated by the board (including the audit committee) and management as a means of ensuring that accountability requirements are met. This raises the issues of credibility and integrity, given the close relationship between these two parties. Mutchler *et al.* (2001) touched on the importance of independence by suggesting that, as the responsibilities of internal auditors grow, so does the demand for greater accountability, independence and objectivity. They suggest that the broadened responsibilities of the internal audit function within the environment of a changing business world, coupled with increasing economic competition and globalization, are creating pressure on the internal audit function, which can jeopardize its independence.

Independence and objectivity are to the profession of internal auditing what the Hippocratic Oath is to the practice of medicine. They go on to define independence as: freedom from material conflicts of interest that threaten objectivity. In other words, it is a state where threats to objectivity are managed to the extent that the risks of ineffective internal audit services are acceptably controlled. The tension resulting from the pressure to provide value-added services while maintaining independence prompts our primary research objective, which is to analyze critically whether internal audit functions in practice are operating independently, in line with theoretical best practice guidelines.

Management of NAADS has a strong influence in setting the overall tone for governance. Claybrook (2004) argued that upper management has the broadest influence on stakeholders, and that management influences operations, as well as the board of directors and even the internal audit function. Nagy and Cenker (2002) confirm this, noting that management, and not internal auditors, ultimately determines the orientation of the internal audit functions. This is supported by Brody and Lowe (2000), who assert that the internal audit function sometimes is requested by management to assist it in advisory roles, such as in acquisitions, mergers and system development and implementation. Bou-Raad (2000) further supports this by suggesting

that more can be accomplished with the internal audit function by reviewing and providing advice to management regarding business objectives.

Sarens and De Beelde (2006) also studied the internal audit function's relationship with management, and concluded that management requires the internal audit function to take on an extended role to compensate for loss of control resulting from increased organizational complexity. In addition, their study results infer that internal auditors are expected to safeguard corporate culture through personal contacts with people in the field (Cohen *et al.* (2002).

Chapman (2001) argues that the primary goal of the internal auditor is objectivity, which involves an unbiased attitude and the avoidance of conflicts of interest. This only can be achieved if the internal audit function is appropriately placed in the organizational structure. Chapman (2001) describes organizational independence as the placement of the internal audit function in the reporting structure so that it is free to determine the audit scope and perform audit work without interference.

Internal audit departments need to ensure an organizational posture which allows them to operate successfully on strategic issues. This means both the independence and mandate to deal with significant strategic business risks and issues. If inappropriately positioned within the company, internal audit deals with tactical issues and is viewed only at that level. Inappropriate positioning can also raise serious concerns about the overall independence of the function (PWC, 2002).

#### **4 The Rationale for Internal Audit in NAADS**

Agency theory contends that internal auditing, in common with other intervention mechanisms like financial reporting and external audit, helps to maintain cost-efficient contracting between owners and managers. internal audit in organizations but can also help explain some of the characteristics of the internal audit department, for example, its size, and the scope of its activities, such as financial versus operational auditing. Agency theory can be employed to test empirically whether cross-sectional variations between internal auditing practices reflect the different contracting relationships emanating from differences in organizational form. The insurance industry provides a test environment within which to examine this proposition.

The insurance industry is dominated by entities which are either stock companies, owned by shareholders, or mutual companies, owned by policyholders. Mayers and Smith (2008) consider that policyholders in mutual companies find it more difficult than shareholders in stock companies to monitor and control the activities of agent/managers effectively because they are a less cohesive and heterogeneous ownership group than shareholders.

To counteract the possibility of loss of policyholders' wealth as a result of a looser ownership-control structure within the firm, agency theory predicts that mutual insurance companies are more likely than stock insurance companies to employ internal monitoring mechanisms such as internal auditors and non-executive directors and to use the services of an audit committee. Furthermore, to prevent agents from taking advantage of the incohesive ownership-control structure and adversely influencing these monitoring mechanisms to suit their self-interests, agency theory predicts that mutual insurance companies may introduce additional control mechanisms.

For example, mutual insurance companies can try to prevent managers from curtailing the scope of the internal audit function and/or ignoring internal auditors' recommendations by ensuring that the role and responsibilities of internal audit are mandated in an audit charter, and that the head of internal audit reports directly, and in an unrestricted way, to the board of directors and/or audit committee. In addition, the corporate reputation and independence of internal audit can be promoted through the appointment of qualified and experienced staff and adequate financial provision for staff development and training. As in the case of UK building societies, previously mentioned, the Government may also seek to protect the interests of a heterogeneous, and potentially vulnerable, ownership group by introducing legislation such as those requiring firms to maintain adequate systems of internal control.

In stock insurance companies internal auditors may be inextricably bound to the interests of shareholders and managers, for example through employee share ownership schemes. Arguably this shared interest lowers internal auditing independence and also affects the nature and scope of internal auditing activities. For example, agency theory predicts that, to ensure high share prices, stock companies may wish to signal to capital markets that they have

achieved above average annual financial performance and that management systems in the company are sound.

Consequently, stock companies will endeavor to achieve an unqualified audit report and they may even disclose details of sound internal control systems in their annual report and accounts [2009]. To help achieve these objectives it is possible that the focus of internal audit activity in stock insurance companies will be geared towards financial audit, fraud prevention and internal control compliance work rather than operational reviews and management audits. Three areas of current interest to the internal auditing profession which could benefit from an agency theory interpretation are explored briefly in this section as follows: internal-external auditor relationships; internal audit outsourcing and the internal auditor in organizational rationalization.

### **Fraud Detection and Prevention in NAADS**

Both fraudulent financial reporting and asset misappropriation have become major costs for government programs [NAADS]. Numerous fraud prevention and detection techniques are now utilized to reduce the direct and indirect costs associated with all forms of fraud. These various techniques include but are not limited to: fraud policies, telephone hot lines, employee reference checks, fraud vulnerability reviews, vendor contract reviews and sanctions, analytical reviews, password protection, firewalls, digital analysis and other forms of software technology, and discovery sampling (Carpenter and Mahoney, 2001; Thomas and Gibson, 2003). Organizations that have not been fraud victims tend to rely more on intangible prevention tools such as codes of conduct or fraud reporting policies while those that have suffered fraud have implemented more tangible measures such as whistle-blowing policies and fraud prevention and detection training (PWC, 2003).

#### **1 Maintain a fraud policy**

NAADS should create and maintain a fraud policy for guiding employees. A corporate fraud policy should be separate and distinct from a corporate code of conduct or ethics policy. Such a fraud policy should be clearly communicated to employees. Various avenue of communication include use in orientation of new hires, employee training seminars, and annual performance



evaluations. Written acknowledgment by each employee that the policy has been read and understood should be required.

## **2 Establish a telephone hotline**

A rather novel fraud approach that is becoming more common is the use of anonymous telephone hotlines (Holtfreter, 2004). It is a very cost effective means for detecting occupational fraud and abuse. A hotline allows employees to provide confidential, inside information without the fear of reprisal that accompanies being a whistleblower (Pergola and Sprung, 2005).

## **3 Employee reference checks**

NAADS should conduct employee reference checks prior to employment. An employee with a history of perpetration of fraud schemes may move from one organization to another. When employee references are not checked, a dishonest person may be hired. A dishonest employee can defraud an unsuspecting organization of thousands of dollars and move on to a new job before the fraud is discovered. Resumes should be scrutinized and information verified to determine that the information provided is legitimate. An organization should not rely on the telephone numbers listed on the resume for prior employers, as they may be false. Employer phone numbers should be obtained by the organization independently.

Second reference check six months after an employee starts work. The reason for a dishonest employee's recent dismissal from a previous job may not have had time to become part of the employee's record during the initial search. This may be discovered by a second check (Thomas and Gibson, 2003).

## **4 Fraud vulnerability reviews**

A fraud vulnerability review that investigates the organization's exposure to fraud should be performed. This includes an assessment of what assets are held and how they could be misappropriated. For example use of electronic commerce, a vulnerability review should also include an assessment of exposure to employee misappropriation or destruction of such "non-balance" sheet items as confidential customer data and financial information. The purpose of

such a review is to “outsmart the crooks.” (Carpenter and Mahoney, 2001). A vulnerability review can help to direct an internal audit plan and, in particular, to highlight the most vulnerable assets. The review is considered a proactive step in fraud prevention and detection. Consideration of each class of asset and the evaluation of the exposure to loss helps the auditor or accountant to see what the thief sees. Steps then should be taken to eliminate, minimize, or at least control the exposures.

## **5 Perform vendor contract reviews**

Review of NAADS annual reports on contracts and agreements can provide an indication of possible contract fraud, including kickbacks, bribery, or conflicts of interest by an organization's employees. Contract fraud can occur when a trade supplier fraudulently takes advantage of a contract to make illegal profits. Contract fraud may involve a conspiracy between entity personnel and a trade supplier or conspiracy among two or more vendors.

Analyzing contract files for the same contractor routinely bidding last, bidding lowest, or obtaining the contract may detect this type of contract fraud. Awarded contracts may also be scrutinized for evidence of a supplier regularly being awarded contracts without indication of a legitimate reason for the constant receipt of contract awards. Such a review may reveal that bribes or kickbacks are the reason for the awards. A review of various public records may reveal whether an employee has a covert ownership interest in the contractor.

## **6 Use analytical review**

Fraud can affect financial statement trends and ratios. Accounts that are manipulated to conceal a fraud may manifest unusual relationships with other accounts that are not manipulated. Also, erratic patterns in periodic account balances may occur because the fraudster may engage only sporadically in fraudulent activity. Financial analysis conducted by an accountant or investigator may reveal existing relationships that are not expected or the absence of relationships that are expected to be present.

It may behoove the accountant or investigator to analyze several years of financial statement data using different techniques to obtain a clear picture of the financial impact of any fraud

scheme. Various analytical review techniques which the accountant or investigator may employ include: trend (horizontal) analysis, ratio analysis (vertical analysis or common size statements), budgetary comparisons, comparisons with industry averages, and review of general ledger and journal entries. Unusual items should be pursued to determine if fraud could be the cause of an aberration.

## **7 Others**

### **Password protection**

The growth of the internet and e-commerce has led to a rise in the number of dial-in ports to computer networks thus increasing the exposure to fraud. Accountants and investigators should assure that only legitimate users have access to the computer network and associated data. Although passwords are the oldest line of computer defense, they still constitute the most effective and efficient method of controlling access.

The difficulty with passwords is that there is an inverse relationship between making the password effective and usable. If password requirements are too complex, users will write the password down, placing it at risk (Gerard et al., 2004). Therefore, every organization needs to evaluate the tradeoffs. Passwords should be six to eight characters long with a mix of letters, numbers and special symbols. Users should be required to change their password often, for example, every 30-60 days. Additionally, users should have to cycle through 6-12 different passwords before being allowed to reuse a password (Gerard et al., 2004).

Also, employees should not be allowed to display their passwords in any location where unauthorized individuals may see them. Lockout procedures should be implemented if a user fails to input a correct password after three attempts.

### **Firewall protection**

One necessary technique for controlling unauthorized access is the use of firewalls. Firewalls can be used at the software or hardware level. At the software level, there are specific programs (Zone Alarm from [zonelabs.com](http://zonelabs.com)) that can be coordinated with internet-related software programs (browsers, e-mail, etc.) to protect the data being passed through them. Hardware firewalls/routers basically prevent people from finding an organization's connection

to the internet. The internet connection is known as an IP address. The hardware firewall/router basically hides the IP address so that hackers cannot find and access it (Gerard et al., 2004).

### **Digital analysis**

Digital analysis, which is based on Benford's Law, tests for fraudulent transactions based on whether digits appear in certain places in numbers in the expected proportion. A significant deviation from expectations occur usually under two conditions. The first condition is that a person has added observations on a basis that does not conform to a Benford distribution. The second condition is that someone has deleted observations from a data set that does not adhere to a Benford distribution (Durtschi et al., 2004).

Tax cheats, check forgers, and embezzlers simply cannot consciously generate random numbers. Forensic accountants and auditors have depended on this human quirk for years and various types of digital analysis software, including DATAS, have proven themselves capable of pinpointing this habit (Lanza, 2000).

### **Discovery sampling**

Discovery sampling is a form of attribute sampling. The latter is a statistical means of estimating the percentage of a population that possesses a particular characteristic or attribute. Discovery sampling is based on an expected error rate of zero. It is employed when the accountant needs to know whether a population contains any error indicative of fraud. If a single case of significant error or fraud is found in a sample, the sampling process is stopped and the error or fraud is investigated.

An account should not include any payments made out to a vendor name that is known to be fictitious unless there is that type of fraud in the account. If there is no such fraud in the account, there should be no payments to fictitious vendors. If an auditor were to test some of the payments in an account and were to find a payment made out to a fictitious vendor, the auditors would know that fraud existed but would not know the extent of the fraud. Conversely, if an accountant examined some account payments and did not find any

illegitimate payments, he or she would not conclude that no fictitious payments existed in the account.

### **Relationships between Internal Audit function And Fraud Detection in NAADS**

The correlation between internal audit function and fraud detection is reflected by an increased focus in NAADS programs in Uganda placed by internal auditors on preventing fraud may serve to deter some employees from engaging in fraudulent activities. Internal auditors, working with management, should aggressively pursue possible fraudulent conduct instead of waiting for situations to be brought to the forefront.

A proactive stance on preventing and detecting fraud should increase employee perception of the likelihood of detection. In addition to being aware of the common types and signals of fraud, certain steps can be taken by internal auditors to combat fraud. These strategies are identified "Internal auditor's fraud checklist" and a number of them are discussed below. (Stoner, 2006).

Fraud can affect financial statement trends and ratios. Accounts that are manipulated to conceal a fraud may manifest unusual relationships with other accounts that are not manipulated. Also, erratic patterns in periodic account balances may occur because the fraudster may engage only sporadically in fraudulent activity. Financial analysis conducted by the internal auditor may reveal existing relationships that are not expected or the absence of relationships that are expected to be present.

It may behave the internal auditor to analyze several years of financial statement data using different techniques to obtain a clear picture of the financial impact of any fraud scheme. Various analytical review techniques which the internal auditor may employ include: trend (horizontal) analysis, ratio analysis (vertical analysis or common size statements), budgetary comparisons, comparisons with industry averages, and review of general ledger and journal entries. Unusual items should be pursued to determine if fraud could be the cause of an aberration.

Review of NAADS programmes, contracts and agreements can provide an indication of possible contract fraud, including kickbacks, bribery, or conflicts of interest by the organization's employees. Contract fraud can occur when a trade supplier fraudulently takes advantage of a contract to make illegal profits. Contract fraud may involve a conspiracy between entity personnel and a trade supplier or conspiracy among two or more vendors.

This type of contract fraud might be detected by analyzing contract files for the same contractor routinely bidding last, bidding lowest, or obtaining the contract. Awarded contracts may also be scrutinized for evidence of a supplier regularly being awarded contracts without indication of a legitimate reason for the constant receipt of contract awards. Such a review may reveal that bribes or kickbacks are the reason for the awards. A review of various public records may reveal whether an employee has a covert ownership interest in the contractor.

A threat analysis that investigates the entity's exposure to fraud should be performed. This includes an assessment of what assets are held and how they could be misappropriated. For those organizations involved in electronic commerce, a threat analysis should also involve an assessment of exposure to employee misappropriation or destruction of such "non-balance" sheet items as confidential customer data and financial information. The purpose of such an investigation or assessment is to "outsmart the crooks". A threat analysis can help to direct an internal audit plan and, in particular, to highlight the most vulnerable assets. The analysis is viewed as a proactive step in fraud prevention and detection. Consideration of each class of asset and the evaluation of the exposure to loss helps the internal auditor to see what the thief sees. Steps then should be taken to eliminate, minimize, or at least control the exposures.

KPMG (1998) suggested that poor internal controls led to almost 60 per cent of the frauds that occurred (KPMG Peat Marwick, 1998). This report highlights the significant role that an internal auditor can play in implementing, monitoring, and enforcing a strong internal control system. Two steps that can be taken by internal auditors to strengthen internal control are enforcement of mandatory vacations and periodic job rotation.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **Introduction**

This chapter describes the research design, the study area, the study population, the sample size, sampling design and procedure, sources of data, data collection methods, and data processing and analysis.

#### **Research design**

The researcher adopted a descriptive and analytical research design in finding the effectiveness of internal audit function on fraud detection. Qualitative design involved description and analysis of data collected from NAADS staff in selected sub counties of Kumi district while Quantitative design involved review of relevant related literature on the study topic.

#### **Population of study**

Naads Kumi has a population of 32 employees who are employed in different departments of the organization. These are distributed in various sub-counties within the district.

#### **Sample size and selection**

A sample of 20 respondents were randomly selected from different sub counties of Nyeru, Kumi, Kanyumu, Mukongoro and Atatur. Where four respondents were randomly selected from each sub county. This was done to provide a fair degree of comparison in order to come up with accurate information.

#### **Data type and source**

The study involved both primary and secondary data. Where primary data was obtained from the respondents interviewed by the researcher and Secondary data was got through intensive reading of books, journals, annual reports; auditor general's reports, internet websites, and reports written by other researchers.

#### **Data collection methods**

##### **Questionnaires**

The researcher used self administered questionnaires; these were distributed to selected employees in different department and later collected for analysis on the study findings.

## **Interview**

Interviews were conducted by the researcher and guided by interview guided questions formulated by the research on the study topic. This helped the researcher to come up with accurate information.

## **Data processing and analysis**

The collected data was first edited, analyzed, and organized in order to obtain complete, comprehensive, accurate and consistent information.

Statistical analysis was done to give a presentation of various responses of those interviewed and interpretation for each. Simple tables were used in form of descriptive frequency and percentages generated to draw conclusions and policy recommendation of the study findings.

## **Limitations**

The researcher encountered the following limitations;

- **Difficulty in accessing information:** most of the reports released by the auditor generals were not accessible by the interns due to the fear of leakage of critical information about the Agency this made it hard for the researcher to obtain information.
- **Unwillingness by the respondents:** most of the respondents were always busy and could therefore offer little time to the researcher and yet the information that was needed was extremely much. Some respondents were afraid that the information they would release could in one way or another cause problems to them, this really made it difficult for the researcher to get information out of the respondents.



## CHAPTER FOUR

### PRESENTATION, ANALYSIS AND DISCUSSION OF THE STUDY FINDINGS

#### Introduction

The data presented in this chapter are the results obtained from the study carried out to find out the effectiveness of internal audit functions and fraud detection in government Agencies.

#### Characteristics of the Respondents

This covers the gender, age, education, periods of the respondents;-

#### Response rate

20 questionnaires were issued to respondents of which all 20 were returned fully filled. This provided a basis for the researcher upon which further findings were obtained to come up with a conclusion on the study topic.

#### Gender

**Table 1: Gender of respondents**

Gender of respondent	Frequency	Percentages %
Male	12	60%
Female	8	40%
<b>Total</b>	<b>20</b>	<b>100</b>

**Source;** Primary School

The results in table 1 show that the biggest number of respondents was male representing 60% while the females represented 40%. This showed male dominance in most of NAADS programs in Kumi district.

## Age

**Table 2: Age groups of respondents**

Age of respondents	Frequency	Percentages %
20-25	2	10
26-30	4	20
31-35	8	40
36-40	6	30
<b>Total</b>	<b>20</b>	<b>100</b>

**Source;** Primary School

From table 2 above it's shown that a majority of NAADS workers are between the ages 31-35 (40%), 36-40 (30%) of the study respondents, 20% are between 26-30 years while 20-25 are 10% of those interviewed. This therefore means that age is one important aspect in NAADS implementation in this area.

## Educational Level

**Table 3: Educational level of respondents**

Education	Frequency	Percentages %
Primary	0	0
Secondary	3	15
University	12	60
Others	5	25
<b>Total</b>	<b>20</b>	<b>100</b>

**Source;** Primary School

Most of the NAADS programs are administered by skillful labour force this is evidenced by a higher number of graduates working with their programs with 76.67% of the workers having attended university. This was followed by 25% for other qualification such as diplomas, and masters. 15% attained secondary education and none had primary education. This therefore means NAADS programs are run by educated individuals.

## Period Worked

**Table 4: Period worked with NAADS**

Period	Frequency	Percentages %
Less 1 year	7	35
1-2	6	30
3-4	5	25
5-6	2	10
<b>Total</b>	<b>20</b>	<b>100</b>

**Source;** Primary School

The results above show that 5 of 20 respondents interviewed had taken more than 3-4 years working with NAADS representing 25%, 2 (10%) respondents had spend 5 plus years while 6 (30%) say they had been working with NAADS for 1-2 years and 35% had worked for less than a year. This therefore shows that NAADS programs are given on contracts and renewal is subject to performance and ones effectiveness in service delivery.

## Nature of the internal audit function

**Table 5: Showing whether internal audit is an independent body in NAADS**

Response	Frequencies	Percentages %
Agree	12	60
disagree	8	40
<b>Total</b>	<b>20</b>	<b>100</b>

**Source: Primary data**

The response in the above table show that 60% of the respondents agree that internal audit is an independent body while only 40% disagree. This implies that internal audit in NAADs works independent on other department in fraud detection.

**Table 6: Showing major issues focused by internal audit in NAADS**

<b>Response</b>	<b>Frequencies</b>	<b>Percentages %</b>
Financial audit	8	40
Internal control	5	25
Risk Mgt	2	10
Operational research	5	25
<b>Total</b>	<b>20</b>	<b>100</b>

**Source:** Primary data

The results in the above analysis show that a majority of respondents say NAADS focuses mostly in financial audit, 25% internal control and operational research and 10% say risk management. This shows that the nature of internal audit is focused on financial audit.

**Table 7: Is IAF promoted as cornerstone upon which corporate governance is built**

<b>Response</b>	<b>Frequencies</b>	<b>Percentages %</b>
Yes	14	70
No	6	30
<b>Total</b>	<b>20</b>	<b>100</b>

**Source:** Primary data

The study shows that 70% of the respondent agrees that IAF is a cornerstone upon which corporate governance is built while 30% say no implying that corporate governance is a result of internal audit function and fraud detection.

**Table 8: Showing the role of IAF in NAADS**

<b>Response</b>	<b>Frequencies</b>	<b>Percentages %</b>
Performance & effectiveness	6	30
Assurance	4	20
Consulting	3	15
Financial & complement	7	35
<b>Total</b>	<b>20</b>	<b>100</b>

**Source:** Primary data

The results in the above table show that 30% of the respondents agree that the role of IAF is improving performance and effectiveness, 20% say assurance, 15% say its consulting and 35% say financial complements was the major role. Implying that internal audit is effective in fraud detection.

**Table 9: Showing methods of fraud detection in NAADS**

<b>Responses</b>	<b>Frequency</b>	<b>Percentage %</b>
Maintain fraud policy	5	25
Employee reference checks	6	30
Perform vendor contract review	1	5
Use analytical reviews	2	10
Discovering sampling.	6	30
<b>Total</b>	<b>20</b>	<b>100</b>

**Source:** Primary data

The study result on methods of fraud detection in NAADS showed 25% for maintain fraud policy, 30% employee reference checks, 5% perform vender contract checks, 10% use analytical reviews and 30% discovering sampling. Therefore cost associated with fraud can only be reduced if these methods are used for effective audit functions.

**Effectiveness of internal audit function in fraud detection in NAADS**

**Table 10 showing the effectiveness of IAF in fraud detection**

<b>Response</b>	<b>Frequencies</b>	<b>Percentages %</b>
Yes	16	80
No	4	20
<b>Total</b>	<b>20</b>	<b>100</b>

**Source:** Primary data

The result in the above table show that 80% of the respondent agrees that internal audit function is effective in fraud detection while only 20% disagree on this. This therefore means that with all the forces entrusted on the audit department fraud has been reduced as per the responses.

**Table 11 showing whether IAF is dependent and objective in fraud detection**

<b>Response</b>	<b>Frequencies</b>	<b>Percentages %</b>
Yes	15	75
No	5	25
<b>Total</b>	<b>20</b>	<b>100</b>

**Source:** Primary data

From the table above the results in the analysis show that 75% of respondents show that IAF is independent and objective in its profession while 25% disagree to this. This implies that IAF needs professionalism in order to detect fraud.

### **Relationship between internal audit function and the level of fraud detection in NAADS**

The finding found out that internal audit and fraud detection are closely correlated and that fraud detection is reflected by an increased focus in NAADS Uganda is placed by internal auditors on preventing fraud may serve to deter some employees from engaging in fraudulent activities. Internal auditors, working with management, should aggressively pursue possible fraudulent conduct instead of waiting for situations to be brought to the forefront.

Fraud can affect financial statement trends and ratios. Accounts that are manipulated to conceal a fraud may manifest unusual relationships with other accounts that are not manipulated. Also, erratic patterns in periodic account balances may occur because the fraudster may engage only sporadically in fraudulent activity. Financial analysis conducted by the internal auditor may reveal existing relationships that are not expected or the absence of relationships that are expected to be present.

The study highlighted significant role that an internal auditor can play in implementing, monitoring, and enforcing a strong internal control system. Two steps that can be taken by internal auditors to strengthen internal control are enforcement of mandatory vacations and periodic job rotation. The role of internal audit function is to detect misstatement in financial statements. However, the most frequent causes of audit failures are due to inexperienced staff assigned to audits and a lack of professional skepticism.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS OF STUDY FINDINGS

#### Introduction

The study was done to find out the effectiveness of internal audit functions on fraud detection in government agencies in NAADS Kumi district. The researcher formulated four research questions for investigation. The chapter therefore summaries, draws conclusions and recommendations of the research findings.

#### Summary of Findings

The study was based on internal audit function and fraud detection in government agencies Case study of NAADS Kumi District. The researcher formulated three objectives that the study was to base on. The research was both qualitative and quantitative. Simple random sampling methods were used on selection of sample population, data was collected using administered questionnaires and interviews guide.

The findings on nature of internal audit function on fraud detection found out that 60% of the respondents agree that internal audit is an independent body while only 40% disagree. It also revealed that a majority of respondents say NAADS focuses mostly in financial audit and internal control.

The findings also showed that 70% of the respondent agrees that IAF is a cornerstone upon which corporate governance is built while 30% disagree.

The finding on the effectiveness revealed that IAF depends on financial complement evidenced by 35% financial complements were the major role.

The study findings on methods of fraud detection in NAADS revealed that 30% employee reference checks and 30% discovering sampling. Therefore cost associated with fraud can only be reduced if these methods are used for effective audit functions.

From the result on findings on effectiveness shows that 80% of the respondent agrees that internal audit function is effective in fraud detection while only 20% disagree on this. This therefore means that with all the forces entrusted on the audit department fraud has been reduced as per the responses. It also showed 75% of respondents showed that IAF is

independent and objective in its profession while 25% disagree to this. This implies that IAF needs professionalism in order to detect fraud.

The finding found out that internal audit and fraud detection are closely correlated and that fraud detection is reflected by an increased focus in NAADS program is placed by internal auditors on preventing fraud may serve to deter some employees from engaging in fraudulent activities. Internal auditors, working with management, should aggressively pursue possible fraudulent conduct instead of waiting for situations to be brought to the forefront.

The study also highlighted significant role that an internal auditor can play in implementing, monitoring, and enforcing a strong internal control system.

### **Conclusions**

The internal audit functions services are initiated by board or audit committees and management as a means of ensuring accountability and control among government agencies by detection of misstatement in financial statements. Auditors according to the findings are supposed to be objective, 70% respondents agreed to the principle.

However, the most frequent causes of audit failures are due to inexperienced staff assigned to audit and lack of professional skepticisms. The analysis show that internal audit involves highly educated individuals in its activities; this therefore means that internal audit functions in NAADS is effective in fraud detection.

### **Recommendations**

The researcher after analysis and summary of the study findings came up with the following recommendations.

1. Government should establish an independent audit system that would provide a comprehensive analysis of all government programs. This will work independent from the internal audit function and would look at the report from their analysis to detect any fraud.



2. It was also recommended that government should strengthen IAF policy; this would lead to an established strong audit function amongst all government agencies and will help to deter employees from such acts.
3. Management should employ highly educated and experienced personnel in management and audit to avoid inadequacy in professional skepticism.
4. Review of NAADS programs should be emphasized to avoid loss of control in managing NAADS programs.
5. Routine checks on both employees and beneficiaries of NAADS programs should be put in place to avoid misappropriation of funds. This will help to provide a strong audit function and deters those who would want to turn public funds to their own use.

**Areas for further research**

*However, the researcher on this study found out that area such as;*

1. The Effects of Internal Audit Outsourcing on Perceived External Auditors Independence.
2. The Role of the Internal Audit Function in Corporate Governance.

## Reference

Cohen, L, and Felson M., (2002), **Social Change and Crime Rate Trends; Routine Activity Approach**, Sociological Review Vol. 44.

Gramling, A.A., M.J., (2004), **The Role of the Internal Audit Function in Corporate Governance**.

Howard F Stettler (1982), **Auditing Principles, A System Based Approach**, 5<sup>th</sup> edition, Prentice Hall Inc, New Jersey.

*Information System Control Journal* Volume 1 2003.

Institute of Internal Auditors (IIA, 1999), *Definition of Internal Audit*, Aitamonete Springs, FL, IIA.

Institute of Internal Auditors (IIA, 2002), *Professional Guidance*.

Internal Audit: *Finding its Place in Public Finance Management* 17.

KPMG, (1998), **Fraud Survey**, KPMG.

Lowe, D.J., MA. (2000), *the Effects of Internal Audit Outsourcing on Perceived External Auditors Independence*. Auditing; a Journal of Practice.

Lundgren, V.H (2003) *Internal state audit- an overview of the working situation of auditors and*

How authorities manage audit. Swedish Government Official Reports SOU 2003: 93

Mayer and Smith R, Wright J., (2008), *Detection and Prediction Financial Statements Fraud*, the

Effectiveness of Fraud Tangle and SAS No.

Ramamorhi, (2003), *Fraudulent Financial Reporting; Consideration of Industry Traits and Corporate Governance Mechanism*.

Riksrevisionen, (Swedish SAI). (2002.) Intervention staten (“State internal audit”), *A report on the working situation for auditors and how government authorities manage audit*, No 23- 2001- 1153.

Syrers & De Beelde, (2006), *Internal Audit Functions and Management*

Horne Van.C (1994), *Fundamentals of Financial Management* (8<sup>th</sup> edition). Prentice Hall, International, New Jersey.

Juszczak P, Adams N.M, Hand D.J, Whitrow, C, Weston, (2008), “*Off-the-Peg and Bespoke Classifiers for Fraud detection*” Vol. 59(9).

**Appendix A: Research Instruments**

**QUESTIONNAIRE**

Respondent,

Wakol Petwa, a student of Kampala International University undertaking a study on internal audit on and fraud detection in government agencies. (NAADS Kumi) and I do appreciate any information that will be availed to me.

Please note that this questionnaire is purely for academic purposes and no part of the information shall be disclosed to third parties.

**SECTION I: BIO-DATA**

Gender.

- a. Male
- b. Female

What is your age group?

- a. 20-25
- b. 26-30
- c. 31-35
- d. 36-40
- e. Others specify

What is your Educational level?

- a. Primary
- b. Secondary
- c. University
- d. Others specify

How long have you been working with NAADS?

- a. Less than one year

- b. 1-2 years
- c. 3-4 years
- d. 5-6 years
- e. 7 years and above

Is internal Audit an independent body in NAADS?

- a) Agree
- b) disagree

The nature of internal audit is focuses on for issues.

- a) Financial audit
- b) Internal control
- c) Risk mgt
- d) Operational research

What are the methods used in internal audit to detect fraud?

.....  
.....

IAF is promoted as cornerstone upon which corporate governance is built?

- a) Yes
- b) No

What is the role of IAF?

- a) Improving performance and effectiveness
- b) Assurance
- c) Consulting
- d) Financial complement

Is IAF effective in fraud detection in NAADS?

- a) Yes
- b) No

Are internal audit functions independent and objective in their profession?

- a) Yes

b) No

. IAF needs to ensure organization posture which allows them to operate successfully on strategic issues

a) Agree

b) Disagree

3. What is the relationship between internal audit function and fraud detection in NAADS?

.....  
.....

*Thank you for your cooperation*

## **Interview Guide**

search will be guided by the following questions while carrying the interviews with NAADS  
at Kumi.

What is the role of internal audit function in fraud detection?

What is the nature of internal audit function in fraud detection?

What are the methods used in internal audit to detect fraud?

What is the level of fraud detection in NAADS?

What methods are used to detect fraud in NAADS?

Is internal audit function effective in NAADS?

What is the relationship between internal audit function and fraud detection in NAADS?

**Annex B: Time frame of the study**

The table below shows the estimated time frame for the research

Period	Mar	Apr	May	June
Activity				
Proposal writing	■	■		
Field data collection, compilation, interpretation and analysis			■	
Preparation of final report and handing in.				■