

# ST. MARY'S UNIVERSITY SCHOOL OF POST GRADUATE STUDIES

# "AN ASSESSMENT OF INTERNAL CONTROL PRACTICE ON SUCCESS OF CONSTRUCTION

#### **PROJECTS**"

#### BY:

#### MEHARI TEKESTE TESFAEZGI

SUBMITTED TO ADVISOR: - TIRUNEH LEGESSE (Ass. Prof)

**January / 2017** 

ADDIS ABABA, ETHIOPIA

# "AN ASSESSMENT OF INTERNAL CONTROL PRACTICE ON SUCCESS OF GOVERNMENT CONSTRUCTION PROJECTS"

BY:

MEHARI TEKESTE ID NUMBER: - SGS/0661/2007A

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ADDIS ABABA, ETHIOPIA

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#### APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies	Signature
Examiner	Signature
Examiner	Signature
Advisor	Signature

#### STATEMENT OF DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Tiruneh Legesse (Asst. Professor). All source of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

The Candidate	
Name	Signature
ST. MARY'S UNIVERSITY	January, 2017
Addis Ababa	

## **DEDICATION**

This work is dedicated to my

## LOVELY FATHER TEKESTE TESFAEZGI

For his love, patience and wisdom; I will always remain grateful for your kindness.

May the Lord place your soul in Heaven!

Never Forget You, Always in My Heart

#### **ENDORSEMENT**

This thesis titled "AN ASSESSMENT OF INTERNAL CONTROL PRACTICE ON SUCCESS OF GOVERNMENT CONSTRUCTION PROJECTS" has been submitted to St. Mary's University School of Graduate Studies for Masters of Business Administration in Project Management (MBAPM) program with my approval as a university advisor.

The Supervisor		
Advisor	Signature	
ST. MARY'S UNIVERSITY	January, 2017	

Addis Ababa

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#### LIST OF ACRONOMYS (A-Z order)

ASC, Audit Service Corporation

BOK, Book of knowledge CE, Control Environment

COSO, Committee of Sponsoring Organizations

CP, Construction project

CPM, Construction project management

HR, Human Resource

IA, Internal Audit

IC, Internal Control

IIA, Institute of Internal Audit

INTOSAI, International Standards of Supreme Audit Institutions

MOE, Ministry of Education

MoFEC, Ministry of Finance and Economic Cooperation

MoH, Ministry of Health

MoUDH, Ministry of Urban Development and Housing;

OFAG, Office of the Federal Auditor General

PMBOK, Project Management Body of Knowledge

SIA, Standard Internal Audit

SPSS, Statistical Packages for Social Science

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Abstract

The purpose of this thesis is to assess the designed, implemented and practiced internal control

system of government organization on the success of their construction projects. For the purpose

of this research internal control and project success are defined in the context defining the key

words of the research. To achieve the objectives of this study, data were collected through

questionnaire from 99 respondents. The respondents were selected using purposeful sampling

method, Further to collect evidenced information 14 management member of the selected

organization was engaged for an interview. The data collected from the questionnaire were

analyzed. And the information collected through an interview was used as an additional data to

strengthen the conclusion. The results of this thesis have shown that internal control of an

organization has direct relation and effect on the success or failure of government construction

project. Internal control has the power to control time, cost and quality of construction projects.

Hence government organization should work to strengthen the internal control system of their

organization and projects to make effective, efficient and economical and to achieve their ultimate

objective successfully.

Key Words:

Control, Internal Control, Internal Audit, Control Environment, Project,

Construction Project, and Success

-1-

## **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background of the Study

All achievements no matter how small or big that a human kind surfaced throughout its existence can be said to have resulted in one way or another from a project. A project can be considered to be any series of activities and tasks that: have a specific objective to be completed within certain specifications, have defined start and end dates, have funding limits (if applicable), consume human and nonhuman resources (i.e., money, people, equipment) and are multifunctional (i.e., cut across several functional lines. Project management can be defined as the planning, organizing, directing, and controlling of company resources for a relatively short-term objective that has been established to complete specific goals and objectives, (Haroldkerzener, 2009).

Projects can be of different categories which range from projects that are small scale to projects that range to multiple billion dollars and may run over several years or decades. Among these project categories the commonly known are construction projects. Due to their complexity nature construction projects are subject to special risks and problems to their involved stakeholders which may include requiring massive capital investment, and deserving rigorous management of progress, finance and quality, (Lock, 2007).

As a county which is ambitiously striving to become a middle income one in the near future of 2030, Ethiopia is undergoing a number of mega, middle as well as small level projects throughout the nation investing huge amounts of capital budgets accordingly.

As indicated in table 1.1 the past five year budget proclamation has indicated that the capital budget is increasing enormously by the years. The intended purpose of this huge amount of capital investment is for implementation and construction of various multiple purposed projects. These projects are mainly owned and managed by different government organizations. How well, effectively and efficiently these budgeted capital investments allocated for the achievement and implementation of the projects depend to a material extent on the Internal control system of

the organizations that are implementing them to make a strong Internal control indispensable to those project management.

Internal control has different meanings. That is, it is difficult to give only one optimal definition to the internal control. This is because it can be explained and seen from different perspectives, (Sawalqa and Qtish, 2012). However some of the accepted definitions of the internal controls are:

Internal control is an integral process that is affected by an entity's management and personnel and is designed to address risks and to provide reasonable assurance that in pursuit of the entity's mission, the following general objectives are being achieved:

Executing orderly, ethical, economical, efficient and effective operations;

Fulfilling accountability obligations;

Complying with applicable laws and regulations;

Safeguarding resources against loss misuse and damage or

According to The International Standards of Supreme Audit Institutions guide line INTOSAI GOV (1900) internal control is a dynamic integral process that is continuously adapting to the changes an organization is facing. Management and personnel at all levels have to be involved in this process to address risks and to provide reasonable assurance of the achievement of the entity's mission and general objectives. (INTOSAI, Guidelines for Internal Control Standards for the Public Sector), therefore the contribution of internal control for the achievement of project is unquestionable.

Despite the contribution and effect of the internal control on the project's success its importance is known by a very few managers or decision makers. And their contribution resulting from a number of reasons is not as much as that of expected. Despite that, the importance of a sound internal control in the management of projects will continue to grow as the tendency for those organizations to use initiatives to drive change and operational transformation continues to intensify.

Since projects are temporary in nature, the success of the project should be measured in terms of completing the project within the constraints of scope, time, cost, quality, resources, and risk as approved between the project managers and senior management (PMBOK, 2013). Therefore this

proposal examines the effect of internal control on the success of government construction projects specifically owned by selected government organizations.

Success means different things to different people Pinto and Mantel identified three aspects of project performance as benchmarks for measuring the success or failure of a project: the implementation process, the perceived value of the project, and client satisfaction with the result, (Shenhar, et al, 2001). Everyone knows what is meant by "project success" and "project failure." The only thing that is certain in project management is that success is an ambiguous, inclusive, and multidimensional concept whose definition is bound to a specific context, (Avignon, and Ika, 2009). Success also includes getting the job done within the constraints of time, cost, and quality. Using this standard definition, Success is defined as a point on the time, cost, and quality/performance grid, (Kerzner, 2009, P, 61). For the purpose of this thesis and construction projects success was evaluated on the perspective of Kerzner's definition which is indicated above.

The assessment includes the practice, effect and contribution of the internal control system in all cycle of the project that is the project initiation, Project planning, project execution, and project close up stages but mainly focuses on the Monitoring and controlling stage. The thesis mainly focuses on the core effects and contribution of internal controls for the success of projects on selected government owned construction project but the result and recommendation was not be limited to only those projects and organizations under the assessment.

#### 1.2. Back Ground, Responsibility and Budget of the Selected Organization

According to the proclamation No.916 /2015 "proclamation to provide the definition of powers and duties of the executive organs of the federal democratic republic of Ethiopia" article no. 26/15, 32/3 and 33/3 The Ministry of Urban Development and Housing, The Ministry of Education, and The Ministry of Health are provided with the following responsibilities respectively.

• The Ministry of Urban Development and Housing has the power to ensure integrated infrastructure provision and service delivery in the urban setting. And accordingly the Ministry has been actively involved in constructing and administering large public

condominium houses in its effort to address the alarmingly growing house needs of the citizen.

- The Ministry of Education is provided with the power to expand and lead higher education.
   Hence, the Ministry was responsible in constructing the multiple universities and facilities throughout the nation.
- The Ministry of health is given the mandate to direct, coordinate and follow-up.
- implementation of the country's health infrastructure system. This goes to the extent of constructing and supervising of large scale health care providing facilities.

By the same token, the Addis Ababa Construction and Roads Authority are given and have the mandate to construct and maintain the city's roads.

**Table 1.1** Annual Capital budget of the selected organization

Organization	Budget Year		
	2006	2007	2008
Ministry of Urban			
Development and Housing	30,111,721,200.00	31,113,683,260.00	35,569,315,160.00
(MoUDH)			
Ministry of	18,605,335,120.00	13,908,682,740.00	18,362,071,710.00
Education(MoE)			
Ministry of Health (MoH)	4,297,196,240.00	4,745,535,560.00	,557,280,130.00

**Source:** - Extracted from yearly Ethiopian Government budget proclamation:

As can be evidenced from the table above, the government allocates huge and incremental amounts of capital budget to these organizations to achieve their goal and responsibility either by direct monument or out sourcing. From the past trends show that more than 50% of this allocated capital budgets are utilized for construction of various projects. This fact coupled with other elements has brought forward the researcher's interests to assess the internal control system which is designed and implemented during the different stage of the construction projects owned by the stated organizations.

#### 1.3 Statement of the Problem

Ethiopia is one of the countries that are striving to enhance their developmental stands. Ethiopia is following the Democratic Developmental State ideology. Following this ideology, the government has a responsibility to expand infrastructures like roads, schools, health institutions, dams, etc. throughout the country in order to ensure equity and equality. This is to meet the duty clearly stated in article 41/4 of the constitution of the Federal Democratic Republic of Ethiopia as "The State has the obligation to allocate ever increasing resources to provide to the public health, education and other social services" and article 43/1 as "The Peoples of Ethiopia as a whole, and each Nation, Nationality and People in Ethiopia in particular have the right to improved living standards and to sustainable development."

As it is indicated on table 1.1 above the past years' government budget proclamation shows an increase of capital budget from year to year where the lion's share of this capital budget is allocated and invested for the construction of different infrastructures including mainly roads, hydroelectric dams and wind farms, houses, universities, health centers, primary hospitals, referral hospitals, and etc.

These construction projects are owned and managed by different governmental organizations, therefore while some of the projects are done according to the initial contract and meet their objective, most of the projects encounter many problems and fail to meet their ultimate objective. This is commonly raised and discussed by the parliament (House of Representatives), different Media and by the general public both formally and informally. In addition they make the main parts of audit reports issued by the Office of the Federal Auditor General (OFAG) and some internal audit reports of the government organizations.

Different reports like reports from the office of the Auditor General including the performance audit report on the construction of health institution (OFAG, Tahisas 2006 E.C). And the internal audit reports of several organization shows that most of the government construction projects don't achieve their objective as planned. Even annual performance reports prepared by most of government organization agree on the delay, poor quality, cost escalation and redesigning of construction projects to justify their unsuccessfulness on the dimensions of project success like their cost, time of completion, scope and quality. This unsuccessfulness of the construction projects earned additional cost to the government and the public in general and the

owners and final users of the project don't gain return/ obtain the anticipated service and benefits from these projects.

The reasons lying under the unsuccessfulness of these construction projects are multi-disciplined but the main organizational gaps leading to it can be referenced from the annual report of OFAG, (Office of the Auditor General) reports of the house of representative, periodicals from The Federal Ethics and Anti-Corruption Commission etc. are:

- Most government construction projects not meeting their objective on the estimated time budget with the expected scope and quality.
- Management's focus, on control and supervision on construction projects being insufficient.
- Designed internal controls not getting implemented on projects as designed.
- Scarce project management professionals.
- In-optimal risk management process.

Almost all the above stated reasons can be well addressed by a systematical designed and effectively functioning internal control system. The way internal controls enhance the performance of the construction projects are holistic stemming from the system for assessment of the project viability and extending through the selection of the best procurement method and contractor selection, progress and expenditure reporting payment controls project risk management and monitoring contract and legislation compliances. It touches various areas of finance, accounting, audit, budget, projects, human resources, and information systems

Failing to put a sound internal control over the construction projects as evidenced in reports from multiple stakeholders and medias has resulted in large sums of cost over runs, prolonged delays, poor asset management or operation inefficiencies, poor quality facilities, multiple breaches of contracts and legislation and incidences of fraud even though sound system of internal control cannot be a proof against collusive fraud.

Currently, articles on assessment of designed and implemented internal control system and its contribution in relation to success of government construction projects are scarce. On the other hand, the construction industry is growing rapidly to demand related articles on this area. Hence this research will play a role in addressing the study gap and provide applicable inputs to the industry.

#### 1.4 Research Questions

The important question here is: "What are the major internal control issues behind the unsuccessful, or in project management terms, failed projects?" or "Is an assessment on the internal control system of government construction project or the responsible government office indicating for the success of the project?" To elaborate, this it may involve works that include assessment of the designed and implemented internal control system on projects, existence of follow ups in accordance with the contract agreements and other related rules and regulations contributing factors and harmony and coordination among the management and teams of those in charge of the project have an effect on the implementation of the internal control system and looking the project manager, project owner and the project management's experience to have a good understanding and knowledge of the control system.

Following the results of the analysis the researcher was make an effort to reach a conclusion and forward actionable recommendations that will add value to the industry.

This thesis or study tries to raise and address the following questions as research question:

- How well the existing internal control system in the government construction projects designed and monitored?
- What mechanism are put in place to ensure effective and strong internal control systems to ensure the implementation of the designed controls at all level of the construction project?
- How is the practice of the internal control systems in most of government owned construction projects?
- What is the role and how is the practice of internal control activities for enhancing the success of the projects as part of the internal control system?
- How the internal audit of the organization add value to strengthen the internal control system of the organization for the success or achievement of the construction projects.

#### 1.5. Objective of the Study

#### 1.5.1. General objective

Most of government construction projects in Ethiopia fail to meet their objective as per their plan. Though the extent and the magnitude of the project failures and the reasons underlying beneath them are different among different organizations one of the common factors that unites them all is the weakness of their internal control system specifically in its implementation.

Therefore; the general objective of this research is to assess and evaluate the internal control system for the success of government construction projects.

#### 1.5.2 Specific Objective

The purpose of the research is to assess and discover answers to questions through an application of scientific Procedures. Each research study has its own specific purpose, (Kothari, 2004, P, 19) in the same way this research has a specific intent to address and answer the following objectives.

- To assess the overall organizational environment and management's commitment and contribution to strengthen internal controls over construction projects.
- To find out the relation between Internal Control and internal audit on construction projects.
- To evaluate the internal control system for the success of construction projects owned by government organizations.
- Identification of the root causes for construction projects failures and evaluate the effectiveness of the existing internal controls in addressing them.
- Assessing how well defined the internal controls in relation to the construction projects are.

#### 1.5.3 Significance of the Study

Significance indicates how the research was refined, revise, or extend existing knowledge in the area under investigation (Pajares, 2007). As described earlier the demand driven constructions

owned by the government are increasing but on the other hand, the successfulness of these projects is questionable. Accordingly, this study will contribute to the area outlined. Managing construction projects represent a complex and complicated processes hence it needs strong internal control system. The government's stand regarding the matter are vividly presented through the proclamation, the directives and manuals that are well designed in support of this but due to reasons like weak implementation of the proclamation and directives, inadequacy of implementation follow up mechanisms, scarcity of competent implementing human recourses and limited awareness by implementing agents regarding the potential contribution of internal controls, most of the construction projects don't meet their objective as expected or according to the plan. Hence this study is expected to contribute the following.

The success or failure of a project is to a larger extent affected by the knowledge and skills of the project manager. In most construction projects the project managers are engineers and their focus is more of to the design and quality with giving little or no attention to strengthen the internal control. As a result the designed internal control system fails to be implemented as per the expectation ultimately contributing to poor management. Therefore this study was have significance by creating awareness on the use of internal control to construction projects.

The other significance of the study is in relation to the internal audit function. One of the management tools for strong and effective internal control is strengthening the internal audit function but in most of construction projects the role and contribution of the internal audit is limited. The reason behind is that the role of internal audit in projects are not considered as important. Accordingly, this study was magnify the role of internal audit on strengthening the internal control in their duty of providing timely and independent report to decision makers.

Unsuccessful projects and the reasons behind them are attracting considerable professional and institutional attention resulting to a number of project management minded career paths becoming increasingly prevalent and attractive to many individuals. Due to this fact this study was have a significant input for individuals seeking project management profession and organizations in their performance.

Success can be evaluated in terms of cost, time, quality and scope. In construction projects these four dimensions need resources in terms of money, material, time and human which all are

limited by nature to raise an importance of utilizing them at the right time and for intended purpose. But the fact is the management of these elements on construction projects is not strong to result in wastages of material, unwise use of time and escalation of costs. So this study would have a significance on challenging the old belief and ambiguity by many on internal controls contribution for areas of finance only by developing a framework on an all rounded importance of internal controls in project success in terms of expenses when dealing with cost, human resource when dealing with time and material and outputs when dealing with quality and scope.

The last but not least significance of the study is to capture lessons learned and apply on ongoing and future projects. The monitoring and controlling phase of a project is the phase that represents the greatest opportunity for reviewing the completeness and effectiveness of the in use internal controls to identify and rectify any deficiencies and deviations and risks either in real time or in the future.

#### 1.6 Scope and Limitation of the Study

The study will take a universal view of the government owned construction projects, but since the constructions owned by government are numerous in type, nature, their distribution and the volume of allocated budget, it is necessary to limit the scope so as to set the boundary of the research work, and help to assess whether the research is feasible or not and give an idea of what is expected. With this special emphasis this study has examined and assessed the internal control systems of the organization or projects on the success of government construction projects specifically owned by the following government organizations. The organizations and the scopes stems from researcher's esteemed knowledge and experience in the stated organizations, their proximity for observation and visit, the availability of related publications and reports and ease of obtaining and referencing documents and providing timely recommendations.

Ministry of Health; (MoH)

Ministry of Education; (MoE) and

Ministry of Urban Development and Housing; (MoUDH)

Addis Ababa Road Authority

Projects owned by the above government organizations are different for this reason this study was limited only to two construction projects by the stated organizations that are:

- Constructions that are executed in Addis Ababa since 2005 E.C. To reach a reliably evidenced conclusion and forward actionable recommendation, relevant and timely documents and information from the mouth of the horse are fundamental for this reason the researcher has limited the indicated period. It is also believed by the researcher that constructions projected that are backed from 2005 are highly subjected to variables that affect their scope, cost and quality resulting from the prolonged time. And,
- Those constructions that are completed and under progress but not at their inception
  period. The reason to conduct this research on projects that are under construction and
  completed ones as well is to have a complete insight and assessment of the inter relation
  with internal control of the different projects at their different level of completion.

Even though the selected government organizations run various construction projects with large amounts of capital budget and scope, the selected construction projects for this study are only the ones around Addis Ababa with an objective to align with the limited resources of time and cost. Hence it is inappropriate to conclude the result of this research to represent to all other government organizations that run similar construction project with varying complexity, size, location and management arena. By the same token the findings of the research was not be exclusively representative of the practice of internal control at all governmentally owned construction projects.

#### 1.7 Definition of Key Terms

Control: Any action taken by management, the board, and other parties to manage risk and increase the likelihood that established objectives and goals was achieved.

Management plans, organizes, and directs the performance of sufficient actions to provide reasonable assurance that objectives and goals was achieved. (IIA) and (INTOSAI GOV 9100)

Internal Control: Internal control can be simply defined as, the process by which an organization governs its activities to effectively and efficiently accomplish its mission. (INTOSAI, 9120). Internal control is also defined as "the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization objectives, (Adewale, 2014).

- Internal Audit: Internal audit is an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggest improvements there to and add value to and strengthen the overall governance mechanism of the entity, including the entity's strategic risk management and internal control system." (Standard on Internal Audit (SIA, 17)
- Internal Auditor: Internal auditor is an independent, objective assurance and consulting function established by the Proclamation 648/2001 to conduct an internal audit. (FDRE Proclamation 648/2001)
- Control environment: The control environment is the set of standards, processes, and structures of the organizations that provide the basis for carrying out internal control across the organizations where the senior management establishes the tone at the top regarding the importance of internal control including expected standards of conduct. (COSO Framework)
- Control Activities: Control activities are the actions established through policies and procedures that help ensure that management's directives to mitigate risks to the achievement of project objectives are carried out. Control activities are performed at all levels of the project, at various stages within the project, and over the technology and project environment. (COSO Framework)
- Construction: Construction in general can be defined as clearing, dredging, excavating, and grading of land and other activity associated with buildings, structures, or other types of real property such as bridges, dams, roads, (http://www.businessdictionary.com/)
- *Project:* A project is a one-time, multitask job with a definite starting point, definite ending point, a clearly defined scope of work, a budget, and usually a temporary team. Or a project is a problem scheduled for solution. Or it is a sequence of unique, complex, and connected activities having one goal or purpose and that must be completed by a specific time, within budget, and according to specification. (J. M. Juran)

*Success:* can be defined as having achieved objectives: Within time, within cost, at the desired performance/technology level, while utilizing the assigned resources effectively and efficiently, (Haroldkerzener, 2009).

#### **CHAPTER TWO**

#### RELATED LITRATURE REVIEW

#### 2.1. Introduction

In any research project, it is essential to understand what has already been done in the specific topic chosen and what has been done in the wider subject area of that topic, (Adams, et, 2007). Literature review provides a framework for establishing the importance of the study as a benchmark for comparing the results with other findings (Creswell, 2009, P. 26). Hence, in this chapter, the result of the review of related works of literature was presented; the review focuses specifically on the following major points and it attempts to answer:

What is "Internal Control"?

What is "Control Environment"?

What are the most important responsibilities of the Internal Auditor?

What major points determine whether or not a project was successful?

Is internal control linked to the success of a project?

Defining the key terms above and providing scientific answers to the questions was an important tool for the final conclusion and recommendation.

#### 2.2. Control

Control is the direct or indirect power to direct the managements and polices of a person or entity weather through ownership of voting securities by contract or otherwise the power or authority to manage or oversee. Or control is to exercise power or influence over the judge controlled the proceedings, it is to regulate or govern by law, and control group are the persons with authority to make decision on a corporate's behalf (Black's law ,1999).

Control can be characterized into the three types;

- Preventive control, are controls that are designed to prevent events before occurring.
- Detective Control, are controls that are designed to detect timely when events occur and
- Reactive Control, policies and procedures which identify the event has occurred and invoke appropriate actions to recover (or mitigate) the situation

And the control activities are the policies and procedures that help ensure that management directives are carried out.

#### 2.3. Internal Controls

There is no one universal definition of internal control as each author has their own insight as to what is internal control. Here are some of the definitions of internal control which could be related to our objective and study. Internal control can be simply defined as, the process by which an organization governs its activities to effectively and efficiently accomplish its mission. INTOSAI, (9120) internal controls are a system consisting of specific policies and procedures designed to provide management with reasonable assurance that the goals and objectives it believes important to the entity was met.

The standard internal audit also defines "Internal Control System" as all the policies and procedures (internal controls) adopted by the management of an entity to assist in achieving management's objective of ensuring, as far as practicable, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information .A very good internal control structure is the only way to create transparency and accountability as well as checking frauds and irregularities in the allocation and disbursement of public fund at the local government level. Hence local government authority should increase their effort to ensure proper and highly effective internal control system is in place within the local government to enhance financial accountability (Aramide and Bashir, 2015). Anthony defined internal control as "the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization objectives, (Adewale, 2014).

Here, it can be concluded that internal control is a system which is used as a tool for transparency, accountability, proper use of resource, compliance with the designed rules and regulations, and for proper reporting in organizations or project activities. Internal controls are applicable to any activity or project directly or indirectly, including individual activities; hence projects highly demand internal control systems since they consume various but limited resources. The internal control system is an important element of enterprises for operating

smoothly, which is also the important measure to achieve the long-term strategic development of the enterprise and which aims to improve the operating efficiency of the effect. The internal control goal guarantees enterprise operation and management compliance with the provisions of the laws and regulations, the safety and proper use of assets, the accuracy and completeness of financial reports and related information, while improving the management efficiency and effectiveness and promote enterprise development strategy—"internal control audit is a control behavior which can understand internal control whether the establishment is effective, can prevent the fraud, (Leng, and Zhang, 2014).

The INTOSAI GOV 9100, Guidelines for Internal Control Standards for the Public Sector presents the components of internal control in the following way:-

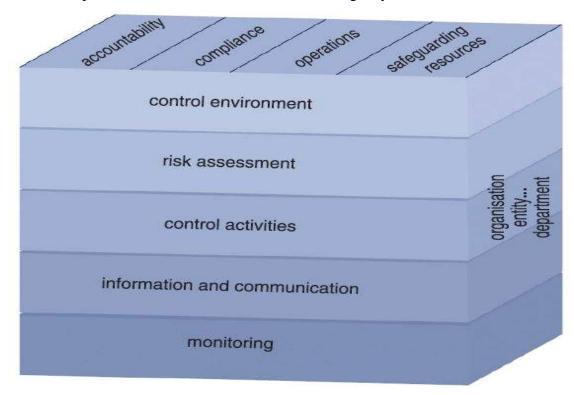


Figure:-2. 1 Components of Internal control

Source: INTOSAI GOV 9100,

The above diagram shows that internal control system consist the entire control environment, the risk assessment, the information and communication, the control activities and monitoring

elements. The control environment also sets the tone of an organization, influencing the control consciousness of its staff. Elements of the control environment are:

- (1) The personal and professional integrity and ethical values of management and staff, including a supportive attitude toward internal control at all times throughout the organization;
- (2) Commitment to competence;
- (3) The "tone at the top" (i.e. management's philosophy and operating style);
- (4) Organizational structure; and
- (5) Human resource policies and practices

In project management, internal controls are particularly valuable because projects tend to have operations scattered over various work sites. According to IAS internal control types involve: a plan of organization, segregation of duties, control of documents, safeguarding of assets, competence of staff, arithmetic and accounting controls, recording and record keeping, supervision, authorization and approvals, vocation and rotation of duties, cost feasibility, routine and automatic checks (Kaplan,2008). This statement greatly supports that effective internal controls significantly contribute to financial performance of companies summing up activities of internal control system significantly supporting the entire activity of a project and ultimately the success of the project.

#### 2.4. Components of Internal Control

#### 2.4.1. Control Environment

The control environment is the first part of the internal control framework. It sets the tone for the company as a whole and it also affects the execution of its staff awareness. This is an integral part of the internal control components and the basis of internal control procedures to provide the tone and organizational structure, (Leng, and Zhang, 2014)"Control environment" means the overall attitude, awareness and actions of directors and management regarding the internal control system and its importance in the entity. The control environment has an effect on the effectiveness of the specific control procedures and provides the background against which other controls are operated (SIA, 12, 2009).

The control environment sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure. Control environment factors include the integrity, ethical values and competence of the entity's people; management's philosophy and operating style; the way management assigns authority and responsibility, and organizes and develops its people; and the attention and direction provided by the board of directors. (Internal Control - Integrated Framework)

According to the Project Management Institute of PMBOK 5<sup>th</sup> edition an organization's culture, style, and structure influence how its projects are performed. The organization's level of project management maturity and its project management systems can also influence the project. This indicates that the culture style and structure of the project has an influence on the internal control system as control environment.

In general control environment is the entire activity of the organization which includes all employees from the chairman and general manager to the project manager, the management at all level, the rules and regulation and the internal and external factors that relate to the activity. This is an area where management's contribution materializes by setting the tone and becoming an example.

#### 2.4.2 Risk assessment

Every entity faces a variety of risks from external and internal sources that must be assessed. A precondition to risk assessment is establishment of objectives, linked at different levels and internally consistent. Risk assessment is the identification and analysis of relevant risks to achievement of the objectives, forming a basis for determining how the risks should be managed. Because economic, industry, regulatory and operating conditions was continue to change, mechanisms are needed to identify and deal with the special risks associated with change.

#### 2.4.3 Information and communication

Pertinent information must be identified, captured and communicated in a form and timeframe that enable people to carry out their responsibilities. Information systems produce reports, containing operational, financial and compliance-related information, that make it possible to run and control the business. They deal not only with internally generated data, but also information

about external events, activities and conditions necessary to informed business decision-making and external reporting. Effective communication also must occur in a broader sense, flowing down, across and up the organization.

All personnel must receive a clear message from top management that control responsibilities must be taken seriously. They must understand their own role in the internal control system, as well as how individual activities relate to the work of others. They must have a means of communicating significant information upstream. There also needs to be effective communication with external parties, such as customers, suppliers, regulators and shareholders.

#### 2.4.4. Control Activities

Control activities are the policies and procedures that help ensure management directives are carried out. They help ensure that necessary actions are taken to address risks to achievement of the entity's objectives. Control activities occur throughout the organization, at all levels and in all functions. They include a range of activities as diverse as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties, (INTOSAI, GOV, 91000).

#### 2.4.5. Monitoring

Internal control systems need to be monitored--a process that assesses the quality of the system's performance over time. This is accomplished through ongoing monitoring activities, separate evaluations or a combination of the two. Ongoing monitoring occurs in the course of operations. It includes regular management and supervisory activities, and other actions personnel take in performing their duties. The scope and frequency of separate evaluations will depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures. Internal control deficiencies should be reported upstream, with serious matters reported to top management and the board.

There is synergy and linkage among these components, forming an integrated system that reacts dynamically to construction projects. The internal control system is intertwined with the entity's operating activities and exists for fundamental business reasons. Internal control is most effective when controls are built into the entity's infrastructure and are a part of the essence of the

enterprise. "Built in" controls support quality and empowerment initiatives, avoid unnecessary costs and enable quick response to changing conditions, (INTOSAI GOV 9100).

#### 2.5. Objectives of Internal Control

According to The International Standards of Supreme Audit Institutions guide line, (INTOSAI GOV 9100) the general objective of internal control is executing orderly, ethical, economical, efficient and effective operations. This means the entity's operations should be orderly, ethical, economical, efficient and effective and consistent with the organization's mission.

- 1. Orderly means in a well-organized way, methodical.
- 2. Ethical relates to moral principles. The importance of ethical behavior and prevention and detection of fraud and corruption in the public sector has become more emphasized since the nineties.
- Economical means not wasteful or extravagant. It means getting the right amount of resources, of the right quality, delivered at the right time and place, at the lowest cost.
- Efficient refers to the relationship between the resources used and the output produced to achieve the objectives. It means the minimum resource inputs to achieve a given quantity and quality of output, or a maximum output with a given quantity and quality of resource inputs.
- Effective refers to the accomplishment of objectives or the extent to which the outcomes of an activity match the objectives or the intended effects of that activity.

Similar to this; the Federal Government of Ethiopia Financial Administration Proclamation, No. 648/2009 for financial administration defines internal control as: "Internal Control" means an integral process that is effected by a public body's management and personnel, designed to address risks and to provide reasonable assurance that is the pursuit of the public body's mission. Internal control is broadly defined 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: (Internal Control - Integrated Framework)

- 1. Effectiveness and efficiency of operations.
- 2. Reliability of financial reporting.
- 3. Compliance with applicable laws and regulations.

Internal auditing can also be seen as a systematic, objective appraisal by internal auditors of the diverse operations and controls within an organization to determine whether

Financial and operating information is accurate and reliable,

Risks to the enterprise are identified and minimized,

External regulations and acceptable internal policies and procedures are followed,

Satisfactory operating criteria are met,

Resources are used efficiently and economically and

The organization's objectives are effectively achieved

All for the purpose of consulting with management and for assisting members of the organization in the effective discharge of their governance responsibilities", (Sawyer, 2003).

#### 2.6. Internal Audit

Like the internal control different authors and professional associations define internal audit in different way but the overall message is similar here are some of the commonly used definition of internal audit; defined internal audit as "an independent appraisal function within an organization for the review of activities as a service to all levels of management. It is a control which measures, evaluates and reports upon the effectiveness of internal control, financial and otherwise, as a contribution to the efficient use of resources within an organization."

"Internal audit is an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggest improvements thereto and add value to and strengthen the overall governance mechanism of the entity, including the entity's strategic risk management and internal control system," (Standard on Internal Audit (SIA, 17,2009).

Most carefully planned internal audit career can come crashing down in a moment over a serious mistake, (Chambers, 2016). The Internal auditor should examine the continued effectiveness of the internal control system through evaluation and make recommendations, if any, for improving that effectiveness. The internal auditor should focus towards improving the internal control structure and promoting better corporate governance (SIA, 12, 2009).

The Institute of Internal Auditors (IIA, 1999) defined internal auditing as: ... 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. In line with the above definition the Federal Government of Ethiopia Financial Administration Proclamation, No. 648/2009 for financial administration defines internal audit as "Internal Audit" is an independent and objective assurance and consulting activity designed to add value and improve an organizations operations which helps an organization accomplish its objectives by bringing in a systematic and disciplined approach to evaluate the effectiveness of risk management, control and governance process; The definition is followed by the financial proclamation providing unlimited access to the internal audit of an organization to conduct performance audit in addition to financial audit.

It is understood that this mandate is given to the internal audit to strengthen the internal control system and as well to serve/ play as a consultancy or advisory role to top management. Included is a performance audit which is an audit of economy, efficiency and effectiveness with which a government organization, a program, a project, an activity or a function uses its resources in carrying out its responsibilities. It embraces. (Performance and Environmental Audit Manuals, 2006, P, 9) Performance audit or value for money audit is a new approach of auditing which practices to evaluate the efficiency, effectiveness, economy and sometimes environmental impact of the activity. An approach of auditing that is very relevant for projects.

At times the effect of internal control could be limited to drive the demand for internal audit overcoming these constraints. The internal audit function constitutes an independent assertion and consultations at the separate component of internal control with the objective of determining whether the internal controls system is well designed and properly operating. Involving:

Control (or Operating) environment

Risk assessment

Control objective setting.

Event identification

Control activities.

Information and communication

#### Monitoring

#### Risk response

The Ethiopian proclamation for financial administration also provides the following responsibility to the internal audit of public bodies of an organization;

- a) Conducting internal audit at specific intervals to evaluate the performance of the public body and to ascertain that public money and public property are used for intended purposes, and submitting audit reports to the head of the public body and to the Minister, follow-up measures taken based on audit findings;
- b) Developing audit programs and audit procedures which are specifically designed to meet the requirements of the public body;
- c) developing a monitoring system which will, at regular intervals, test and report to management and the Minister on the public body's compliance with the applicable internal and external directives and procedures; and
- d) Advising management, at regular intervals, on its internal practices and controls and on whether they are efficient and economical.

On top of the above responsibilities given by the proclamation, the internal audit of an organization has unlimited access to conduct an audit. The audit requires the internal auditors possess the knowledge, skills, independence and integrity needed to perform their responsibilities, (IIA's standard 1210).

Internal auditing is an integral part of the corporate governance mosaic in both the public and the private sectors this is because an effective organization is one that has good and valuable internal control that could check problem areas in the organization so that remedial action could be taken, (Atu, et al,2014).

It must be noted well that Internal Control and Internal audit should not be a substitute for good management. They exist to assist sound management but not to replace management or to be presented as an excuse for poor management, (Adewale, 2014).

In practice, due to distinct characteristic of construction projects the internal controls that are designed according to conventional business would be difficult to fully play their effectiveness for the reason why internal control and internal audit should be integrated and exist to strengthen the internal control system of an organization and a project. It is very important for the top

management to work toward shaving a strong internal audit section because the internal audit is used as a mirror for the organization. Even though the independence of the function is subject for a debate it is consultative and vital to the internal control activity.

#### 2.7 Responsibility Management on internal Control

Any project needs control at all stages. According to the PMBOK (2013) control is very crucial on the project areas of: its Scope, time Schedule, costs, Quality, Communications, Risks, Procurements process, and the Stakeholder Engagement. Alike to any projects, construction projects need strong internal control especially during the implementation /execution stage because at this stage huge amounts are invested on the project and the risk that could happen at this stage is irreversible leading to great damages. For projects, controls include the process of tracking, reviewing, and reporting project progress against the performance objectives defined in the project management plan, (PMBOK, Year 2013, P, 62). Here it is simply understood that control or internal control on project is mandatory.

The regulation No.190/2009 article 9/2 indicates that; Subject to directives of the ministers (MoFEC) the heads of public bodies shall provide information to enable the government to maintain necessary central controls over budgetary funds. This article clearly indicates that the role of the management body for the effectiveness of internal control is unquestionable, and managers are responsible on the designing, implementing and follow-up of the effectiveness of the internal control. Internal control as a process, effects by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of a firm's objectives in the effectiveness and efficiency of operations, reliability of financial and management reporting, compliance with applicable laws and regulations and protect the organization's reputation. Effective internal control system operates when some specific procedures are adopted by the management (Kinyuai et al, 2015).

Organization must have strategy of control systems to measure and track the execution of the strategy. They must be able to monitor the strategy implementation so that if there are any deviations corrective measures can be taken to correct them, (Mbaka, & Dr. Mugambi, 2014). Project managers need to have the project management knowledge, as well as the technical skills, to master their projects. The competencies outlined in the PMBOK (2013) include:

Scope, time, and cost management;

Human resource management;

Communication management;

Risk management; and

Quality and contract management

According to El-Sabaa, a project manager is required to have extensive cross-functional experience (Randt, et al, 2014). Project managers' previous experience has minimal impact on the project's performance, whereas the size of the previously managed project does affect the manager's performance, the wrong choice of project manager, the unplanned project termination and unsupportive top management were the main reasons for failure, (Belassi, and Tukel, 1996).

Top management usually controls a project manager's access to resources which are supervised by functional Managers. According to the definition of INTOSAI GOV Year 9100 Internal control is a dynamic integral process that is continuously adapting to the changes an organization is facing. Management and personnel at all levels have to be involved in this process to address risks and to provide reasonable assurance of the achievement of the entity's mission and general objectives.

From the points raised above, it can be concluded and understood that the responsibility and role of the management is important on strengthening the internal control and as well the internal audit of his organization or project. Therefore managements of public body and projects should give due attention to the internal control system of their organization.

## 2.8. Responsibility of Employees/Individuals on internal Control

Directly or indirectly, internal control is the responsibility of all the employees of an organization. Internal control system is the organizational structure of the organization or project According to Kumar T., completion of a project requires input from a variety of groups including the client, the project team, the parent organization, the producer and the end user. Each party has a role in defining and determining success. They all have specific tasks and responsibilities that they must fulfil in order to achieve success (Munns & Bjeirmi, 1996). The structure of an organization indicates who is accountable for directing and carrying out these activities and defines management hierarchies; it spells broadly who is responsible for whom for what at each level in the organization. Virtually all employees produce information that is used in the internal

control system or take other actions needed to affect the existing controls. Therefore if all the employees of the organization perform their duty on the right time according to the presented laws and regulations and policies and procedures with the given resource, right quality on the right time and ultimately satisfying their end customers, we can say that there is sound internal control.

It is the people who make internal controls function. This means internal control is functioned with the entire organizations' or projects' member of management and employee. According to INTOSAI GOV (9100) internal control is accomplished by individuals within an organization, by what they do and say. Consequently, internal control is affected by people. People must know their roles and responsibilities, and limits of authority.

## 2.9. Responsibility of the Internal Audit on internal control

The internal auditor shall perform the internal audit procedures and related activities to obtain information relevant to evaluating internal controls associated with related party relationships and transactions. (The Institute of Chartered Accountants of India) Internal Control system involves internal auditing, administrative and other accounting controls set-up by the management in order to ensure achievement of its planned objective (Adewale, 2014). The IIA (1999) definition of internal auditing is now well-known and well-accepted: "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", (Stewart,et al, 2010, P, 5). Yet again, the IIA definition of internal audit highlights the value-adding role of internal audit as an assurance and consulting activity.

Even though the trend of assessing risks related to the activity are not satisfactory in most organizations and projects, it is assumed that the responsibility of assessing, identifying and managing risk is given to the top management but studies reveal that internal auditors are also seen as key contributors as consultants and assurance providers on risk management processes and systems. The internal auditor's dual role provides both assurance services and consulting activities, (Stewart, et al., 2010, P, 15).

According to Belassi &Tukel, 1996 project managers who possess the necessary technical and administrative skills are successful project termination. Here the word administrative links with the entire internal control system of the organization this means to be successful project managers should have knowledge and skill of administration they should not be only technical this means for the complete success the function of internal control should not give to certain parties it should be the priority function of the top, middle and low level management.

## 2.10. Internal Control and Risk Management

Risk management means a series of company's activities that appropriately manage various internal and external risks associated with its business, in the course of corporate management, to maintain and augment its value. Generated and developed originally from the viewpoints of natural disaster preparedness and management of finance-related uncertainty, the concept of risk management is nowadays taken as activities intended to manage wide-ranging risks, in response to the increasing necessity of managing socioeconomic uncertainty.

Although risk management and internal control stand on different backgrounds and have been developed through different paths, they have many common objectives, deal with various risks surrounding industry and work to maintain and enhance the value of the company. In the recent times as environments surrounding construction projects are changing and the responses thereto of the organizations are exposed to increasingly stricter criticism from stakeholders. It is becoming necessary to associate risk management with internal control and have them function accordingly.

As risk management and internal control are necessary for any construction project to achieve its primal objectives in terms of cost, time and quality they should be established and operated respectively for each construction projects. However, the level of efforts varies a great deal from organization to organization, and project to project and recognition towards such efforts has not necessarily been shared by and between many parties concerned.

## 2.11. Construction Projects

Construction in general can be defined as clearing, dredging, excavating, and grading of land and other activity associated with buildings, structures, or other types of real property such as bridges, dams, roads.

Similarly construction project management (CPM) is the overall planning, coordination, and control of a project from beginning to completion. CPM is aimed at meeting a client's requirement in order to produce a functionally and financially viable project. The construction industry is composed of five sectors: residential, commercial, and heavy civil, industrial, and environmental.

A construction manager holds the same responsibilities and completes the same processes in each sector. All that separates a construction manager in one sector from one in another is the knowledge of the construction site. This may include different types of equipment, materials, subcontractors, and possibly locations, (https://en.wikipedia.org/wiki). The construction industry is complex in its nature because it comprises large numbers of parties as owners (clients), contractors, consultants, stakeholders, and regulators. Despite this complexity, the industry plays a major role in the development and achievement of society's goals,(Enshassi, et al, 2009).

Despite the size and type the nature of construction project is unique and complex that it involves large resource, peoples from different profession. On top of this addressing the various interests of various stockholders also makes it more complex, hence it needs close and day to day control on all aspects of the project from the initiation stage to closing and hand over of the project. In government construction project due to multiple internal and external factors the complexity is much higher.

However, the success criteria for construction remain the same. The basic criteria for determining construction project (CP) success has mainly been centered on quantitative variables such as-cost, time and quality of specification, (Gaba,2013). According to a Book of knowledge (BOK) in the construction industry, delivering a construction project involves eight processes.

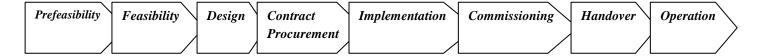


Figure:-2.2 Stages of a Construction project delivery process

Source: - (Gaba, 2013)

To perform all the above stages of the construction project, resources are important which are scarce by nature. Therefore the resources invested and expended for the activities should be overseen and monitored by strong internal control system.

One of the success criteria but seen to be failed at various occasions for construction projects is time. Regarding this criteria the standard condition of contract for construction of civil work project clause 43 states that Subject to any requirement in the Contract as to completion of any section of the Works before completion of the whole, the whole of the Works shall be completed, in accordance with the provisions "Certification of Completion of works" within the time stated in the Contract calculated from the last day of the period as that within which the Works are to be commenced, or such extended time as may be allowed. Similarly with regard to quality the standard condition indicates the following;

"All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labor and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the Works for testing as may be selected and required by the Engineer."

Organizations have gradually strengthened the construction of enterprise internal control and supervision, and the most representative issues which put forward the effectiveness of internal control self-assessment, (Leng, and Zhang, 2014).

## 2.12. Project success

The concept of project success is difficult to define. According to the Canadian Oxford Dictionary (1998), success is "the accomplishment of an aim; a favorable outcome", (Ika, 2009). A project can be considered to be the achievement of a specific objective, which involves a series of activities and tasks which consume resources. It has to be completed within a set specification, having definite start and end dates. And project management can be defined as the process of controlling the achievement of the project objectives; (Munns and Bjeirmi, 1996). Success means different things to different people. Pinto and Mantel, for example, identified three aspects of project performance benchmarks for measuring the success or failure of a project: the implementation process, the perceived value of the project, and client satisfaction with the result, (Shenhar, et al, 2001).

The outcomes of project management success are several. They would include the obvious indicators of completion like budget, satisfying the project schedule, adequate quality standards, and meeting the project goal, (Munns and Bjeirmi, 1996). Hence the primary tools to ensure that these indicators are in place are the designed and implemented internal controls of the organization or project. Projects always have three-dimensional goals; time, cost, and quality ("Iron Triangle" of cost, time, and quality). Pinto and Slevin mention that projects are often rated as successful because they have achieved acceptable levels of the three-dimensional goals, (Randt, et al, 2014, V, 25).

On the other hand, the factors which may cause the project management to fail would include the inadequate project basis, wrong person as project manager, unsupportive top management, inadequately defined tasks, lack of project management techniques, misused management techniques, unplanned project closedown and lack of commitment to the project

These factors would suggest that successful project management requires planning with a commitment to complete the project; careful appointment of a skilled project manager; spending time to define the project adequately; correctly planning the activities in the project; ensuring correct and adequate information flows; changing activities to accommodate frequent changes on dynamic; accommodating employees' personal goals with performance and rewards; and making a fresh start when mistakes in implementation have been identified,( Munns and

Bjeirmi,1996)To assess a project's success, one needs to understand the distinct dimensions and address different timeframes—from very short to very long ,( Shenhar,et al, 2001).One of the most common approaches to project success has been to consider a project successful when it has met its time and budget goals,( Shenhar, et al, 2001, 699–725).

Almost 50 years ago some authors suggested cost, time and quality as the success criteria bundled into the description. The criteria of success known as the Iron Circle was under argument and accordingly, De Lone identified six post implementation system criteria to measure the success of a system, (Atkinson, 1999).

System measures

System quality

Information quality

Information Use

Users' satisfaction

Individual impact

Organizational impact

Successful project management can then be defined as having achieved the project objectives: Within time, within cost, at the desired performance/technology level, while utilizing the assigned resources effectively and efficiently, accepted by the customer, (Haroldkerzener, 2009).

## 2.13. Failed Projects

Failure could be avoided by paying careful attention to the project management factors which caused failure, (Munns & Bjeirmi, 1996). Duncan and Gorsha also identified three problem areas which indicate the success of a project. These are under-costing, overspending and late delivery. It is suggested that project planning is needed to overcome these problems, (Munns and Bjeirmi, 1996). Undercoating or overcasting is related to cost of project while late delivery is linked to completion time. The project iron triangle indicates time, cost, quality and scope as dimensions of quality. Cost and time are measurements of success therefore they are critical areas for the success or failure of a project.

A project is a mode of organizing resource. It is a group of individuals who are assembled to execute different tasks on a familiar set of objectives for a distinct period of time. Projects need a leader who can identify the work objectives and criteria for success and recruit staff from all

relevant areas of proficiency, (Abbasi, et al, 2014). According to these authors most organizations have experienced projects that did not end on time, were over budget, or changed in scope over time. And they indicate some basic reasons why projects fail. These are

Lack of senior management

Scope creep

**Unclear Project Objectives** 

Gaps in communication

Lack of visibility of all projects

The study conducted by Abbasi, et al,(2014) indicates some other reasons which could be consider as contributing factor for failed projects these are:-

Extreme geographic location

Weak risk management

Lack of timely decisions

Sluggish response in critical situation

Undermining the situation

Lack of planning

Financially mismanaged project

The author concludes that projects failure is preventable with good project planning. Proper planning is a core element of an internal control system and most of the reasons indicated for failed projects could have been prevented or minimized to a greater scale had the organizations or the projects maintained a well-designed and effective internal control system.

## 2.14. Internal control to project success

There are great differences among projects. Projects may differ in terms of technology, size, complexity, risk, and other variables, (Shenhar, et al, 2001). Accordingly, the internal control system designed and implemented should be in line with the type and complexity of the project in place. Shenhar, et al, 2001 indicated in their article that project success planning should become an integrated portion of organizations' strategic thinking and strategic management. And each project has its own specific dimensions. Successful project management techniques will

contribute to the achievement of projects, but project management will not stop a project from failing to succeed, (Munns & Bjeirmi, 1996) one of the most critical factors for the successful completion of projects is top management support. The support is usually strongest if there is a project champion and this champion is from the top management, (Belassi & Tukel, 1996).

Internal control is designed by the top management of the organization and implemented under their close supervision. Internal controls are used as a tool to monitor whether the allocated budgets or funds are utilized on its intended purpose, whether people are doing their duty properly and with discipline, whether materials are safeguarded and used only for their proper purpose etc. Performing all these in a wrong way means there are irregularities and a poor internal control system is in place as result, the planed activity or project will not meet its purpose which means it will have failed.

Controls serve a particular purpose for each construction project phase and react to the ever changing list of risks in each phase. Internal control is the most important, fundamental, and effective means of management in modern enterprises. Whether establish and improve internal control or not is directly related to success or failure of construction projects. A large number of actual cases show that the majority of causes of failure and decease of projects are short of internal control, and particularly due to ineffective internal control.

## **CHAPTER THREE**

## RESEARCH DESIGN ANDMETHODOLOGY

### 3.1. Introduction

The study was planned to carry out at selected government organization which have construction projects. Research design refers to a scheme or plan of action for meeting the objectives of the study. Each design has its own applicability depending on the problem and objectives of the study, the attributes and geographical dispersion of the subjects under study, and several other factors like the researcher's capability, resources and time.

A descriptive research design is selected for this research as it enables the researcher to assess what the internal controls in relation to government construction projects are, whether the internal controls are effective or ineffective and what aspect of the construction projects are affected by those internal controls and also help the researcher to assess whether a relationship really exists between the two.

The study was designed as a descriptive research, descriptive study which is used to gather the relevant and appropriate information on the assessment of the internal control on the success of construction projects. The investigation method involves asking concerned individuals questions face to face, or via questionnaires, and departments of the selected organization to find out personal, professional, organizational or sectored information. Therefore this section of the thesis will present the sub topics of the chapter like the research design and methodology that was applied specifically to this study. It covers research design strategy, population, sample size and sampling method, method of data collection, ethics, and method of data analysis.

## 3.2. Research Design

This study was designed to follow descriptive research design which is mixed of qualitative and quantitative but dominantly qualitative research strategy, The descriptive research design was used to assess the practice of internal control system in the government construction projects on the selected government organization and also to draw comparisons between management and line staffs' responses; Descriptive research design studies are those studies which are concerned with describing the characteristics of particular individuals or of groups. In descriptive studies,

the researcher must be able to define clearly, what he wants to measure and must find adequate methods for measuring it along with a clear cut definition of 'population' he wants to study. Its aim is to obtain complete and accurate information in the studies, (Kothari, 2004, P, 37,).

For the same reason, descriptive qualitative research design is selected by the researcher because it equips the researcher to assess clearly the designed and implemented internal control system on the selected government construction project through applying and gathering various and diverse forms of data, such as interviews, observations, and documents.

The reason behind is that this research will focus mainly on the assessment of the practice of the internal control systems of the government construction projects and its implication for success, thus the data to be collected are mainly qualitative stemming from interviews and questionnaires. It also includes steps like coding the interview replies, customizing observations, tabulating the data; and performing several statistical computations.

## 3.3. Population

The main purpose of this study is to assess the designed and implemented internal control system on the government construction projects and in order to forward constructive and actionable recommendations it should be based on concrete evidence. Therefore the evidence or data should be collected from concerned bodies. For this study, data was gathered from the following target groups.

- Employees of the selected organization (i.e. employees of the MoH, MoE, MoUDH, and Addis Ababa Road Authority) for this research including but not limited to procurement officer, finance officer, store and time keepers, project managers, foreman, warehouse officer of the government construction projects of the selected organization, of the contracting companies and similar organizations. Data was planned to collect from eight respondents representatively from each department which are directly related to construction projects of the selected and mentioned four organizations that is implementer of the construction project through using questionnaire totaling the selected respondent to 32.
- As managements are crucial on projects by making important decisions and driving change related to the projects, to meet their hectic work schedule this study has conducted an

interview with two management members of the selected organization's management and project managers from each organization including MoFEC. The total number of management interviews was 10.

- According to financial regulation of the Federal Republic of Ethiopia the Internal auditors of the government organization have unlimited access to evaluate the designed and implemented internal control system of their organization. Hence collecting data from the internal auditors of the selected organization is very important. Data was planned to collect through questionnaires and interview. The expected number of respondents from this group was five from each organization that have a senior role involvement in control assurance and construction projects audits. Here three questionnaires were also being distributed among inspection directorates of the MoFEC because this directorate has full and relatively complete information regarding the internal control and the projects of all the government organization. The total respondent of this group were 23.
- External auditors of government organization like the Federal Auditor General, have the duty and responsibility of assessing the internal control system of the auditee organization and recommending on the findings. Therefore collecting data from this body on this area is crucial; the data was collected from eight auditors selected from the two organizations through questionnaires and two from each was selected for interviews. Among them 6 were selected from a director and an audit manager level.
- The focus of this thesis is on the public construction projects. The employees of the organization being mostly the main end users of those projects having a direct or indirect involvement. This group observes impartially the progress and defects of the project and is sometimes becoming the end user to have a first-hand experience. Hence, gathering 28 respondents' which is made up of seven respondents from each organization would be relevant.

The rationale is that the selected respondents are direct or indirect stakeholders (beneficiaries, employees, managers' internal and external auditors of the selected organizations) on the stated (public) construction projects and are believed to provide their response free of bias.

The above respondents are systematically selected from the focused organization and group on the basis of the researcher's experience and good knowledge of the area through its direct involvements of similar activities and working landscapes of the stated organizations.

## 3.4 Sample Size

As illustrated on the above Population/Target group section for the questionnaire a total sample of 99 respondents was taken for questionnaire and 14 for interviews. It is believed that the data and information which was collected using the above informative samples through the designed method was sufficient enough or was reasonable to reach into conclusions and to forward recommendation.

Table 3.1: Summary of the sample size:-

No	Respondent	Questionnaire	Interview
1.	Employees of the selected four organizations (MoH, MoE,		
	MoUDH, and Addis Ababa Road Authority) that have a		
	direct link with the construction (8 forms each).	32	
2	Management members of the MoH, MoE, MoUDH, and		
	Addis Ababa Road Authority, (2 from each and 2 from		10
	MoFEC).		
3	Internal Auditors of the selected four organizations and		
	MoFEC (5 from each and 3 from MoFEC).	23	
4	External Auditors from OFAG, ASC (8 from each).	16	4
5	Other staffs from the selected four organizations i.e. MoH,		
	MoE, MoUDH, and Addis Ababa Road Authority (7 from	28	
	each).		
Tota	l number of respondents	99	14

## 3.5 Sampling Technique

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample, (Kothari, 1990:54). Accordingly use of appropriate sampling method is crucial for a research.

For this research in order to collect relevant and evidenced data and information from those targeted group who are well experienced, familiar and having a rich knowledge on the research topic, the researcher designs to use purposive sampling method. Purposeful sampling or known as judgmental, or selective, is a method where a non-probability sample is selected based on characteristics of a population correlating to the objective of the study. Therefore the researcher chooses this sampling method for the reason that the method is primarily used when there is a limited number of people that have expertise in the area being researched, or when the interest of the research is on a specific field or a small group.

The selected groups are targeted groups which have direct relation with and who are familiar directly or indirectly with construction project of their organization as well as the auditors who are engaged in the audit of the organization or projects held by the organizations to become fundamental in providing a first hand and relevant information for the researcher to conduct the assessment and reach on the right conclusions to forward valuable and evidenced recommendation.

### 3.6 Data Sources

This study is descriptive qualitative research. Qualitative researchers typically gather multiple forms of data, such as interviews, observations, and documents, rather than rely on a single data source, (Kothari, 2004, P, 175). The study was used primary data and secondary data.

For the purpose of this study primary data are important and mandatory because primary data are fresh data which are collected by the researcher through interview, questionnaire, inspection and observation, and are self-administered. But secondary data will also be used by merging and aligning with the focus of primary data.

### 3.7 Method of Data Collection

For the purpose of this research, data has been collected through questionnaires, interviews and physical observation and inspection. Close ended questions are chosen by the researcher to make it easier and quicker for respondents to answer, to make the answers of different respondents easier to compare, to make answers easier to code and statistically analyze and to make response choices easily clarify questions meanings for respondents. With an aim to further strengthen the

assessment, interviews with the management of the selected organization on selected and key points has been conducted coupled with the physical observation and inspection of project sites and working practices by the researcher.

### 3.8. Data Collection Instrument

The data collection tool was mainly questionnaires and interview as primary data and reports as secondary data. The questionnaire was carefully designed to cover relevant issues related to the study. To establish the reliability and credibility of the questionnaire the researcher was conducted with senior staffs that have deep knowledge and information about the selected organization. Following the communication of the senior staff the draft questionnaire was carefully edited and evaluated in the face of their relevance to the expected information. The questionnaires were open or close ended types depending on their information needs.

It is expected that the data and information collected will only be about and only focus on the assessment of the internal control on the success of construction projects. The interview and as well the questionnaire will try to exploit deeply the necessary data. Like our sample the questionnaires was distributed randomly to the mentioned groups and it is expected the entire questionnaire was collected within a week after submission. Meanwhile the interviews was conducted with the concerned target groups.

### 3.9 Data Collection Procedure

To meet its objective and address the stated research questions, Data were collected by self-administrated questionnaires from the selected government organization using a structured and pre-tested questionnaire which is adopted from project management and internal control procedures.

Primary data where originally obtained by the direct efforts of the researcher through, interviews and direct observation. This gives the researcher the chance to control the quality of the data being obtained. The primary data was the most important and basic to examine the effect of the internal control on government construction project.

Therefore, during the data collection process, the researcher has formally contacted the respondents before starting the interview and distributing questionnaire to make ready and be

informant the concerned parties in order to collect reliable and true information that helps to reach at acceptable conclusions. The rationale behind the questionnaire and the interview was explained to each of them and five to eight working days were given to them to go through and thorough and complete the questionnaire. Given their duty on other responsibilities it is believed that giving the stated time to the respondents would be important so that they can realize each item in the questionnaire and respond the correct and real condition.

## 3.10 Data Quality Control

The quality of data was guaranteed by proper designing and pre-testing of the standard questionnaires. Pretesting was done by experts in the area and their language, subject and comments were included to the final questionnaires. The study participants were filling the questionnaire in their own perspective institutes. The questionnaires were reviewed and checked for completeness by the researcher..

## 3.11 Method of Data Analysis

Data was evaluated based on the responses from the distributed questionnaire and interviews conducted and each response was administered by applying simple frequency arrangement using appropriate software application like SPSS (Statistical Packages for Social Science) and MS Excel and was deeply analyzed using various statistical tools. The research will give proper attention on the questionnaires and interviews content validity, proper scoring, order of questions and a selection of a representative sample.

### 3.12 Data Management and Analysis:

All the questionnaires were checked manually for any inconsistencies and incompleteness in the data set. Coded and entered into Microsoft Excel 2007 and transferred to IBM SPSS Statistics 20 software packages and Microsoft excel for analysis. For the demographic and dependent variable frequency and descriptive statistics was applied to analyze the data. The results were presented in the form of tables, figures and text using frequencies and summary statistics such as mean, standard deviation and percentage.

## 3.13 Reliability and Validity

Reliability estimates the consistency of the measurements or more simply, the degree of uniformity of the results obtained from repeated measurements. Reliability is essentially about consistency, (Adams, et al, 2007, P, 235). On the other hand, validity is the strength of our conclusions, implications or propositions, (Adams, et al, 2007, P 237). For this purpose, the quality of data was measured, evaluated and guaranteed using appropriate techniques.

## 3.14. Ethical Consideration

In the course of any research, the researcher has an ethical responsibility to complete the work honestly and with integrity. Accordingly, this research was free of fraud and plagiarism. The entirety of the research was carefully planned and was governed by ethical considerations.

# **CHAPTER FOUR**

## DATA ANALYSIS, INTERPRETATION, AND DISCUSSION

### 4.1. Introduction

The study was conducted to assess the Internal Control practice of selected government organization for the success of their construction Projects with an aim to identify areas of deficiencies and provide productive recommendations.

The sample for this study was planned to be 99 respondents from the four targeted governmental organization who run construction project (FMoH, MoE, MoUDH, and Addis Ababa Construction and Road Authority AARCA) and organizations which conduct an external audit and evaluate overall statuses of the selected organization (OFAG, ASC, MoFEC). The respondents were selected using a purposeful sampling, judgmental, or selective sampling. This sampling method is a non-probability sampling that is selected based on the characteristics of a population and the objective of the study.

The data analysis and interpretation section, presents and discuss on the first part the detail descriptive statics results related with the demographic factors of the study followed by an analysis to evaluate the designed and implemented internal control system of the selected organization for the success of their construction projects.

## 4.2. Survey Results and Discussion

### 4.2.1 Demographic Information of Respondents

Prior to running of SPSS for the detail analysis of the descriptive statistics mixed of qualitative and quantitative and interpretation of the samples of the targeted respondents dealing with the demographic information of the respondents will provide reliability and relevance of the question and as well the respondents. The baseline characteristics of the respondents were as follows.

A total of 99 targeted respondents (beneficiaries, employees, managers' internal and external auditors of the selected organizations) on the stated (public) construction projects were planned to include in the study. Eighty three completely filled questionnaires were analyzed with an overall response rate of almost 84%. The highest proportion of the respondents, 43 (52.4%) were

within the age group of 25-35 years while 29 (35.4%) between the age group of 36-50 years to indicate the respondents great deal of familiarity and experience in the area of the study. Males constituted 56 (70%) of the respondents. From the total, 83 respondents 47 (63.5%) were supporter Role in construction projects. Almost 100% of the respondents do have a Bachelor of Art or a Masters level educational status demonstrating the respondents' academic ability to understand well and respond on the subject matter and the questionnaires. Most of the respondents 70 (86.4%) were line staff and supervisors who do deal with the internal control and construction projects as part of their day to day activities.

The details of demographic characteristics among the selected government organization who own construction projects are illustrated under on Table 4.1.

Table 4.1 Demographic statistics of respondent

variables	Frequency	Percentage
	N	%
Age		
18-24	5	6.1
25-35	43	52.4
36-50	29	35.4
51-60	5	6.1
Above 60	0	0
Sex		
Male	56	70.0
Female	24	30.0
<b>Educational Status</b>		
Primary Education	0	0
Secondary Education	0	0
TVET	1	1.3
BA/ BSc	60	73.1
MA/MSc	21	25.6
PhD	0	0
Above PHD	0	0
Job Position		
Line Staff	34	42.0
Supervisor	36	44.4
Manger	11	13.6

Source: - Own Survey, 2016

### 4.2.2. Existence of Internal Control

As can be seen from table 4.2, While addressing question one and two the respondents tend to being average with a standard deviation of 0.99 to be in different between disagree and agree on the existence of internal controls that also emphasis on construction projects which are working their intended purpose effectively.

The respondents stand comes clear when they hold an average neutral stand with a mean value of 3.1 on question three regarding a scheduled evaluation of the implementation of internal controls though there is a standard deviation of 1.09 to spread some respondent in both directions which makes the researcher believe the level of awareness by all staffs in the existence of internal control in those organization is limited as the standard deviations are due to the responses from the 58% supervisory and managerial level respondents. This could also be due to the limitation of knowledge regarding who and how evaluation of those internal controls is carried out. There appears to be a clear segregation of duty in relation to construction project activities and harmonization of line and support staffs within the stated organizations despite the respondents' average neutral view where the question of independent project comes to question which is followed by a standard deviation of 1.17 which the researcher accepts this due to the fact that some organizations are functioning with project offices while others don't.

The management of the selected organization was interviewed and the summary of the information collected was almost the same with that of the information gathered from questionnaire in everything except the following

- Some members of the management believe that timely remedial actions are taken according to the recommendations based on audit findings related to the construction projects.
- Some of them assume that the cause for the failure of the projects is not related to weak internal control system but that it was the result of other forced measures.
- The capacity and knowledge of the internal and external auditors to evaluate the actual
  performance of construction projects is not tailored with the need of the top management
  and the public.

- The existing rules and regulations of procurement of the government are difficult to implement on construction projects.
- The employees of these construction projects need continuous capacity building to change the wrong attitude and create a sense of ownership.

To sum up, regarding the summary of respondents to questionnaires given to assess the existence of internal controls within their organization, with an overall mean response of 3.3, the respondents have confirmed that they have an inclination to lay somewhere between being neutral and agree on the existence of internal control within their organization. As a good practice though the internal controls may not be functioning effectively, it is the researcher's strong belief that the internal controls should have had existed and be well known by all respondents to be answered as agreed or strongly agreed.

Table: 4.2. Descriptive Statistics of Existence of Internal control on the selected organization

Descriptive Statistics								
Existence of IC	N	Minimum	Maximum	Mean	Std. Deviation			
Existence of IC Q1	82	1.00	5.00	3.3049	0.97739			
Existence of IC Q2	82	1.00	5.00	3.2805	1.02167			
Existence of IC Q3	81	1.00	5.00	3.1481	1.07367			
Existence of IC Q4	82	1.00	5.00	3.3780	0.92483			
Existence of IC Q5	82	1.00	5.00	3.3659	0.94949			
Existence of IC Q6	82	1.00	5.00	3.1341	1.17339			
Valid N (list wise)	81							

Source: Own Survey, 2016

### 4.2.3. Control Environment

Results on control environment shows a higher level of confidence from respondents on question one, four and seven where 53%, 54% and 51% of the respondents either agree or strongly agree on managements closely following up the implementation of internal control system in various steps of the project, the management assigning a clear authority and responsibility and communicating the objectives of the project to provide effective direction to employees respectively.

This indicates the extent to which ambiguity regarding employees understanding the roles and responsibilities of management on internal controls are minimized within those organizations. The concerning result is seen on question number eight where respondents were required to confirm if performance audits are conducted by the internal audits of the organizations on regular basis and almost 60% responded to either be neutral or disagree. Performance audit is believed to be one of the internal control systems where value for money in areas of economy, efficiency and effectiveness is asserted but the result shows the level to which it is exercised and contributing to construction projects is small enough not to be well known to give comments on or disagree by more than half of the respondents.

This was along with a standard deviation of 1.09 which was understood by the researcher to be due to respondents with or no experience of conducting performance audits swinging the results. Though not to the level of question eight the other worrying result was obtained on question three where 52% of the respondents responded below average when the question of appropriate and timely remedial actions being taken to correct irregularities in construction projects arises.

The internal controls that provide remedial actions are the primal activities that would have deterred or at least minimized the potential drawbacks on money, time and quality aspects. Subjects that are explained later on the research. On the remaining questions the respondents seems to be neutral having a mean value of 3.2 with a marginal tendency to agree on management providing feedback to staffs, the selected management theories ability to enhance the internal control system and the presence of project chart which sets clear lines of responsibility where no respondent strongly disagreeing on communicating construction project objectives to provide effective direction to employees.

The data obtained through interviews and documents review supports to a higher level the stands on performance audit and taking appropriate and timely remedial actions grounds where interviewees showed in what can be said all in all similar stands.

**Table: 4.3.** Descriptive Statistics of control Environment of the selected organization

Descriptive Statistics								
Control Environment	N	Minimum	Maximum	Mean	Std. Deviation			
CE Q1	82	1.00	5.00	3.3902	0.95266			
CE Q2	82	1.00	5.00	3.2195	0.92995			
CE Q3	82	1.00	5.00	3.1463	1.07866			
CE Q4	82	1.00	5.00	3.4390	1.00735			
CE Q5	82	1.00	5.00	3.2195	0.91657			
CE Q6	81	1.00	5.00	3.3210	1.11610			
CE Q7	82	2.00	5.00	3.3659	0.83905			
CE Q8	81	1.00	5.00	3.0123	1.08965			
Valid N (list wise)	80							

Source: Own Survey, 2016

### 4.2.4 Internal Audit

Responses from respondents regarding internal audit are more extrapolated than the others. 72% of the respondents affirmed to agree of this the 30% by strongly agreeing on the direct responsibility and accountability of the internal audit to the top management. This is due to the mandate given to the internal audit function of the stated organization through legislation which also justifies for most respondents to agree on independency of the internal auditor from routine activities in the project.

But the outreaching of the proclamation was not without its limitation where only 50% of the respondents to agree when independency of the internal auditors was brought to the picture. The results of the interview was clear here when the fact that internal auditors are the employees of the organization they audit and report to the top management to cause a concern on the independency of the internal auditors in the eyes of most respondents. But despite all these, half of the respondents tilt to agree on the presence of strong internal audit department. The

bothersome but the hard truth was also reflected on question seven when the 72% of the respondents tend to disagree on the internal audit staffs obtaining continuous professional trainings to develop their profession.

This view was more strengthened with the interview held with the audit managers of the stated organizations as explained the trainings are limited to only local trainings which themselves do not exceed twelve hours. This fact contradicts the international well accepted standard and a good practice for internal auditors to obtain at least forty hours of continuous professional developments in any given year.

Another low consent was reached in skills and capacity of the internal audit to conduct project audits where more than half of the respondents put the subject in to question. From the interview it was easy to understand it was aggravated mainly due to high turnover in the sector. The sum effect of the factors above greatly contributes for the respondents to have a disagreeing tendency on the internal audit conducting scheduled audit on construction projects.

**Table: 4.4.** Descriptive Statistics of Internal Audit of the selected organization

Descriptive Statistics									
Internal Audit	N	Minimum	Maximum	Mean	Std. Deviation				
IA Q1	82	1.00	5.00	3.9268	0.97854				
IA Q2	82	1.00	5.00	3.3780	1.11820				
IA Q3	82	1.00	5.00	3.3415	1.05666				
IA Q4	82	1.00	5.00	3.2927	1.08284				
IA Q5	82	1.00	5.00	3.4512	0.99570				
IA Q6	82	1.00	5.00	3.1220	1.04693				
IA Q7	82	1.00	5.00	2.7561	0.98834				
IA Q8	82	1.00	5.00	3.1829	1.18767				
IA Q9	82	1.00	5.00	3.0488	0.95455				
Valid N (list wise)	82								

Source own: 2016

### 4.2.5 Management to Internal control

Results are at variance to question one and question two with the highest and the lowest mean values respectively while assessing the managements stand in view of internal controls. Respondents as well as the data from interviews have agreed the commitment of the management to strengthen the internal control of the organizations 57% of the respondents and almost 100% of the interviewees being supervisors and managers have played its role in flawing a bit the results. But in contrary the respondents and the researchers personal observation has confirmed that availability of sufficient and continuous capacity building supports to the staffs are at scarce. The limited availability of resources or budgets for similar activity is the major cause of such organization wise detriment practice.

The management's commitment should be reflected in allocating sufficient budget and resources for capacity building schemes on staffs working on control systems. By the same token, a mean result of 3.1 on taking actions on reported weakness of controls poses a concern of the management's commitment to strengthen the existing internal control systems. Tough there exists a tendency to agree on employees being well aware of the contribution of internal control to success of construction projects a much higher results would have demonstrated a more sound stand of the management on internal control.

This could be partly explained due to only a few controls existing that are directly related to construction projects. The highest but one mean result was obtained for existence of a clear and scheduled reporting system on the performance and over all activities of the construction project. But from the observation the stated reporting's lack to incorporate reports on the causes of any inefficient practices or use of resources which could impair the overall objective of the construction project.

**Table: 4.5.** Descriptive Statistics Attitude of Management on Internal Control

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation				
Management on IC Q1	82	1.00	5.00	3.4634	0.97113				
Management on IC Q2	81	1.00	5.00	2.7778	1.03682				
Management on IC Q3	82	1.00	5.00	3.1707	1.00376				
Management on IC Q4	82	1.00	5.00	3.2805	0.98475				
Management on IC Q5	82	1.00	5.00	3.2195	0.94313				
Management on IC Q6	81	1.00	5.00	3.3086	0.97008				
Valid N (list wise)	80								

Source own survey: 2016

#### 4.2.6 Control over Procurement

Respondents have a more or less an average stand on control in procurement with a little exception in the areas of procurement transparency and maintaining a clear guidelines for construction procurements where on both term respondents inclined to agree. It indicates the familiarization of the in use government procurement manuals and procedures across the stated organizations. The data for identifying and controlling cost escalation on the stated organization shows the lowest results with a mean value of 2.85 which are seven percent below the average indicating gaps in the internal control system.

A control system that shows trends and results should have been in place to monitor cost escalation more efficiently. Internal controls are in place to detect if not prevent when breaches occur and as a best practice organizations likewise the respondents were expected to have had agreed on such points but the result are different from this with a mean value of 3.0 indicating an average level of confidence by the users in the existing controls leaving a room for improvement in the internal control of the stated organizations in the stated area. The fact that breaches are left unidentified or reported could be one of the reasons for the quality of the construction projects of the stated organizations to result as average.

**Table: 4.6.** Descriptive Statistics of Control on Procurement

Descriptive Statistics							
Control on Procurement	N	Minimum	Maximum	Mean	Std. Deviation		
Control on Procurement Q1	82	1.00	5.00	3.2439	1.00075		
Control on Procurement Q2	82	1.00	5.00	3.1098	1.01842		
Control on Procurement Q3	82	1.00	5.00	3.1098	1.04239		
Control on Procurement Q4	82	1.00	5.00	2.8537	0.97020		
Control on Procurement Q5	82	1.00	5.00	3.2073	0.97800		
Control on Procurement Q6	81	1.00	5.00	3.0370	0.95452		
Valid N (list wise)	81						

Source own: 2016

### 4.2.7 Control over human resource and Time Management

Proper induction of employees is a highly recommended practice especially when the role involves high risk and sensitive environment like construction projects. But this appears not to be the case in the selected organization with the lowest mean value of 2.5 and a standard deviation of 0.98 obtained in response to staffs given training on internal control system of construction projects when newly recruited.

This supported by the second lowest mean response of 2.7 for presence of strong internal control in relation to efficiency and time management for project staffs would have impacted adversely at least in the short run the success of the projects as inappropriate actions may not be prevented and/or actions taken until full awareness by the staffs is created.

This is partly reflected with an apparent mean neutral stand of the respondents and opinion of the interviewees held when addressing if appropriate actions are taken on staffs of projects that are not in line with the rules and regulation of the project. The absence of clear autonomy to project managers to direct and take actions on support staffs who normally report to another supervisor not in the direct involvement of the project must have acted as an impediment for this. As governmental organizations the factors where a higher agreement supposed to exist but results show average were control on the salary, other benefits and attendance to employees.

Observations and some interview points have indicated lower benefit schemes, location of the construction projects and collusion to some degree by staffs as major factors to create an inherent risk over the internal controls.

The success of construction projects rely to a great extent on the level of expertise and experience of the project manager which is only marginally above the average in the selected organization the benefit schemes present as the solely cause for this to exist.

Table: 4.7. Descriptive Statistics Control on Human Resource and Time Management

De	Descriptive Statistics							
Control on HR and Time Management	N	Minimum	Maximum	Mean	Std. Deviation			
Control on HR& Time Management Q1	81	1.00	5.00	3.1481	1.05013			
Control on HR &Time Management Q2	81	1.00	5.00	3.1605	0.94150			
Control on HR &Time Management Q3	81	1.00	5.00	2.5309	0.98851			
Control on HR &Time Management Q4	82	1.00	5.00	2.7561	1.09501			
Control on HR &Time Management Q5	82	1.00	5.00	2.9634	1.04757			
Control on HR & Time Management Q6	82	1.00	5.00	3.0366	0.96155			
Control on HR &Time Management Q7	82	1.00	5.00	3.1341	1.02755			
Control on HR &Time Management Q8	82	1.00	5.00	2.9878	1.07145			
Control on HR& Time Management Q9	82	1.00	5.00	3.2195	0.94313			
Valid N (list wise)	81							

Source own: 2016

### 4.2.8. Internal control over Schedule and Quality

The presence of timely and accurate information for decision making is vital for an organization as well as construction projects. Obtaining a marginally higher response than mean 3.0 values for obtaining timely, relevant and reliable reports on projects and for existence of decisively established channels of communication to whistle blow for the top management is a concerning fact. It was understood that there exists an information gap and most reports are received delayed mainly due to capacity of individuals working at projects and the existing longed channels of communication. As per the standards from MoUD, government procurement manuals and best

practices require construction contracts to contain penalties for failures to timely meet covenants. Once again the respondents prefer to remain indifferent on contract and related penalty terms. Penalties are effective to the extent they are exercised. Seldom than not, the red tape in court proceedings, the difficulty in easily replacing contracted agents along with the time and cost associated with these acts as a bottle neck not to exercise this right.

**Table: 4.8.** Descriptive Statistics Internal Control on Schedule and Quality

Descriptive Statistics							
IC on Schedule & Quality	N	Minimum	Maximum	Mean	Std. Deviation		
IC on Schedule & Quality Q1	82	1.00	5.00	3.0854	1.04470		
IC on Schedule & Quality Q2	81	1.00	5.00	3.2469	0.90182		
IC on Schedule & Quality Q3	82	1.00	5.00	3.2561	0.91370		
IC on Schedule & Quality Q4	82	1.00	5.00	3.0488	1.07614		
IC on Schedule & Quality Q5	82	1.00	5.00	3.2195	0.98161		
IC on Schedule & Quality Q6	82	1.00	5.00	3.4634	2.31578		
Valid N (list wise)	81						

Source own: 2016

## 4.2.9 Assessment on General internal Control Questions

A slightly higher than average responses were obtained for question one three and four with mean results of 3.2, 3.2 and 3.4 respectively the highest being for question relating to duties of key employees of construction projects being well defined. It is comforting to obtain an above average result when it comes to duties of key employees but it would have pave the road for accountability to be addressed to a higher extent if results were much highly agreed.

This is well explained on the result of question three where respondents demonstrate an almost similar view on aligning a clear accountability whenever irregularities on construction projects arise. This indicates an existing gap in avoiding ambiguity and maintaining a clear accountability within the stated organizations. Though management members and staffs are believed to be fairly aware of the effect of the internal control to success of the construction projects this should be greatly enhanced along with a demonstrated commitment to take remedial actions on recommendations by both internal and external auditors for which respondents show a clear

average perception. Despite their importance the results in relation to a continuously updated internal control and a continuous risk management are disconcerting when they simply turn out to be average coupled with an almost one standard deviation to demonstrate some respondents to believe the actual status are much lower than average.

Proper risk management and maintaining a dynamic internal control help organizations understand the risks they are exposed to, put controls in place to counter threats, and effectively pursue their objectives. They are therefore an important aspect of an organization's governance, management and operations with no exception to construction projects.

**Table: 4.9.** Descriptive Statistics of the general questions related to the construction projects

General Questions	N	Minimum	Maximum	Mean	Std. Deviation
General Questions Q1	82	1.00	5.00	3.2073	1.09700
General Questions Q2	82	1.00	5.00	3.0244	1.11084
General Questions Q3	81	1.00	5.00	3.2099	1.08069
General Questions Q4	82	1.00	5.00	3.3780	1.03804
General Questions Q5	82	1.00	5.00	2.9878	0.89572
General Questions Q6	82	1.00	5.00	3.0732	0.95297
General Questions Q7	82	1.00	5.00	3.0488	0.98008
Valid N (list wise)	81				

Source own: 2016

## 4.2.10. Cost, Time and Quality dimensions

### **4.2.10.1.** Time Dimension

All (100%) respondents demonstrate all government construction projects delay more than six months. Majority of the respondents or 62 (74.6%) believed that government construction project delays ranges between 13-24 months or above 24 months to complete the constructions this indicates the deficiency existing on the internal controls in relation to proper planning and the internal controls that are in place to prevent any delays and detect potential delays.

In addition it demonstrates in more than half of construction projects the internal controls that are incorporated in the contractual agreements to deter and proactively monitor prolonged delays

are not being implemented effectively. Though part of the delay could be due to factors outside the control of the internal control system like unfavorable weather condition, the researcher finds it difficult to holistically pause such longed delays on uncontrollable factors only. Fig.4.1. illustrates the average delay in months.

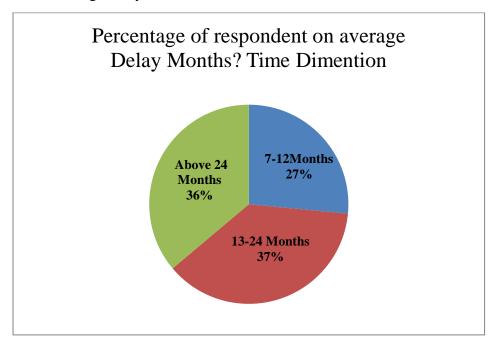


Figure: - 4.1.

### 4.2.10.2. Cost Dimension

As depicted in Figure 4.2. All (100%) respondents demonstrate all government construction projects incur a cost escalation ranging from 5%. The researcher considers the possibility of the cost escalation presented on government construction projects as a percentage could be misleading of the hard fact as 5% could be a very large sum of money which may run to tens of hundreds of millions when the project involves large sums of money like house and road projects. One of the most critical areas that internal controls are expect to function well is the area of cost control which appears to be in absence in the selected organizations. And the fact that 38.5% of the respondents demonstrate that the cost escalation is higher than 20% indicates the gap that is existing in the internal control in addressing economy in terms of controlling cost escalation.

It can easily be explained that the cost escalations could have been partly triggered from material cost increases and encountered design changes but the researcher believes that these could have been prevented if a sound control system was in place to conduct appropriate planning and feasibility studies.

The following figure shows the result of cost escalation pattern of the selected government construction projects very well.

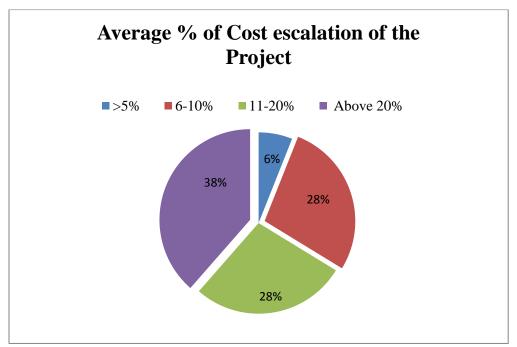


Figure:-4.2. Pattern of cost escalation

## 4.2.10.3. Quality Dimension

There is still a disagreement between project management researchers as to what constitute project success and how quality is to be measured. One way of measuring quality as the method selected in this study is through assessing the perception of the end users and stakeholders. In what can be said half of the respondents confirmed an average quality standard of on progress and completed government construction projects while 34% responded a good quality. None has responded an excellent quality where as 17% responded of a poor or a very poor quality.

It's highly expected of internal controls to address efficiency through a provision quality outputs in order to effectively meet their intended purposes but in contrary they appear to be of in short in the stated organizations.

It can be concluded from here that the internal controls that are in use at the stated organizations are not sound enough to result in quality though relative deliverables in the eyes of the stakeholders to imply a further room for development.

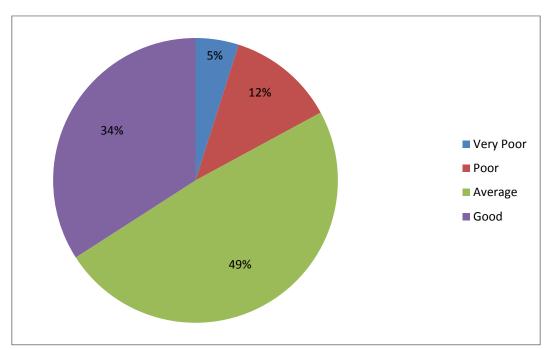


Figure: 4.3. Quality of the projects on pie charts

Source own: 2016

## **CHAPTER FIVE**

## SUMMARY, CONCULUSION & RECOMMENDATIONS

## **5.1 Summary**

In this paper the researcher attempted to study assessment result on the practice of internal control system of government organization and the relation for the success of their construction projects. In doing so, primary data obtained through interview and questionnaires, distributed to targeted and selected groups using pervasive sampling method; the targeted group was management member of the organization or projects, employee of the selected organization internal auditors and as well external auditor who has interest on the organization /project. The following conclusion can be inferred from the study.

- Most of the response from the respondent is neutral this indicates that the awareness on internal control system is not satisfactory at all level of the management and staff of the project or the organization. And as well the attitude of management members on internal control of the government organization.
- From the response of the internal and external auditors it is clearly understood that the capacity of internal audit specifically in relation to project audit is weak.
- The result of the analysis and the interview shows that there is lack of transparency on procurement and recruitment as well as capacity building schemes and associated benefit schemes of employee for the project.
- Even though the internal audit section is directly accountable to head of the organization
  and project and have unlimited access to perform an audit on the construction project the
  response declare that the internal audit don't conduct an audit specifically to evaluate the
  construction projects.

- Most of the respondent believes that most of government construction is delayed, they
  incur additional cost, and the quality is not as per the standard on the response collected
  there is no response of excellent in relation to quality dimension.
- The response also shows that there is lot of audit layers on the project and valuable recommendations forwarded from the internal and external auditors but remedial action were not taken accordingly.
- There is a longed channel of communication and delay on relevant information to top management for decision making.

### **5.2. Conclusions**

According to, Abbasi, et al, 2014 a project is a mode of organizing resource. It is a group of individuals who are assembled to execute different tasks on a familiar set of objectives for a distinct period of time. Projects need a leader, who can identify the work objectives and criteria for success and recruit staff from all relevant areas of proficiency; from this statement it is clear that the key responsibility of the leader of project is to mobilize the resource and people for the success of the project. Here mobilizing people and scared recourse needs plan and control therefore designing and implementing strong internal control is important for the success of projects at all and government construction projects as well.

For this study, the internal control system of four government organizations who own different types of construction projects were assessed, and the influence of internal control for the success of their construction project was evaluated.

The data collected from the selected and targeted groups was focused on the overall internal control system like the control environment, the existence of internal control, the strength and independence of the internal audit and the awareness of the management and the staff on internal control. Data was also collected in order to evaluate the control on procurement, human resource quality, cost escalation as well as the schedule or time of the construction projects. The statistical result indicates that there is a direct relation between the organization's internal control and the success of their construction and that internal control can control the cost escalation, delay, and quality of projects.

This study strongly suggests that most of the government's construction projects are delayed by up to more than twenty months, there is cost escalation which is more than 10% and the quality of the construction projects is average or less than average.

The other result obtained from this study is that there is no strong system of procurement, the control of the human resources deployed on these projects is not satisfactory, although the internal audit of the organization is independent, its contribution to success is limited as a result of a capacity problem, lack of continuous training and misunderstandings on the part of the top management. The other important point identified on this study is that the management of the selected organization doesn't take appropriate, timely and continuous remedial actions according to the recommendations given by the internal and external auditors.

Therefore as the study evidenced and based on the above general conclusion the researcher forwards the following general but key recommendation to be implemented so as to achieve the and meet the purpose of the government construction projects by strengthening the internal control of the organization and the project.

#### **5.3. Recommendation**

As a result of what is discussed above and based on the findings and conclusions of the study, the researcher of this study forwards the following recommendations to the selected organization in specific and to government organizations who own construction projects in general. The researcher believes that the intent of government construction projects is to solve the social problems of the society and the government needs to complete the projects efficiently, economically and effectively.

This means that the completion of the projects should be on time and according to the contractual agreement, as per the allocated budget that is without additional cost and with the expected and designed quality. Hence the management of the construction projects at all levels, the internal and external auditors of the organization and the whole staff should implement the following recommendations for success of their construction projects.

 All government construction projects are designed to complete as per the schedule, allocated budget and quality but this study identifies that construction quality is average, there is cost escalation and there is also delay but this may minimize or control with strong internal control. Hence the organization should have strong internal control system to support the day to day activity of the project. Therefore the management of the government organization should give due attention to their internal control system.

- Internal control is designed and implemented to support the overall activity of the organization proactively and it needs to follow-up day to day on its implementation. On the other hand, internal control is the responsibility of the entire staff of the organization. Hence management of the organization should build coordination among all their staff to maintain strong internal control system.
- The success of a project is the result of timely procurement, close supervision of human resources, risk management, proper communication with internal and external stakeholder's etc. from this study we can understand that
  - Delay of projects is the result of weak control on human resource, time extension, unplanned procurement, poor communication with internal and external stakeholder etc.
  - Problems related to quality indicate that the organization doesn't exploit the value for money principle (VFM).
  - All projects have their intended purpose like resolving social problems, generate
    profits etc. therefore if projects are delayed the owner of the project will
    categorically all the above and as government the people will raise question on
    the government.

This is some of the risks that the management of the project should give due attention to mitigate and minimize. Strong follow-up which should be supported by internal control definitely reduce these matters.

• A project is a one-time, multitask job with a definite starting point, definite ending point, a clearly defined scope of work, a budget, and usually a temporary team. Or A project is defines as 'A unique set of co- ordinated activities, with definite starting and finishing points, undertaken by an individual or organization to meet specific objectives

within defined schedule, cost and performance parameters.' From this definition we can understand that a project is,

Coordinated activity,

Has starting and finish time,

Has clearly defined scope and budget,

Have its performance parameters,

To meet this objective the project should have skilled project management professionals which can and the project manager should be supported by the designed internal control system.

- According to The Institute of Internal Auditors Research Foundation (2011) the business world is becoming increasingly complex due to new, evolving, and emerging risks. Organizations are giving risk management more consideration, but implementing an effective risk management program takes time and discipline. Internal auditors are finding they can play important roles in risk management. Evidently most of projects are exposed to risk with different reasons on the other hand risk management is a new science but has the big contribution for the success of projects therefore parallel to the design of construction project expected risk should be identified and all the possible method of risk mitigation should be designed and communicated to all staff of the project as part of the internal control system.
- Internal audit of an organization or project part of the entire internal control system, internal audit has the mandate to evaluate the performance of projects; internal audit is accountable to the top management body of the organization to keep its independency.
   But according to this study
  - Most of the internal audit of the government organization is not strong and there is skill gap to evaluate construction project.
  - Less attention is given to internal audit by the top management and the staff of the project.

- Appropriate and timely action is not taken based on the recommendation of the auditors.
- The researcher also reaches to conclusion during the interview with management of organization that most of the internal auditors of the organization is not motivated to their profession.
- There is no capacity building mechanism to build the capacity of the internal auditor.

Therefore the top management the organization should take into account the above points since accountability to strengthen the internal audit and the staff of the internal audit should update themselves to add value on the success of the project. Similarly appropriate action should be taken on recommendation given by the external auditor.

# 5.4. Limitation of the Study

The growing economy and population has driven a rapid increase in infrastructure demand. The government has been and still is allocating large budgets for roads, railway, bridge, dam, houses and other construction projects accordingly. In relation to their scope, location, complexity and purposes, these construction projects are owned by different governmental organizations. Hence, it is difficult to conduct an assessment and evaluation over all of them. Therefore, this study will only focus on the projects included in the scope of the study. Some of the reasons for the limitation include:

- 1. Time and financial constraints. For this reason, the study was restricted to only the constructions in Addis Ababa.
- 2. Due to the complexity and diversity nature of government projects, it was difficult to generalize the findings and recommendations to all construction projects owned by the government.
- 3. Unavailability of prior studies on similar topic.

# 5.5. Direction for Future Research

This study was conducted to assess and evaluate the internal control system designed and implemented on government organizations to the success of construction projects. The sample was drawn from only four selected government organizations and thus this study may not be very conclusive about government construction projects as a whole. On top of the limited organization, the sample selected for the questionnaire and interview was also limited. So, future research on this or similar topics should to use a larger sample of respondents for the sake generalizing the results of the study applying it to most of the government owned construction projects.

This study considers only time, cost and quality of project as dimensions to evaluate the success of construction projects, but there could be some other relevant dimension that may be used to evaluate the success of similar projects such as the scope of the project, which is not included in this study. Future researches, therefore, may consider other dimensions that are relevant to this topic and issue.

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# **APPENDICES:-**

#### ST. MARY'S UNIVERSITY

#### SCHOOL OF POST GRADUATE STUDIES

#### MASTERS OF BUSINESS ADMINISTRATION IN PROJECT MANAGEMNENT

# **QUESTIONNAIRE**

Dear Respondents, This questionnaire is designed to assess the existing internal control system of the organization/project for the success of government construction projects. All responses were used to conduct a study for the partial fulfillment of Master's Thesis in Business Administration in Project Management. I would like to assure you that you were guaranteed for the confidentiality of information as you are not requested to put any mark that identifies you. The responses given will only be used for the intended purpose. Besides, this assessment should only take not more than 25 minutes of your precious time. I am grateful for your cooperation in advance!

# PART 1 Demographic information Male L Female 1. Gender: -25-35 $\square$ 36-50 $\square$ 51-60 $\square$ above 60 $\square$ 18-24 2. Age: -Support Direct/Line 3, Role in construction projects High school TVET BA/BSC Primary L 4. Education level: -MA/MSc $\square$ PhD Above PhD $\square$ Supervisor level Line staff Managerial Level $\square$ 5. Job position: -5-10 □ 10-15□ .6. Work Experience: -1-5 15-20 above 20□ N.B Please put a " $\sqrt{}$ " mark to all your responses in the square provided beside each statement

# PART 2

This part two of the questionnaire covers about the internal control system designed and implemented in your organization/project or projects you are familiar specifically related to the construction projects. Please indicate how much you agree or disagree with each of the following statements by using tick marks  $(\sqrt{})$  the tick mark that best represents your opinion:-

- 1 Indicates strongly disagree,
- 2 Indicates disagree,
- 3 Indicates neutral,
- 4 Indicates agree and
- 5 Indicates strongly agree.

	5		·			
No	Dimensions	Strongly	Disagree	Average	Agree	Strongly
		Disagree				agree
	A. Ex	istence of in	ternal contro	ol		
1	There are strong Internal controls within					
	_					
	your organization that also emphasis on					
	construction projects					
2	The Internal controls are working their					
_						
	intended purpose effectively					
2						
3	There is scheduled evaluation on the					
	implementation internal controls.					
4						
4	Segregation of duty in relation to					
	construction project activities are					
	clearly designed and implemented.					
5	There is harmonization among the					
	support staff and line staff of the					
	project.					
6	There is independent project office to					
	manage all the projects.					
	manage an the projects.					

	В.	Control Env	rironment		
1	The management closely follow-up the implementation of internal control system in the various step of the project.				
2	Management provides feedback and to all staffs working in construction project.				
3	Appropriate and timely remedial actions are taken to correct irregularities in the implementation of the construction project.				
4	The management has assigned a clear authority and responsibility in relation to construction projects.				
5	The management's selected management theories enhance the internal control system?				
6	There is an organizational/project chart which sets forth clear lines of responsibility.				
7	The construction project objectives have been communicated so as to provide effective direction to employees control issues				
8	Performance audits are conducted by the Internal audit department on a regular basis and recommendations are acted on and followed.				

		C. Intern	al Audit			
1	The internal audit section of the					
	organization is directly responsible and					
	accountable to top management of the					
	organization.					
2	According to the power given by the					
	finance proclamation The internal audit					
	is fully independent.					
3	There is strong Internal Audit					
	department/section in your					
	organization/project.					
4	The internal audit department has					
	unlimited access to perform an audit on					
	the overall activity of the project.					
5	The Internal Audit section is					
	Independent from the other routine					
	activity of the project					
6	The internal audit has skilled and					
	capable staff to carry out its assignment					
	and to conduct various types of audit on					
	projects.					
7	Staffs of the internal audit obtain					
	continuous training to develop their					
	profession.					
8	Annual budget is allocated for the					
	internal audit department to conduct an					
	audit independently.					
9	Scheduled audit was conducted on the					
	construction project on past two years					
	D. Ma	nagement o	n Internal co	ontrol	<u> </u>	
1	Management of your organization is					
	committed to strengthen the internal					
	control system.					

2	Management of your organization				
	provides sufficient and continuous				
	capacity building support to the staffs				
	that are working on the control system.				
3	Management of your organization takes				
	action on reported weakness of controls.				
4	Management and staff are well aware				
	on the contribution of internal control to				
	success of construction projects.				
5	The senior management demonstrates,				
	through its actions the necessary				
	commitment to internal controls within				
	the organization.				
6	There is clear and scheduled reporting				
	system on the performance and over all				
	activities of the construction project				
	E.	Control on	procuremen	ıt	
1	There is transparency on procurement of				
	goods for construction projects.				
2	There is scheduled program for				
	procurement of materials for				
	construction projects.				
3	Strong internal control are designed and				
	implemented over procurement of				
	materials for construction project.				
4	Cost escalations on procurement are				
	well identified and controlled.				
5	There are clear guidelines maintained				
	by the organization for construction				
	procurements?				

6	There is a system to identify and report					
	when there exists a breach on the					
	presented guidelines?					
	F. Control on Hum	nan resou	rce and time	managem	ent	
1	There is transparency on recruitment of					
	staff for the construction projects.					
2	Recruitment of staff for project in					
	accordance to the project capacity.					
3	All Staffs which are recruited for the					
	project has got training on the internal					
	control system of the construction					
	project or the organization.					
4	Strong internal control in relation to					
	efficiency and time management is in					
	place on the project staff.					
5	The salary and other benefit to					
	employee are controlled and a system in					
	place to prevent and detect mischief.					
6	Appropriate action is taken on staff of					
	projects that are not in line to the rules					
	and regulation of the project or					
	government employee.					
7	Control on attendance is strong on the					
,	construction projects					
	1 0					
8	The company's culture, human resource					
	policies and performance reward					
	systems support the					
	organizational/project objectives and					
	internal control system?					
<u> </u>						

9	Project managers have the sufficient				
	level of expertise to oversee and				
	monitor the construction projects.				
	Internal Contro	ol on sche	edule and Qu	ıality	
1	The management and the Board				
	receive timely, relevant and reliable				
	reports on Project progress that				
	provide them with the information,				
	from inside and outside the				
	company, needed for decision-				
	making.				
2					
2	There are established channels of				
	communication for individuals to				
	report suspected breaches of laws or				
	regulations or other improprieties on				
	the projects.				
3	There is a system where involved				
	agents submit periodic reports in				
	comparison to the scheduled work				
	break downs.				
4	Contracts contain penalties for failure to				
	complete the project or meet milestones				
	timely and the penalties are exercised				
	often.				
5	The organization has a system to control				
	and review the selection and works of				
	sub-contractors.				

6	Project managers have the sufficient				
	level of expertise to oversee and				
	monitor construction projects of similar				
	size and nature.				
		1 O	ati ama		
		eneral Que	stions		
1	The management members and staff of				
	the organization are well aware on the				
	effect of internal control to success of				
	construction projects.				
2	Remedial action is taken on				
	recommendations given by internal and				
	external auditors.				
3	There is clear accountability on				
	irregularities on the process of				
	constriction.				
4	Duties of key employees of the project				
	are well defined.				
5	Does the organization have a good				
	internal control system which is kept				
	updated?				
6	The significant internal and external				
	risks identified and assessed on an				
	ongoing basis.				
7	The organization has the expertise and				
	the sound internal controls system to				
	manage and complete successfully the				
	construction projects.				

# PART 3

# Questionnaires related to Time, Cost and Quality of Projects

What is the average delay on construction projects by your organization or construction projects you are familiar: -
6 months  7-12 Months  13-24 Months  above 24 Months
What is the average % of cost escalations on construction projects by your organization or construction projects you are familiar: -
>5%
What is the quality standard of on progress and completed construction projects by your organization or construction projects you are familiar?
Very Poor ☐ Poor ☐ Average ☐ Good ☐ Excellent ☐
Thank you for your kind cooperation.



#### ST. MARY'S UNIVERSITY

#### SCHOOL OF POST GRADUATE STUDIES

#### MASTERS OF BUSINESS ADMINISTRATION IN PROJECT MANAGEMNENT

#### Points for an interview

# Dear Sir, Madam,

These points of discussion are designed to assess the existing internal control system of the organization/project for the success of government construction projects. All the points raised during the interview was used only and only to conduct a study for the partial fulfillment of Master's Thesis in Business Administration in Project Management. I would like to assure you that you was guaranteed for the confidentiality of information as you are not requested to put any mark that identifies you. The responses given will only be used only for the intended purpose. Besides, this interview is assumed to take only about 15 minutes of your precious time. I am grateful for your cooperation in advance!

- Do you believe that there is cost escalation, delay, frequent change of design and problems related to scope on projects completed or still on execution stage under your organization or organization you conduct an audit. Would you brief me in detail please? What are the main reasons?
- Do you believe that the internal control system designed in your organization or organizations you perform an audit are adequate and proper to control the projects for their success. Please discuss in detail.

 How do you evaluate the activities of the internal audit on projects of your organization or organization you conduct an audit in relation to the achievement and success of the construction project. Let's discuss in detail.

• Do you believe that the strength of an internal audit of adds value on the internal control system and the success of projects or does an internal audit have direct relation to success or fail of construction project? If yes how? If no what are the reason behind?

 Does the management take an appropriate and timely remedial action on recommendations given by the internal and external auditors directly related to construction project to enhance the success and achievements of the construction projects? Please brief me the details.

 Do the management and the whole staffs of the organization believe that the internal control system has direct effect on the on the success and fail of construction projects?
 What are the systems placed by the management related to the role of the internal control on achievements of construction project.

 How do you evaluate the overall internal control system of your organization or organization you are familiar over their cost, quality, time, scope, human resource, procurement etc.

• Do you believe that strong internal control has the power to minimize or avoid delay, cost escalation and problems related to quality and scope of the construction project?

Thank you for your kind cooperation.