ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF PROJECT MANAGEMENT

AN ASSESSMENT OF CONSTRUCTION PROJECT MONITORING AND EVALUATION PRACTICES: IN THE CASE OF AASTU COMMERCIAL COMPLEX BUILDING CONSTRUCTION PROJECT

By
Tsegaye Teressa

Jun, 2024 G.C
Addis Ababa; Ethiopia

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ACRONYMS

AASTU	Addis Ababa Science and Technology University
AC	Actual Cost
ACWP	Actual Cost for the Work Performed
BCM	Beneficiary Contact Monitoring
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
CV	Cost Variance
DB	Design and Build
EV	Earned Value
EVT	Earned Value Technique
FDRE	Federal Democratic Republic of Ethiopia
GC	General Contractor
IT	Information Technology
M&E	Monitoring & Evaluation
PMI	Project Management Institute
PV	Planned Value
RBM	Result-Based Management
RD	Research Development
RII	Relative Importance Index
SPSS	Statistical package for social sciences
SV	Schedule Variance
TNT	Tesfaye Nardos Tilahun (Company's name)
UNDP	United Nations Development Program
UNECA	United Nations Economic Commission for Africa
USAID	United States Agency for International Development

Table of Contents

List of Tables

List of Figures

ABSTRACT

This study aims to assess the practices and challenges of Monitoring and Evaluation (M&E) in the case of AASTU Commercial Complex Building Construction Project which is undertaken by TNT Construction and Trading which is one of the Grade I GC contractor in Ethiopia. The study applied descriptive research design and used both questionnaires and semi structured interview to gather the data. To analyze the data, both qualitative and quantitative approach were used. The quantitative data were analyzed with the use of SPSS software and RII (Relative Importance Index) of frequencies. The data gathered from the open ended and close ended questions presented in combined way. The sampling method for this study was census. The target population of the study was 35 respondents in number from which the data will be collected. The findings from the key informants interview and M&E process document review of AASTU Commercial Building Construction Project tells that the project M&E system were well organized but it faces lots of challenges during conducting the M&E activity. Some of the challenges that the result shows are M&E implementation strategies and guidelines need regular updates with the scientific management systems, unavailability of data gathering and analyzing tools, project staffs has no positive acceptance on the feedbacks of the M&E team, data auditing is not regularly exercised and difficulty in communicating the results of M&E between employees. In order to improve effectiveness, provide appropriate trainings to all levels of the M&E staff, appropriate technological advancement, and sufficient allocation of funds, adequate top level management support and active stakeholder's involvement are some of the vital recommendations made in this research.

Key Words: *Monitoring, Evaluation, Project M&E Practices, Project M&E challenges, AASTU Commercial Complex Building and TNT Construction & Trading*

CHAPTER ONE
INTRODUCTION

The study assessed the practices of M&E in building construction that affect project performance, success and decision making process. This chapter presents the background of the study, statement of the problem, basic research questions, objectives (general and specific), significance of the study and scope and limitation of the study.

1.1 Background of the Study

Construction industry is the backbone for development of any country across the globe. Ethiopia's construction industry and infrastructure development includes building constructions, transport infrastructure, road construction, railway and energy projects, real estate and industrial parks. Small and medium construction companies operate in the informal market and local and foreign companies operate in the formal market. The involvement of foreign companies is dominated by Chinese companies which are undertaking large projects.

The construction industry is playing a vital role in the economic growth of developing countries like Ethiopia. According to the Construction Industry in Ethiopia (2022) Report; the construction market in Ethiopia is projected to grow at an annual average growth rate of more than 8% to 2026. The country's 10-year development plan includes infrastructure development and the objective of public-private partnerships. The industry is very huge, unstable and demands a huge amount of capital investment.

According to Chekol & Nuramo (2020), projects are carried out and managed in accordance with the organization's goals and established practices. However, lack of knowledge, economic constraints, leadership and organizational culture, misunderstanding of project management concepts, and a lack of appropriate software were identified as emerging constraints to the development of professional project management practices in Africa (Kissi & Ansah, 2014). In Ethiopia, the level of construction project management practice in terms of adapting general project management procedures, project management functions, tools, and techniques is inadequate (Ayalew et.al 2016). Studies further showed that many projects fail to be successfully completed for a variety of reasons. Among these failures are poor planning of the project

implementation process and a lack of understanding of the need for project monitoring and evaluation (Otieno, 2000; Callistus & Clinton, 2018).

Project success is the question of completing a project against its main design parameters set at the start of the project and on time, within budget, in accordance with the set specifications or standards, and with customer satisfaction respectively (Ottosson, 2013). The successful execution of construction projects and keeping them within estimated cost and prescribed schedules depend on a methodology that requires sound engineering judgment (Al-Najjar, 2008).

Monitoring and evaluation (M&E) is described as a process that assists project managers to scale up performance and influence the results. M&E aims at improving present and future use outputs, outcomes and impact (UNDP, 2012). Gyorkos (2013) asserts that monitoring provides management and stakeholders with clear indicators of advances and attainment of forecasted results using the available resources.

Day (2010), asserts that effective M&E is increasingly being appreciated as an important requirement for both project and portfolio management. This is because M&E provide grounds for being accountable in utilizing the resources available for development. Further M&E can be applied to make the project even stronger at the design stage, implementing it and stimulating potential partners among the stakeholders.

TNT Construction and Trading is a construction and general trading company established in accordance with the commercial code of the Federal Democratic Republic of Ethiopia (FDRE) in year 2005 (1997 E.C). Currently its office is located in Lemi Kura sub city Woreda 13. The company is established with the purpose of providing various construction services, import and export and other general trading activities and in so doing contributing specifically to the development of the construction industry in the country and generally to the economic growth of the country. The firm is currently registered as a General Contractor Grade-I meeting all the criteria set by government laws.

Currently, the company is undertaking different construction works of Building projects, Roads, Infrastructures, Waste Water Treatment Plant, Stadium and Site Works. As any other entity, the successful completion of its project is one of the driving forces at the company. AASTU Commercial Complex Building is one of the projects that are currently undertaken by the company in Addis Ababa. Based on the

firm's previous experience, effective project M&E is proved to be one of the key elements in achieving project successes. The firm uses monitoring and evaluation on projects, to determine whether a project has achieved the desired outcomes, which in turn facilitates the decision-making process in terms of the performance of the project. M&E can play a major role in enhancing the effectiveness of projects. Hence, the M&E system is really one of the pillar activities at the firm. Therefore, the aim of this study is to assess M&E practices and challenges in the case of AASTU Commercial Complex Building Construction Project of TNT Construction and Trading.

1.2 Statement of the Problem

The success of projects depends on various factors. One of the key factors for project success is having a sound monitoring and evaluation system and practices to make informed decisions and document lessons learnt for future programming, design and implementation (Gudda, 2011). With the above statement in mind projects at TNT Construction and Trading are monitored and their progress is evaluated on a weekly basis. Project's cost, time, scope, quality and resources (material, equipment and labor) are the major parameters which are assessed continuously.

There is a need to assess the process of M&E systems because M&E has emerged as a key policy development and performance management tool. Failing and Gregory (2003), argued that M&E is imperative to enable organizations track their performance and to measure the effects of the managerial actions thus acting as an avenue of a prompt feedback on evolvement towards goals and effectives of the intervention of the program. Hailey (2000), stated that M&E systems augment managerial processes and provides evidence for decision making.

M&E has evolved over time due to the need for Result-Based Management (RBM) as well as limited resources and involvement of non-state actors in development (Kusek and Rist 2001). Result-Based Management (RBM) is an approach to project management based on clearly defined results, and the methodologies and tools to measure and achieve them. RBM supports better performance and greater accountability by applying a clear, logical framework to plan, manage and measure a project with a focus on the results intended to be achieved. Rist, Boilyand Martin (2011: 11) indicated that Monitoring and evaluation (M and E) are essential components of results based management. Accordingly; the main aim of this research was to assess practices of M&E of TNT Construction and Trading construction projects according to professionals working in the

head office and projects located at Addis Ababa. The study; finally point out the overall significance of the company's M&E practice and identify its strength and weakness too.

1.3 Basic Research Questions

- What is the current Project Monitoring and Evaluation practice of AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa?
- How effective is the Practice of project Monitoring and Evaluation in AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa?
- What are the challenges in implementing Monitoring and Evaluation in AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa?

1.4 Research Objective

1.4.1 General Objective

The general objective of this study is to assess the M&E practices and challenges of AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa.

1.4.2 Specific Objectives

- To explore the current monitoring and evaluation practice of AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa.
- To check the effectiveness of monitoring and evaluation practice of AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa.
- To identify the challenges of monitoring and evaluation in AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa.

1.5 Significance of the study

The purpose of this study is to assess the M&E practice and process of TNT Construction and Trading projects in Addis Ababa. The paper will play its own roles for the company in finding out the major issues that make the company not efficient in managing the projects' M&E. And also, the findings and recommendations of the study will be used for those concerned bodies to find out more effective solutions to respond in controlling the practices and challenges of project M&E. It will be hoped that the paper will give awareness on how to improve project M&E practice of the company and other construction companies' future projects.

1.6 Scope of the study

The study is focused on the assessment of M&E practices and challenges of AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa. The company has six active building construction projects, two infrastructure (road) projects and four waste water treatment plants construction projects which are located at Addis Ababa, Bahirdar, Debrebirhan, Arbaminch, Bonga, Ambo, Odabultum and Debremarkos. Due to its number of projects and geographical dispersion, the data collection for the research was delimited to AASTU Commercial Complex Building Construction Project. The sample respondents comprise only managerial and professional engineers at the management level of the project. The result of the study is presented based on the opinion and responses of the respondents who were selected randomly.

1.7 Limitations of the study

The major challenge of this study was on the data collection process that the respondents took so much time because they were busy on filling the questioners. Some respondents were hesitant to tell the truth and were not fully cooperative in sharing the causes of delay in the mentioned construction project. This leads to took more time to analyze the given data of the respondents.

The company's currently on progress projects are located at Addis Ababa, Bahirdar, Debrebirhan, Arbaminch, Bonga, Ambo, Odabultum and Debremarkos. Due to the accessibility, shortage of time and financial resources, the study was limited its scope and focused on only AASTU Commercial Complex Building Construction Project.

1.8 Organization of the Paper

This paper is organized into five chapters. The first chapter deals with introduction part reflecting on the background of study, statement of the problem, objectives of the study, basic research questions, significance of the study, scope of the study and organization of the paper. The second chapter deals with related review of literature relevant to the study and it includes the theoretical frame works of the study. The third chapter deals with the research methodology and methods of conducting the study. The collected data from the subject of the study was carefully analyzed and interpreted under the fourth chapter. And the last fifth chapter presents the summary, conclusions and recommendations on the findings of the study. At last reference and appendix that includes questionnaire, interview questions and company's organizational structure and operation procedure chart as the part of the paper.

CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1 Introduction

In this section; the literature reviews that is already in existence concerning the practices of M&E of construction projects in the world and Ethiopia with specific accent on the construction projects. It presents an overview of previous work on related topics that provide the essential background for the purpose of the study. It further organizes the work into various topics and sub-topics under theoretical review that is strongly guided by the three objectives of the research.

2.2 Definition of terms and concept

2.2.1 What is a project?

According to the PMI, (2013); "Project is defined as a temporary endeavor undertaken to create a unique product or service. Temporary; means that every project has a definite beginning and a definite end. Unique; means that the product or service is different in some distinguishing way from all similar products or services."

(Lewis, (2005, P.5) define a project as - A project is a one-time job that has a definite starting point, definite ending point, clearly defined scope of work, a budget, and is multitask in nature. (Wysocki, (2003, P.3) define a project as - A project 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.

2.2.2 Characteristics of a project

A project shall have its own characteristics set aside so that it can be completed within budget and time. As cost and time for a construction project are interdependent, these shall be carefully planned. An increase or decrease in construction project time affects the budget of construction projects. Here follows six common characteristics of a project: project is typically for a customer, the project is temporary in nature and it typically has a defined start and a defined end-point, the project will have a unique set of requirements that need to be delivered within the boundaries of this project, a project can typically be more of a once-off endeavor, rather than something that's

happening all the time in a repeated fashion, a project is not 'business as usual' which is more akin to a process and a project can very often be cross-functional, or indeed cross-organization.

Construction implies designing building, installation and commissioning of items of civil, mechanical, electrical, telecommunication and other utility works necessary for building a specified construction-related facility or service.

A Construction project is a high-value, time bound, the special construction mission of creating a construction facility or service, with predetermined performance objectives defined in terms of quality specification, completion time, budgeted cost and other specified constraints.

The characteristics of a construction project are; project should have a specified target, should be unique and cannot be replicated with the same task and resources giving the same results, satisfy the owners requirement and expectations from the project, should not be a routine work, although there are some aspects that are routine, consist of a number of associated activities contributing to the project as a whole, the time limit for completion of project shall be defined, is complex and it involves a number of individuals from different departments. So, right coordination shall be setup within departments, the project manager must be flexible to accommodate any change that might occur during the project, there are factors of uncertainty such as the performance of individuals, how their skills adapt to unfamiliar work, and other unknown external influences, the total cost of construction project shall be defined and project shall be completed within the given budget, it should provide unique opportunities to acquire new skills, gives impetus to the project manager to adapt to working under changing circumstances, as the nature of the project is change, there are risks with each step of the project, and the project manager should manage those risks to reach the project goal.

2.2.3 Project Constraints

A project will be impacted by conflicting constraints. According to Wysocki (2003) there are five constraints operate on every project, these are Scope, Quality, Cost, Time and Resources.
Scope – defines the needs that the customer has, or the requirements expressed and implied.
Quality – to what standard is the project expected to deliver?

Cost – a major consideration throughout the project management life cycle. The first consideration occurs at an early and informal stage in the life of a project.

Time – a project is usually required by a customer by an agreed date.

Resources – the amount of money, budget, or resources that are available to be expended on the project.

2.2.4 Types of Projects

Projects can be broadly classified into different types based on their characteristics, objectives, and deliverables. Here are some common types of projects:

Construction projects: Projects involving the construction of buildings, bridges, roads, and other physical structures.

Information technology (IT) projects: Projects involving the development and implementation of software, hardware, and networking systems.

Marketing and advertising projects: Projects involving the development of marketing and advertising campaigns, branding initiatives, and product launches.

Research and development (R&D) projects: Projects involving the development of new products, services, or technologies, or the improvement of existing ones.

Event management projects: Projects involving the planning and execution of events such as conferences, trade shows, and festivals.

Organizational change projects: Projects involving the implementation of organizational changes, such as mergers, acquisitions, or restructuring initiatives.

Process improvement projects: Projects involving the improvement of existing processes to enhance efficiency, reduce waste, and increase productivity.

Social and community projects: Projects involving the development of social and community initiatives, such as charitable programs, community service projects, and public welfare campaigns.

2.2.5 Classification of Projects

Every Project is different from one another. Projects can be classified based on several different points. The classification of projects in project management varies according to a number of

different factors such as complexity, source of capital, its content, those involved and its purpose. Projects can be classified based on the following factors.

According to Complexity:

Easy: A project is classified as easy when the relationships between tasks are basic and detailed planning or organizations are not required. A small work team and a few external stakeholders and collaborators are common in this case. The tasks of the projects can be undertaken by a small team.

Complicated: The project network is broad and complicated. There are many task interdependencies. With these projects, simplification where possible is everything. The task of executing this type of project requires proper planning.

According to the source of capital:

Public: Financing comes from Governmental institutions.

Private: Financing comes from businesses or private incentives.

Mixed: Financing comes from a mixed source of both public and private funding.

According to Project content:

Construction: These are projects that have anything to do with the construction of civil or architectural work. Predictive methods are used along with agile techniques which will be explained later on. Furthermore, construction is an engineering project and the process of planning its execution must be painstakingly done to achieve the desired outcome.

IT: Any project that has to do with software development, IT system, etc. The types of project management information systems vary across the board, but in today's world are very common.

Business: These projects are involved with the development of a business idea, management of a work team, cost management, etc., and they usually follow a commercial strategy.

Service or product production: These are projects that involve the development of an innovative product or service, design of a new product, etc. They are often used in the R & D department.

According to those involved:

Departmental: When a certain department or area of an organization is involved.

Internal: When a whole company itself is involved in the project's development.

Matriarchal: When there is a combination of departments involved.

External: When a company outsources external project manager or teams to execute the project. This is common in digital transformations, process improvements and strategy changes, for example.

According to its objective:

Production: Oriented at the production of a product or service taking into consideration a certain determined objective to be met by an organization.

Social: Oriented at the improvement of the quality of life of people. This can be in the form of rendering corporate social responsibility (CSR) to the people.

Educational: Oriented at the education of others. This is always done to make them better.

Community: Oriented at people too, however with their involvement.

Research: Oriented at innovation and the gaining of knowledge to enhance the operational efficiency of an organization.

2.2.6 Characteristics of a Project

Focus: Project has a fixed set of objectives

Lifespan: Each project is time bound through the schedules

Unique: No two projects are alike in their execution even if the plans are duplicated and therefore a single time activity

Flexibility: Change and project are synonymous.

Team Spirit: This involves coming together of different individuals from varied disciplines

Risk and Uncertainty: Every project has risk and uncertainty associated with it

Task: It is further subdivision of a project

Subcontracting: The survival of a company depends how wisely it selects its vendors

2.2.7 Construction Projects

According to Aburizk (2010) construction projects differ from other projects in that construction projects have the following features.

Construction is typically undertaken at a fixed location or site, requiring a closer look at the logistical complexities involved. The building materials and resources required will have to be procured and taken to the site. Where the works are significant in scope, working space, traffic

management, security, public health and safety, and the environmental impact of the operations will all have to be given consideration.

Weather creates uncertainty for any project. In Ethiopia most of the road projects closed on summer due to rain fall in other parts of the world, temperature, snow, water, and sand can have a negative impact on the progression of works.

In modern construction, the introduction of new materials and technologies, methods, and requirements for sustainable or green development, can all contribute toward increasing levels of risk and complexity. Thorough project planning, design, research, and procurement can aid in their reduction and management.

The uniqueness of construction projects also means that the external influences and constraints would be different, yet subject to change throughout the project timeline. These can include rates of technological change, sources of financing, market forces, climate change, politics, and changing client requirements.

The timelines of construction projects are typically measured in years. Accordingly, clients would typically be required to have prepared and formalized at a very early stage, a design and budget. With some projects, the finer details and points are not fully worked out until after the works have commenced, thereby negatively impacting cost, quality, and timelines for the completion of activities.

Finally, differing members of the project organization to have balance conflicting commercial business interests and against achieving the aims and objectives of the project. For example, contractors may focus more on profit maximization and less on the other parameters which define project success. Clients on the other will seek to have the asset delivered in the shortest time possible, at the lowest cost, with the highest quality. Consultants, based on their contractual arrangements, may seek to also maximize their incomes, by limiting their time on the project. This offers a very complex landscape which has to be navigated, and often doesn't work to the best advantage of the project itself.

2.2.8 Parties in Construction Projects

There are many parties involved in construction projects but according to Rohaniyati (2009) the primary construction project parties include:

Employer/Owner: Define project requirements, function and services. Also, owners are responsible for providing financing support to a project.

Contractors: Carry out the works properly and in accordance with the contract. The contractor shall provide all supervision, labor, plant and contractor's equipment which may be required. All materials and plant on site shall be deemed to be the property of the employer.

Designer (Architect/Engineer): Responsible to interpret the idea and need of the owner in to a tangible blue print. And also watch and supervise the activities and to test and examine any materials to be used or workmanship employed in connection with the works.

2.2.9 Construction Project Life cycle

Every construction has a life cycle starting from its initiation to its maturity and close up. According to Lawrence (2003) a construction project has six phases:

Table 2.1: **Construction Project Life Cycle**

No.	A Construction Project Phases	Description
Phase 1	Pre-Project Phase	A construction project begins with an idea or the wish for more efficient provision of some public service. Whether the idea will be converted into a completed project will be decided during the planning and design phase. The owner must decide the type of project, select design professional and consultant.
Phase 2	Planning & Design Phase	The project is fully defined and made ready for contractor selection and deployment during the Planning and design phase. The consultant defines the project's objectives, consider alternative ways to attain those objectives and ascertain whether the project is financially feasible. In this process of planning and feasibility study, a project brief will be developed, more details will be set forth in a program statement, various sites may be investigated, public input may be sought, a preliminary cost estimate will be prepared and a final decision on whether to proceed with the project will be rendered.
Phase 3	Contractor Selection Phase	In anticipation of selecting a contractor, the owner must decide the method either an open selected contractor will be invited to submit offers. The consultants open the submittal, and evaluate the tenders, the selection of the successful contractor and the finalization of the construction contract.

Phase 4	Project Mobilization Phase	After the contractor is selected, a number of activities must be completed before installation work can begin at the project site. The contractor hand over the construction site, all the drawings and specification. The contractor prepares detailed program for the construction activities and submit it to the consultant for approval and budget. The worksite must be organized, with provisions for temporary buildings and services, access and delivery, storage areas and site security. The process of obtaining materials and equipment to be incorporated into the project must be initiated and arrangements for labor, the other essential resource, must be organized. With the completion of this phase, it is finally time to begin the actual field construction.
Phase 5	Project Operation Phase	In presenting the contractor's activities on the construction site, we will suggest, perhaps too simply, that the responsibilities involve three basic areas: monitoring and control, resource management and documentation and communication.
Phase 6	Project Closeout and Termination Phase	As the project nears completion, a number of special activities must take place before the contractor's responsibilities can be considered complete. There are the various testing and startup tasks, the final cleanup, various inspections and remedial work that may result from them and the process of closing the construction office and terminating the staff's employment.

2.2.10 Project Management

Project Management is the application of knowledge, skills, tools and techniques to project activities to meet project goals. It is the application of a set of principles, methods, and techniques to effectively plan and control a project work. It is the discipline of planning, organizing and managing resources to bring about the successful completion of specific project goals. It is accomplished through the application and integration of the project management processes of initiating, planning, executing, monitoring and controlling, and closing.

Project management is the application of modern management techniques and systems to the execution of a project from start to finish, to achieve predetermined objectives of scope, quality, time and cost, to the equal satisfaction of those involved. According to PMI; (2004): "Project management is the application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project."

From initiation/authorization to completion/closure, a project goes through a whole lifecycle that includes:

1) defining the project objectives (**Initiation**),
2) planning the work to achieve those objectives (**Planning**),
3) performing the work (**Execution**),
4) monitoring and controlling the progress (**M&E/Controlling**), and
5) closing the project after receiving the product acceptance (**Closing**).

Figure 2.1: **Five Sets of Processes in Project Management**

2.2.11 Monitoring and evaluating a construction project

PMI (2001) explains that monitoring and control of project work is "the process of tracking, reviewing, and regulating the progress to meet the performance objectives defined in the project management plan". It further explains that monitoring includes status reporting, progress measurement, and forecasting.

Monitoring is defined as the concurrent process of tracking the implementation of activities of the project and attaining its planned outputs. It helps to provide real time information of the progress of the project in terms of completing its activities and achieving its immediate outputs, both in terms of quality and target. Monitoring, thus, is an activity to see if an ongoing project is proceeding on track. It involves the process of systematically collecting data to provide real time

information for all stakeholders (managers, funders, participants) on the progress of implementation and the achievement of desired outcomes.

The critical functions of monitoring are: to gather feedback from the participants; collect data; observe the implementation of activities of the project; analyze contextual changes; and provide an early warning system of potential challenges. Analysis of monitoring data is critical to ensure that the project is being implemented in the right direction for it to achieve its intended outcomes. In case the project is not moving in its intended direction, midcourse correction should be done. Monitoring is applicable to all program levels (from input, process, output and outcome). Most commonly, the focus is on output data, although it is also important to track the goals and the objectives. Monitoring should ideally be an internal function of the project management team. Monitoring, thus, plays a critical role in the success of a project.

Monitoring of results helps to improve strategies and targeting. Enabling decision makers to focus the project resources on areas where they can get the maximum output, understand project implementation barriers or challenges in real time and suggest course correction measures and ensure that the project is more effective and result oriented. It also focuses on impact level changes throughout the project, rather than just at the end of project evaluation.

Evaluation is defined as systematic research to see if a program can achieve its intended outcomes and impacts. Evaluation is done firstly to see whether the envisaged objectives and goals have been achieved or not, and secondly, to see whether the achievement is because of the project interventions. It should assess the magnitude of change in the outcome and impact and whether the change in the outcome or the impact can be attributed to the project intervention. Evaluation assesses if there is any deviation from the goals and the objectives, and whether it can confidently be said that the objectives are achieved only because of project intervention.

Evaluation, then, is a type of causal research that establishes the cause-effect relationship between the activities and the outputs on the one hand and the objectives and the goals on the other. While monitoring facilitates mid-course correction in attainment of project outcomes, evaluation helps analyze variances from envisioned objectives and goals. By providing feedback to the project functionaries, M&E facilitates learning by doing. Development and enhancement of in-house capacities to anchor the M&E functions is, thus, a prerequisite for learning organizations.

2.2.12 Project Progress Monitoring

Project management has the obligation of establishing sufficient controls over a project to ensure that it stays on track towards the achievement of its objectives. According to European Union (2017) this is done by monitoring (internal), which is the systematic and continuous collection, analysis and use of information for management control and decision-making, whereas evaluation is an assessment, as systematic and objective as possible, of an ongoing or completed project, program or policy, its design, implementation and results whose aim is to determine the relevance and achievement of objectives, developmental efficiency, effectiveness, impact and sustainability.

Monitoring is the routine management task of collecting and reviewing information that discloses how an operation is proceeding and what aspects of it need correcting, if any. Monitoring is an ongoing function that uses the systematic collection of data on specified indicators to inform management and the main stakeholders of an ongoing International Federation or national society operation of the extent of progress and achievement of results in the use of allocated funds (IFRC 2002). Monitoring occurs throughout the project life cycle with a baseline study conducted before the project begins.

According to Kariuki (2014) monitoring is a continuous assessment of the function of project activities in the context of implementation schedules and the use of project inputs. Valadez and Bamberger (2004) argued that monitoring is more of a program activity, whose role is to determine whether project activities are implemented as planned. It is the routine collection and analysis of information to track progress against set plans and check compliance to established standards that helps identify trends and patterns as well as inform decisions for project management.

Projects usually monitor variety of things according to their specific informational needs. There are different types of monitoring commonly found in a project monitoring system. According to IFRC (2011) there are seven types of monitoring listed as follows:

Result Monitoring: This is where monitoring entwines with evaluation. It gathers data to demonstrate a project's overall effects and impacts on the target population. It helps the project team to determine if the project is on the right track towards its intended results and whether there may be any unintended impacts.

Process Monitoring: This is often referred to as 'activity monitoring.' Process monitoring is implemented during the initial stages of a project as its sole purpose is to track the use of inputs and resources, along with examining how activities and outputs are delivered. It is often conducted in conjunction with compliance monitoring and feeds into the evaluation of impact.

Compliance monitoring: Just as the name suggests, the purpose of compliance monitoring is to ensure compliance with donor regulations, grant, contract requirements, local governmental regulations and laws, ethical standards, and most importantly compliance with the expected results of the project. The need for compliance monitoring could arise at any stage of the project life cycle.

Context Monitoring: Context monitoring is often called 'situation monitoring.' It tracks the overall setting in which the project operates. Context monitoring helps us identify and measure risks, assumptions, or any unexpected situations that may arise within the institutional, political, financial, and policy context at any point during the project cycle. These assumptions and risks are external factors and are not within the control of the project, however, context monitoring helps us identify these on time to influence the success or failure of a project.

Beneficiary Monitoring: This type of monitoring is sometimes referred to as 'Beneficiary Contact Monitoring (BCM)' and the need for this may arise at any stage of the project cycle. Its primary purpose is to track the overall perceptions of direct and indirect beneficiaries in relation to a project. It includes beneficiary satisfaction or complaints with the project and its components, including their participation, treatment, access to resources, whether these are equitable, and their overall experience of change. Beneficiary monitoring also tracks stakeholder complaints and feedback mechanism.

Financial Monitoring: The main purpose of financial monitoring is to measure financial efficiency within a project. It tracks the real expenditure involved in a project in comparison to the allocated budget and helps the project team to form strategies to maximize outputs with minimal inputs. This is often conducted in combination with 'processes' and 'compliance' monitoring and is crucial for accountability and reporting purposes.

Organizational Monitoring: As the name suggests, organizational monitoring tracks institutional development, communication, collaboration, sustainability and capacity building within an organization and with its partners and stakeholders in relation to project implementation. According to Jody and Ray (2004) project monitoring includes the following major items.

- Physical project progress monitoring
- Finance progress monitoring
- Project quality Monitoring
- Assumption monitoring

Project Physical Progress Monitoring

Physical project progress monitoring informs managers and owners of the project in keeping a check on weather activities in project are up to schedule, if not managers need to be able assess how significant the delay is and weather remedial action needs to be taken. Managing physical progress can be linked to managing time. The items to be considered during physical monitoring are:

- Results of activities / project out puts
- Project inputs
- Progress of project according to objectives
- The way the project is managed and style of work

Project milestones are the simplest method for monitoring physical progress monitoring. Wysocki (2003) describes mile stones as it is the main step to test if the goals are achieved, and it helps in discovering the status of the project. Milestones define certain phases of the project, and represent decisive steps during the whole phases. They are set after a certain number of work packages that belong together in certain way. Effective monitoring and control over a project physical progress requires systematic 'performance analysis' this calls for answer the following questions:

- Is the project as a whole (and its individual component) on schedule, ahead of schedule, or behind schedule?
- If there is a variation? Where did it occur, why did it occur, who is responsible for it, and what would be its implications?
- What is the trend of the physical performance? What would be the likely final cost and completion date of for the project and its individual components?

Three approaches according to J. Jackson (2010) can be used in measuring physical progress.

1) Quantifying output of the activity in absolute terms. It is used to determine what percentage of the work is completed on the project. It can be calculating by measuring the quantity of work executed to date relative to the total quantity of work planned.

Work performed * 100(%) …….1

Work planned

For example, if it is planned to perform a total of 3,000square meter of floor tiles and performed only 1,500 square meters so far, there is a 50 percent complete with the work.

2) Valuing the output of the activity. To calculate earned value of the completed work and compare with total value of work planned.

Value of work done * 100(%)…….2

Total value of Work planned

3) Using time spent on the project /activity.

Time spent to date * 100(%)…….3

Total time to complete

Financial Progress /Expenditure/ Monitoring

As the project progresses the following must be measured periodically for purposes of cost monitoring and control. Control of budgeted cost involves evaluation of cost variances by comparing actual costs with budged costs to determine cost overrun / under run and computing schedule variances by comparing budgeted costs of work scheduled and work performed to determine deviations from the schedule. Further, it is used to estimate project cost at completion (PMI, 2004).

One of the budget monitoring or cost performance measurement techniques is the earned value technique (EVT). According to J. Lewis (2004), the earned value technique compares the cumulative value of the budgeted cost of work performed (earned) at the originally allocated budget amount, to both the budgeted cost of work scheduled (planned) and to the actual cost of work performed (actual).

Budgeted cost of work scheduled (BCWS) or planned value (PV): Planned value is the budgeted cost for the work scheduled to be completed on an activity or work break-down structure component up to a given point in time. It shows what is planned for execution budgeted cost of work performed (BCWP) or earned value (EV): Earned value is the budgeted amount for the work actually completed on the schedule activity or work break down structure component during a given time period.

Actual cost for the work performed (ACWP) or actual cost (AC): Actual cost is the total cost incurred in accomplishing work on the schedule activity or WBS component during a given time period. It is obtained by summing up the actual cost incurred to date in progressing work package. The AC must correspond in definition and coverage to whatever was budgeted for the PV and the EV, (PMI, 2004).

An important part of the cost control is to determine the cause of variance, the magnitude of the variance and to decide if the variance requires corrective action. The earned value technique involves developing these key values for each schedule activity, work package or control account. The PV, EV and AC values are used in combination to provide performance measures of whether or not work is being accomplished as planned at any given time. According to James J. Lewis (2004), the most commonly used measures are cost variance (CV) and schedule variance (SV).

Cost variance: CV is computed by comparing actual performance with the budgeted cost of work performed. CV equals EV minus actual cost (AC).

$$CV = EV - AC \text{…….....} 4$$

The cost variance at the end of the project will be the difference between the budget at completion (BAC) and the actual amount spent.

Schedule variance: SV is computed by comparing budgeted cost of work performed with the budgeted cost of work scheduled.

$$SV = EV - PV \text{…….....} 5$$

Schedule variance will ultimately equal zero when the project is completed because all of the planned values will have been earned. If schedule variance is positive, then the project is ahead of its planned cost, i.e. earned value of the work performed is higher than the planned or schedule earned value. If it is negative than the planned or schedule earned value. If it is negative, then the project is behind its planned cost.

Project Quality Monitoring

The first goal of the quality management plan is to get things done right the first time. Getting it right in construction doesn't always mean getting it perfect. For example, it is rare to find a concrete floor slab that is perfectly level. But it is commonly expected that a floor slab be level or flat within certain tolerances. According to technical specification a column form work is expected

to be straight enough to a tolerance of 6mm. This is not perfect, but it is a common standard of quality expected in the industry. So before doing this, the project team must first know what the quality standards are and the best way to achieve them. Workers can't do the job right the first time if they don't have the proper skills, the necessary level of experience, adequate supervision, and the tools and equipment needed to perform the task. In most cases, the foreman is responsible for seeing to it that the workforce is prepared and motivated to complete the task at hand.

Quality monitoring primarily deals with issues relating to conformance to the plans and specs. All of the materials, systems, and workmanship applied to the project must conform to the requirements set forth in the contract documents. Quality control is accomplished using a number of different mechanisms: submittals, mock-ups, shop drawings, inspections, and testing, which are all called for in the project manual.

Assumption Monitoring

Project risks should be monitored and controlled. The process of writing down the risks and assessing them makes everyone on the project team aware of their existence and is a good place to start. You need to put together a *risk log*. This document lists all risks that you want to manage, identifies who is supposed to manage the risk, and specifies what should be done to manage the risk event.

- The *ID Number* always remains the same, even if the risk event has occurred and been managed. If you take the risk off of the list and file it elsewhere, don't assign the old number to a new risk. Leave the number the same or there will be a great deal of confusion
- The *Risk Description* is a short statement of the risk event.
- The *Risk Owner* is the person who has to manage the listed risk.
- The *Action to Be Taken* lists what the owner is going to do to deal with the risk event.
- The *Outcome* tells you what happened.

Other processes to be monitored includes; procurement, payment, equipment and labor output monitoring.

Project Progress Monitoring Tools

There are three most widely used communication tools as mentioned by Metalign (2015) which includes progress reports, meetings and site visits.

Progress Reports: Progress reports prepared at regular intervals for reviewing of the status of the project. Progress reports enables the assessments of progress and achievements and helps focus on results of activities; enabling the improvement of subsequent work plans. Reporting helps from the basis for decision-making and learning at the management level. Reporting communicates how effectively and efficiently a project is meeting its objectives.

Regular Meetings: Regular progress review meetings help managers to inform all the members about the general progress and to identify where and when problems are likely to arise and then to act to prevent them from occurring as much as possible.

Site Visits: Site visits are important means of communication in the monitoring of project activities and output progress. Site visit is an in-depth gathering of project information for monitoring purpose.

Ensuring Quality of Monitoring Data

It is said that the quality of project monitoring is as good as the quality of data collected. It is very important to collect good quality data so that the program management team and other important decision makers can trust it and make use of it for tracking and improving the program. Good quality data should be accurate, complete, consistent (across different sources), timely, useful, precise, and accessible. Robust data quality assurance mechanisms and regular data auditing ensures the veracity of the monitoring data.

Data Quality Assurance

For data quality assurance, systems, document protocols and guidelines for ensuring monitoring data quality are developed throughout the various project stages. Checks and procedures are also defined right across the various stages viz., designing of monitoring formats, translation of monitoring formats, during data collection, data entry or digitization etc.

Key aspects that should be included while developing a data quality assurance plan is listed below:

1) Listing quality assurance mechanisms to be followed at all project stages.

2) Assigning roles and responsibilities for data collection, data auditing and deciding their frequency.
3) Conducting concurrent data auditing and investigating the reasons for data variance if any.
4) Calibration of the monitoring and reporting formats to check their precision, and translation, while ensuring they are not biased in any way.
5) Validation of data and data cleaning systems.
6) Conducting training to build the capacities of the data collection team and to maintain consistency in the way the tools are administered.
7) Defining roles and responsibilities for data collection and data auditing.
8) Defining data quality benchmarks and action to be taken in case the collected data falls below these benchmarks.

Data Auditing

As part of quality assurance, it is also necessary to devise the plan for conducting data auditing. Data auditing is an exercise by means of which the veracity of data is checked. Data auditing is done primarily using two techniques-one, by conducting spot-checks and two, by conducting back checks. In spot-checks, the data quality auditor is present at the time when the data collector is collecting data. In this way, real time feedback can be provided to the data collector on tool administration or other related issues. Spot-checks done during the starting phase of data collection help to assess how survey tools are being administered by the data collectors. In back checks, the data auditor goes to a randomly selected sample of respondents from whom data has been collected by the main survey team. It is suggested that there should be a separate team for conducting back-checks, and these should be conducted immediately, i.e., on the very next day of the data collection. Both data sets are then matched to find if there is any variance between the two sets. This helps in gauging the quality of the data being collected, and based on this, improvement or rectification measures are taken up as and when required. At the same time, it is important to keep in mind that mostly factual questions should be used as part the back check tool so that the possibility of variance due to different responses by the respondent or any other external factor is at a minimum. Triangulation with other data sources is also useful for auditing the quality of the data.

2.2.13 Project Progress Evaluation

Evaluation is a systematic and objective assessment of an ongoing or completed project, program or policy in terms of its design, implementation and results and impact. Its aim is to determine the relevance and achievement of projects objectives, as well as its efficiency, effectiveness, Impact and sustainability. The IFRC (2002) stated that an evaluation should provide information that is credible and useful which enables the incorporation of lessons into management decision making. Evaluations are conducted for different purposes and at different points on an evaluation.

There are various types of evaluations which can be categorized according to the time of evaluation, according to who conducts the evaluation, and according to the methodology of the evaluation (IFRC 2011).

Evaluations based on timing are divided in to formative, summative, midterm, final ex-post. Scriven (1967) introduced the concept of formative evaluation, for Scriven, the objective of formative evaluation is to provide data that permit successive adaptations of a new program during the development and implementation phases of it. Formative evaluations generally are evaluations that lead to the conception of some programs, as they are usually conducted prior to the commencement of the program. Formative evaluation is used to determine the need and desirability of the project during its formulation stage (Weiss 1998-31).

The summative evaluation is conducted during or after the implementation of a project, with the aim of improving it. According to Palumbo and Hallet (1993-22), this leads to project improvement, by determining whether the project has succeeded or failed to achieve its intended objectives, and by making modifications to this project, if needed, to make them more effective.

Midterm evaluations are formative in purpose and occur in the middle of implementation phase of a project. Final evaluations are summative in purpose and are conducted at the completion of project implementation to assess how well the project achieved its intended objectives while ex-post evaluations are conducted sometime after implementation to measure long-term impact and sustainability.

Evaluations based on who conducts the evaluation are divided into Internal or self-evaluations, external or independent evaluations, participatory evaluations and joint evaluations. Evaluation

Based on Technicality or Methodology are divided into real-time evaluations, meta-evaluations, thematic evaluations, cluster or sector and impact evaluations.

Monitoring and Evaluation of a project is the process of tracking, reviewing, and regulating the progress to meet the performance objectives defined in the project management plan. It further explained that monitoring includes project status reporting, measurement of progress, and forecasting whereas, performance reports provide information on the project's performance with regard to scope, schedule, cost, resources, quality, and risk, which are often used as inputs to other processes. There are ten types of project monitoring:

Formative Evaluation: This is generally conducted before the project implementation phase. But depending on the nature of the project, it may also continue through the implementation stage. Its main purpose is to generate baseline data to investigate the need for the project, raise awareness of the initial project status, identify areas of concern and provide recommendations for project implementation and compliance.

Process Evaluation: It is conducted as soon as the project implementation stage begins. It assesses whether the project activities have been executed as intended and resulted in certain outputs. Process evaluation is useful in identifying the shortcomings of a project while the project is still ongoing to make the necessary improvements. This also helps to assess the long-term sustainability of the project.

Outcome Evaluation: This type of evaluation is conducted once the project activities have been implemented. It measures the immediate effects or outcomes of the activities in the target population and helps to make improvements to increase the effectiveness of the project.

Summative Evaluation: This occurs immediately after project conclusion to assess project efficacy and the instant changes manifested by its interventions. Summative evaluation compares the actual outcome data with baseline data to determine whether the project was successful in producing the intended outcomes or bringing about the intended benefits to the target population. It provides evidence of project success or failure to the stakeholders and donors to help them determine whether it makes sense to invest more time and money for project extension.

Impact Evaluation: Impact evaluation assesses the long term impact or behavioral changes as a result of a project and its interventions on the target community or population. It assesses the degree to which the project meets the ultimate goal, rather than focusing on its management and

delivery. These typically occur after project completion or during the final stage of the project cycle. However, in some longer projects, this can be conducted in certain intervals during the project implementation phase, or whenever there is a need for impact measurement.

Real-time Evaluation: Real-time evaluation is undertaken during the project implementation phase. It is often conducted during emergency scenarios, where immediate feedback for modifications is required to improve ongoing implementation. The emphasis is on immediate lesson learning over impact evaluation or accountability.

Participatory Evaluation: This type of evaluation is conducted collaboratively with the beneficiaries, key stakeholders and partners to improve the project implementation. Participatory evaluation can be empowering for everyone involved as it builds capacity, consensus, ownership, credibility and joint support.

Thematic Evaluation: Such type of evaluation focuses on one theme across a number of projects, programs or the whole organization. The theme could be anything, ranging from gender, migration, environment etc.

Cluster or sector Evaluation: Just as the name suggests, this evaluation is implemented by larger development and humanitarian sectors, including a group of different organizations, programs or projects that are working on similar thematic areas. It assesses a set of interconnected activities across different projects and entities. As a result, it strengthens partnerships within these key sectors, while improving their coordination, accountability, predictability, and response capacity.

Meta-Evaluation: This is used to assess the evaluation process itself. Meta-evaluations could be useful to make a selection of future evaluation types, check compliance with evaluation policy and good practices, assess how well evaluations are utilized for organizational learning and change, etc.

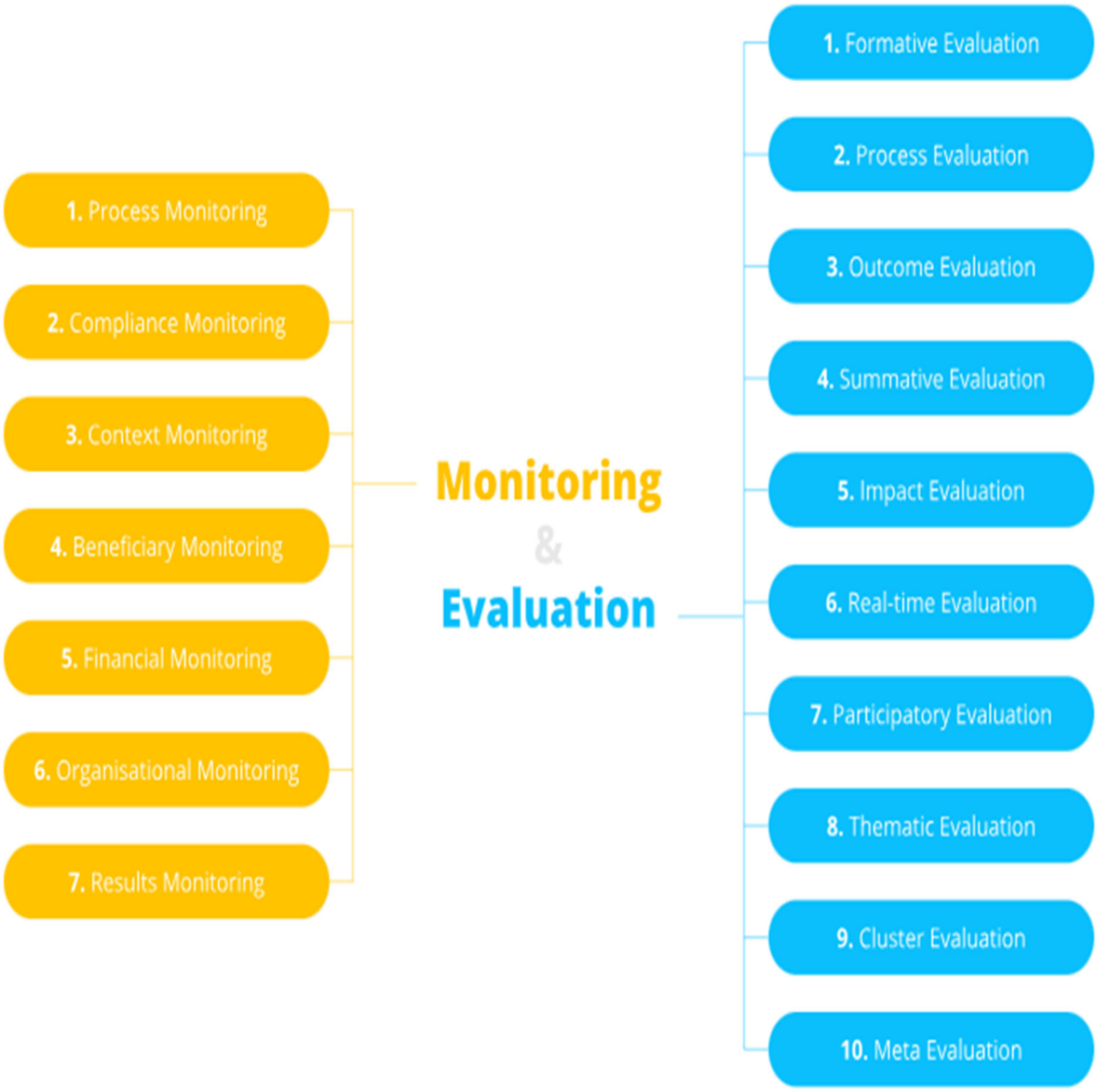

Figure 2.2: **Classification of M&E based on Purpose, Focus, Timing & Audience of Assessment**

2.2.14 Importance of Monitoring and Evaluation

Monitoring and evaluation are essential to any project or program. Through this process, organizations collect and analyze data, and determine if a project/program has fulfilled its goals. Monitoring begins right away and extends through the duration of the project. Evaluation comes after and assesses how well the program performed. Every organization should have an M&E system in place. Here are ten reasons why:

M&E results in better transparency and accountability

Because organizations track, analyze, and report on a project during the monitoring phase, there's more transparency. Information is freely circulated and available to stakeholders, which gives them more input on the project. A good monitoring system ensures no one is left in the dark. This transparency leads to better accountability. With information so available, organizations need to keep everything above board. It's also much harder to deceive stakeholders.

M&E helps organizations catch problems early

Projects never go perfectly according to plan, but a well-designed M&E helps the project stay on track and perform well. M&E plans help define a project's scope, establish interventions when things go wrong, and give everyone an idea of how those interventions affect the rest of the project. This way, when problems inevitably arise, a quick and effective solution can be implemented.

M&E helps ensure resources are used efficiently

Every project needs resources. How much cash is on hand determines things like how many people work on a project, the project's scope, and what solutions are available if things get off course. The information collected through monitoring reveals gaps or issues, which require resources to address. Without M&E, it wouldn't be clear what areas need to be a priority. Resources could easily be wasted in one area that isn't the source of the issue. Monitoring and evaluation helps prevent that waste.

M&E helps organizations learn from their mistakes

Mistakes and failures are part of every organization. M&E provides a detailed blueprint of everything that went right and everything that went wrong during a project. Thorough M&E documents and templates allow organizations to pinpoint specific failures, as opposed to just guessing what caused problems. Often, organizations can learn more from their mistakes than from their successes.

M&E improves decision-making

Data should drive decisions. M&E processes provide the essential information needed to see the big picture. After a project wraps up, an organization with good M&E can identify mistakes,

successes, and things that can be adapted and replicated for future projects. Decision-making is then influenced by what was learned through past monitoring and evaluation.

M&E helps organizations stay organized

Developing a good M&E plan requires a lot of organization. That process in itself is very helpful to an organization. It has to develop methods to collect, distribute, and analyze information. Developing M&E plans also requires organizations to decide on desired outcomes, how to measure success, and how to adapt as the project goes on, so those outcomes become a reality. Good organizational skills benefit every area of an organization.

M&E helps organizations replicate the best projects/programs

Organizations don't like to waste time on projects or programs that go nowhere or fail to meet certain standards. The benefits of M&E that we've described above – such as catching problems early, good resource management, and informed decisions – all result in information that ensures organizations replicate what's working and let go of what's not.

M&E encourages innovation

Monitoring and evaluation can help fuel innovative thinking and methods for data collection. While some fields require specific methods, others are open to more unique ideas. As an example, fields that have traditionally relied on standardized tools like questionnaires, focus groups, interviews, and so on can branch out to video and photo documentation, storytelling, and even fine arts. Innovative tools provide new perspectives on data and new ways to measure success.

M&E encourages diversity of thought and opinions

With monitoring and evaluation, the more information the better. Every team member offers an important perspective on how a project or program is doing. Encouraging diversity of thought and exploring new ways of obtaining feedback enhance the benefits of M&E. With M&E tools like surveys, they're only truly useful if they include a wide range of people and responses. In good monitoring and evaluation plans, all voices are important.

Every organization benefits from M&E

While certain organizations can use more unique M&E tools, all organizations need some kind of monitoring and evaluation system. Whether it's a small business, corporation, or government agency, all organizations need a way to monitor their projects and determine if they're successful. Without strong M&E, organizations aren't sustainable, they're more vulnerable to failure, and they can lose the trust of stakeholders.

2.2.15 Monitoring vs Evaluation

Having understood the definition of M&E, here are some of the distinctions between monitoring, which is to see 'what we are doing' and evaluation, which is to assess 'what we have done' are given in the matrix below (KEPA, 2015).

Table 2.2: **Monitoring vs Evaluation**

	Monitoring	Evaluation
Definition	Concurrent analysis of project progress towards achieving the planned results with the purpose of improving management decision making (Aquaknow, 2016).	Assessment of the magnitude of change in the results proposed by the project that may be attributed to the project.
When it is done?	Systematic activity should be done regularly throughout the project implementation.	It should be done only at specific points of time like in the middle of the project, at the change of phase, and at the end of the project etc.
Scope	Focuses on activities, outputs and indicators of progress and change.	Focuses on delivery of project outcomes and impacts. It assesses the progress towards the project objectives and goals.
Who does it?	Ideally, it should be an internal activity. This should be done by project staff or its target beneficiaries.	Ideally, it should be an external activity to avoid conflict of interest. It should be conducted by external evaluators while involving donors, project staff and project users.
Why it is done?	It is done to report project progress to the management, to identify the bottlenecks, take remedial action and modify the project implementation plans.	It is done to ensure accountability of the project, learn broad lessons and provide recommendations to similar projects. It highlights the potential and the achievements of the project.

Monitoring	Evaluation
• Clarifies program objectives. • Links activities and their Resources to objectives. • Translates objectives into performance indicators and sets targets • Routinely collects data on these indicators, compares actual results with targets • Reports progress to managers and alerts them to problems	• Analyzes why intended results were or were not achieved • Assesses specific causal contributions of activities to result • Examines implementation process • Explores unintended results Provides lessons, high lights significant accomplishment or program potential, and offers recommendations for Improvement

Figure 2.3: **Complementary Roles of Results-Based Monitoring and Evaluation**

2.2.16 Monitoring & Evaluation Levels

Monitoring is a day to day activity of assessment of project progress, whereas evaluation is the episodic assessment of overall achievement. By juxtaposing M&E with the various stages of the results chain, it should be able to gauge at which stage of the results chain or theory of change of the project, should the M&E be focused on.

Table 2.3: **M&E at Various Levels of the Results Chain**

Stage in the result chain	M&E
Impact	Evaluation
Outcome	
Output	Monitoring
Activities/Processes	
Inputs	

With respect to the Logical Framework, impact and outcomes fall within the domain of evaluation, whereas outputs, activities and inputs fall within the domain of monitoring.

2.2.17 Monitoring & Evaluation Typologies

Some popular typologies and terminologies commonly used in M&E are:

Monitoring Typologies

Monitoring is a task that is inherently undertaken by doers or implementers of the project themselves. Therefore, when monitoring is performed by the project team itself or internally by the project implementing team, it is called ***internal monitoring***. Sometimes, when projects involve parties or organizations external to the project for facilitating the monitoring functions, it is classified as ***external monitoring***.

If the project implementers restrict the monitoring process to themselves, it is called non-***participatory monitoring***. Project stakeholders, including the communities remain mere information providers and have no role in analyzing the information and providing inputs for project implementation. When functional participation of key stakeholders of the project, including the target community for the project is solicited, it is called ***participatory monitoring***.

Evaluation Typologies

While monitoring is inherently an internal activity, evaluation is an external activity usually done by those external (individuals/agencies/ institutions) to the project. Generally speaking, evaluation is ***external evaluation***. However, when project implementers choose to undertake evaluation by themselves, it is called ***internal evaluation***. Evaluation can be best defined based on the timing of conducting the evaluation. Evaluation per se is a less frequent activity generally undertaken at the completion of a project for assessment of attainment of the project objective. This is the ***post-project*** or ***post-facto evaluation***. In the case of many long duration projects, evaluation is also conducted midway through the project implementation. Mid-term evaluations help to ascertain the level of achievement of long duration projects half way through the project. When the program funders or the management is interested in a more regular assessment of the achievements of the project, the outcome and impact level assessment is done at a six monthly or a yearly period also. This time series design of evaluation is commonly known as ***concurrent evaluation***.

To relate the achievement of objectives and goals directly to the project, it may also be necessary to compare the status in the project area with an identical non-project area, which forms the control group while the project villages are the treatment group. This kind of evaluation design is called

the ***control-experiment design***. Depending upon the time when the evaluation is implemented, it can be concurrent, mid-term or post-facto and internal or external.

2.3 Empirical Literature Review

Monitoring and Evaluation should be integral components of the management cycle including project planning and design. Passia (2004) and Gyorkos, (2003) notes that project planners should include a clearly delineated monitoring and evaluation plan as an integral part of the overall project plan that include monitoring and evaluation activities, persons to carry out the activities, frequency of activities, sufficient budget for activities and specification of the use of monitoring and evaluation findings.

Evaluation is the tool for proving knowledge for continued implementation. Ex-post evaluation may be used for impact assessment, Michelson, (1995). Jody and Ray (2004) identify the complementary roles of the two functions. Information from monitoring feeds into evaluation in order understand and capture any lessons in the middle or at the end of the implementation with regard to what went right or wrong from learning purposes. This could lead to redesigning the project.

2.3.1 Factors Affecting Monitoring and Evaluation practice

There are many different (soft, hard and mixed) factors that influence the success of project M&E, ranging from the people who communicate or implement the M&E to the systems or mechanisms in place for co-ordination and control according to a desk research conducted by Mugambi & Kanda (2013). In order to undertake an M&E effectively we should have to take these factors into account.

According to a study conducted by Hlatshwayo & Govender (2015) the M&E framework, which was devised by the government of South Africa, has over the years experienced both conceptual challenges and practical hindrances, as a result of weak institutional and structural arrangement, lack of skills, limited capacity, poor knowledge and information management. This indicates the importance of considering the mechanisms that helps to minimize the negative impact of these determining factors in order to enhance the effectiveness of M&E.

UNDP also emphasizes the importance of human and financial resources for the successful implementation of monitoring and evaluation. Inadequate resources lead to poor quality M&E. To ensure effective and quality monitoring and evaluation, it is critical to set aside adequate financial and human resources at the planning stage. The required financial and human resources for monitoring and evaluation should be considered within the overall costs of delivering the agreed results and not as additional costs (UNDP 2009).

Human Resource Capacity

The M&E system cannot function without skilled people who effectively execute the M&E tasks for which they are responsible. Therefore, understanding the skills needed and the capacity of people involved in the M&E system (undertaking human capacity assessments) and addressing capacity gaps (through structured capacity development programs) is at the heart of the M&E system (Gorgens & Kusek, 2010). In its‟ framework for a functional M&E system, UNAIDS (2008) notes that, not only is it necessary to have dedicated and adequate numbers of M&E staff, it is essential for this staff to have the right skills for the work. Moreover, M&E human capacity building requires a wide range of activities, including formal training, in-service training, mentorship, coaching and internships. Lastly, M&E capacity building should focus not only on the technical aspects of M&E, but also address skills in leadership, financial management, facilitation, supervision, advocacy and communication.

Building an adequate supply of human resource capacity is critical for the sustainability of the M&E system and generally is an ongoing issue. Furthermore, it needs to be recognized that growing evaluators requires far more technically oriented M&E training and development than can usually be obtained with one or two workshops (Acevedo, 2010).

Monitoring and evaluation carried out by untrained and inexperienced people is bound to be time consuming, costly and the results generated could be impractical and irrelevant. Therefore, this will definitely impact the success of projects (Nabris, 2002). In assessment of CSOs in the Pacific, UNDP (2009) discusses some of the challenges of organizational development as having inadequate monitoring and evaluation systems. Additionally, the lack of capabilities and opportunities to train staff in technical skills in this area is clearly a factor to be considered. Staff need to be trained not only on collecting descriptive information about a program, product, or any

other entity but also on using something called-values‖ to determine what information and to draw explicitly evaluation inferences from the data, that is inferences that say something about the quality, value or importance of something (Davidson, 2004). In a study by White (2013) on monitoring and evaluation best practices in development INGOs, indicate that INGOs encounter a number of challenges when implementing or managing M&E activities one being insufficient M&E capacity where M&E staff usually advises more than one project at a time, and have a regional or sectorial assignment with a vast portfolio. Furthermore, taking on the M&E work of too many individual projects overextends limited M&E capacity and leads to rapid burnout of M&E staff whereby high burnout and turnover rates make recruitment of skilled M&E staff difficult, and limits the organizational expertise available to support M&E development.

Insufficient stakeholders' involvement

Stakeholder participation is the other important issue to be considered in analyzing factors that affect the effectiveness of M&E according to the view of different researchers. According to Mugambi & Kanda (2013) knowing and understanding the partners and all stakeholders is vital in community based projects. This can affect monitoring and evaluation in terms of funding, requirements and what information will be required by each stakeholder. For effectiveness and efficiency, a proper stakeholder analysis needs to be conducted to ensure the strengths, weaknesses, opportunities and threats of each stakeholder identified. A study conducted by Mwangi, 2015 shows that stakeholder participation significantly affects the effectiveness of monitoring and evaluation. According to Oloo (2011) stakeholder participation in the CDF projects is minimal and this in turn negatively affects the effectiveness of the projects' monitoring and evaluation. Study conducted by (Ochieng, 2012) also supports this idea. In the study conducted by Sammy & Daniel (2015) among 50 study participants 57% believe that stakeholder participation is critical for the successful implementation of M&E. A unit increase in stakeholder participation increases the effectiveness of monitoring and evaluation by 26% (Mwangi, 2015).

Neglecting pertinent stakeholders in monitoring and evaluations could lead to a low degree of ownership of findings and reduces the likelihood that project implementers will incorporate findings in decision-making processes. It also can lead to lack of collaboration, or even the development of an adversarial relationship, among beneficiaries, Monitoring and Evaluation experts, the government, donors, stakeholders and implementers (EMI, 2014).

Budget allocation for M&E

Monitoring and evaluation (M&E) are means to multiple ends. Measuring government and nongovernmental organizations activities, constructing and tracking performance indicators across sectors and over time, evaluating programs requires huge budget allocation. To achieve their intended objective local nongovernmental organizations, need to allocate adequate budget for M&E, but donors contrary to this while appraising and approving local nongovernmental budgets cut out the monitoring and evaluation component of the budget (TECS, 2013). Therefore, local nongovernmental organizations forced either to quit their services or produce fake monitoring and Evaluation reports.

Budgeting and resource allocation affects M&E and this is required to be planned well to ensure the monitoring and evaluation of community projects is done effectively (Mugambi & Kanda, 2013). The project budget should provide a clear and adequate provision for monitoring and evaluation activities. A monitoring and evaluation budget can be clearly delineated within the overall project budget to give the M&E function the due recognition it plays in project management. A monitoring and evaluation budget should be about 5 to 10 percent of the total budget (Oloo, 2011). A unit increase in budget allocation increases the effectiveness of monitoring and evaluation by 26% (Mwangi, 2015).

Loose Monitoring and Evaluation planning

Local nongovernmental organizations often cut out M&E during the planning process because donors less likely take an interest in and commit to M&E activities (MLYAM, 2011). Failure to plan M&E activities at the beginning of a project may result in loss of data that staff cannot make up at a later stage.

Infrequent Monitoring and Evaluation

Local NGOs expected to regularly conduct monitoring and evaluations focused on inputs, progress, outputs, and changes, but due to lack of expertise and budget rarely engage in such activities as per the requirement by donors and Governments. NGOs need to monitor physical progresses at least quarterly and financial progresses monthly.

Management Support

Management has a role in enhancing project success through supporting monitoring and evaluation team. Such support may be achieved through factors such as communication, commitment, leadership style, managing politics, managing societal demands and motivation (Kamau & Mohamed, 2015). According to the study carried out by Elizabeth (2013) the role of management in the operation of monitoring and evaluation takes the second rank among the factors that contributes to the difficulty of using monitoring and evaluation system. World Bank also indicated that management support determines the success of monitoring and evaluation because it is the management who decides the resources required for the M&E, how the M&E undertaken, and for what purpose the result will be used. These findings show the effect management support has on the effectiveness of monitoring and evaluation.

Poor knowledge and information management

The source of performance data is important to the credibility of reported results hence; it is important to incorporate data from a variety of sources to validate findings. Furthermore, while primary data are collected directly by the M&E system for M&E purpose, secondary data are those collected by other organizations for purposes different from M&E (Gebremedhin, Getachew & Amha, 2010). In the design of an M&E system, the objective is to collect indicator data from various sources, including the target population for monitoring project progress (Barton, 1997). Moreover, developing key indicators to monitor outcomes enables managers to assess the degree to which intended or promised outcomes are being achieved (Kusek & Rist, 2004). Frequent data collection means more data points; more data points enable managers to track trends and understand intervention dynamics hence the more often measurements are taken, the less guess work there will be regarding what happened between specific measurement intervals. But, the more time that passes between measurements, the greater the chances that events and changes in the system might happen that may be missed (Gebremedhin et al., 2010). Guijt (1999) concurs that to be useful, information needs to be collected at optimal moments and with a certain frequency. Moreover, unless negotiated indicators are genuinely understood by all involved and everyone's timetable is consulted, optimal moments for collection and analysis will be difficult to identify.

According to Cornielje, Velema and Finkenflugel (2008), only when the monitoring system is owned by the users the system is it likely to generate valid and reliable information. However, all too often the very same users may be overwhelmed by the amount of daily work which in their view is seen as more important than collecting data and subsequently the system may become corrupted. A system of data collection should be self-organizing and evolving as it gathers information from the environment where the staff would then generate the information in the course of their daily activities (Innes & Booher, 1999: 415).

Lack of Integration

The proper design and implementation of M&E activities need the integration of the whole system of project owners. Lack of ownership of the M&E process or results: Most impact indicators may not be collected appropriately. Some directorates want their activities to be more visible in the report. Lack of consistency in some data collected at the district level damage the whole system and outcome of M&E.

Lack of commitment to monitoring by project staff and implementing partners may lead to delay in implementing monitoring systems. More often, lack of information use by project management; widespread lack of integration and cooperation between project M&E and project management with no clear, mutually agreed-upon guidelines; poor use of participatory and qualitative M&E methods, due to limited capacity and inability to see the need for such information are major problems of integration during the design and implementation of M&E.

CHAPTER THREE
RESEARCH DESIGN & METHODOLOGY

3.1 Introduction

This chapter deals with all detail information regarding the methodology and procedures that were followed to determine the approaches, techniques and methods of collecting information and data from the study population. It gives detail information on research design, data type and research population, sampling technique and instrument, data analysis and presentation and ethical considerations of the study.

3.2 Research Design

This research's design is a descriptive type; which was described the practices and challenges of M&E on TNT Construction and Trading projects located at Addis Ababa. According to Kothari (2008); "descriptive research design is used to describe an event or a feature of things as it exists at present and is appropriate when the study is concerned in specific predictions, narrative of facts and characteristics concerning individuals or situations." Kothari (2004) defines descriptive research study as "Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual, or of a group".

According to Orodho (2003) descriptive survey is defined as a method of collecting information by interviewing or administering questionnaires to a sample of individuals.

Goddard and Melville (2001) argued that descriptive or case-study research is a research in which a specific situation is studied either to see if it gives addition to any general theories, or to see if existing general theories are borne out by the specific situation.

"A descriptive study is concerned with finding out the what, where and how of a phenomenon." Saunders et.al (2009). Hence, a descriptive research will enable us to answer the questions of who, what, when, where and how details of the M&E system of the company. By doing this, this study will also be building a profile about monitoring and evaluation.

The research approach for this study is mixed approach. The basis for selecting a mixed approach for this study is because of the nature of the research problem required both qualitative and quantitative data sets.

3.3 Data Type and Source

Using a combination of qualitative and quantitative data will improve an evaluation by ensuring that the limitations of one type of data is covered by the strengths of the other. The distinction between the two is that quantitative methods produce numerical data and qualitative methods result in information which can best be described in words (Casley and Kumar 1989).

According to Creswell (2002) quantitative research is the process of collecting, analyzing, interpreting, and writing the results of a study, whereas qualitative research is the approach to data collection analysis, and report writing differing from the traditional, quantitative approaches. The quantitative method was used to produce numerical data which is statistically manipulated to meet required objectives through descriptive statistics (frequencies and percentages).

According to Leedy (1993) qualitative research is based on the belief that first-hand experience provides the most meaningful data. Qualitative data, that is believed to give large volumes of quality data from a limited number of people is aimed at understanding the world of participants from their frame of reference, (Walker1985). Qualitative research as research that begins with assumptions, a worldview, the possible use of a theoretical lens and the study of research problems inquiring into the meaning individuals or groups ascribe to a social or human problem. (Creswell 2007).

Both Primary and secondary data were used in this research study. The primary data were attained directly from key informants which included Project Managers, Office engineers, Project Coordinators, Site Engineers, Construction Engineers, Follow-up Engineers and Forman by employing both questionnaire and key informant interview. Secondary data were collected by detailed reviewing related literature; i.e. books, articles, journals, other relevant written publications and records of the company's reports which are related to M&E.

3.4 Research Population

Population is defined as any group of individuals who have one or more characteristics in common that are of interest to the researcher (Best 2007). Salkind (2008), defined population as the entire of some groups. Population is further defined as entire group of people the researchers want to investigate (Sekaran and Bougie 2010).

The target population of this research was thirty-five (35) in number who are the participants of the projects observing and assessment process of the company, which include the Project Managers, Office engineers, Project Coordinators, Site Engineers, Construction Engineers, Follow-up Engineers and Forman. There are five active projects of the company in Addis Ababa which have one Project Manager and one Office Engineer in each project and one project coordinator and one Follow-up Engineer for three of four projects which depends on the size and scope of the projects located at the head office level.

Table 3.1: **Composition of the Population**

No.	Composition of the Population	Quantity
1	Department of Engineering	20
2	Contract Department	5
3	Strategic Planning Department	5
4	Procurement Department	5
	Total	35

Source: **Own Survey; 2024**

3.5 Sampling Technique and Instruments

Sampling Technique is the process of selecting a sufficient number of elements from a population (Raval 2009). Sampling refers to the process through which the sample is obtained from a population. According to Alvi (2016), Sampling techniques are classified into probability and non-probability.

In this research non-probability purposive sampling was adopted. Deliberate sampling, also called non-probability or purposive sampling method consists of purposive selection of particular items of the universe to represent a sample (Mishra and Alok 2017). Purposive sampling involves selecting certain number of informants based on the nature of their qualification and designation. According to Neuman (2006), purposive sampling is when the researcher specifically targets certain people due to their knowledge about the research subject. Purposive sampling is especially exemplified through the key informant technique and the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Bernard 2002).

This method was appropriate because the selected sample comprised of informed persons who possessed fundamental data that was sufficiently enough to give a better insight into the research questions.

Data collection methods are ways through which the researcher gets data needed from the respondents (Patten and Newhart) expressions, tone of voice, gestures, feelings and attitudes.

Data collection instrument, both the questionnaire and semi structured interview questions were developed. The questionnaire was distributed to the respondents with a short oral briefing about the objective of the assessment. According to Russell and Joseph (2012) questionnaire surveys are less time-consuming and give the respondents the freedom to answer the way they feel most comfortable. Secondary data collection involved documentation review through internet, publications, articles, Project and donor reports, and books. A research study that raises questions that require interviewing and questionnaires for data collection should use a survey design (Kombo and Tromp 2009).

The questionnaire totally was focused on the monitoring and evaluation practices and challenges of the company projects' and their current status. Its statements which were developed by the researcher to answer the research questions and objective were evaluated on a 1-5 Likert scale, where 1 - indicates Strongly Disagree with the statement, 2 - Disagree, 3 - Neutral, 4 - Agree and 5- refers to Strongly Agree with the statement.

Similarly, person to person informal interview with key informants were undertaken. The interview guide was developed by taking the research questions and the objectives of the study into considerations. All relevant variables were included to help in identifying as well as conclude the problems and to provide appropriate recommendations. The main reason for using semi-structured open-ended interview was that the interviewee can elaborate more on issues that require additional explanation. "The primary advantage of interview is that the respondents provide much more detailed information than data collected via other data collection methods such as survey." Carolyn and Palena (2006).

The necessary secondary data was also obtained from the company's recorded documents by participatory observation method of data collection. Observations enable the researcher to describe

existing situations using the five senses, providing a "written photograph" of the situation under study (Erlandson, Harris, Skipper, and Allen 1993).

Kawulich (2005) argued that participant observation, has been used in a variety of disciplines as a tool for collecting data about people, processes, and cultures in qualitative research. According to DeWalt and DeWalt (2002), the goal of designing a research using participant observation as a method is to develop a holistic understanding of the phenomena under study that is objective and accurate given the limitation of the method.

Since the sampled respondents are professionals; the language of communication was English and thus the questionnaire and interview questions were constructed in English.

3.6 Data Analysis and Presentation

According to Cooper and Schindler, (2008); “This was the process of collecting, modeling and transforming data in order to highlight useful information, suggesting conclusions and supporting decision making. Analysis refers to breaking a whole into its separate components for individual examination. Grbich (2007). In addition, Shamoo and Resnik (2003), stated that data analysis is the systematic approach of using logical and statistical techniques as a means to describe and assess the gathered data.

Quantitative data was analyzed using descriptive statistics including frequencies and percentages; while qualitative data was analyzed using content analysis by counting various aspect of the content. Qualitative data was transformed into quantitative data and was analyzed by using Statistical Package for Social Science (SPSS) in accordance with the main objectives of the study. The data is then presented using frequency tables and charts.

3.7 Validity and Reliability

The researcher attempted to design the instruments using reliable sources such as published books, articles, and previous research in the field to ensure the validity and reliability of the data used in this study. Furthermore, the researcher received feedback on the questionnaire from the research advisor in order to reduce instrument errors.

3.8 Ethical Considerations

According to Shah (2011) and Akaranga et al. (2013), ethics refers to the moral beliefs or philosophy and sometimes ways of life, social norms for conduct that differentiates between acceptable and unacceptable behavior. Fulfilling the ethical duty of confidentiality was essential to the trust relationship between researcher and participants, and to the integrity of the research project. Respondents was respectfully requested their willingness to participate in this study. Also to protect the information from unauthorized access, use, disclosure, modification, loss or theft, appropriate cautions was taken. Each respondent was coded appropriately to increase the confidentiality of their responses.

CHAPTER FOUR
ANALYSIS AND RESULT DISCUSSION

4.1 Introduction

The general objective of the study was to assess the M&E practices and challenges of AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa. Specific research objectives are to explore the current monitoring and evaluation practice, to check the effectiveness of monitoring and evaluation practice and to identify the challenges of monitoring and evaluation in AASTU Commercial Complex Building Construction Project of TNT Construction and Trading which is located in Addis Ababa. This chapter highlighted the presentations, analysis and interpretation of findings of the study. The presentation of the findings was derived from the analysis of the data that was sourced from the purposively sampled respondents by means of a questionnaire and semi-structured in-depth interviews and content analysis of various publications. The respondents were purposively selected based on their knowledge of M&E in construction projects. The documents used in the analysis were chosen according to relevant content.

The research response rate was computed and presented, proceeded by the demographic information of the respondents, finally the findings on three key objective areas of the study were presented and interpreted using frequency tables, pie charts and bar graphs.

The study used interviews and questionnaires as tools for primary data collection. The researcher targeted twenty staff members from the Department of Engineering, five staff from Contract Department, five staff from Strategic Planning Department and five staff from Procurement Department. The respondents were given one month to respond, and the researcher didn't have any influence in the responses.

4.2 Response Rates of Respondents

For the study, a total of 45 questionnaires were distributed through google sheet and hardcopy. Out of the 45 questionnaires administered, 35 responses were collected (30 through hardcopy and 5 through the online google form) contributing to 77.77% response rate.

According to Mugenda and Mugenda (1999), a response rate of 50% is adequate for analysis and reporting; a rate of 82.10% is excellent while a response rate between 70% and 82% is good; therefore, this response rate was good for analysis and reporting.

Moreover, interviews were conducted with five respondents; two from the Department of Engineering, one from the Strategic Planning department, one from contract department and one from procurement department. All the interviewees had experience in M and E.

4.3 Background Information of the Respondents

The background information of respondents has included age, project work experience in M&E and level of education. Profiles of the respondents who participated in this study are shown in the tables below.

4.3.1 Age Distribution of Respondents'

About 23 respondents (65.71%) were between the age of 36-45 years, while 7 respondents (20.00%) were between 46-55 years and 5 respondents (14.28%) were above 55 years. This implies that those respondents in the age group of 36-45 years made the majority during the study carried out. These findings reveal that majority of staff working in the organization are of productive age group and are matured people who are advantaged with knowledge in M&E and thus can help in assessing the M&E systems.

Table 4.1: **Age Range of Respondents'**

Age Range of Respondents'	Frequency	Percentage
25 – 35 years	0	0%
36 – 45 years	23	65.71%
46 – 55 years	7	20.00%
Above 55 years	5	14.29%
Total	**35**	**100%**

Source: **Own Survey; 2024**

4.3.2 Respondents' Level of Education

Respondents varied in levels of education. 12 respondents (34.28%) were at masters/postgraduate level, 20 respondents (57.14%) were at undergraduate level and 3 respondents was (8.57%) at Diploma level. This indicates that the majority of the respondents had first degree and above. The findings implied that most of the employees work at TNT Construction and Trading projects had attained higher education which indicates that they had the knowledge, capacity, skills and management expertise to conduct and assess M&E activities well.

Table 4.2: **Respondents' Level of Education**

Respondents' Level of Education	Frequency	Percentage
Masters/Postgraduate	12	34.28%
Under graduate	20	57.14%
Diploma	3	8.57%
Total	**35**	**100%**

Source: **Own Survey; 2024**

4.3.3 Respondents' Level of Work Experience in M and E

The respondents were requested to indicate how many years of experience they have in Monitoring and Evaluation activities. The findings are demonstrated in the table below.

Table 4.3: **Respondents' Level of Work Experience in M&E**

Respondents' Level of Work Experience in M&E	Frequency	Percentage
None	0	0%
1 – 4 years	3	8.58%
5 – 8 years	13	37.14%
9 – 12 years	15	42.85%
Above 12 years	4	11.43%
Total	**35**	**100%**

Source: **Own Survey; 2024**

Based on the findings, majority of the respondents 42.85% (15) had 9 – 12 years of work experience in Monitoring and Evaluation followed by 37.14% (13) respondents who had 5-8 years

and 11.43% (4) respondents had above 12 years of experience in M&E. Other respondents; 8.58% (3) had 1-4 years of experience in M&E activities.

The results indicated that most employees, 91.42% (32), have M&E experience for a longer duration of over 4 years and thus had sufficient information on the organization's M&E processes, system and on stakeholders' participation, availability of funds and organization's leadership which influences effectiveness of monitoring and evaluation systems. The respondents have different positions and work experience in the company. All of them are working and involved in the M&E or working in other departments within the construction projects, which are relevant to M&E. This demonstrates that the participants are familiar with the content of the research and were well qualified to be involved in this research. After data collection, a systematic sequence of preparations was done comprising checking, editing, as well as uploading of data into the SPSS.

4.4 Current Monitoring and Evaluation Practice of the Project

In these section the question was intended to find out the current M&E practices applied in AASTU Commercial Complex Building Construction Project, to accomplish this question sub questions were asked to the respondents such as stakeholders involvement, if existing M&E information provide to program managers/officers to assist in decision-making and planning, if existing M&E implemented produces useful management report and if existing M&E plans are there indicators that are clearly linked to the objectives of the project.

4.4.1 Stakeholders' Involvement

The respondents were investigated to determine the involvement of stakeholders on the project's current monitoring and evaluation practices and the findings shows that the M&E team were involved in about 62.86% meaning that the project's M&E team hold the majority burden on the exercising of M&E practices and all project staffs were involved in about 22.86% of monitoring and evaluation practices of project following the M&E team. 11.43% responded that donors were involved as they were the one who finance of the projects. Only one result about 2.86% shows that beneficiaries has less involvement in M&E practices and the community has no any involvement in the current monitoring and evaluation practices of the project.

Table 4.4 **Stakeholders] involvement in exercising M&E practices**

Description	Frequency	Percentage (%)
Beneficiaries	1	2.86
Donors	4	11.43
M&E Teams	22	62.86
Project Staff	8	22.86
Community	0	0.00
Total	35	100

Source: **Own Survey; 2024**

4.4.2 Computerized M&E practices of the project

The result indicates that majority 27 (77.14%) of the respondent says the project does not use a computerized M&E system and 8 (22.86%) of the respondent says the project have a computerized M&E system. Based on this result it is possible to conclude that the project does not use much computerized M&E system.

4.4.3 Management role towards implementation of M&E practices

Majority (62.86%) about 22 respondents indicate that there is an adequate role of management in exercising M&E system on the project. About 10 respondents 28.57% of the respondents rate the role of management is very adequate. The result shows that 8.57% about 3 respondents do not know the role of the management involvement towards the implementation of the M&E practices.

4.4.4 Availability of written M&E Plan for the project

Majority of the respondents 27 (77.14%) responded that they have an M&E plan of the project. 4 (11.43%) respondents are not sure about the existence of the M&E plan. The remaining 4 (11.43%) respondents respond that they do not have any information about the existence of project M&E plan. This indicates that most of the project teams knows the existence of the project M&E plan and utilize it.

Table 4.5 **Availability of M&E Plan**

Availability of M&E Plan	Frequency	Percentage (%)
Yes; it is available	27	77.14
Not Sure	4	11.43
I don't know	4	11.43
Total	35	100

Source: **Own Survey; 2024**

4.4.5 The Adoptability Rates of the M&E Plan

Table 4.6 shows that 20 (57.14%) of the respondents indicated that the M&E plan of the project is very easy to adopt while 5 (14.29%) indicated that the plan they had is easy to adopt. 2 (5.71%) indicated that the M&E plan is difficult to adopt. The remaining 8 (22.86%) respondents indicate that they do not know about the project's M&E plan. The majority number of respondents of the project rated that the M&E plan is difficult to adopt and that is significantly high number as a result it puts the practicality and the implementation of the plan is in questionable state.

Table 4.6 **Adoptability Rates of M&E Plan**

Adoptability Rates of M&E Plan	Frequency	Percentage (%)
Very Easy	20	57.14
Easy	5	14.29
Difficult	2	5.71
Not Sure	8	22.86
Total	35	100

Source: **Own Survey; 2024**

4.4.6 Type of M&E tools used by the project

Majority (68.57%) of the respondent in the project answer that the logical framework is used as a M&E tool. The second most used tool with (25.71%) respondent inform that is the results frame work. The table below further shows that equal number (14.29%) of respondent informed that the project uses the theory of change and outcome mapping as a M&E tool.

Table 4.7 **Type of M&E tool used**

Type of M&E tool used	Frequency	Percentage (%)
Logical Framework	24	68.57
Theory of Change	9	25.71
Result Framework	1	2.86
Outcome Mapping	1	2.86
Total	35	100

Source: **Own Survey; 2024**

4.4.7 Form of Evaluation that the project conduct

Respondents were asked to indicate the type of project evaluation carried out. Accordingly, as indicated in the below table 4.8 (54.29%) 19 respondents said midterm evaluation, (20.00%) 7 respondents said ex-ante evaluation and (17.14%) 6 respondents said summative evaluations and the remaining (8.57%) 3 respondent said impact evaluations carried out by the project.

Table 4.8 **Type and form of Evaluation**

Type and form of Evaluation	Frequency	Percentage (%)
Mid-Term Evaluation	19	54.29
Ex-Ante Evaluation	7	20.00
Summative Evaluations	6	17.14
Impact Evaluations	3	8.57
Total	35	100

Source: **Own Survey; 2024**

4.5 Monitoring and Evaluation Effectiveness

This section shows findings to the questions that determines the effectiveness of M&E of the project. Findings to each of them are discussed below.

4.5.1 M&E plan that guides the project's M&E activities and the plan contents

As indicated in the table 4.9, majority of the respondents are disagreeing with the availability of M&E plan document and the contents included in the plan with (77.14%) for all items. This indicates the absence of separate project M&E plan. In searching the project's M&E plan

document the researcher also found out that the project has no separate and comprehensive M&E plan document and hence these corroborates the response given by the respondents. An interview held with management members also indicated that the organizations have no separate M&E plan document. However, the importance of M&E is described in the strategic plan document of the organizations and in the annual plan documents in few paragraphs.

Table 4.9 **Monitoring and Evaluation Plan and Contents**

M&E Plan & Contents	Frequency	Percentage (%)
Disagree	27	77.14
Strongly Disagree	4	11.43
Neutral	4	11.43
Agree	0	0.00
Total	35	100

Source: **Own Survey; 2024**

4.5.2 The Project M&E lesson learning and documentation system

Table 4.10 **Lesson Learning and Documentation system**

Lesson Learning & Documentation system	Frequency	Percentage (%)
Strongly Agree	2	5.71
Agree	1	2.86
Neutral	10	28.57
Disagree	18	51.43
Strongly Disagree	4	11.43
Total	35	100

Source: **Own Survey; 2024**

Respondents were asked to explain their extent of agreement regarding the project's M&E lesson learning and documentation system availability. Accordingly, 28.57% of the respondents were neutral whether the project has project M&E lesson learning and documentation system, 51.43% disagree and 11.43% strongly disagree with this idea. From this it is possible to say that the project has no well-established project M&E lesson learning and documentation system. The response obtained from interviewees also supports this idea. According to the interviewees there is no

separate project M&E lesson learning system except the monthly and annual project progress reports which are part of the project's general performance report. The review of the project's document also indicates that there is no separate project M&E lesson learning and documentation system or practice except the monthly and annual performance reports.

4.5.3 Well-established Monitoring & Evaluation system

Respondents were also asked to give their level of agreement regarding the availability of well-established project M&E system. Accordingly, (62.86%) of the respondents were agree about the availability of well-established M&E system while (17.14%) of the respondents were neutral to this idea. And the rest (11.43%) & (8.57%) were disagree and strongly agreed respectively. This indicates that the project has no well-established project M&E system which is clearly known, owned and practiced by the staffs who conduct project M&E.

Table 4.11 **Project M&E System**

Project M&E System	Frequency	Percentage (%)
Strongly Agree	3	8.57
Agree	22	62.86
Neutral	6	17.14
Disagree	4	11.43
Strongly Disagree	0	0.00
Total	35	100

Source: **Own Survey; 2024**

4.5.4 Frequency of M&E activities of the project

Table below shows that while 8.57% of respondent says the project used to assess their M&E activities on monthly basis while 5.71% M&E activities were carried out quarterly. The findings also indicate that 25.71% of the respondents were conducting M&E activities annually followed 60.00% monitored activities bi-annually.

Table 4.12 **Frequency of M&E activities of the project**

Frequency of M&E activities of the project	Frequency	Percentage (%)
Monthly	3	8.57
Quarterly	2	5.71
Annually	9	25.71
Bi-Annually	21	60.00
Total	35	100

Source: **Own Survey; 2024**

4.5.5 Use of M&E as Input for Decision Making

Table 4.13 **Use of M&E as Input for Decision Making**

Use of M&E as Input for Decision Making	Frequency	Percentage (%)
Always	24	68.57
Sometimes	7	20.00
Not at all	4	11.43
Total	35	100

Source: **Own Survey; 2024**

Majority of respondents reported that the project always utilize M&E findings as input for decision making while some responded that they sometimes use the findings. The table further shows that the remaining respondents reported that they don't use M&E findings as input for decision making. This indicates that the project refers to M&E findings for various decisions making as indicating that inputs from M&E are valuable.

4.6 The Main Challenges during implementation of M&E Activities

4.6.1 Human Resource Capacity

Human resource capacity determines the project's M&E effectiveness. Nabris (2002) said that M&E carried out by untrained and inexperienced people is bound to be time consuming, costly and the results could generated prove impractical and irrelevant.

In this regard respondents were asked to give their level of agreement regarding the issues related to human resource capacity. The response presented in table below.

Table 4.14 **Human Resource Capacity Related Issues**

Human Resource Capacity Related Issues	SA		A		N		DA		SDA		Total
	N	%	N	%	N	%	N	%	N	%	%
Human resource	9	25.71	23	65.71	0	0.00	2	5.71	1	2.86	100
Relevant training	0	0.00	7	20.00	0	0.00	16	45.71	12	34.29	100
Motivation system	3	8.57	5	14.29	4	11.43	14	40.00	9	25.71	100
Experience sharing	3	8.57	6	17.14	3	8.57	15	48.85	8	22.86	100

Source: **Own Survey; 2024**

As indicated in the above table, 65.71% and 25.71% of the respondents agree and strongly agree respectively with the idea that says the project has adequate skilled human resource who can bearing M&E while 5.71% and 2.86% respectively disagree and strongly disagree with this idea. The majority of the staff of the project agree about the adequacy of human resource capacity which shows the project have sufficient human resource capacity.

In this regard 34.29% of the respondents strongly disagree and 45.71% disagree with the idea that says personnel who bear M&E get relevant training on a regular basis. Only 20.00% agree on the idea. M&E personnel do not get relevant training on a regular basis according to the majority of the respondents. This indicates that the project does not give personnel trainings for who conduct project M&E on a regular basis.

Another human resource related issue respondents were asked to give their agreement was availability of motivational systems. Accordingly, 40.00% of the respondents disagree and 25.71% strongly disagree that there is a motivational system for M&E staff. On the other hand, 11.43% of the respondents were neutral and the remaining 14.29% and 8.57% respectively agree and strongly agree that there is a motivational system for M&E staffs. The result indicates there is poor motivational system for staff members.

M&E best practice experience sharing is the other issue that the respondents were requested to give their level of agreement regarding the idea. Accordingly, 48.85% of the respondents disagree and 22.86% strongly disagree with the idea that says M&E best practice experience sharing undertaken to enhance M&E staff capacity. On the other hand, 17.14% of the respondents agree and 8.57% strongly agree that there is M&E best practice sharing within and between other project

to enhance the capacity of M&E staff. The remaining 8.57% of the respondents were neutral whether there is an M&E best practice sharing within and between other projects to enhance the capacity of M&E staffs. The result shows that lack of sharing within and between other projects to enhance the capacity of M&E staff.

In this regard, the interviewees were believed that the project has adequate human resource capacity that can conduct project M&E especially technical staffs. However, the project's M&E staffs didn't get project M&E related trainings on a regular basis. Rather the training is provided to the M&E staffs rarely. Absence of motivational system for project M&E staffs and M&E best practice experience sharing are the areas of the project's weakness that the interviewees were admit.

4.6.2 Project M&E Budget Allocation

In this study respondents were asked to give their judgment regarding project M&E budget allocation and their response is presented in the following table.

Table 4.15 **Allocation of Project M&E Budget**

Allocation of Project M&E Budget	Frequency	Percentage (%)
Separately	13	37.14
With total project budget	19	54.29
I have no idea	3	8.57
Total	35	100

Source: **Own Survey; 2024**

As shown in the above table according to 54.29% of the respondents said project M&E budget is included in the total project budget. While 37.14% of the respondents said it is allocated separately. On the other hand, 8.57% of the respondents' neutral about how project M&E budget is allocated in the project.

According to the interview the project's M&E budget is a big problem in the project. The budget is allocated in the overall annual operational budget on budget codes is inadequate for the M&E work. So, in this regard there is big problem as replied by the interviewees. In addition to these, before it is spent the M&E budget must be requested by the project staff immediate manager/director, verified by strategic planning and finance directorate and approved by deputy CEO. With this procedure, the experts are not happy since they

believe that the process is bureaucratic and takes time to finish the process immediately and go to their work.

4.6.3 Project M&E Management Support

Respondents were requested to indicate their level of satisfaction regarding the management support given to M&E. As we see from table 4.16; 40.00% of the respondents were dissatisfied and 20.00% were extremely dissatisfied with the support given to M&E by the management. On the other hand, 31.43% were satisfied while 8.57% were extremely satisfied with management support given to M&E. the result shows most employees are dissatisfied by the management support given to project M&E and some employees are satisfied.

Table 4.16 **Satisfaction Level to Management Support**

Satisfaction Level to Management Support	Frequency	Percentage (%)
Extremely Satisfied	3	8.57
Satisfied	11	31.43
Dissatisfied	14	40.00
Extremely Dissatisfied	7	20.00
Total	35	100

Source: **Own Survey; 2024**

Table 4.17 **Top Management Response to Project M&E Results**

Top Management Response to Project M&E Results	Frequency	Percentage (%)
Strongly Agree	1	2.85
Agree	16	45.71
Neutral	2	5.71
Disagree	11	31.43
Strongly Disagree	5	14.29
Total	35	100

Source: **Own Survey; 2024**

As of the above table, 45.71% of respondent agreed and 2.85% respondent strongly agreed that top management is committed to project demands and improvements which are identified through M&E. On the other hand, 31.43% and 14.29% of the respondents respectively disagree and

strongly disagree with the idea of top management commitment to respond to project demands and improvements that are identified through M&E while 5.71% of the respondents were neutral with this idea.

In relation to management support the interviewees were said that the project's top management is committed and given attention to project M&E related issues. However, sometimes quick decisions may be taken regarding project related issues which are identified through M&E. Some issues take longer time to get decision because they may need support from higher managements.

4.6.4 Stakeholders' Engagement and Project M&E

Stakeholder participation significantly affects the effectiveness of M&E (Mwangi, 2015; Oloo, 2011). In this regard respondents were asked to indicate how frequently stakeholders participate on the project's M&E and whether they perform their responsibility properly. The response presented in the following table.

Table 4.18 **Stakeholders' Participation on the Project M&E**

Stakeholders' Participation on the Project M&E	Frequency	Percentage (%)
Never	5	14.29
Sometimes	18	51.43
Frequently	10	28.57
I don't know	2	5.71
Total	35	100

Source: **Own Survey; 2024**

As indicated in the above table 4.18; 51.43% of the respondents said that stakeholders sometimes participate on the project's M&E process. while 28.57% of the respondents said stakeholders participate frequently on the project's M&E process. 14.29% of the respondents said stakeholders never participate on project's M&E and 5.71% were neutral about how frequent the stakeholders are participating on the project's M&E activities.

Table 4.19: **Stakeholders' Performance in Project M&E Responsibility**

Stakeholders' Performance in Project M&E Responsibility	Frequency	Percentage (%)
Strongly Agree	0	0.00
Agree	5	14.29
Neutral	0	0.00
Disagree	21	60.00
Strongly Disagree	9	25.71
Total	35	100

Source: **Own Survey; 2024**

As indicated in the above table; stakeholders did not properly perform their responsibility in the project's M&E according to the respondents' 60.00% disagree and 25.71% strongly disagree. On the other hand, 14.29% of the respondents agreed that stakeholders fulfill their responsibility of M&E activities of the project's.

4.7 Benefits of the Project in practicing of M&E activities

Table 4.20: **Benefits of the project in Practicing of M&E activities**

No	Benefits in Practicing of M&E	(5)	(4)	(3)	(2)	(1)	RII	Rank
1	M&E results in better transparency and accountability	13	15	5	2	0	0.8229	5
2	M&E helps project catch problems early	23	7	0	4	1	0.8686	1
3	M&E helps ensure resources are used efficiently	19	11	2	3	0	0.8629	2
4	M&E helps project learn from their mistakes	13	15	5	2	0	0.8229	5
5	M&E improves decision-making	17	12	4	2	0	0.8514	3
6	M&E helps project stay organized.	20	10	0	1	4	0.8343	4
7	M&E helps project replicate the best projects/programs	12	14	4	2	3	0.7714	7
8	M&E encourages innovation	9	17	3	0	6	0.7314	9
9	M&E encourages diversity of thought and opinions	15	7	6	5	2	0.7600	8
10	Every project benefits from M&E	1	2	0	21	11	0.3771	10

Source: **Own Survey; 2024**

According to table 4.20 the most highly ranked benefit that the project gets from practicing M&E is M&E helps the project catch problems early (RII = 0.8686), M&E helps ensure resources are used efficiently (RII = 0.8629), M&E improves decision-making (RII = 0.8514), M&E helps project stay organized (RII = 0.8343) and M&E results in better transparency and accountability and M&E helps project learn from their mistakes (RII = 0.8229). These are the top five scored benefits that the company gets from exercising M&E activities and the remaining are ranked respectively by their result of RII.

As of the analysis conducted through interview on the benefits of the project; the project is beneficiary by practicing M&E activities to catch problems early before the problems are complicated and resource utilization will be effective. And also it is helpful to the project staff for decision-making process and the project will stay organized.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings analyzed in chapter four with respect to the study objectives. It also presents the conclusions and the recommendations to the company.

5.2 Summary

Based on the analyzed and presented data on the previous chapter the company has a well-organized planning, M&E system. The main identified strengths of the company were that the management has great concern and close follow-up on planning, M&E activities and have well-structured planning, M&E team. The planning team prepares plans of the projects during mobilization period but the plans are not revised regularly; the revision will be performed as required. Most plans for the projects prepared using Ms-Project and Ms-Excel soft wares. Revision of plans is performed by comparing planned project activities schedule against actual schedule in order to determine project schedule performance. The required resources (Manpower, Equipment & Material) with their procurement and delivery schedule and, Finance and Interim Payment schedules for the projects planned during the mobilization period of the projects. The plans used as the reference for performing monitoring and evaluation activities.

The M&E team regularly perform M&E activities of the projects. As of the respondent's response the M&E team has close monitoring activity and evaluations are done on the monthly basis. It actively monitors the project progress with the company's well-organized standards and guidelines to how to monitor the project progress, performance of the work (Physical & Financial), resource utilization and procurement activity. The project staffs routinely collect data and prepare regular reports that help to evaluate the project progress, performance of the work (Physical & Financial), resource utilization and procurement activity. The performance of employees is evaluated regularly. Also subcontractors' performance is properly monitored but performance evaluations are not performed regularly and routinely evaluated. The company not yet provides M&E training to its staffs involved in M&E. They perform the activities with their previous experience which is not updated. This is the major challenge of the company in performing M&E activities with un-updated company strategies and guideline with the scientific management systems. Unavailability

of data gathering and analyzing tools and insufficient time and resource to conduct M&E are the other challenges of the company. Overall the company's M&E practice is good and it brings the benefits to catch problems early, to ensure resources are used efficiently, improves decision making, the company stay organized and results in better transparency and accountability.

5.3 Conclusion

The study examines the TNT Construction and Trading's project planning, monitoring and evaluation practice and as the result obtained from it and based on its specific objectives the following conclusions were drawn:

The company has a well-organized and structured M&E system and team. But as of some respondents these practice has some challenges that ban the system to be effective and efficient.

Management role on implementation of M&E systems was notably high. But supporting the system with sufficient resource and time will be expected from it. Without adequate resources and time, the projects would be forced to scale back on some of the M&E activities they were supposed to carry out. This would have an implication of inadequate and ineffective M&E of the projects as the respondents implemented.

As the M&E system is significant to the company which support it to achieve its goals the planning, M&E strategies, guidelines and frame works are not updated with the current scientific management.

There is a well-organized team but data gathering and analyzing tools are unavailable. The selection of tools and techniques to be used in an M&E system determines its success or failure.

The M&E system is important in the company that it supports the attainment of the projects' objectives.

There is no previously prepared training that will upgrade and update the skills and knowledge of planning, M&E staffs which is critical to the achievement of desired M&E results. According to Gorgens and Kusek, (2009) there is a great demand for skilled professionals, capacity building of M&E systems, and harmonization of training courses as well as technical advice.

Participation of stakeholders in M&E process is crucial determinacy for success and its absence leads to failure. From the study, stakeholder participation was notably very limited with less involvement in key areas that may determine the projects' success or failure.

The company's management routinely evaluates project performance but the prepared plans are not regularly revised. This may raise questions on the efficiency of the M&E activities results. Most respondents showed that it is difficult to communicate the results of M&E between employees.

Project Risk plans must be included in the project masters schedule. But as the research result shows that all others like resource plans, procurement plans, financial plans were prepared and be a part of the master plan bur risk plans are not prepared by the company and management did not give concern on it.

5.4 Recommendations

Based on the research findings and the conclusion, the following Recommendations are proffered.

- In order to make the M&E system effective and efficient, the company needs to revise and update its M&E strategies, guidelines and framework at organization level and the management should assign sufficient resource (financial, human and physical resources) and time for performing the M&E activity.
- Schedule updates should also be made continuously for every change made either by assigning responsible teams or individuals that are dedicated for this or establishing a proper communication between each section of the project through project managers and team leaders.
- It is recommended that managerial M&E tools and techniques will be good to perform effective M&E. A less time taking tools should be implemented for the information transferring purpose.
- The company has to participate all the project employees in order to let them to have attention to collect routine accurate and reliable project progress data and sent to the M&E team for further M&E activities and feedbacks.

- The organization should purchase additional electronic data collecting instruments and its core process manual should to concentrate more on using software programs in project monitoring and evaluation to obtain more accurate data, save time, and minimize error.
- The M&E team should be more supported by the management and prepare regular trainings in order to build the capacity, skills and knowledge of the team members and let them share their experiences with projects staffs which help them to avoid communication difficulty on the results of M&E between them. It also helps them to give attention and priority to perform M&E activities.
- Top-level management of the organization should support and keep teams' motivation enhanced that enables team members to keep deadlines for reports and enhance sense of ownership.
- All the projects' progress reports should be evaluated with the reference of the revised and updated plans. If the plans are not revised the result and feedback of the M&E activities will be inefficient and ineffective.

5.5 Suggestions for Further research

This study was focused on very limited points due to time, resource and methodological constraints. Thus, it is highly recommended if the following points are assessed on future researches in which this research constrained to cover them.

- Further research to identify the human capacity of projects and its influence on M&E systems.
- Further research would be required to determine the actual impact of in appropriate M&E on the performance of projects.

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Appendix A: Questionnaire

St. Mary's University
School of Graduate Studies
School of Business

An Assessment of Construction Project Monitoring and Evaluation Practices: In The Case of AASTU Commercial Complex Building Construction Project

Questionnaire for Data Collection

Dear respondents;

I am undertaking a research survey on construction projects focusing on project monitoring and evaluation practice in AASTU Commercial Complex Building Construction Project undertaken by TNT Construction and Trading which is located in Addis Ababa.

The research is an individual research project as part of my study for MBA Degree in Project Management at St. Mary's University.

The main purpose of the research questionnaire is to collect information regarding the current condition of construction project monitoring and evaluation practice in AASTU Commercial Complex Building Construction Project. As a key staff you are invited to participate in this survey. The information you provide in response to the items in the questionnaire will be used as part of the data needed for the study.

All the information you provide will kept in strict confidentiality and it will be used only for academic research purpose. Please answer each question carefully and be sure that there is no right or wrong answer. If you are unsure of an answer, please respond with your best estimate. I value your participation and thank you in advance for the commitment of time, energy and effort. If you have any further question; I can be reach at the address below.

With Greatest Regards;

Tsegaye Teressa
Tel. +251-9-93 54 96 08
Email. tsegaye333@gmail.com

General Instructions

- ❖ There is no need of writing your name.
- ❖ Write your opinion on space provided for those questions.
- ❖ In all cases were answers options are available; please tick (√) in the appropriate box.

Part I. General information of the respondents; please use (√) in the relevant box for your response.

a) Project Name: _____

b) Which stakeholder do you represent?

Client/Owner ☐ Consultant ☐ Contractor ☐ Others ☐

c) Gender: Female ☐ Male ☐

d) Age

25-35 years ☐ 36-45 years ☐ 46-55years ☐ Above 55 years ☐

e) Educational Background:

f) Total Work Experience:

PHD ☐ MA/MSC ☐ BA/BSC ☐ College Diploma ☐

If Other; Please specify: _____

g) Total Work Experience:

Less than 5 years ☐ 5-10 years ☐ 10-15 years ☐ Above 15 years ☐

If Other; Please specify: _____

Part II. Listed below are questions about project Monitoring and Evaluation. Please indicate your answers on the current status of your project's Monitoring and Evaluation practice that will enable the researcher to assess what you think about the project monitoring and evaluation practice in your project and organization.

1) Does your project prepare any detailed project monitoring & evaluation during project mobilization period?
   a) Yes b) No
2) Who are the major stakeholders involved in the project monitoring & evaluation of projects in your organization?
   a) All Project Staffs b) M&E Staffs c) Donors d) Beneficiaries
   e) If Others; Please specify: _____
3) Does your organization has organized standards, guidelines, manuals & procedures for project monitoring and evaluation works?
   a) Yes b) No
4) If "No" what kind of appropriate guide is used? Please specify: _____
   _____
5) If "Yes" does your organization properly exercise the standards, guidelines, manuals & procedures for project monitoring and evaluation works?
   a) Yes; for all projects b) Yes, for some projects c) I am not sure
6) Does your organization used the prepared M&E plan that guide project execution?
   a) Yes; for all projects b) Yes, for some projects c) I am not sure
7) If your answer to question no. 5 is "b" or "c" what is the reason behind?
   a) Lack of budget b) Lack of Focus c) It is irrelevant d) Lack of expertise
   e) If Others; Please specify: _____
8) How frequently did your project perform evaluation and monitoring of the project's performance?
   a) Never b) Daily c) Weekly/ Biweekly d) Monthly e) Quarterly
   f) Annually g) If Others; Please specify: _____

9) What is your level of agreement on the role of the management towards the implementation of the M&E system?

a) Strongly Agree b) Agree c) Neutral d) Disagree e) Strongly Disagree f) I don't know

10) How would you rate the implementation of M&E System?

a) Very Easy b) Easy c) Difficult d) Very Difficult

11) Which type of evaluation do your organization carry out on its projects?

a) Ex-Ante Evaluation (Start-Up Evaluation) b) Mid-Term Evaluation

c) Terminal/Summative Evaluation d) Ex-post /Impact evaluation

e) All f) None

12) Does your organization properly manage the challenges on the M&E activities?

a) Yes b) No

If "No"; Why? Please specify: _____

13) How do you evaluate your organization's project progress M&E practice?

a) Best b) Good c) Well d) Needs improvement

Part III. Listed below on this part there are questions that will evaluate the effectiveness of Monitoring and Evaluation. Please read each question and give appropriate answer regarding the monitoring and evaluation system of your project. Please use (√) in the relevant box for your response.

SA – Strongly Agree A – Agree N – Neutral D – Disagree & SD – Strongly Disagree

a) Questions regarding current monitoring practice of the organization and the project

No	Current Monitoring Practice of the organization and the project	SA	A	N	D	SDA
1	The pre-prepared plans are used as inputs or reference for project monitoring of the company's projects.					
2	The company has well organized team that monitors projects based on the prepared plans.					
3	The monitoring team actively monitors the project progress, performance of the work, resource utilization and procurement activity.					
4	The management has great concern and close follow-up in monitoring of projects as per the prepared plan.					

5	The project staffs have enough knowledge and experiences to monitor the project progress, performance of the work, resource utilization and procurement activity.					
6	Subcontractors are actively monitored for the successful achievement of the project progress as per the time and quality schedule.					
7	The company has well organized standards and guideline to how to monitor the project progress, performance of the work, resource utilization and procurement activity.					
8	The organization properly exercise the standards, guidelines, manuals & procedures for monitoring project works.					
9	There is company's standard monitoring plan for all projects.					
10	The monitoring plan is properly exercised on all projects.					

b) Questions regarding current evaluation practice of the organization and the project

No	Current Evaluation Practice of the organization and the project	SA	A	N	D	SDA
1	The pre-prepared plans are used as inputs for project valuation of the company‘s projects					
2	The company has well organized team that evaluates projects based on the prepared plans.					
3	The team actively evaluates the project progress, performance of the work, resource utilization and procurement activity.					
4	The management has great concern and involvement in conducting regular evaluation of projects as per the prepared plan.					
5	The project staffs routinely collect data and prepare regular reports that help to evaluate the project progress, performance of the work (Physical & Financial), resource utilization and procurement activity.					
6	The evaluation team gives constructive feedbacks to the project staffs.					
7	Subcontractors performance is regularly evaluated for checking their performance is supporting the project's master schedule in order to achieve the project goal.					
8	The evaluation team of the company has sufficient experience and knowledge to perform evaluation of the projects all over performance.					
	Data Auditing is applicable to realize the accuracy of project					

9	staffs' reports.					
10	The performance of employees is evaluated regularly.					
11	There is company's standard evaluation plan for all projects.					
12	The evaluation plan is properly exercised on all projects.					
13	The company provides M&E training to its staffs involved in M&E.					
14	The M&E training provided is effective and it improves the capacity of the staffs.					

c) Questions regarding challenges of the organization and the project in practicing of M&E activities

No	Challenges in Practicing of M&E	SA	A	N	D	SDA
1	M&E practices are not give priority by the some employees of the firm at project level.					
2	Less attention of employees at project level to collect routine data and sent to the M&E team for further M&E activities.					
3	Insufficient time and resources to conduct M&E.					
4	M&E implementation strategies and guidelines need regular updates with the scientific management systems.					
5	Unavailability of data gathering and analyzing tools.					
6	Project staffs have no positive acceptance on the feedbacks of the M&E team.					
7	Difficulty in communicating the results of M&E between employees.					
8	Data auditing is not regularly exercised.					

Please specify any challenges that your organization and the project is face during performing M&E activities.

_____

_____

_____

_____

_____

d) Questions regarding benefits of the organization and the project in practicing of M&E activities

No	Benefits in Practicing of M&E	SA	A	N	D	SDA
1	M&E results in better transparency and accountability					
2	M&E helps organization catch problems early					
3	M&E helps ensure resources are used efficiently					
4	M&E helps organization learn from their mistakes					
5	M&E improves decision-making					
6	M&E helps organization stay organized.					
7	M&E helps organization replicate the best projects/programs					
8	M&E encourages innovation					
9	M&E encourages diversity of thought and opinions					
10	Every organization benefits from M&E					

Please specify any benefits that your organization is gaining during performing M&E activities.

_____

_____

_____

_____

_____

Thank you!!

Appendix B: Interview

Interview Questions

Dear Interviewee;

These interview questions will be answered by purposively selected respondents from management team members. The purpose of this interview is to request you to provide information about performance of monitoring and evaluation at AASTU Commercial Complex Building Project undertaken by TNT Construction and Trading. The information you provide will be treated with a lot of confidentiality and used for academic purpose and suggesting some improvements on the monitoring and evaluation system at the company.

1) Do you believe that your organization has a well-established project monitoring & evaluation system? If 'Yes', is it effectively practiced or implemented? (If 'No', what is the reason behind and how it affects the success of the projects?)
2) How do you monitor and evaluate the progress of projects in the organization? How often do you conduct these monitoring and evaluation activities?
3) How much is the project stakeholders' involvement on practicing monitoring and evaluation activities?
4) Did you perform project monitoring and evaluation activities in the organization? Who is responsible for project monitoring and evaluation? Do you think the organization's practice on monitoring and evaluation is satisfactory? Why or why not? What are the main challenges that affect the organization's project M&E effectiveness?
5) Which approaches you suggest to be used so as to improve monitoring and evaluation Practices of your organization?

Thank you!!

Appendix C: TNT Construction & Trading Organizational Structure & Operation Procedure Chart