The Role of Monitoring and Evaluation on Project Time Performance: The Case of Development Bank of Ethiopia Wolaita Sodo District Projects

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THESIS TITLE

THE ROLE OF MONITORING AND EVALUATION ON PROJECT TIME PERFORMANCE: THE CASE OF DEVELOPMENT BANK OF ETHIOPIA WOLAITA SODO DISTRICT PROJECTS

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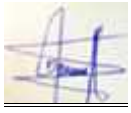
Muluadam Alemu (PhD)	 20/07/2023
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DECLARATION

I, the undersigned, declare that this thesis work is my original work, has not been presented for a degree in this or any other universities, and all sources of materials used for the thesis work have been duly acknowledged.

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Outline:

LIST OF ACRONYMS

DBE - Development Bank of Ethiopia.

RBM - Result Based Management

M&E - Monitoring and Evaluation

UNDP - United Nations Development Program

IFRC - International Federation of Red Cross and Red Crescent Societies

UNICEF-United Nations International Children's Fund

NPL-Non Performing Loan

MTR-Mid Term Review

IPEC- International Program on the Elimination of Child Labor

PMBOK- Project Management Body of Knowledge

NBE- National Bank of Ethiopia

EV- Earned Value

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ABSTRACT

Purpose of this study is to assess the role of monitoring and evaluation on project time performance at Development Bank of Ethiopia (DBE) taking a case of projects financed in Wolaita Sodo district. Explanatory research design and mix of survey and ex-post facto research strategy was used. Census was applied for total 53 respondents. The research objective was to determine the influence of monitoring and evaluation factors: planning process, technical expertise and management participation on project time performance. The district's seven projects documents were analyzed in addition to primary data collection. Documentary analysis showed that five projects among the seven were behind schedule on their time performance and the rest two were ahead of schedule. Interviews and documentary analysis showed that that poor time performed projects were implemented before the utilization of new monitoring and evaluation guideline at the district. From data analysis it was found that the monitoring and evaluation factors, planning process, M&E technical expertise and management participation have strong correlation with project time performance. It was also found that management participation having negative correlation with project time performance on the project owner side. The study recommends that organizations/projects plan shall be in alignment with the strategy, technical expertise involvement to be entirely focused on the whole project life cycle and management participation shall have a form of supportive and facilitative rather than interference. Further research was also recommended.

***Key words**: monitoring, evaluation, plan, technical expertise, management, performance*

Chapter One

Introduction

1.1 Background

Monitoring is an ongoing and long term process in which activities being executed are examined to be as per the standard. It also helps to spot the weakness and/or the strength along the way of executing these activities (Kerzner, 2003 & Waithera, 2015). Whereas evaluation is performed either at the midterm or at the end of the project lifecycle in order to assess the strength, weakness, output and outcomes of the project. Monitoring has always been perceived as a major component of measuring and improving the performance of the successive development plans (Phiri, 2015). When it comes to M&E, Evaluation has traditionally been overshadowed by monitoring. Monitoring and evaluation is one of the crucial project management activities which shall be executed from the project initiation stage to the end of the project. Even if the project is completed these activities can be used as a point of reference for future projects (measure outputs, outcomes and impacts).

Development bank of Ethiopia (DBE) is one of government owned financial institutions engaged in providing short, medium and long term development credits by financing viable projects from the priority areas of the government. DBE's distinguished feature is its "project" based lending tradition. Project financed by the Bank are carefully selected and prepared through appraisal, closely supervised and systematically evaluated (Tulu et al., 2018). When doing this the bank (lender) contributes 75% and above project cost while the borrower contribute 25% and less amount of the total required cost for the project, DBE credit policy (2022). So these huge amounts of contribution make the bank the major stake holder of the project. In order to be back bone for the project that it finances it mobilizes funds from domestic and foreign sources Asfaw (2016).

As most of governmental institution project practice, those projects which are being implemented through the partial finance of DBE, were observed to be delayed and/ or subjected to be considered as NPL(non-performing loan) (Asfaw, 2016). This is a clear

indication of either one or two or three aspects of project performance (budget, quality and schedule) are not in alignment with the plan. Since the bank has strict control over the project budget issue, without the consent of the bank top management budget overrun of project is impossible. Regarding project schedule projects under the finance umbrella of DBE are found to face implementation delay (Tulu et al., 2018; Legesse, 2013).

One of project performance attribute is project time performance. It helps to measure the progress of project with respect to the planned time schedule of the project. Knowing the track of the project progress used to identify if the project is on schedule, behind schedule or ahead of schedule (Kerzner, 2003). This research has the aim of showing the role of monitoring and evaluation on the project time performance taking different factors of monitoring and evaluation, i.e, planning related, management related and technical expertise related factors and selecting projects from the district portfolio whose time performance are ahead of schedule, on schedule and behind schedule.

1.2 Statement of the problem

Project monitoring and evaluation exercise as per (Larson, 2015), though this management activity importance is inevitable, globally it is neglected in most organizations except for stakeholder protocol or accounting controls. In the same literature monitoring and evaluation are mentioned as activities of the most ignored areas of project management. Even if project monitoring and evaluation exercise adds value to the overall efficiency of project planning, management and implementation by offering corrective action to the deviation from the project expectation (Kamau, 2015), unfortunately, it is common to find resistance to monitoring and evaluation activities ,Larson (2011)

Though this M&E exercise importance is inevitable, finding studies regarding monitoring and evaluation practice in African context is found to be difficult due to scarcity of literatures in this practice. As per Basheka et al., (2015) this monitoring and evaluation practice is a young exercise in Africa. Evidences show that the oldest evaluation association in Africa was established in 1997 in Ghana. In addition it's mentioned in this literature that African evaluation association also established two years later in 1999. So

as per this author the field of monitoring and evaluation in Africa is growing from infancy to adulthood. Mark (2015) showed that among fifty four African nations only South Africa, Kenya, Benin and Uganda have ministry of evaluation. Even if more than two thousand governmental organizations established their own monitoring and evaluation units mostly these unit focus primarily on monitoring.

In Ethiopia most of studies regarding monitoring and evaluation are on international NGOs, health sector programs and aid programs. As per Juillard et al., (2022) there is no national evaluation policy frame work for the country. But only donor funded project are found to conduct an evaluation exercise. In 2021 Ethiopia had received around $3.98 billion from donors as an official development assistance (World Bank, 2021), which is near to 10% of its annual budget (UNICEF, 2019). This indicates that those evaluations conducted within governmental bodies are mainly for the sake of donor requirements. Existing evaluation exercise in these organizations mainly focus on quantitative approaches and quantitative data collection as well as analysis is also widely practiced. This is highlighted in the 2014 diagnostic report (Juillard et al., 2022) that served as an input for the development of the 2018 M&E guide. There are only few number of courses delivered as an academic course in Ethiopian higher education institutions: and as of 2021, Jimma University is the only institution that gives M&E as a postgraduate certification, even if it's specific to health sector (ABH Partners, 2021).

The rationale for conducting this study is that, to the best of the researcher knowledge it's found that adequate researches, that comprehensively assess the role of monitoring and evaluation on project time performance in general and Development Bank of Ethiopia financed projects in particular, are not available with the exception of a studies made by Wondimagegnehu (2012), on the determinants of NPLs of banking industry in Ethiopia and Tulu (2018), Determinant of project implementation delay. But several DBE report documents (annual reports 2016/17 - 2021/22) and researches (Legesse, 2013 and Tulu et al., 2018) show that most of the projects being financed by the bank frequently face delay and have poor time performance. On the bank project loan procedure it's mentioned that projects need to have a follow up timeline to track the progress (DBE loan procedure 2014). In addition, in this document, on the projects appraisal document the time

schedule for conducting each activity is expected to be shown clearly. But in practice the plan is not uniformly implemented (Tulu et al., 2018). Lately as a borrower requirement monitoring and evaluation plan is requested as a mandatory. The bank didn't establish a monitoring and evaluation unit till 2021 as a separate function though; there are some activities which resemble monitoring and evaluation (Tulu, 2018).

There have been several studies conducted to show key factors that affect project performance or success (Lindhard S. et al, 2016, Adnan E. (2010), Sevar N. (2017), Tomoyuki K. (2013). Though these studies are made in assessing the detailed factors for the success of project, monitoring and evaluation was not considered as a key factor.

The literature review showed that there are researches that have been conducted mostly from USA, Hong Kong, Kenya, Ghana, and the like. Not much of the studies have been carried out on the monitoring and evaluation in relation to project time performance from the Ethiopian's perspective. Some studies conducted in other countries on objectives relatively similar to this study, however, indicate that there is knowledge gaps that need to be filled.

Phiri (2015) conducted a study titled "influence of monitoring and evaluation on project performance" indicated a clear relationship between monitoring and evaluation and project performance in general. But the term project performance was not explained well. Since project performance has indicators like quality, cost and time, the study didn't distinguish which performance indicator it used for the study. Similarly Mwangu (2015), how monitoring and evaluation affects the outcome of projects, showed monitoring and evaluation contribution for the project success taking a case study of constituency development fund projects in Kenya. Since project success is obviously measured as performance output regarding time, cost and quality, similar to the above study project success still is vague. Ali (2013) revealed linkage of monitoring and evaluation with project success. But the study took road construction projects as samples for the research. Like the above shown studies Joshua (2013), Iravo (2015) and Nzigu (2018) showed role and contribution of monitoring and evaluation for project success taking cases of situations which differs from this study. But as mentioned above all those studies didn't elaborate project success which is usually measured as output performance of time, cost and quality in detail.

There are plenty of studies that examines monitoring and evaluation activities influence in projects. However, none of these studies have focused on DBE's financed projects time performance. Most researchers conducted in Ethiopia regarding monitoring and evaluation primarily focuses on Infrastructure and construction projects (Bezabih (2002), Ermiyas (2006) and Mebrehatu (2010)). Since DBE's financed project doesn't fit contextually with construction projects it's observed that there was a contextual gap with this study. The current study shall add knowledge to the already existing through the identification of the roll of M&E practices on project time performance of DBE financed projects specifically under Wolaita Sodo district projects using the following objectives: planning process of the M&E team, technical expertise of M&E and management related of DBE and borrower. So this study is intended to fill the conceptual and contextual gaps respectively, for the studies like mentioned above.

1.3 Research objective and/or Research question

1.3.1 General objective

The study has an objective of identifying the role of monitoring and evaluation on the time performance of Development bank of Ethiopia financed projects.

1.3.2 Specific objectives

1. To assess DBE specific planning process effect on project time performance.
2. To assess DBE specific technical expertise role on project time performance.
3. To assess DBE specific management participation effect on project time performance.
4. To assess Borrower specific planning process role on project time performance.
5. To assess Borrower specific technical expertise effect on project time performance.
6. To assess Borrower specific management participation role on project time performance.

1.4 Research hypothesis

1. H_{11}; DBE specific planning process factors have a significant statistical effect over project time performance.

2 H_{12}; borrower specific planning process factors significantly affect project time performance.

3 H_{13}; DBE specific technical expertise factors significantly affect project time performance.

4. H_{14}; borrower specific technical expertise factors significantly affect project time performance.

5. H_{15}; DBE specific management factors significantly affect project time performance.

6. H_{16}; borrower specific management factors significantly affect project time performance.

1.5 Significance of the research

From literatures it's found that less attention is given to the practice of monitoring and evaluation of projects from planning to the completion stage. Sometimes this monitoring and evaluation is considered as a donors' requirement and conducted for the sake of fulfillment. But on other studies, it is shown that properly implementing project monitoring and evaluation make the projects perform better than those whom lack it. Conducting such study make project managers, project owners, financers, stakeholders and government bodies to be aware the significant impact of monitoring and evaluation practice on the project time performance. It also pave the way for further studies regarding monitoring and evaluation factor that specifically affect each party of the project and to identify which element of monitoring and evaluation practice highly influence the time performance of the project. In addition it can make projects to evaluate their monitoring and evaluation practice based on the result based management (RBM) approach.

1.6 Scope and limitation of the research

Main reasons for selecting Development bank of Ethiopia to other types of government and private banks for the reason that it is engaged in projects that are risky by nature and provide long term loans which by its nature lead to delay. Hence, monitoring and evaluation factors affecting project time performance in other districts of DBE were assumed to be similar. Furthermore, since the Bank under consideration has the same credit policy and loan procedures (from application for loan up to loan collection) throughout its all districts and head office, a case study in DBE Wolaita Sodo district was assumed to be representative.

The study focused on projects financed by Development Bank of Ethiopia Wolaita Sodo district. On this study projects of other districts and outside DBE were not included. Only project of Wolaita Sodo district were the central focus of the study due to the shortage of time to cover large radius of the district's area.

This study covered projects of the borrowers of the district from 2017/18 onwards. Moreover, the absence of well organized database made data collection process difficult. Thus, this study is limited to both DBE and borrower specific monitoring and evaluation factors affecting time performance of Development Bank of Ethiopia Wolaita Sodo district.

1.7 Organization of the study

Chapter one of this research is introduction that contains the background of the study, statement of the problem and objectives of the study. Chapter two is for literature review: theoretical and empirical literatures. The third chapter focuses on the methodology by which the study was conducted. This chapter has the sources of data, sampling techniques and sample size determination and the method of data collection and analysis. Chapter four deal with data analysis, interpretation and presentation. The last part, chapter five is all about summary, conclusion and recommendation.

Chapter Two

Literature review

2.1 Introduction

This chapter mainly presents definition and role of monitoring and evaluation and its influence over projects time performance. Monitoring and evaluation was discussed from its evolution and perspectives of different scholars. Similarity and differences between monitoring and evaluation explained. Different factors of monitoring and evaluation, i.e., planning process, management participation and technical expertise were discussed in detail. Project time performance definition and how it's measured is explained in this chapter.

2.2 Monitoring and evaluation

Monitoring and evaluation are two distinct functions and have different role in project life cycle, yet they are complementary somehow that make these terms interactive and mutually supportive essential management functions (UNDP). Monitoring and Evaluation is a management process whose priority is assist project Performance improvement and achieve expected or planned project deliverables. as per Tengan (2017) The objective of monitoring and evaluation is to improve existing and intended management of inputs, outputs, outcomes and impact in projects and programs being executed by tracking the progress, performance and results of projects and programs, or even institutions, and organizations, whether international or local NGOs, government or individuals (United Nations Development evaluation Office, 2002).

The main function of monitoring and evaluation is to provide indicators on how to execute activities well through a better understanding of what works and what does not. Monitoring and evaluation is basically the main processes for "learning from experience." by learning means a process of analysis, which depend on existence of proper information or evidence on which to base the analysis (Mwangu, 2015). Monitoring and evaluation is the integration of information and experience. Data is the input to process this management activity. Access to appropriate data and data sets that can be processed into usable, timely and relevant statistical information is essential for

effective monitoring and evaluation that in turn can lead to a learning experience (Roger et al., 2008).

Monitoring and evaluation is one of the most critical management functions of project management as it is an activity of tracking progress of a project and is a governing of project wellbeing. In the project activities monitoring and evaluation contribute in providing a constant feedback about the progress of a project, the challenges it is facing, and the efficiency with which it is implementing (Harry et al., 2013). With effective monitoring and evaluation, it would be possible to judge if work is flowing in the right stream, whether progress and success can be claimed and how future efforts might be improved (IFRC, 2011).

Monitoring and evaluation is a necessary process that provides important information to make informed decisions regarding service delivery and execution of management activity including efficient and effective utilization of resources (Tengan, 2017). It helps to measure the extent to which intervention is on track and to make any required improvements accordingly, and measuring the extent to which the project/program has achieved the desired goal. Based on Rossi et al (2004), the monitoring and evaluation findings further studies can be made.

Monitoring and evaluation is important to Project Managers and their stakeholders (including donors/government) because they need to know if they are in alignment that the project activities are meeting the set objectives and attaining the desired effects. Project monitoring and evaluation importance differs for different stakeholders based on their target and objectives (Oztuk, 2010). Monitoring and evaluation assist on ensuring transparency on utilizing project resources, which is particularly useful for project financers and development partners. An independent monitoring and evaluation systems will be externally credible and socially legitimate but not the independent one lose its relevance (Abalang, 2016).

Monitoring and evaluation help for check and balance to ensure the plan is executed well (Mwangu, 2015). Those projects with participatory monitoring and evaluation practice achieved critical success on the project implementation. Even though this management

activity importance is inevitable, project monitoring and control neglected in most organizations except for stakeholder protocol or accounting controls (Larson, 2015). In the same literature monitoring and evaluation are mentioned as activities of the most ignored areas of project management. Even if project monitoring and evaluation exercise adds value to the overall efficiency of project planning, management and implementation by offering corrective action to the deviation from the project expectation (Kamau, 2015), unfortunately, it is common to find resistance to monitoring and evaluation activities ,Larson (2011)

2.3 Project monitoring

Project monitoring is a tool for stakeholders to gather continuous feedback regarding project progress towards achieving goal (UNDP; Tengan et al, 2017). Similarly Kerzner (2003), Khan (2003), Ibeto (2005) and Waithera (2015) defined Project monitoring as the process of continuous collecting required information to compare the actual and planned consumption of project inputs and completed outputs. As per (IFRC, 2011) Monitoring is defined as a routine collection and analysis of information to track progress against set plans, checking compliance with the established standards. Also it can be defined as a continues striving function of an ongoing intervention that target basically to provide the management and main stakeholders with early indications of progress, or lack thereof, in the attaining the objectives. An "ongoing intervention" might be a project, program or other kind of support to an outcome **(**United Nations development program evaluation office 2002).

Others like Guijt (2003) perceive project monitoring activity as regular and continuous assessment of activities for identifying change, understand where current position is, how far the status of the project moved. As per Crawford (2003), project monitoring is a management driven function whose main target is to bring project efficiency. Monitoring is also thought as of information gathering tool for assessing effects and impacts of project (Fotieno, 2019). These activities help to identify delay as early as possible and contribute positively for the timely completion of projects (Mwangu, 2015). Several multilateral organizations used this activity as a key process in their project execution.

Among these, World Bank is one who considered project monitoring activity as a critical success factor (Ika et al., 2011).

Monitoring is generally an ongoing process of information collection mainly for project/program management and it tends to focus on activities. But in spite of all this contribution of monitoring activity, the misunderstanding of the monitoring role for project benefit is observed to cause negative impact on the project (Fotieno, 2019).

2.4 Project evaluation

Project evaluation can be defined as the process of collecting information to identify the consequence and impact of a project (Phiri, 2015). According to IFRC (2011), evaluation is "a systematic and objective assessment of an ongoing or completed project, program or policy, its design, implementation and results." Evaluation is a selective exercise that is systematic and objective to track progress toward and the achievement of an outcome. Evaluation is a continuous activity and an exercise that involve assessments of differing scope and depth carried out at several points in time in response to evolving needs for evaluative knowledge and learning during the effort to achieve an outcome (United Nations development program evaluation office, 2002). Evaluation takes a periodic and a very broad view of the entire program and involves less routine programmatic reviews. It's main concern is outcomes.

According to ECCSFE (2017), Evaluations can occur at projects three point of time, the first one is midterm evaluation during the project execution phase and such interim evaluations are usually undertaken at midpoint of the project, to assess progress and propose necessary amendments to project design during the remaining period of implementation. The second evaluation takes place at the end of a project for the resource utilization, results, and progress toward target. This will enable to give awareness about the project; based on this the evaluation result will use to improve future design. The third evaluation takes place after the project is completed. Ibeto (2015), also agree that evaluation is the systematic assessment and determination of projects/programs effect during and after implementation. This type evaluation is for assessing the impact of development projects. This activity used as a tool for analyzing the effect and impact of

project based on the information gathered through monitoring (Fotieno, 2019; Khan, 2003).

(Guijt et al., 1998; Khan, 2003) stated role of evaluation as a periodic valuing, performance review, assessing strategic issues, performance review and checking the effectiveness of changes and programs. Similarly evaluation role on completed or ongoing activities considered as a tool for checking the achievement of stated objectives and influence on decision making (Tengan, 2017; UNDP, 2012). As per Crawford (2003) and Waithera (2015) this project management activity is externally driven management function which insists on project effectiveness.

Evaluation is one of a project management activity that has several purposes. It is expected to have a characteristic of impartiality, usefulness, technical adequacy, and stakeholder involvement, value of money and feedback and dissemination. A quality evaluation provides feedback that can be used to improve programming, policy, and strategy (Njuki *et al.,* 2015). In addition evaluation also used to identify unexpected phenomenon and consequences of development initiatives, which may not be observable in regular monitoring as the latter focuses on the implementation of the development plan. Evaluation based itself on the data and information earned by the monitoring system as a way of analyzing the trends in the effects and impact of the project (Waithera, 2015). Similarly Kahilu (2010), show in some cases, it should be noted that monitoring data might reveal a result which depart itself from what is expected of the project, which may trigger the need to conduct of an evaluation to assess the assumptions and premises on which the project design is based. What is produced from project evaluation findings help for the organizational development and fill the gap in global knowledge regarding the subject (United Nations Development Program 2009).

2.5 Elements and processes of Monitoring and Evaluation

To conduct M&E developing framework is necessary. The frame work help to define internal relationships between program/project inputs, processes, outputs, and outcomes and external relationship with environment. Also it assists to understand project goals clearly and to be clear with short and long term objectives (Waithera, 2015). There are three kinds of monitoring and evaluation frameworks namely conceptual frame work,

result frame work and logical frame work. These logical frame works show the clear path between activities to stated goals/objectives. In order to measure change produced by an activity or intervention, developing of indicator is necessary. These indicators shall be well defined, reliable, verifiable and cost effective (IPEC, 2011).

Another important element of monitoring and evaluation is data collection. Data can be collected from primary source or secondary source. Data collection is done through direct observation, key informant interview, using secondary source, focus group discussion, Community group interview and Mini survey (using structured questionnaire) (Oztuk, 2010). Most importantly monitoring and evaluation become effective when it's participatory. Involving stake holders in decision making rather than only as a recipient of monitoring and evaluation report make project increase efficiency and effectiveness. These data collection processes help to produce qualitative and quantitative information useful for the monitoring and evaluation (Njuki *et al.,* 2015).

After developing indicator specifying baseline information (prior status before the intervention) and level of performance (performance level in a given period of time) needed to be achieved shall be determined. There are regulatory baseline, performance baseline and enterprise baseline (IPEC, 2011).

Reporting of monitoring and evaluation findings for internal and external audiences has different forms. A good report focus on results, performance, steps and comparative performance achieved. This reporting can be done via oral, written document, informal discussion, written progress report and press and main media (Tengan, 2017; UNDP, 2012).

2.6 Similarities and Differences of Monitoring and Evaluation

Juliet (2016) mentioned that the high level of attention given to results (outcomes), in contrary to activities and output, has brought some major changes in the focus, approach and application of Monitoring & Evaluation systems. Whereby as focus of management changes from activities to results, focus on monitoring and evaluation also changes from the traditional monitoring and evaluation system, which make it clear assessment of the role of interventions to development outcomes. Assuring and making continuity a result

based Monitoring & Evaluation system is not a piece of cake task for it demand consistent and regular commitment, champions, time, effort and resources.

Though monitoring and evaluations nature is of interactive and mutually supportive character, evaluation differ from monitoring in three aspects namely timing, focus and level of detail (ECCSFE 2017). Monitoring occurs throughout the implementation. A baseline study is usually conducted before the implementations begin for monitoring. Evaluation can occur at different points for different purposes-at different points on an evaluation (IFRC, 2002).

According to OUBS (2006), although monitoring takes place throughout a project, evaluation is activities which bases itself on the findings of monitoring and happen at the end of project implementation, in a final summative evaluation. Summative evaluation is a process for identifying: What the project has achieved, part of the project executed well, the aspects that went bad or worst, and provide lesson for the activities to be taken seriously next time. Purpose of this evaluation is to learn from the good and bad of the current activities and based on the lesson learned perform well on the coming activities.

According to IFRC (2011), the main difference between monitoring and evaluation is their timing and focus of assessment. Monitoring is an ongoing activity and focus on the current execution phenomenon; on the other hand, evaluations are executed at specific points in time to determine how well it performed and result are found due to this. Purpose of data produced by monitoring or evaluation is also another kind of difference between these two. Monitoring data is typically used by managers for ongoing project/program implementation, tracking outputs, budgets, compliance with procedures, etc. But evaluations may also inform implementation (e.g. a midterm evaluation), but they are less frequent and examine visible changes (outcomes) that rigor in analysis, such as the impact and relevance of an intervention (Njuki *et al.*, 2015).

2.7 Importance of Monitoring and Evaluation

Utilization of project monitoring and evaluation differ based on their reasons and interests. Monitoring and evaluation assure greater transparency and accountability in the effective utilization of project resources, which is particularly useful for project financers

and development partners. An Ideal monitoring and evaluation systems should be free from bias and independent enough to be externally acceptable and socially legitimate but not so independent to lose its relevance. Its credibility is a critical issue. It is also important to Project Managers and their stakeholders (including donors/government) because they need to know the extent to which their projects are meeting the set objectives and attaining the desired effects (Abalang, 2016).

Monitoring and evaluation is an important process that produces information to have a better decision making based on reliable information regarding service delivery and implementation. This include efficient and effective utilization of resources, establishing line of conformance to the expectation and to make any desired adjustment if necessary, and determine the amount of success in achieving the desired impact of the intervention. Based on these findings further studies can be executed in the future (Rossi et al, 2004).

2.8 Monitoring & Evaluation Theories

There are three broad theories with respect to monitoring and evaluation namely management theory, program theory and result based theory (RBM) view.

2.8.1 Management Theory

This theory is also well known as Frederick Taylor's Scientific Management. In his theory, Fredrick Taylor emphasized well trained workers and disintegrating complex duties (Work Breakdown Structure) into parts to make the performance high. This theory has been regarded as his main contribution towards work management where management plays a role of performing the science and instruction while workers in each group performs "the work for which it was best suited" to optimize the performance of the subtasks. This theory contains frameworks that can help project implementer to guide their project well. Monitoring processes is considered as a critical activity on project implementation process (Kasaija, 2015). This however, calls for a detailed and sound management to monitor tasks of various groups at each stage of project implementation in order to improve workers performance and capacity of agencies to accomplish their central role (Muchelule, 2018).

2.8.2 Program Theory

Chen, et al. developed this theory. This theory mainly insisted on identifying who claims responsibility for bringing change and how it can be implemented. It's part of change theory and applied development evaluation field.

The theory is expected and practical model on how a program hypothetical works (Bickman, 2007). Lipsey (2011) stated it's an explanation of how inputs are changed to outputs and their relationship. It measure result by comparing input with respect to output. It clearly shows how the processes affect the result. Rossi et al. (2012), argued that a program theory consist of an organizational plan on how to deploy resources and organize the activities of the program activities to warrant that the planned service system is established and at the same time maintained. The theory applied in the input output model to monitor performance, communicate findings and improve project performance. The M&E practices are the basic inputs when utilized well equates to the processing of the inputs and eventually give measurable output. Program theory explains how the changes in input contribute same in output, and give good result. The inputs to the process refer to the variables that influence the outcome, which is performance; in this case, the variables are the planning process, technical expertise, stakeholder involvement and management participation (Njuki *et al.*, 2015). This logical model clarifies the program objectives and identifies expected casual links in following the result chain; inputs, process, outputs and the overall outcome. On every stage of logical model it shows a clear linkage of performance measure. It clarifies the questions within the project by tracking the progress and taking necessary measures when change occurs to ensure the targets are met. A program theory shows a single immediate result that the intervention create, it helps to analyze whether there is deviation with the intended level of performance (Bickman, 2007).

2.8.3 Result-based Management (RBM) and monitoring and evaluation

Performance management (or results-based management) is a strategy designed to acquire changes in the way organizations execute their activities, with better results at the core of the system. RBM defines the end result and monitoring as well as self-assessment

of progress is required to sustainable results, including recording performance (UNDP, 2012).

RBM is a continuous process whose key aspects all intensify monitoring and evaluation elements begin with planning then setting the vision, mission and according to results design the framework tools. RBM is an ongoing process, which requires a regular feedback from the participants; the feedback supports the lesson learning a process improvement (UNDP, 2012). RBM provides elements for project monitoring performance, this are linked to the variables in the current study, the planning process, technical expertise, stakeholder involvement and management participation are key elements directly linked to the RBM theory. This elements result to sustainable change **is** discussed in detail here below.

A. Planning Process in M & E

Planning target making the systems and processes necessary to ensure the intended results is achieved as planned. In addition, what is found in the monitoring and evaluation plan provides the information needed to assess and guide the project strategy, ensure effective operations, meet internal and external reporting requirements, and to inform future programming (UNDP, 2009).

Planning in monitoring and evaluation involves practically making the project activities to make them as to be able to be monitored and evaluated. This will involve keeping a log frame of the objectives and indicators to be monitored throughout the project (IFRC, 2011). The aim of the monitoring and evaluation plan is to assist in determining and communicating project progress and how much the project objectives and outcomes are achieved. The plan also identifies the evaluation questions to be addressed using project evaluation. According to Bickman (2007), the monitoring and evaluation plan defines the indicators to be noted, defines the people mandated to collect them, defines the tools, and forms to be adopted, and describes the method of data dissemination to be used in the organization. Therefore, many monitoring and evaluation systems would fail due to the less concern given to each activity at the planning stage without the use of monitoring and evaluation plans (UNDP, 2012).

B. Technical expertise in M & E

The role of Monitoring and Evaluation experts in assisting project manager and/or project stakeholders in providing technical assistance with the aim of improving data collection and analysis, reporting, monitoring, and evaluation of the ongoing intervention in a specific area or at the country level is inevitable (Njuki *et al.,* 2015). These experts critical engagements are to contribute to enhance the system of data collection and project monitoring and evaluation, provide technical support to project managers for what concerns data collection and analysis, train and supervise local data collectors to monitor data collection, and supervise the completeness and make sure overall quality of the data collected, assist project managers in the monitoring project activities and results, ensure the punctuality and quality of reports, assist to the analysis of context and emerging needs and collaborate in any operational research and scientific documentation activities (Harry et al 2013).

C. Stakeholder's involvement in M & E

Project stakeholders are parties those who share a common understanding and involvement in the decision making process of the project. Participation by stakeholders contributes to empowerment and to joint ownership of the project (Njuki *et al.*, 2015). Stakeholders' involvements in monitoring and evaluation activities help in promoting the enhancement of participatory development program. This parties have a legal right and obligation to be aware of what's happening regarding the program/projects , what kind on necessary actions needed, what will be the outcome, and what to learn from this phenomenon except being the observer for the changes and recipients of the written reports (Kahilu, 2010).

One effective way for stakeholders to contribute to the achievement of program or project objectives is to be directly involved in the monitoring and evaluation process - in the formulation of critical questions and in the collection and analysis of data (Njuki *et al.*, 2015). Doing this is involving directly in the assessment of the relevance, performance, and success of the program or project and in recommending quality improvement issues on the current and or in the future intervention. All of the groups that have a role and an interest in the objectives and implementation of development activities are the stakeholders in the monitoring and evaluation process. The key stakeholders are target

groups or those sectors of the population targeted to benefit ultimately from the results of program and projects; direct beneficiaries, usually institutions and/or individuals who are the direct recipients of technical cooperation aimed at strengthening their capacity to undertake development tasks that are directed at specific target groups; those who are responsible for ensuring that the results are produced as planned: program managers and staff of the Government or of the non governmental agencies and those who are accountable for the resources that they provide to the program and projects: national policy-makers and budget authorities, donors, and other development partners (Lipsey, 2011). There also several associated parties could also be added to the list: external consultants, suppliers, and other persons or organizations providing inputs to the program or projects; and other institutions (private-sector entities, CSOs) in the program or project environment that may also be affected by or interested in the results of the program or projects (Kusek & Rist 2004).

A monitoring and evaluation system which is participatory make the process more effective since people who may be affected by activities, outputs outcomes, and decisions made about a project or can influence positively and or negatively the implementation and operations of a project and the monitoring and evaluation process (Njuki, *et al* (2015). Stakeholders will be more concerned with the monitoring and evaluation process if they are involved from the beginning and throughout the process. Thus, through the involvement of all relevant stakeholders, there will be clear support for the process and ownership of the findings. An organization's leadership play too vital role in ensuring the effectiveness of a monitoring and evaluation system (Kusek & Rist 2004). The management contributes in the allocation of resources, designing of the system, communication of results, and making other key decision that affects monitoring and evaluation and projects' activities. Their commitment to the implementation and operation of the monitoring and evaluation system is very crucial (Kahilu, 2010).

D. Management participation in M & E

Annual project reviews, quarterly, and mid-year partner/staff meetings, and during supervision missions are forms of managing and regularly assessing the impact of project

implementation. These methods are usual for existing projects and for new projects to plan into their implementation procedures (Bickman, 2007).

Key stake holders hold annual review with their partners as part of their process. While doing this, staff, partners and local people will discuss the monitoring data on activities, outputs, and outcomes. This monitoring data will be analyzed with respect to the ultimate goal in order to identify if the task is as per the intention. How the project is implemented and how the relationship with stake holders handled is also analyzed. This leads to formulating the next annual work plan and budget (AWPB) and adjusting monitoring and evaluation plans. This self-assessment and development of the AWPB become the foundation for annual progress report, but more strategic issues can also emerge from community level discussions (So an annual review process links all four elements of managing for impact: impact, strategy, operations, and monitoring and evaluation (Maylor, 2013).

(Lipsey, 2011) Quarterly and mid-year review and planning meetings could also be conducted on same manner with participatory annual review, but with fewer stakeholders and more discussion on the implementation way and relationship. These regular and improvement-oriented self-assessments are indicators of the existence of learning environment and the organization is able to execute the mentioned project effectively (Goyder, 2009).

As per Kerzner (2013), Supervision missions and mid-term reviews are also occasions when all four aspects of managing for impact come together. But only these cannot be pillar for the project, as MTRs appear lately in a project's life and supervision missions are not always in enough depth or timed appropriately to influence impact achievement. When project implementers are responsible for their learning process, they claim responsibility for their action and do whatever necessary to correct the mistake (Oakley, 2013). Such action involves acknowledging mistakes, act accordingly to change in the context by rethinking activities, keeping good practice and processes and looking always for alternative opportunities.

Performance monitoring somehow related with the communication of performance information. It focuses on defining objectives, developing indicators, and collecting and analyzing data on results (IPEC, 2011). Results-based monitoring and evaluation systems have been successfully designed and used to monitor and evaluate at all levels of projects, programs, and policies. Data collection and analyzing them can take place at any point of time to provide feedback. This help for a better informed decision making (Oakley, 2013).

According to Robert (2010), evaluation information shall be proven, credible, reliable as well as useful, and should enable the timely incorporation of findings, recommendations along with lessons in the decision-making process. In the project life cycle Monitoring and evaluation can and should be evident to project, program, or policy, as well as after completion. "The specific information will also be different at each level, the complexity of collecting data will be different, the political sensitivity on collecting the data may change, and the uses of the information may change from one level to another" (Kusek & Rist 2004).

2.8.4 Stakeholder Theory

This theory help the firm to understand it's self within the frame of its environment (Oakley, 2013). The primary aim of this theory is to make stakeholders well organized and prepared on handling project related issues. This concept lately becomes the most interesting idea that catch eyes of project related matters (Oakley, 2013). Primarily, it aim on equipping the management staffs with necessary knowledge beyond the profit maximization duties and their duties to the stakeholders identified in the firm's input-output model to embrace the claims and interests of non-stockholding groups. In reviewing the stakeholder theory said that people or groups who have a legitimate interest in an enterprise only do so because of the benefits that they obtain and added that no set of benefits and interests are prioritized over the others.

2.9 M & E Design and Planning on Successful Project Implementation

Evaluating project performance routinely and periodically is good for its performance. It seeks to establish causality for the situations and trends recorded by monitoring. Evaluation shall be based upon the monitoring results. Project managers must use

findings of the evaluation to make any changes to the Implementation design and implementation of their project or other interventions. This process shall be formal and periodic like midterm evaluation to assist regulators and project financers to be aware of the project progress (Iravo, 2015). The type of evaluation that is conducted at the end of the project life time along with project completion report is called terminal evaluation. An ex post evaluation may be conducted a further period after completion, when it is necessary to assess the impact of the intervention long after the completion (Ramesh, 2012).

As per Kerzner (2013), design and planning can best be described as the function of selecting the organization's objectives and establishing the policies, procedures, and programs necessary for achieving them. monitoring and evaluation planning in a project environment may be described as determining what course of action going to take place within the project scope. Project planning must be systematic, flexible enough to handle unique activities, disciplined through reviews and controls, and capable of accepting multifunctional inputs (Maylor, 2013).

A well organized project manager perceive project planning as an iterative management process that happen throughout the project lifecycle. Prior to commencing any work it shall be clearly understood and financers and stakeholders shall be in alignment for the successful execution of the work, Kerzner (2013).

2.10 Challenges of M&E

Monitoring and evaluation activity is an ongoing activity which is subjected to multiple constraints during and after implementation of project activities. As per Bamberger et. al.(2010), constraints of implementing this activity are first tight allocation of fund for careful design and collecting of data which in turn lead to difficult to make the relevant sample size for analysis and interpretation of results. Beside this assigning small duration to conduct monitoring and evaluation activity is another challenge (Iravo, 2015). Assigning tight schedule to conduct monitoring and evaluation activity is due to the frequently requiring result of information obtained from M&E data collection. In addition to these another obstacle is limited access to the relevant required data to build baseline for monitoring and evaluation. Administrative records and survey information might not

be as required to cover targeted population. Lastly political and organizational pressure on the formulation, design, implement, analyze and dissemination of M&E is also a critical challenge.

Iravo (2015), considered another major challenge in M&E is separation of monitoring and evaluation institution from planning institutions and functioning as a separate isolated unit. Moreover, shortage of professionals, multiple results frameworks, too many indicators, lack of aid predictability, weak statistical capacity have been identified as constraints.

2.11 project schedule management

One of the three dimensions of project performance measurement is project schedule. Project schedule management is a process of ensuring completion of projects within a planned frame of time and cost. As per PMBOK 6th edition (2017), project schedule management consist six processes namely Plan Schedule Management, Define Activities, Sequence Activities, Estimate Activity Durations, Develop Schedule and Control Schedule. In this document it's explained that Project scheduling provides a detailed plan that represents how and when the project will deliver the products, services, and results defined in the project scope and serves as a tool for communication, managing stakeholders' expectations, and as a basis for performance reporting PMBOK 6th edition (2017).

Time monitoring is a measure of how much the project stick with the planned time schedule for a defined period of time. It's tracking of the progress of the project with respect to the time frame set at the planning stage. It includes all the characteristics of monitoring taking project schedule (time performance) as a core object (Iravo, 2015).

As per Larson (2011), having met a time estimate for a probability of 95% success emanates from past experience. But other considerations shall not be ignored to achieve this. Same author indicate some factors such as planning horizon, people, project duration, project structure and organization, padding estimate, organization cultures and other factors affect the accuracy of estimate. Even if project time estimating is a complex activity, having considered the above factors help for the better estimation. Similarly poor project time estimate is the main reason for project failure Kerzner (2013).

Crawford and Bryce (2003), mentioned that a little lags in initial schedule or if the projects start with challenges, the rest of the projects remain in difficulties. But in contrary if the project is built with self correcting system; if it fall behind, the problem will be identified as soon as possible and it will be dealt immediately. This problem identification is done through performance (progress) measurement tools.

According to Kerzner (2003) most common techniques for project scheduling are Gant or bar chart, control chart, milestone chart, line of balance and networks(PERT, ADM/CPM, PDM, GERT). To decide whether the project is on schedule, ahead of schedule or behind schedule there is a method called schedule variance earned value analysis. Time scheduling considered as a critical management issues because of the project are always framed in tight time deadline Kerzner (2003).

As per Larson (2011) project schedule management comprises four steps. These are

a) Setting a base line: it's an element to measure performance. Work breakdown structure (WBS) and time-sequence data from network help to develop project baseline for all project activity time phase. Gantt chart and/or control chart are useful tool to communicate project status.
b) Measuring progress and performance: quantitative measurement of time performance is conducted. Earned value is necessary to provide a realistic estimate of performance against a time-phased budget. Earned value (EV) is defined as the budgeted cost of the work performed. This help to determine the status of the project regarding time performance as is on schedule, ahead of schedule or behind schedule.
c) Comparing plan against actual: timely and frequent comparison is made to track the actual performance with respect to the planned performance at a specific point of time. Such a comparison helps to identify if there is lag in activities.
d) Taking action: if there is significant deviation from plan necessary measure is taken.

2.12 Measuring Schedule Variance Using Earned Value

According to Verzuh (2005), *in* order to tell if the project is ahead of schedule, on schedule or behind schedule the variation in status of different activities makes it difficult. That is, several activities might be on the right track and one or few activities

might be lagging. To describe the status of such kind of project schedule the use of earned value is necessary. For computation purpose use of cost figure as a basis for schedule measurement is necessary. Elements of earned value computation are:

• Budgeted cost of work performed (BCWP): The planned (budgeted) cost of tasks that are complete.

• Budgeted cost of work scheduled (BCWS): The planned (budgeted) cost of work that should have been completed to date.

• Schedule variance (SV): The schedule variance is the difference between the value of the work that was planned for completion and the value of the work that was actually completed. It uses cost values to measure schedule performance. SV = BCWP − BCWS.

• Schedule variance percent (SV %): The schedule variance divided by the planned cost to date. A positive SV% is good; it means more work has been performed to date than originally planned. A negative SV% is bad, because it means less work has been completed than the plan called for. SV% = SV/BCWS.

• Schedule performance index (SPI): BCWP divided by BCWS (SPI >1.0 = ahead of schedule; SPI < 1.0 = behind schedule). Using the cost figures as the basis for schedule measurement is useful because it takes into account the number and size of tasks that are behind schedule.

2.13 Development Banks as a Project Financer

Development banks are state owned financial institutions mainly engaged on non profitable projects that have a longer project duration (long term loan) and those that are socially beneficial projects (Wruuk, 2015). Development banks contribution as project financer is promoting economic growth and fostering industrialization by focusing on a non-commercially viable area. Development banks provide technical support and cheap loans. They are also stakeholders in poor corporate. Last, but not the least, point is that they were very successful in accommodating entrepreneurship within those European national economies (Oztuk, 2010). These banks are thought to bring structural change in economies and have lion share on tackling market failure.

Even if Development banks role is inevitable in poor economy as per Musacchio et al., (2017) their role is categorized into three groups with respect to Market Failures Addressed or Government Failures Created, Subsidies, Long-term capital, Guarantees,

equity, technical assistance, and research & development. This classification is summarized as three different views i.e. industrial (financing entrepreneurial and industrialization), social (alleviate un-employment, housing and energy problems) and political views (addressing needs of politically connected persons and/or companies). Musacchio et al., (2017) summarize Development bank theory as "industrial policy: Development banks are intended to finance entrepreneurship, industrialization, and the infrastructure necessary for the economy to efficiently adjust to industrialization and maximize productivity gains. Social role: Development banks are intended to insure that social concerns are appropriately prioritized against profit maximization and that resources are allocated for projects addressing socio-environmental factors when unattractive for purely profit purposes. Political role: Development banks are used by politicians primarily to achieve personal objectives and to advance political agendas."

As per (NBE Directive, 2012) Development finance institution is an institution which provide loan mainly for medium and long term project finance business, with the purpose of promoting development in the industrial, agriculture, construction, services, commercial or other economic sectors.

Development bank of Ethiopia is one of the state owned banks mainly focused on financing on projects which are government's key priority areas. On the bank official document (loan manual of 2014) clearly defined DBE as "As a strategic government owned institution, DBE is uniquely positioned in the financial industry as it is empowered to extend both development finance and short term working capital loans as a package. Like all other financial institutions, however, the major instrument that guides and governs the operational doctrine of the Bank is the Credit Policy. It is thus these carefully crafted policies which ensure that the key requirement of sustainability is met through prudent financial intermediation and sustained resource mobilization."

Regarding monitoring and evaluation the bank clearly state this term in it's latest credit policy of 2022 that the bank shall conduct regular on-site and off-site follow up and monitoring of projects and ensure that reports contain full-fledged analysis including gap identification(against the project appraisal plan), and must contain problem solving recommendations timely(credit policy,2022).

2.2 Empirical literature

Phiri (2015) conducted a study on the influence of Monitoring and Evaluation on project performance at African Virtual University (AVU). It was guided by four objectives that establish how monitoring and evaluation plans influence project performance; to assess the influence of monitoring and evaluation training on project performance; to determine how baseline surveys influence project performance; and establish the influence of information systems on project performance. To determine a possible monitoring and evaluation-project performance relationship the Multinational Project (MNP) and the Virtual University for Cancer Control Network (VUCCnet) were analyzed through a mixed research design of ex-post facto and survey. Primary data was analyzed using quantitative and qualitative methods. Based on the data collection and analysis the findings clearly show the existence of relationship between monitoring and evaluation with project performance.

According to a case study of Mwangu (2015) and Iravo (2015) who conducted how Monitoring and Evaluation Affects the Outcome of Constituency Development Fund Projects in Kenya, this study investigated how monitoring and evaluation affect the success of Constituency Development Fund Projects in Kenya - Gatanga Constituency being a case study. The aim of this study is to establish whether the project monitoring and control efforts of the contractors and project supervisors help better result on project deliverables. A field survey was made with a sample of 45 respondents who were selected by stratified random sampling. Structured questionnaires were used to collect data and analyzed using Statistical Package for Social Sciences (SPSS, Version 16.0). The finding of the study show that contractors and project supervisors apply monitoring tools to a certain level in their project operations consequently producing satisfactory levels of success. The findings further revealed that most constituency development fund projects in Gatanga Constituency were completed within the stipulated time frame and budget and that majority of the respondents considered them a success.

Another case study of Joshua (2013) made with the purpose of showing the role of monitoring and evaluation practices to the success of donor funded food security intervention projects. Main targets of this study were Kibwetzi district residents who

benefited the intervention of donor funded food security project. Using purposive sampling a sample of 40 respondents was selected from four different locations, namely Nzambani, Makindu, Mtito Andei and Masongaleni via purposive sampling. Questionnaire was a data collection tool with 10 questions where respondents indicated responses on a Likert scale. For triangulation of data from key informants, focused groups discussion and the government officers who had been involved in these projects were used for Semi structured interviews. Using MS Excel 2010 Quantitative data was analyzed. The study established that the monitoring and evaluation of the food security intervention project was not participatory. But it concluded that participatory monitoring and evaluation in food security projects therefore contributes to the success of food security projects though it should be complemented with good project management skills. Callistus et al., (2018) established another study on the role of monitoring and evaluation. The study adopts an extensive desk review approach to explain the role of monitoring and evaluation throughout the life cycle of project delivery. This desk review study explained the role of monitoring and evaluation throughout the life cycle of project delivery. The study was organized by briefing meaning of construction project management, understanding monitoring and evaluation, Benefit of Construction Project Monitoring and Evaluation and Challenges of Construction Project Monitoring and Evaluation. It divided the challenges into three organizational, project based and technical based. The study concluded by identifying the critical role of monitoring and evaluation on construction projects and recommended projects to consider monitoring and evaluation activities from inception to completion.

Ali (2013) conducted a study to assess the effect of monitoring and evaluation system on project success, specifically to road construction projects in Kenya. It considered road contractors and regulatory bodies, who are participating on road construction project in Nairobi and its surrounding, as target population. Project mission, structural capacity, processes and outcome mapping are considered as the main variables and also ingredient of monitoring and evaluation. Descriptive study design was implemented and both qualitative and quantitative data were collected. Structured questionnaire was used to collect primary data. For the sake of secondary data collection document review on the previously made studies was done. The data collected from the field was captured using

Statistical Package for Social Sciences (SPSS) and Microsoft excel. The study concluded that project mission, structural capacity, processes and outcome mapping correlate positively with project success and also lack of adequate data for monitoring and evaluation is a problem for African countries in general.

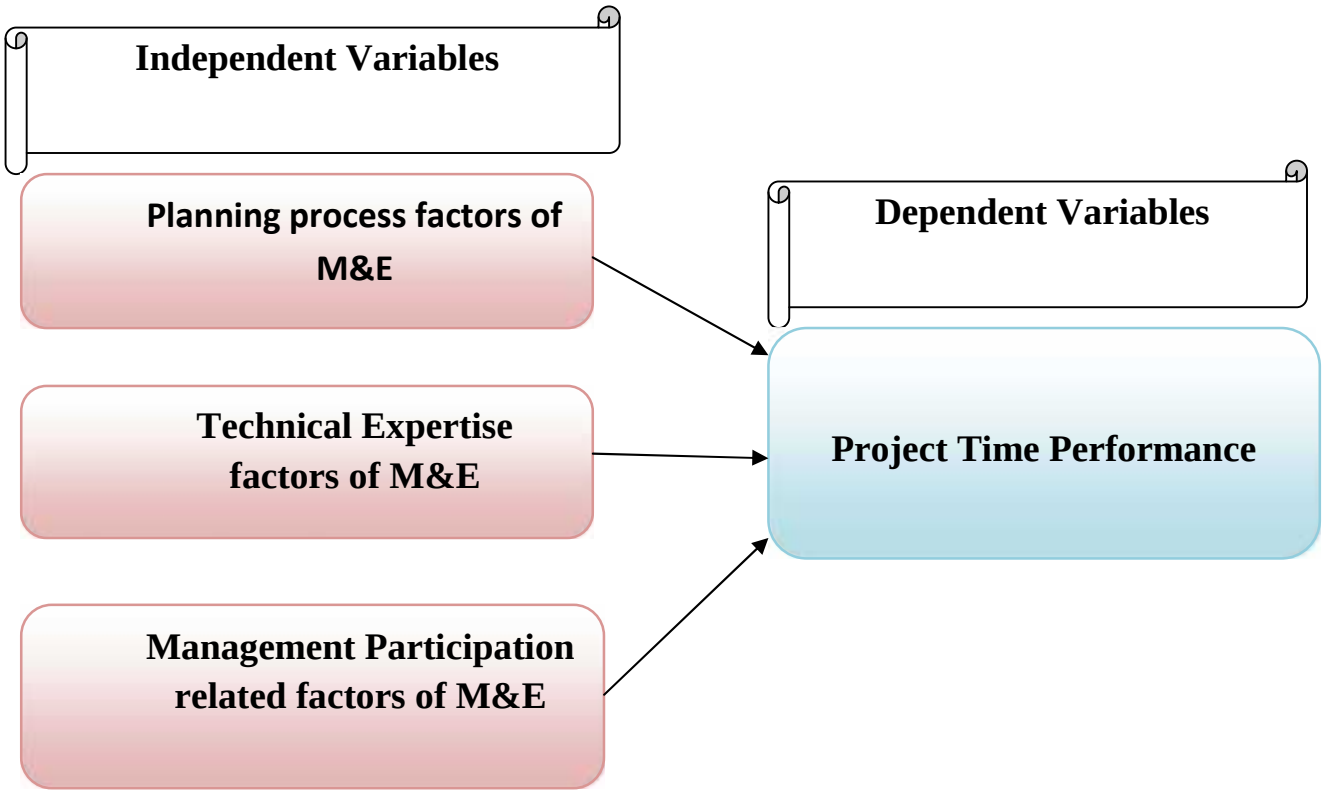
Nzigu et al (2018) made a descriptive study in Nairobi, Kenya, to assess the influence of monitoring and evaluation on gated residential housing project success. In this study the researchers took 89 community projects contractors as a population. The collected data were analyzed through descriptive statistics measures. To establish relationship, regression was generated from the primary data. Logical framework matrix and input material schedule were considered as a common monitoring tool. Project success was considered as dependent variable while monitoring budget, monitoring tools, stakeholder analysis and evaluation design as independent variable. The finding of this study indicated that there is a positive co relation between monitoring budget, monitoring tools, and stakeholder analysis and evaluation design and project success.

2.3 Conceptual Framework

According to Kothari (2004), one of the researchers tool for directing inquiry is conceptual framework. It's a conceptual map for structuring ideas. It map researcher's perspective towards the problem and guide on mapping way. Aside from presentation the way of the study, through the conceptual framework, the researcher can be able to show the relationships of the different constructs that wants to investigate. The following conceptual framework show how the research will be guided.

Figure 1: Conceptual Frame work

Source: Adopted from Phiri, B., (2015), Bickman (2007) & Tylor (2013)



Chapter Three

Research Methodology

3.1 Research approach and design

To achieve the objective of the study, the research used explanatory research design to identify role of monitoring and evaluation on the Development bank of Ethiopia financed projects time performance at the Wolaita sodo district. Explanatory research design as explained by sounders et al. (2009), study the problem to identify the possible relationship with variables. So as the research focus on showing the relationship between variable explanatory research design is useful (sounders et al., 2009). Since the casual relationship between variables is unknown, there was a need to develop hypothesis, collection of quantitative data as well qualitative data and design research strategy. So these was done via deductive (theory testing) approach (sounders et al., 2009).

This research used a mix of survey and ex-post facto research strategy. It's about studying independent variable or variables in retrospect for their possible relationship to, and effects on, the dependent variable or variables (Cohen et al., 2008). This study considered factors related with monitoring and evaluation as independent variable and project time performance was considered as dependent variable. This research design was selected because DBE as a source of finance financed multiple projects and this institution is expected to conduct monitoring and evaluation as a management tool.

3.2 Population, Sample size and sampling procedure

This study is based on projects financed by DBE at Wolaita Sodo District and respondents associated with these projects. Due to small population size from DBE side and project owner side, a census was conducted. Project owner and project manager for each project were censored as respondents for this study on the borrower side. If the project owner was also project manager his/her deputy considered as a respondent. From DBE side 28 respondents involving; one district manager, four branch managers, six technical experts and seventeen non technical experts (that directly assigned for projects) were considered. From borrower side 25 respondents were considered. Among these

thirteen were project owners and eight of them were project manager and the rest four are technical expertise in the projects.

This study considered evidences gathered from documentary analysis of seven projects of DBE Wolaita sodo district projects which were considered as performing loans to reveal the role of M&E on project time performance. For convenience all selected projects of the Wolaita sodo district are located in Wolaita sodo city and its surroundings. As per the bank policy the maximum amount of borrowing capacity for the projects in this district is birr 60,000,000. This borrowing limit is for both regular projects and project under lease financing (DBE revised credit policy, 2022).

3.3 Data sources and data collection method

To conduct this study, consent was found from DBE. This research has qualitative and quantitative data. Primary data gathering was conducted via survey. For each of the project one questionnaire, that let participants to fill out the survey by their own, was used for project implementers (DBE side) and project owner or his/her project manager. The questionnaires focused on monitoring and evaluation and project time performance of the project under study. The reason for selecting survey was it allowed self responded data from respondents. In addition interview in which the researcher asked each respondent several questions was used. But mainly this research relied on document analysis to identify the possible relationship of monitoring and evaluation with project time performance and assess project performance status of the projects. So document analysis was used as means of data collection tool.

3.4 Data analysis method

In this research there is qualitative and quantitative data. So for qualitative data, those described by sounders et al., (2009),

"During analysis, the non-standardized and complex nature of the data that you have collected will probably need to be condensed (summarized), grouped (categorized) or restructured as a narrative to support meaningful analysis",

That are non-numerical, narrative and thematic methods was used. As per sounders et al. (2009), quantitative data "can be divided into two distinct groups: categorical and numerical. Categorical data refer to data whose values cannot be measured numerically

but can be either classified into sets (categories) according to the characteristics that identify or describe the variable or placed in rank order. These are known as descriptive data or nominal data as it is impossible to define the category numerically or to rank it. Rather these data simply count the number of occurrences in each category of a variable. For virtually all analyses the categories should be unambiguous and discrete" or describe the variable or placed in rank order, which are numerical and statistical data, was analyzed by inferential statistics (regression analysis) that incorporate correlation analysis. Measures of central tendency (mean, standard deviation), frequency and percentage will be implemented to analyze the data gathered through the questionnaire. The findings were shown through tables and figures.

3.5 Reliability and Validity

For a research to be credible there must be two factors to be considered namely reliability and validity, to analyze result and quality of the research can be evaluated. Reliability indicates about consistency. Reliability precisely estimates measurements consistency and uniformity degree of the results that are found from repetitive results. For this research data consistency was checked using reliability test (Cronbach's Alpha methods). As per to Sekaran (2010), reliability below 0.6 are considered to be poor, acceptable in the 0.7 range, and good for results above 0.8. Generally reliability result is between 0 and 1. The closer to one the more result be reliable. Result show that 0.941 cronbach's alpha value, generally can be taken as good.

Tabel 3.1: Reliablility Statistics

Variable	**Cronbach's alpha**	**No. of item**
Project time performance	0.867	3
Planning process in M&E	0.876	6
Technical expertise in M&E	0.785	7
Management participation In M&E	0.908	7

Over all	**0.941**	**23**

Chapter Four

Data Analysis, Presentation and Interpretation

4.1 Introduction

This chapter presents results found from document analysis, interviews and questionnaire of projects found in the district. Respondents in DBE side were employees of the DBE wolaita sodo district those who were exclusively engaged with those projects. On the project owners' (borrowers') side project owner and/or project managers were included. This chapter contains mainly three parts. First part is about respondents' profile, i.e., gender, age, level of qualification, year of service in the organization, position in the organization, experience and involvement in M&E activities in the organization. The other part presentation of sample data, regarding study variables, collected from respondents. These variables were measured using five point Likert scale, i.e., 1=Strongly Disagree, 2= disagree, 3= Neutral, 4= Agree and 5=Strongly Agree. The last part deals with

Quantitative data were analyzed through descriptive and inferential statistics using SPSS 23. Qualitative data were analyzed in light of project document evidence from project proposal, project appraisal and project follow up reports. Data were analyzed as per the procedure shown on the previous chapter and interpretation of result was made as per the research questions and hypothesis made on the first chapter.

4.2 Response Rate of Respondents

When doing this research 30 questionnaires were distributed for the DBE side and 28 questionnaires were distributed on the project owners' side. From these the numbers of returned questionnaire are 28 from DBE side and 25 from project owner side. The response rate obtained in this study is 93% and 89% from DBE side and project owner side respectively.

4.3 Respondent's demographic information

Table4.1: Demographic Information of DBE and Project owners' side

Demographic Information				
	DBE side		Project Owner side	
Gender	**Frequency**	**Percentage (%)**	**Frequency**	**Percentage (%)**
male	20	71	20	80
female	8	29	5	20
Age				
21 - 29	1	4	7	28
30 - 39	16	57	8	32
40 - 49	8	29	5	20
above 50	3	11	5	20
Educational qualification				
Ph.D	-	-	-	-
MA/MSc	9	32	2	8
BA/BSc	19	68	15	60
Diploma	-	-	6	24
High School completed	-	-	2	8
Experience				
Less than 2 yrs	-	-	3	12
2 to5 yrs	4	14	7	28
5to10 yrs	17	70	8	32
More than 10 yrs	7	25	7	28
Position in the organization				

Top Management	0	-	4	16
Project Team Leader	0	-	3	12
Middle Management	8	29	15	60
M&E Expert	-	-	-	-
Other Expert	20	71	6	24

Source: own survey, May 2023

4.4 Monitoring & Evaluation practice

A. monitoring and evaluation plan for project implementation

Table 4.2 Monitoring and evaluation plan of DBE

DBE Side				
Description	**Yes**		**No**	
Do you think your organization have a well established project Monitoring and evaluation plan when implementing projects?	Frequency	percentage	frequency	percentage
	20	71	8	29

Source: own survey, May 2023

Among the respondents who participated in this research 71% agreed that DBE has a well organized monitoring and evaluation plan when executing (funding) projects. The remaining 29% of the respondents were not convinced to consider the implementation schedule and project follow up plan as a well develop monitoring and evaluation plan. While going through the project documents its found that there was a guideline, which is called follow-up and evaluation guideline launched within the past two years from date of data collection, used by the loan officers to monitoring and evaluate project activities.

Table 4.3 Monitoring and evaluation plan of project owners

Project Owner Side				
Description	**Yes**		**No**	
Do you think your organization have a well established project Monitoring and evaluation plan when implementing projects?	frequency	Percentage (%)	frequency	Percentage (%)
	20	80	5	20

Source: own survey, May 2023

Majority of respondents from the project owner side also agreed to accept their organization have a well prepared monitoring and evaluation plan. 80% of respondents do agreed their organization established a well prepared plan for monitoring and evaluating project activities. But

Table 4.4 Reason behind not for having M&E plan

DBE Side	**Frequency**		**Percentage**	
Reason behind not for having M&E plan in the organization	**DBE**	**Project owner**	**DBE**	**Project owner**
We don’t have the design	0	5	0	100
Projects are too small	7	-	87	-
Not important to us	1	-	13	-

Source: own survey, May 2023

Among those eight respondents whom disagree for the above question in table 4.2 mainly mentioned the reason for not having monitoring and evaluation plan is due to the project size. From interview and document analysis it's found that all projects in the district are limited to be a maximum of sixty million birr. Respondents agreed that due to the small size of project make M&E activity unnecessary. From their response it can be understand that the follow up and evaluation manual cannot be used as M&E plan

The reason for not having M&E plan in organization from respondents of project owner side mentioned majorly as lack of monitoring and evaluation design in the organization. During interview some respondents agreed that there is no mechanism to conduct monitoring and evaluation activities within the organization.

B. who involved in planning M&E activities

Table 4.5 People involved in planning of M&E activities

	Frequency		**Percentage**	
which of the following do you think were involved in the planning of the M&E activities of your organization	**DBE**	**Project owner**	**DBE**	**Project owner**
Project managers		3		12
Top Managers	3	15	11	60
Middle managers	20	-	71	-
Consultants	-	7	-	28
Team Leaders	4	-	14	-

Source: own survey, May 2023

Majority of respondents with agreed that in order to plan monitoring and evaluation activities prime participants are middle management members of the DBE. From the organization manpower structure those who considered as middle managers are district managers, branch managers, and division and team managers.

Among those who participated in this questionnaire from project owner side majority (72%) of them pointed out that top managers of the project owner involve in planning M&E activities of the organization. From documentary analysis and interview it's found that top managers are project client or project manager.

C. Budget for M&E activities

Table 4.6 Monitoring and evaluation budget

	Frequency		Percentage	
In your organization M&E activities have	**DBE**	**Project owner**	**DBE**	**Project owner**
A separate budget	-	1	-	4
not special budget	25	22	89	88
I have no idea	3	2	11	8

Source: own survey, May 2023

Regarding budget for monitoring and evaluation activities majority of respondents agreed that no special budget were allocated to conduct this activity. As most organization no special treatment is given for M&E activity. Since it's considered as a fulfillment criteria 89% of the respondents agreed monitoring and evaluation activity have no separate budget. Documentary analysis and interview with key informants also prove this.

Table 4.7 amount of budget allocated for M&E activities

Project Owner Side		
If separate budget is allocated for monitoring activities, what percentage of the total project budget allocated for this purpose?	**Frequency**	**Percentage**
Less than 5%	-	-
5-10%	1	1
More than 10%	-	-
not specific	-	-

Source: own survey, May 2023

Regarding budget for monitoring and evaluation activities majority of respondents agreed that no special budget were allocated to conduct this activity. As most organization no special treatment is given for M&E activity. Since it's considered as a fulfillment criteria

88% of the respondents agreed monitoring and evaluation activity have no separate budget. Documentary analysis and interview with key informants also prove this. Among those who mentioned the project have separate budget for M&E activity estimate its budget to be 5-10% of the total project budget.

4.5 Descriptive statistics

The following sub-sections concerned regarding the independent variable aspect data presentation, analysis, and interpretation of planning process of M&E activities, M&E technical expertise and management participation in the M&E activities of DBE and project owner respectively. In addition for dependent variable of project time performance data presentation, analysis and interpretation regarding the technique and method of projects time performance measurement is presented.

This part primarily reflects respondent's perspective of the dependent and independent variable. Respondents provide information based on their level of agreement as per the Likert scale 1 to five.

On the test of variables, a mean of 3.0 is used to determine neutrality. To show the difference from the mean, the standard deviation was used. A low standard deviation indicates that the data is spread over a wide range of values, whereas a high standard deviation indicates that the data is spread over a big range of values. Descriptive statistics in the form of mean and standard deviation were used to show the respondents' level of agreement with the organizations' implications. The responses of the respondents for the variables indicated below were measured on a five-point Likert scale with 1= strongly disagree, 2= disagree, 3 = neutral, 4= agree and 5= strongly agree. However, to make the interpretation of the mean results easier and clearer, the scales were reassigned as follows. This formula is adapted from Vichea, (2005), with 5-point scales, the interval for breaking the range in measuring each variable is calculated by 5−1/5= 0.8. It means items with scores that fall between the ranges of: 4.20 – 5.00 are considered as strongly agreed; 3.40 – 4.09 as agreed: 2.60 – 3.39 as Neutral; 1.08 – 2.59 as disagree and 1.00 – 1.79 strongly disagree. Data from questionnaires were processed by the SPSS program in terms of frequency, mean, and standard deviation (Descriptive statistics).

D. Approach to plan about M&E activities

Table 4.8 Planning M&E activities using logical frame work in DBE side

DBE Side				
Description	**Yes**		**No**	
Does your organization use the logical frame work approach (log frame) so as to plan about monitoring activities in your organization?	frequency	percentage	frequency	percentage
	-	-	28	100

Source: own survey, May 2023

Table 4.9 Planning M&E activities using logical frame work in project owner side

Project Owner Side				
Description	**Yes**		**No**	
Does your organization use the logical frame work approach (log frame) so as to plan about monitoring activities in your organization?	frequency	percentage	frequency	percentage
	1	4	24	96

Source: own survey, May 2023

All participants in this questionnaire from the DBE side and 96% of respondents from the project owner side respond that their organization is not familiar with using log frame to plan monitoring and evaluation activities. This means in the project monitoring and evaluation plan nature and quantities of inputs, magnitude of outputs, end of project status and degree of goal achievement are unclear.

4.5 Project Time Performance

A. Activities Duration Estimation

Table 4.13 Estimation of activity duration

When estimating activities duration the project plan use the following	**DBE Side**		**Project Owner Side**	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Assumptions based on normal	14	50		

working methods during normal working hours			16	64
past experience	6	21	3	12
Expert opinion	-	-	3	12
Mathematical deviation	1	4	2	8
Random guess	4	14	1	4

Source: own survey, May 2023

More than half respondents from DBE side and project owner side 50% and 64 % respectively respond that activity duration estimation for project was made assuming normal working hours at normal working condition exist throughout project life cycle. Some respondents 20% of the DBE side and 12% from project owner side agreed that past experience, expert opinion and random guess techniques are better method for estimation of activity duration.

B. Project Time Performance Review

Table 4.11 Review of project time performance

How do you review the project time performance and know the project is going well?	**DBE Side**		**Project Owner Side**	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Using Earned Value (EV) method	7	25	-	-
Measure progress against milestone	10	36	20	80
Tracking Gantt chart	8	29	4	16
Using status review technique	3	11	1	4

Source: own survey, May 2023

Majority of respondents agreed that measuring project progress against milestone is a better way of tracking the project time performance. This comparison with milestone gives a precise percentage estimation of project time performance against the plan. Tracking Gantt chart is also considered as one of the useful technique to track the project

time performance. Only respondent from DBE side respond that earned value (EV) method sometimes utilized in assessing project performance.

C. Current Project Time Performance

The seven projects (populations of this study) have different project budget and planned project duration. Physical progress and elapsed time of these projects was taken on the date of data collection.

From documentary analysis it was found that only project number 5 and 7 implementation begun within the past two years. In this period DBE had undergone reform works throughout the organization which include major changes in project monitoring and evaluation.

Table 4.12 District's Project status at the time of data collection

project	[A] Budget (birr)	[B] Planned Duration In months	[C] time elapsed	Performance		[F] Schedule Variance ([E]-[D])x [A])
				[D] planned	[E] actual (EV)	
1	25,354,655.00	36	90%	95%	50%	-11,409,594.75
2	19,834,190.00	40	155%	100%	30%	-13,883,933.00
3	14,780,000.00	36	120%	100%	85%	-2,217,000.00
4	12,480,290.00	36	128%	100%	53%	-5,865,736.30
5	11,400,000.00	36	51%	64%	70%	684,000.00
6	20,362,602.61	40	70%	85%	55%	-6,108,780.78
7	12,643,222.00	40	45%	43%	45%	252,864.44

Source: own survey, May 2023

A: The amount of budget approved for the project

B: Total amount of time in months assigned to complete the project implementation

C: Amount of time in months elapsed from start date to the date of data collection

D: Planned percentage of work completed at the date of data collection

E: Actual percentage of work completed at the date of data collection

F: Difference of actual and planned amount of work performed at the date of data collection

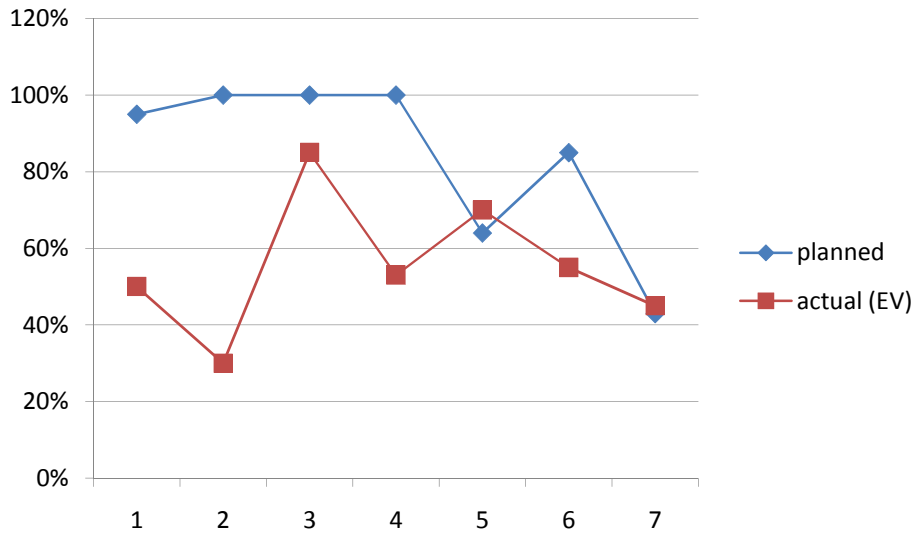


Figure 2: Planned value vs. Earned value

Except project number 5 and 7 the remaining projects implementation begun more than two years ago. But project number 5 and 7 implementations start in the last two year in which the organization established project monitoring and evaluation directorate at head office level.

Table 4.13 Project time performance

Which of the following project time performance best describe this specific project?	**DBE Side**		**Project Owner Side**	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Behind schedule	25	89	21	84
On schedule	3	11	4	16
Ahead of schedule				

Source: own survey, May 2023

Almost all of the respondents from both side agreed that projects at their hand during the filling of this questionnaire are behind schedule. Time performance of specific project is said to be behind schedule if its progress is way back from the point that it supposed to be at a specific period of time. This is an indication of poor project time performance.

4.6 Planning process in M&E

Table 4.14 M&E planning process in DBE

DBE Side

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	mean	Std. Deviation
M&E plan define type of data to be collected, tool for collecting, people mandate to collect the data and method of data dissemination		4	1	11	12	4.11	1.031
The M&E plan align with the overall project/organization system and reflect result based management theory		4	2	10	12	4.18	1.056
The M&E plan assist in providing information to assess project strategy and effective operations			4	10	14	4.36	0.731
The M&E plan help to insure both internal and external reporting meet the requirement			8	17	3	3.82	0.612
M&E plan make project activities be monitor-able throughout the project life cycle				5	23	4.82	0.390
M&E plan assist in communicating the progress in achieving project objective and outcomes				7	21	4.75	0.441

Source: own survey, May 2023

Majority of the respondents agreed that the monitoring and evaluation plan exhibit clearly the type of data to be collected. In the documentary analysis it's found that checklist was prepared to follow the steps and procedure while conducting monitoring activities. List of closed ended questions, questionnaires and status review questions are found in the list that indicate what information can be found from the monitoring and evaluation assessment report. People's role on the data collection and way of data dissemination for the M&E data collection also briefly stated. The roles of person assigned for the collection of data, the frequency of data collection and how the findings are going to be reported with report format is found in the plan. Respondents agree with this with a mean value of 4.11 and standard deviation of 1.031.

Most of the respondents express their agreement with mean value of 4.18 and standard deviation of 1.056 that the monitoring and evaluation plan reflect the behavior of the project/organization. As per the respondents response the M&E plan emanated from the organization strategic plan. In addition respondents also agreed that the M&E plan is in alignment with what the concept in the result based management theory.

Regarding giving assist in providing information and evaluate the project strategy and effective operation, the M&E plan is perceived by respondents to be helpful with mean value of 4.36 and standard deviation of 0.731. Since project objectives and targets are derived from the strategic plan the project monitoring and evaluation plan help as an instrument to check if the project implementation is as per the strategic plan and in reverse it help to evaluate how much the strategic plan assist in shaping the project main target.

Among the respondents majority of them, mean value of 3.82 and standard deviation of 0.612, agreed that the M&E plan guaranteed that it has the capacity to make sure internal and external reporting be as per the requirement. as mentioned above the monitoring and evaluation plan consist of reporting formats developed to disseminate information gathered in data collection stage. In this plan the requirement of stake holders, project/organization top management and every work unit is shown.

Majority of the respondents agreed that the M&E plan ensure the project be easily monitor able throughout the project life line. Those who participate in this research as respondents consider the M&E plan as a tool that facilitate the check and balance system of the project execution with mean value of 4.82 and standard deviation of 0.390. Similarly significant amount of respondents consider this M&E plan as an assistant in progress communication which indicate whether the project objectives and outcomes are achieved as needed mean value of 4.75 and standard deviation of 0.441.

Table 4.15 M&E planning process in project owner side

Project Owner Side

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	mean	Std. Deviation
M&E plan define type of data to be collected, tool for collecting, people mandate to collect the data and method of data dissemination			10	8	7	3.88	0.833
The M&E plan align with the overall project/organization system and reflect result based management theory			9	8	8	3.96	0.841
The M&E plan assist in providing information to assess project strategy and effective operations			11	6	8	3.88	0.881
The M&E plan help to insure both internal and external reporting meet the requirement			13	10	2	3.56	0.651
M&E plan make project activities be monitor-able throughout the project life cycle			5	2	18	4.52	0.823
M&E plan assist in communicating the progress in achieving project objective		5		8	12	4.08	1.152

and outcomes

Source: own survey, May 2023

Significant amount of respondents agreed that the monitoring and evaluation plan exhibit clearly the type of data to be collected, people's role on the data collection and way of data dissemination for the M&E data collection. This is shown with a mean value of 3.88 and standard deviation of 0.833.

Most of the respondents agreed with mean value of 3.96 and standard deviation of 0.841 that the monitoring and evaluation plan reflect the behavior of the project/organization and also match with the result based management theory.

Regarding assisting in providing information and evaluate the project strategy and effective operation, the M&E plan is perceived by respondents to be helpful with mean value of 3.88 and standard deviation of 0.881.

Among the respondents majority of them, mean value of 3.56 and standard deviation of 0.651, agreed that the M&E plan guaranteed that it has the capacity to make sure internal and external reporting be as per the requirement.

Majority of the respondents agreed that the M&E plan ensure the project be easily monitor able throughout the project life line mean value of 4.52 and standard deviation of 0.823.

significant amount of respondents consider M&E plan as an assistant in progress communication which indicate whether the project objectives and outcomes are achieved as needed mean value of 4.08 and standard deviation of 1.152.

Referring interview with respondents and documentary analysis its found that there is variation in monitoring and evaluation plan of project owners, which is a mandatory DBE requirement, within projects. Kind of data to be collected, how to collect and how the collected data to be disseminated shows variations in different project plan. Since these plans were prepared by different bodies for different kinds of projects their difference is inevitable. Average number of M&E plan of project owners fit with their organization

and/or projects system. During interview some respondents informed how much the project owners tried to make the M&E plan full fill the requirement of the bank but not the need of the project. Documentary analysis showed that this M&E plan lack basic reporting formats for the internal and external uses. Even if most respondents agreed the project owners M&E plan make activities monitor able from through observation of the plan its found that the M&E plan seem to be prepared for the general purpose instead of being used for specific project purpose.

4.7 Technical expertise in M&E

Table 4.16 M&E technical expertise in DBE side

DBE Side

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	mean	Std. Deviation
M&E expertise involve in the planning stage		4	7	13	4	3.61	0.916
M&E expertise involve in the execution of project		5	4	15	4	3.64	0.951
M&E expertise involve after completion of project		8	4	13	3	3.39	1.031
M&E expert assist project manager and/or stake holder on improving methods of data analysis		3	5	11	9	3.93	0.979
Training is given for local data collector on data collection	3	4	11	10		3.00	0.981
The completeness and quality of data collected of M&E reports are checked		7	9	8	4	3.32	1.020

Technical expertise collaborate on any operational research to assist on context analysis of emerging needs	3	11	14	3.29	0.937

Source: own survey, May 2023

Among those who participated as respondents average number of them remain neutral that monitoring and evaluation experts engagement was considerably high during the whole project life cycle, i.e., during planning, execution and after completion of project work with mean and standard deviation value of 3.61 & 0.916, 3.64 & 0.951 and 3.39 & 1.031 respectively. This means that level of monitoring and evaluation expertise involvement during and after project execution is average. From documentary analysis it's found that expertise who acted as person in charge for M&E acted mainly during project execution. There was no evidence found that M&E expertise involvement in the preparation of M&E plan and after the completion of project works.

Most of respondents agreed that M&E experts have great role in providing assistance in improving how data are collected, analyzed and reported with mean value of 3.93 and standard deviation of 0.979. Interview with respondents showed that these experts assist project managers more than they assist stake holders.

Majority of respondents remain neutral that local data collectors or information sources are given training and education regarding M&E data collection and analysis with mean value of 3.00 and standard deviation of 0.981. As per the respondents opinion data collection from local source was being done via a usual trend or based on previous experience.

Relatively higher number of respondents agreed that the quality and timely completion of data collection as well as quality of M&E reports are properly checked with mean value of 3.32 and standard deviation of 1.02. From through documentary analysis its observed that there was no mechanism shown or formats developed to check quality of data.

Technical expertise who participated on any operational research are perceived by most of respondents as an assistant on context analysis of emerging needs with mean value of 3.29 and standard deviation of 0.937.

Table 4.17 M&E technical expertise in Project owner side

Project Owner Side	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	mean	Std. Deviation
M&E expertise involve in the planning stage		1	16	6	2	3.36	0.70
M&E expertise involve in the execution of project		1	15	6	3	3.44	0.768
M&E expertise involve after completion of project		8	11	4	2	3.00	0.913
M&E expert assist project manager and/or stake holder on improving methods of data analysis		6	7	7	5	3.44	1.083
Training is given for local data collector on data collection	1	2	17	5		3.04	0.676
The completeness and quality of data collected of M&E reports are checked		3	15	4	3	3.28	0.843
Technical expertise collaborate on any operational research to assist on context analysis of emerging needs	1		16	8		3.24	0.663

Source: own survey, May 2023

Among respondents who participated in this study average number of them remain neutral that monitoring and evaluation experts engagement was considerably high during the whole project life cycle, i.e., during planning, execution and after completion of project work with mean and standard deviation value of 3.36 & 0.70, 3.44 & 0.768 and 3.00 & 0.913 respectively. Documentary analysis and interview with key informants

suggested that most of the projects even have no expertise that exclusively assigned for M&E activities. But few projects have these expertises who execute this activity in addition to their regular responsibility.

Average number of respondents agreed that M&E experts have great role in providing assistance in improving how data are collected, analyzed and reported with mean value of 3.44 and standard deviation of 1.083 and local data collectors or information sources are given training and education regarding M&E data collection and analysis with mean value of 3.04 and standard deviation of 0.676. Similarly higher number of respondents remains neutral that the quality and timely completion of data collection as well as quality of M&E reports are properly checked with mean value of 3.28 and standard deviation of 0.843.

Technical expertise who participated on any operational research are perceived by average number of respondents as an assistant on context analysis of emerging needs with mean value of 3.45 and standard deviation of 1.04.

Interview with key informants indicate that level of M&E expertise involvement in the project owner side is mostly below average generally due to less attention given by the project owner.

In general, as per Harry et.al.(2014), technical expertise participation in project monitoring and evaluation play an inevitable role on improving ways of data collection, dissemination of findings, assisting management staffs on deciding to choose approach of ensuring quality of data collection and methodologies. Same researcher mentioned also that unless training given by technical expertise for local data collectors, biased and incomplete data might be reported by untrained data collector, which in turn lead to wrong decision (Rossi et al,2004).

4.8 Management participation on M&E

Table 4.18 Management participation on monitoring and evaluation in DBE side

DBE Side

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	mean	Std. Deviation
Management prepare project review report regularly to assess the impact of project implementation		4	1	6	17	4.29	1.084
Management measure the competency of M&E expertise to take timely measure to improve it	1	4	19		4	3.75	1.005
Management allocate necessary budget for the execution of M&E activities throughout project life cycle.			8	13	7	3.96	0.744
Management evaluate the evaluation process	1		5	18	4	3.86	0.803
Management monitor performance information, define objectives, develop indicators, collect and analyze data	1		6	16	5	3.86	0.848
Management check their appropriateness of M&E findings on decision making process	1		8	14	5	3.79	0.876
Management allocate necessary resource for stakeholders to communicate result and involve in decision making on key points of M&E	1		8	15	4	3.75	0.844

Source: own survey, May 2023

Regarding assessment of project execution most of the respondents agreed with mean value of 4.29 and standard deviation of 1.084 that the management prepare quarter, midterm and annual review report in order to assess the impact of project

implementation. On the district quarterly and annual report summary of project assessments made was found.

Most of the respondents agreed management commitment in measuring the competency of M&E expertise and taking proper action whenever necessary with mean value of 3.75 and standard deviation of 1.005. On the organization employees evaluation report, quarterly and annual reports, evaluation of expertise including M&E expertise was found.

Regarding fund allocation for the execution of monitoring and evaluation activities throughout of the project life cycle majority of the respondents agreed that adequate amount of budget was allocated for the same purpose with mean value of 3.96 and standard deviation of 0.744. Even if respondents express their level of agreement from documentary analysis it's found that there is allocation of budget for monitoring and evaluation activities for all projects financed in that district but there was no special budget allocation for each project specifically. this budget is utilized based on the need or request.

It's obvious that the evaluation process need to be evaluated by itself regularly. The one in charge for this purpose is the management. Most of the respondents those who take part in this research agreed that the management frequently assess the evaluation process with mean value of 3.86 and standard deviation of 0.803.

Significant number of respondents agreed that management monitor performance information, define objectives, develop indicators, collect and analyze data with mean value of 3.86 and standard deviation of 0.848.

Most respondents with mean value of 3.79 and standard deviation of 0.876 agreed that the management ensure the evaluation findings to be credible, reliable, important and punctual and provide proper recommendations. In addition management is also considered as responsible for checking the findings appropriateness on decision making process. This response of respondents is strengthen by the finding on the documentary analysis that summary of the projects monitoring follow up report contain detail comments and their recommendation of the management

When it comes to the point of allocating necessary resources for stakeholders involved in the system, communicate the findings and make them participate in decision making on crucial area of monitoring and evaluation activities, relatively large number of respondents agreed that management play significant role with mean value of 3.75 and standard deviation of 0.844.

Table 4.19 Management participation on monitoring and evaluation in DBE side

Project Owner Side

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	mean	Std. Deviation
Management prepare project review report regularly to assess the impact of project implementation			4	12	9	4.20	0.707
Management measure the competency of M&E expertise to take timely measure to improve it			4	16	5	4.04	0.611
Management allocate necessary budget for the execution of M&E activities throughout project life cycle.			4	10	11	4.28	0.737
Management evaluate the evaluation process			6	9	10	4.16	0.80
Management monitor performance information, define objectives, develop indicators, collect and analyze data			5	10	10	4.2	0.764

Management check their appropriateness of M&E findings on decision making process	2	1	12	10	4.12	1.092
Management allocate necessary resource for stakeholders to communicate result and involve in decision making on key points of M&E	2	1	13	9	4.08	1.077

Source: own survey, May 2023

Regarding assessment of project execution most of the respondents agreed with mean value of 4.20 and standard deviation of 0.707 that the management prepare quarter, midterm and annual review report in order to assess the impact of project implementation.

Most of the respondents agreed management commitment in measuring the competency of M&E expertise and taking proper action whenever necessary with mean value of 4.04 and standard deviation of 0.611.

Regarding fund allocation for the execution of monitoring and evaluation activities throughout of the project life cycle majority of the respondents agreed that adequate amount of budget was allocated for the same purpose with mean value of 4.28 and standard deviation of 0.737.

It's obvious that the evaluation process need to be evaluated by itself regularly. The one in charge for this purpose is the management. Most of the respondents those who took part in this research agreed that the management frequently assess the evaluation process with mean value of 4.16 and standard deviation of 0.80.

Average number of respondents agreed that management monitor performance information, define objectives, develop indicators, collect and analyze data with mean value of 4.20 and standard deviation of 0.764.

Most respondents with mean value of 4.12 and standard deviation of 1.092 agreed that the management ensure the evaluation findings to be credible, reliable, important and

punctual and provide proper recommendations. In addition management is also considered as responsible for checking the findings appropriateness on decision making process.

When it comes to the point of allocating necessary resources for stakeholders involved in the system, communicate the findings and make them participate in decision making on crucial area of monitoring and evaluation activities, relatively large number of respondents agreed that management play significant role with mean value of 4.08 and standard deviation of 1.077.

For both sides (DBE and project owner), documentary reviews and respondents responses show that serious attention given to regular review and reporting for project implementation which in turn assist management team to be aware of status of the project (Bickman, 2007). As per Ramesh (2015), not only ongoing evaluation but also ex-post evaluation and terminal evaluation make management teams to be aware for what mistakes made on past projects and lesson can be taken for future works. Management reports suggested that unlike Larson (2015), as M&E is for accounting control and stakeholder protocol, but on both sides monitoring and evaluation was taken seriously.

4.9 Project Time Performance

Project time performance was evaluated by measuring the elapsed time to execute the whole work compare it against plan. The respondents were requested to show their level of agreement regarding time baseline against which the project performance can be compared with, how the project time performance was being reviewed and which time performance best describe the project time performance.

The weighted average mean and standard deviation was computed based on the response and is listed in the questionnaire below.

Table 4.20 project time performance DBE side

DBE Side

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	mean	Std. Deviation
In the project plan there is a time baseline against which a project performance (progress) can be measured.		4		8	16	4.29	1.049
Individual activities always are completed without lagging from planned duration.	1		4	10	13	4.21	0.957
During resource allocation priority is given to activities in the critical path than activities in non-critical path.		4	1	11	12	4.18	0.945

Source: own survey, May 2023

For time baseline in which project performance (progress) can be measured most of the respondents agreed that the project plan has a set mechanism of doing this with a mean value of 4.29 and standard deviation of 1.049. From documentary analysis and interview with the respondents most of them considered project implementation plan as a time baseline.

Similarly majority of the respondents agreed that the project plan incorporated network diagram which show when the project begin commencement as well as when the implementation end with mean value of 4.21 and standard deviation of 0.957. In addition most of the respondents agreed that linkage between activities and their interdependence are clearly shown. In addition they responded that activities in critical path are clearly identified with mean value of 4.18 and standard deviation of 0.945. Documentary evidences showed that in the project plan there are network diagrams showing inter

linkage of activities from start to end with the workflow direction. Respondents also mentioned about these network diagrams during interview that they use these diagrams to track the progress of project implementation.

Table 4.21 project time performance DBE side

Project Owner Side

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	mean	Std. Deviation
In the project plan there is a time baseline against which a project performance (progress) can be measured.		2		13	10	4.24	0.831
Individual activities always are completed without lagging from planned duration.	5		2	10	8	3.64	1.469
During resource allocation priority is given to activities in the critical path than activities in non-critical path.	5		2	11	7	3.6	1.443

Source: own survey, May 2023

Respondents in the project owner side for time baseline in which project performance (progress) can be measured, most of the respondents agreed that the project plan has a set mechanism of doing this with a mean value of 4.24 and standard deviation of 0.831. Documentary review indicated that in the project plan there is a time baseline which used as a bench mark for each activity execution.

Similarly large number of the respondents agreed that the project plan incorporated network diagram which show when the project begin commencement as well as when the implementation end with mean value of 3.64 and standard deviation of 1.469. In addition

average number of the respondents agreed that linkage between activities and their interdependence are clearly shown. In addition they responded that activities in critical path are clearly identified with mean value of 3.6 and standard deviation of 1.443.

Generally as per Mwangu (2015), setting a baseline and tracking of project activities in reference to the baseline help to identify delay in activities as early as possible. The five projects whose status was behind schedule lacks this attribute of monitoring and evaluation which in turn led them to have bad project time performance.

4.10 Correlation Analysis of Monitoring and Evaluation with Project Time Performance.

Correlation is a statistical relationship between entities. It measures the extent two variables are related. It measures the degree in which variables are related. There are two types of correlations, Positive and negative correlation. a positive correlation indicate that the linear relationship is positive, i.e., the variables increase or decrease in the same direction. Negative correlation is the opposite of positive correlation in which variables which are related increase or decrease in different directions. The slope in negative correlation is negative.

Correlations (DBE side)

		TP	PP	TE	MP
TP	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	28			
PP	Pearson Correlation	.969**	1		
	Sig. (2-tailed)	.000			
	N	28	28		
TE	Pearson Correlation	.920**	.825**	1	
	Sig. (2-tailed)	.000	.000		
	N	28	28	28	

MP	Pearson Correlation	.972**	.922**	.939**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	28	28	28	28

**. Correlation is significant at the 0.01 level (2-tailed).

Figure 3: Spearman Correlation DBE side

Correlations (Project owner side)

		TP	PP	TE	MP
TP	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	25			
PP	Pearson Correlation	.859**	1		
	Sig. (2-tailed)	.000			
	N	25	25		
TE	Pearson Correlation	.758**	.686**	1	
	Sig. (2-tailed)	.000	.000		
	N	25	25	25	
MP	Pearson Correlation	-.232	-.002	.141	1
	Sig. (2-tailed)	.265	.993	.500	
	N	25	25	25	25

**. Correlation is significant at the 0.01 level (2-tailed).

Figure 4: Spearman Correlation Project owner side

Correlation coefficient shows the degree or measure of the extent of linear relationship between variables and it's denoted by "R". The strength of correlation between variables can be shown numerically. The value of "R" is always between -1 and 1. The strength of relationship can be defined as strong, fairly strong, little and no relationship. R value less than 0 means there is a negative relationship between variables and vice versa for the positive result. 0 values of R means there is no relationship or insignificant relationship

between variables. Positive one and negative one R result is the strong positive and negative relationship between variables respectively.

Correlation result is not always the only means of telling the relationship between variables. Correlation slope might not always become straight line. Incorporating standard deviation and mean value gives better interpretation result of the data.

From the above two tables, all variables related with DBE are strongly and positively correlated. TP, PP, TE & MP variables have a positive and strong correlation with each other. Whereas in Borrowers related variables MP has a negative correlation with TP and PP. But for these variables the table shows that the significant value is greater than 0.05, which make the finding to be insignificant. but the remaining variables have strong and positive correlation.

4.11 Regression Analysis

Regression analysis helps to predict dependent variable from one or multiple independent variables. It also helps in showing how much changes occurred in a particular dependent variable due to set of independent variable. In this research there are more than one independent variable so multiple regression is used for the purpose of predicting their impact on the dependent variable. It also show which of the variables among the list has the highest level of impact on the dependent variable with a predefined significant value.

In conducting regression two values are important, regression value and R value. regression coefficients are of two types, unstandardized and standardized coefficients. when using unstandardized coefficient constant values are used in the regression equation along with coefficients. Whereas standardized coefficient is computed by multiplying unstandardized coefficient with the ratio of standard deviation of independent variables and dependent variable. Standardized coefficient help to compare the relative magnitude of explanatory variables impact in the model.

R value helps to explain the difference between predicted value and observed value. This difference is computed based on the regression equation obtained. in the regression analysis two types of R value, i.e., R and R^2 are used. R^2 is the proportion of change and show how much of change is accounted on dependent variable due to the change in independent variable. This is somehow adjusted value of R. It shows how much percent an Independent variable in the model can predict variance in dependent variable.

Model Summary (DBE side)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993[a]	.987	.985	.10604

a. Predictors: (Constant), MP, PP, TE

Figure 5: Model summary DBE side

Regression coefficients help to measure how strongly each of independent variable predict dependent variable. It explains how an independent variable particularly predicts the dependent variable. Unstandardaized coefficients show by how much a dependent variable is impacted

when a particular independent variable is changed with a unit value of change.

Model Summary (Project owner side)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.933[a]	.871	.853	.42591

a. Predictors: (Constant), MP, PP, TE

Figure 6: Model summary Project owner side

as per the figure 1, the adjusted R^2 value of 0.987 shows that 98.7% of project time performance of DBE is explained by the joint factors related with planning process, technical expertise and management participation of DBE. Similarly as per figure 2, the adjusted R^2 value of 0.871 shows that 87.1 % of project time performance of Borrower(Project owners) is explained by the joint factors related with planning process, technical expertise and management participation of the project owners.

R^2 measures statistically how close the data are fitted to the regression line. In regression it sometimes called coefficient of multiple determination. The adjusted R is the percentage expression of the variance in the dependent uniquely or jointly explained by the independent variables.

ANOVA[a] (DBE side)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.543	3	6.848	608.941	.000[b]
	Residual	.270	24	.011		
	Total	20.813	27			

a. Dependent Variable: TP

b. Predictors: (Constant), MP, PP, TE

Figure 7: Analysis of Variance DBE side

ANOVA (analysis of variance) is a statistical test for identifying difference in the group means when there are parametric dependent and independent variables. Independent variable can be one or more. It help analyzing the variance, test the hypothesis the means

of two or more population are equal. In analysis the test helps to show the impact of independent variable/s on dependent variable. This ANOVA analysis helps to make decision on to take decision on hypothesis test.

ANOVA[a] (Project owner side)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.773	3	8.591	47.360	.000[b]
	Residual	3.809	21	.181		
	Total	29.582	24			

a. Dependent Variable: TP

b. Predictors: (Constant), MP, PP, TE

Figure 8: Analysis of Variance Project owner side

F value helps to identify the ratio of variance between two values. i.e., the mean square of the treatment to the mean square of the error which are both measures of variance. If null hypothesis is going true ratio of variance will be close to 1. When the variation between treatment groups is larger than the variation within treatment group the value of f becomes higher and show that null hypothesis is false.

Coefficients[a] (DBE side)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.541	.139		-3.881	.001
	PP	.665	.075	.554	8.817	.000
	TE	.264	.073	.257	3.619	.001
	MP	.216	.101	.221	2.136	.043

a. Dependent Variable: TP

Figure 9: Regression coefficient DBE side

The independent variable PP (planning process) predicts TP (time performance) 66.5% of a time with a significant value of 0.000. The other independent variable TE (technical expertise) predicts TP (time performance) modeling in a way 26.4% of a time with a

significant value of 0.000. The third predictor variable, i.e., MP (management participation) has a share of predicting at 21.6% of a time with a significant value of 0.043. Since all independent values' significant number is below 0.05 the coefficients can be used in the regression model.

This study use the following multiple regression model to determine the statistical significance of the predictors' impact on the dependent variable,

$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \varepsilon$

Where: Y= is the dependent variable indicating the time performance

α= may be a constant worth of Y when all X's (independent values) are considered to be zero

β1, β2, β3 = are the regression co-efficient or change introduced in Y by each X

ε = is the random error term accounting for all other factors not captured within the model.

Where; Y = Time performance

- X1= Planning Process
- X2= Technical Expertise
- X3= Management Participation

The magnitude and direction of relationship of independent variables over dependent variable is explained in the following equation:

$Y = \alpha + 0.665X1 + 0.264X2 + 0.216X3 + \varepsilon$

The regression model indicate that assuming all independent variables as insignificant except one of them and increase or decrease this independent variable by one unit cause change in the dependent variable by the multiplication coefficient value of that independent value. Holding all variables at zero will result in a negative project time performance equal to negative 0.541. Similarly assume all independent variables as zero except the independent variable X1 (Planning process). Increasing this planning process by one unit will cause increment in project time performance by 0.665. This is computed with statistically significance level of this variable is 0.001 and at 95 percent confidence interval.

When all independent variables kept zero except the independent variable X2 (Technical expertise) increasing this independent variable by one unit will cause the project time performance to be affected by 0.264. This shows that technical expertise has a significant effect on project time performance with statistically significance level of this variable is 0.001 and at 95 percent confidence interval.

Keep independent variable X 3 (Management participation) increases by a unit amount while the remaining independent variables to be zero will increase project time performance to be impacted by the factor 0.216. This is solid evidence that show management participation has a significant role on project time performance with statistically significance level of this variable is 0.001 and at 95 percent confidence interval.

The above results show that all coefficients are non zero. These indicate that all independent variables has a significant effect on the project time performance. On the other hand, all of the indictors mentioned above were significant predictors of project time performance with a p-value of less than 0.05.

Coefficients[a] (Project owner side)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.225	.773		.291	.774
	PP	.858	.159	.587	5.405	.000
	TE	.770	.213	.396	3.613	.002
	MP	-.537	.149	-.287	-3.591	.002

a. Dependent Variable: TP

Figure 10: Regression coefficient Project owner side

The independent variable PP (planning process) predicts TP (time performance) 85.8% of a time with a significant value of 0.000. The other independent variable TE (technical expertise) predicts TP (time performance) modeling in a way 77.0% of a time with a significant value of 0.002. The third predictor variable, i.e., MP (management participation) has a share of predicting at 53.7% of a time with a significant value of

0.002. Since all independent values' significant number is below 0.05 the coefficients can be used in the regression model.

This study use the following multiple regression model to determine the statistical significance of the predictors' impact on the dependent variable,

$Y = \alpha + \beta1X1 + \beta2X2 + \beta3X3 + \varepsilon$

Where: Y= is the dependent variable indicating the time performance

α= may be a constant worth of Y when all X's (independent values) are considered to be zero

β1, β2, β3, β4 = are the regression co-efficient or change introduced in Y by each X

ε = is the random error term accounting for all other factors not captured within the model.

Where; Y = Time performance

- X1= Planning Process
- X2= Technical Expertise
- X3= Management Participation

The magnitude and direction of relationship of independent variables over dependent variable is explained in the following equation:

$Y = \alpha + 0.858X1 + 0.770X2 - 0.537X3 + \varepsilon$

The regression model indicate that assuming all independent variables as insignificant except one of them and increase or decrease this independent variable by one unit cause change in the dependent variable by the multiplication coefficient value of that independent value. Holding all variables at zero will result in a project time performance equal to 0.225. But the p value is greater than 0.05 this result cannot be taken as reliable. Similarly assume all independent variables as zero except the independent variable X1 (Planning process). Increasing this planning process by one unit will cause increment in project time performance by 0.858. This is computed with statistically significance level of this variable is 0.000 and at 95 percent confidence interval.

When all independent variables kept zero except the independent variable X2 (Technical expertise) increasing this independent variable by one unit will cause the project time

performance to be affected by 0.770. This show that technical expertise have a significant effect on project time performance with statistically significance level of this variable is 0.002 and at 95 percent confidence interval.

Keep independent variable X3 (Management participation) increase by a unit amount while the remaining independent variables to be zero will decrease project time performance to be impacted by the factor 0.537. This is solid evidence that show management participation has a significant role on project time performance with statistically significance level of this variable is 0.001 and at 95 percent confidence interval.

The above results show that all coefficients are non zero except for X3 (management participation). This indicates that all independent variables has a significant effect on the project time performance. On the other hand, all of the indictors mentioned above were significant predictors of project time performance with a p-value of less than 0.05.

4.12 Hypothesis Testing

On DBE side considering t and p values of the table 5.4

Hypothesis 1: DBE specific Planning process factors will not affect project time performance was rejected at t = 8.817 and p = 0.000. So it can be concluded that DBE specific planning process can have significant impact on project time performance.

Hypothesis 2: Borrower (Project owner) specific Planning process factors will not affect project time performance was rejected at t = 5.405 and p = 0.000. So it can be concluded that Borrower (Project owner) specific planning process can have significant impact on project time performance

Hypothesis 3: DBE specific technical expertise factors will not affect project time performance was rejected at t = 3.619 and p = 0.001. So it can be concluded that DBE specific technical expertise can have significant impact on project time performance.

Hypothesis 4: Borrower (Project owner) technical expertise factors will not affect project time performance was rejected at t = 3.613 and p = 0.002. So it can be concluded that

DBE specific technical expertise can have significant impact on project time performance.

Hypothesis 5: DBE specific management participation factors will not affect project time performance was rejected at t = 2.136 and p = 0.043. So it can be concluded that DBE specific management participation can have significant impact on project time performance.

Hypothesis 6: Borrower (Project owner) management participation factors will not affect project time performance was rejected at t = -3.591 and p = 0.002. So it can be concluded that DBE specific technical expertise can have significant impact on project time performance.

Chapter Five

SUMMARY, CONCULUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter gives basic findings of this study based on the objectives mentioned at first chapter. Based on the findings, conclusion is drawn and recommendation is given. Gaps of this study are shown to pave the way for future studies to fill.

5.2. Summary of findings

Regression analysis conducted on both sides, in DBE and project owners' side, indicated that monitoring and evaluation represented by their factors have influence on the project time performance. Documentary analysis also showed from the sampled projects five of them, which were financed by DBE based on the loan procedure manual of 2014, are found to be on status of behind schedule. Whereas project number 5 and 7, who incorporated new monitoring and evaluation plan as a mandatory implementation tool, are found to be on status on ahead of schedule.

When projects were at planning phase and the plan documents incorporate elements that assist the organization top managers, project managers, team leaders, expertise and anyone concerned with that specific project to be aware of monitoring and evaluation data sources, procedure of data collecting and ways of data dissemination, interpreting the M&E data during and/or project execution will be easy. Since this planning process reflect overall organization strategy regarding M&E, how to achieve effectiveness and ways of making activities to be monitor able, execution of the plan be easy for everyone involved in this activity. Means of communication the M&E findings both on internal and external reporting can be also found from the monitoring and evaluation planning phase. Task for the organization management team or project management (owner) be to make sure M&E report is as per the format developed in the planning.

Technical expertise involvement in the monitoring and evaluation is also found to be directly related to the project time performance both in the DBE and project owner side. From the questionnaire and documentary analysis it was found that those two projects

under consideration, project 5 and 7, they are mostly visited by the DBE loan officers. Several number of follow up reports and implementation recommendations were found in their files. These technical expertise assisted project owner or it's delegate on how to collect data, compile data, develop reporting format and train data local collectors at project sites. These technical expertise developed checklist to monitor quality of data and its timeliness. This strong involvement of M&E expertise started before the project implementation and till the date of data collection it continues.

Management teams of both sides participation were found to be higher in project 5 and 7 than the remaining and the time performance of these projects is good. In fact the status of the project during data collection was ahead of schedule. In the project file multiple team meetings minutes, agenda and reports were found. Till date of commencement at least three quarterly meeting were held for each project. The organization management team was committed to assign resources for each project. There was no special budget for these projects monitoring and evaluation activities but the management frequently assign expertise to visit the project site by facilitating them with accommodations and vehicles. Technical expertise reports regarding project monitoring and evaluation was seriously considered by the management team. As shown on the regression analysis there was strong correlation with the project time performance. But when it comes to the project owner side the owners of the project found to interfere in technical decisions of the expertise, abuse procedures and diversion of funds somehow for other purposes. As shown in the analysis the project owners' involvement in the project is negatively affecting project performance.

5.3. Conclusion

The objective of this study was to identify the role of monitoring and evaluation in projects time performance. Accordingly the study was structured to answer research questions raised and finally come up with the findings that are aligned with the predetermined hypothesis.

Based on the regression analysis monitoring and evaluation factors of DBE and project owners planning process, technical expertise and management participation have strong

effect on project time performance. Among these factors only management participation of the project owner is negatively correlated with project time performance.

When a M&E plan clearly identify which kind of data to be collected a person assigned for the data collection purpose will be equipped with information on which method to use for data collection and his/her mandate on dissemination of data. If the M&E plan reflect the overall strategy of the organization or project it help to make assessment on the strategy and its effective implementation. In addition a monitoring and evaluation plan that have reporting format to communicate progress of the project for internal and external use, management team of project or organization easily track the time performance and can make any corrective decision when necessary.

Organizations or projects who involve technical expertise highly before, during and after the execution of the projects assist the management team to decide and improve type of data to be collected, method of data collection, data analysis and reporting which in turn make leaders of the organization and projects forward a timely decision if there is lag in the execution of activities.

Managers of the organization and projects who engaged on preparation of quarterly, mid-term and annual reports are more aware of the project status. In addition when management team participate on evaluating the competency of M&E expertise and frequently evaluate the evaluation process, decision can be easily made on improving the involvement of M&E expertise. Furthermore, high engagement of the organization/project management help the development of indicators to develop indicators that make projects time performance monitor able and progress be easily tracked. This indicators and base line data help anyone to assess the status of each activity and track the status of project any time. If necessary measures are needed management team can provide recommendation.

Since monitoring and evaluation is a back bone for the timely completion of the projects it need to be seriously considered as a critical activity both on DBE and project owners side. It has high impact on the cost, quality and budget performance of the project.

5.4. Recommendations

Based on the findings of the study, recommendations have been formulated which if implemented would enhance further the influence of monitoring and evaluation on project time performance.

1. From all M&E factors both on DBE side and project owner side, planning process has the highest correlation factor with project time performance. This make planning process is the highest factor in determining the time performance of projects. So management team shall make sure full M&E plan to be in place in the life cycle of project.
2. The finding also suggested that technical expertise involvement in M&E of project activities assist management in having upper hand on the projects. So technical expertise shall involve in M&E activity through the project implementation and their competency shall be checked by the management team of projects and organization.
3. Managers of every level in projects and projects shall consider seriously suggestion made by the technical expertise when preparing quarterly, midterm and annual reports regarding the impact of project implementation. In addition necessary budget shall be allocated for M&E activities. Frequently evaluation process and technical expertise competency shall be also checked by the management team.

5.5 Suggestion for Future Work

Due to lack of data this study is limited to one district of Development Bank of Ethiopia. In addition stakeholder's involvement as monitoring and evaluation factor couldn't be incorporated in this study due to unavailability of data. So in the future researchers shall

1. make organization level research incorporating all districts and head office projects
2. Stakeholders' involvement in the monitoring and evaluation as a fourth factor shall be incorporated.

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APPENDICES

Appendix 1: Research Questionnaire for Respondents

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

QUESTIONNAIRE ON *"The Role Of Monitoring And Evaluation On Project Time Performance: The Case Of Development Bank Of Ethiopia Wolaita Sodo District Projects"*

Dear Respondents,

I am a postgraduate student pursuing my Master's Degree in Project Management at St. Mary's University. As part of this course, I am carrying out a research on **"***The Role Of Monitoring And Evaluation On Project Time Performance: The Case Of Development Bank Of Ethiopia Wolaita Sodo district Projects***"**

In this regard you have been selected to take part in this study as a respondent; your response will contribute a lot on the achievement of the objective of this research. Kindly cooperate in filling the questionnaire, as your genuine, complete, and timely responses are crucial for the success of my study. The data collected will be used for this academic research only. I thank you in advance for your time and cooperation.

Yours Faithfully

ANDINET AYELE

Email:unitedone88@gmail.com

Mobile: +251 9 12 61 52 56

Direction:

- No need of writing your name
- Put "√" mark in the appropriate space
- Consider the following abbreviation and use where appropriate:
  M&E = Monitoring and Evaluation
  DBE = Development Bank of Ethiopia

PART ONE: Background information of the respondent

1.1. Sex: Male ☐ Female ☐

1.2. Age: 21-29 ☐ 30-39 ☐ 40-49 ☐ 50 and above ☐

1.3. Your qualification

Ph.D. ☐ MA/MSc ☐ BA/BSc ☐ Diploma ☐ High School completed ☐

1.4. Year of service in the organization

Less than 2years ☐ 2 to5 years ☐ 5to10 years ☐ More than 10 years ☐

1.5. Your position in the organization

Top Management ☐ Project Team Leader ☐ Middle Management ☐

Monitoring and evaluation Expert ☐ Other Expert ☐

1.6. Is there practical experience of monitoring system in your organization

Yes ☐ No ☐

1.7. Do you have direct involvement in Monitoring System of the organizations?

Yes ☐ No ☐

PART TWO

The following parts mention monitoring and evaluation factors that may affect project time performance. Therefore, please express your level of agreement by putting "X" mark on the box that best describe your opinion.

Ratings:

1 = strongly Disagree, **2 =** Disagree, **3 =** Neutral, **4 =** Agree, **5 =** Strongly Agree

		Rating				
No	Description	1	2	3	4	5
	Planning process in M&E					
	M&E plan define type of data to be collected, tool for collecting, people mandate to collect the data and					

	method of data dissemination					
	The M&E plan align with the overall project/organization system and reflect result based management theory					
	The M&E plan assist in providing information to assess project strategy and effective operations					
	The M&E plan help to insure both internal and external reporting meet the requirement					
	M&E plan make project activities be monitor-able throughout the project life cycle					
	M&E plan assist in communicating the progress in achieving project objective and outcomes					
	Technical expertise in M&E					
	M&E expertise involve in the planning stage					
	M&E expertise involve in the execution of project					
	M&E expertise involve after completion of project					
	M&E expert assist project manager and/or stake holder on improving methods of data analysis					
	Training is given for local data collector on data collection					
	The completeness and quality of data collected of M&E reports are checked					
	Technical expertise collaborate on any operational research to assist on context analysis of emerging needs					

	Management participation on M&E					
	Management prepare project review report regularly to assess the impact of project implementation					
	Management measure the competency of M&E expertise to take timely measure to improve it					
	Management allocate necessary budget for the execution of M&E activities throughout project life cycle.					
	Management evaluate the evaluation process					
	Management monitor performance information, define objectives, develop indicators, collect and analyze data					
	Management check their appropriateness of M&E findings on decision making process					
	Management allocate necessary resource for stakeholders to communicate result and involve in decision making on key points of M&E					

Project time performance related Questions

1) The project plan time baseline assists in comparing against with project performance (progress)

Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ strongly agree ☐

2) Individual activities always be completed without lagging from planned duration..

Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ strongly agree ☐

3) During resource allocation priority is always given to activities in the critical path than activities in non-critical path

Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ strongly agree ☐

4) When estimating activities duration the project plan use the following. (You can choose more than one alternative if it's applicable in your specific project)

☐ Assumptions based on normal working methods during normal working hours

☐ past experience ☐ Expert opinion ☐ Mathematical deviation ☐ Random guess

5) How do you review the project time performance and know the project is going well? you can choose more than one

☐ Using Earned Value (EV) method ☐ Measure progress against milestone

☐ Tracking Gantt chart ☐Using status review technique

- Please mention any other technique that is not included in the choices but you think applicable in the specific project

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_____

6) Which of the following project time performance best describe this specific project?

Behind schedule ☐ on schedule ☐ ahead of schedule ☐

Project Monitoring and Evaluation Related Questions

1) Do you think your organization have a well established project Monitoring and evaluation plan when implementing projects?

Yes ☐ No ☐

- If your answer is No for the above question what is the reason behind not to have the plan?

We don't have the design ☐ Projects are too small ☐ Not important to us ☐

- Please mention any other reason that is not included in the choices but you think still that is the reason

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2) Which of the following do you think were involved in the planning of the monitoring of the activities of your organization? you can select more than one if any.

Project managers☐ Top Managers☐ Middle managers☐ Consultants☐ Team Leaders☐

3) In your organization the monitoring activities have:

A separate budget ☐ not special budget ☐ I have no idea ☐

4) If separate budget is allocated for monitoring activities, what percentage of the total project budget allocated for this purpose?

Less than 5%☐ 5-10%☐ More than 10%☐ not specific ☐

5) Does your organization use the logical frame work approach (log frame) so as to plan about?
Monitoring activities in your organization?

Yes ☐ No ☐

- If you don't use the log frame, please mention any other framework you use

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6) What do you think the monitoring and evaluation system contribute to the project time performance?

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7) Does your organization participate stakeholders in all stages of M&E(from planning to implementation of M&E system)

Yes ☐ No ☐

- If your answer is "Yes", please mention stakeholders role from planning to implementation of M&E system

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- If your answer is "No", please mention possible draw backs for the timely execution and completion of project works

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Thank you for taking your precious time to fill this questionnaire