ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

FACTORS AFFECTING THE EFFECTIVENESS OF MONITORING AND EVALUATION PRACTICES: IN THE CASE OF TECHNOSERVE ETHIOPIA, COFFEE INITIATIVE PROGRAM

BY:

EMNET SOLOMON

ID No. SRS/0561/2011A

JUNE, 2021

ADDIS ABABA, ETHIOPIA

FACTORS AFFECTING THE EFFECTIVENESS OF MONITORING AND EVALUATION PRACTICES: IN THE CASE OF TECHNOSERVE ETHIOPIA, COFFEE INITIATIVE PROGRAM

BY:

EMNET SOLOMON

ID No. SRS/0561/2011A

A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN PROJECT MANAGEMENT

JUNE, 2021

ADDIS ABABA, ETHIOPIA

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

SCHOOL OF BUSINESS

FACTORS AFFECTING THE EFFECTIVENESS OF MONITORING AND EVALUATION PRACTICES: IN THE CASE OF TECHNOSERVE ETHIOPIA, COFFEE INITIATIVE PROGRAM

BY:

EMNET SOLOMON

APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies	**Signature**
Advisor	**Signature**
External Examiner	**Signature**
Internal Examiner	**Signature**

DECLARATION

I, Emnet Solomon, declare that the thesis entitled "**Factors Affecting the Effectiveness of Monitoring and Evaluation Practices: In the Case of TechnoServe Ethiopia, Coffee Initiative Program"** is my original work. I have carried out the present study independently with the guidance and support of the research advisor **TEMESGEN BELAYNEH (PhD).** Any other contributors or sources used for the study have been appropriately acknowledged. Moreover, this study has not been submitted for the award of any Degree or Diploma Program in this or any other institution.

Emnet Solomon _____ _____

Signature **Date**

St. Mary's University, Addis Ababa **JUNE, 2021**

ENDORSEMENT

This is to certify that **Emnet Solomon** has completed her thesis entitled "**Factors Affecting the Effectiveness of Monitoring and Evaluation Practices: In the Case of TechnoServe Ethiopia, Coffee Initiative Program"** for the partial fulfillment of Masters of Business Administration in Project Management at St. Mary's University, School of Graduate Studies.

TEMESGEN BELAYNEH (PhD) _____

Advisor Signature

St. Mary's University, Addis Ababa **JUNE, 2021**

ACKNOWLEDGEMENT

First and foremost, I thank almighty God for giving me the chance to start and complete my study.

Second, my gratitude goes to my advisor, Temesgen Belayneh (PhD), for his unreserved evaluation, comments and advice throughout the research. Also for his patience and expert input that helped shape this research.

Special thanks to employees of TechnoServe Ethiopia, especially Meti Temesgen for her relentless support by willingly and generously providing me with the information I needed during my study.

Lastly, I sincerely appreciate everyone who supported me in this study, by their time and cooperation. I'm very grateful for my parents, family especially my sister Etsub Solomon for assisting me in proofreading and editing and friends for encouraging me all the way to the end.

God bless you all!

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS/ ABBREVIATIONS

CI: Coffee Initiative

CRS: Catholic Relief Services

DRN: Development Researchers' Network

IFRC: International Federation of Red Cross and Red Crescent Societies

M&E: Monitoring and Evaluation

NGOs: Non-Governmental Organizations

PMBoK: Project Management Book of Knowledge

PMI: Project Management Institute

SFCG: Search for Common Good

SPSS: Statistical Product and Service Solutions

TNS: TechnoServe

UNAIDS: Joint United Nations Programme on HIV/AIDS

UNDP: United Nations Development Programme

UNFPA: United Nations Population Fund

USIP: United States Institute of Peace

ABSTRACT

Monitoring and evaluation have been commonly recognized as an essential component of project management life cycle. M&E is important in project design and planning, transparency, advocacy, performance management, internal institutional learning and benchmarking, and evidence-based decision making. Monitoring and evaluation are carried out to achieve the best of the project's standards and in doing so are influenced by factors that decide its effectiveness. Accordingly, the purpose of this research was to examine the determinant factors affecting the effectiveness of monitoring and evaluation practices in the case of TechnoServe Ethiopia, Coffee Initiative Program. The research utilized a quantitative approach and descriptive and explanatory research designs. Both primary and secondary data types were in play to collect data. The primary data were collected through questionnaires, and secondary data such as program report and M&E report were used. The study targeted a total of 81 respondents. However, only 72 responded to the questionnaire, which contributed to 89% of the response rate. The data collected were analyzed using SPSS software, employing descriptive and inferential statistics. According to the results, the 55.5% positive variation in the effectiveness of M&E practices can be explained by the changes in the determining factors mentioned in the study. However, the remaining 44.5% is attributed to factors that were not covered in this particular study. This indicated that the organization should properly review its practices in relation to these factors as required considering it majorly determines the effectiveness of its M&E practices.

***Key words**: Monitoring, Evaluation, effectiveness, M&E planning, availability of funds, technical expertise, stakeholder's participation and role of management*

CHAPTER ONE

INTRODUCTION

This chapter focuses on the introductory part of the research. It gives emphasis to the Foundation of the Study and the Organization, Statement of the Problem, Research Questions, Objectives, Significance, Scope and Limitations of the Study, and lastly Operational Definitions.

1.1.Background of the study

The effective use of knowledge, skills, tools, and techniques to project activities to meet the requirements of a project is known as project management. It entails a proper application and incorporation of the project management processes identified for the accomplishment. Project management can also be described as the discipline of initiating, planning, executing, controlling, and closing the work of a group to achieve the project's goals and meet specific success criteria (PMI 2017).

PMI (2017) defines Monitor and Control as a tracking, evaluation, and reporting method of the overall progress of a project to meet the pre-determined targets in the project management plan. The advantages of this process are permitting all the concerned bodies to apprehend the progress of the project, understanding the measures taken to tackle any performance problems, and preparing cost and schedule forecasts to provide a transparent future project plan. Monitoring and evaluation practices are not only important to projects but are also part and parcel of the project design. Monitoring and evaluation practices are separate functions, where both are required for the effectiveness of the project.

According to Gudda (2011) monitoring is the process of gathering the essential data with minimal effort to make a guiding choice at the appropriate time. This additional data constitutes the necessary information that will be used for analysis, discussion, evaluation, and reporting. It pursues at identifying whether the intended goals have been realized. DRN (2003) further explains monitoring that it is the practice of continuously assessing project implementation and

initial impact through data collection and analysis, reporting, and information utilization. Thus, monitoring is largely a management obligation that should continue throughout the life of a project and provide methods for delivering important information to the right people at the appropriate time to assist them in making the best decision.

As a way of inspecting the trends in results and effects on the project, evaluation is illustrated on the facts and records generated by the application of monitoring practice. Otieno (2019) argues that monitoring records disclose considerable differences from the initial expectations of the project, which may additionally warrant the mission of evaluation to examine the assumptions and premises on which the project plan is pillared on. It is the objective and systematic method of identifying the significance, effectiveness, efficiency, sustainability, and impact of actions in the overall project performance, focusing on the investigation progress made toward attaining the pre-noted objectives. Mishra & Soota (2005) described that evaluation is carried out either at the end of the project or a few years after its completion to gain an understanding of what went right or wrong about the project's predefined objectives. It also showed what lessons can be learned and transferred to other similar or related projects to be executed in the future.

European Commission Civil Society Fund in Ethiopia (2017) describes that an operational M&E program is essential to handle projects effectively. An effective M&E framework is the collection of processes for planning, gathering and analyzing information, and reporting, along with the appropriate supporting conditions and capacities needed for M&E outputs to make a valuable contribution to decision making and learning. A functioning M&E system can integrate the more formal, data-oriented side of the M&E task to the informal observation and communication.

There are different organizations in Ethiopia that are either nonprofit or business enterprise that function with the implementation of programs/projects. The use of monitoring and evaluation for the success of projects is therefore a requirement. This research intended to assess the determining factors that affect the effectiveness of M&E practices in TechnoServe Ethiopia, an international nonprofit that promotes business solutions to poverty in developing countries.

1.2.Background of the organization

TechnoServe was established by businessman, Ed Bullard in 1968 to enhance the lives of humans in the growing world so that they can carry themselves, their families, and their communities out of poverty. It is a nonprofit organization currently working in 29 nations throughout Africa, Latin America and Asia. They function in areas of enterprising men and women in the developing world to build competitive farms, businesses, and industries. TechnoServe has been impacting and transforming people's lives for over 50 years through strategized business solutions (TechnoServe, 2020).

TechnoServe (2020) describes Ethiopia as a country with abundant resources, provides immense opportunities for inclusive growth in different sectors: 85% of total employment and more than 45% of the GDP is accumulated through the Agriculture sector. However, many smallholder farmers and enterprises are not integrated into commercial markets due to a lack of coordination, leadership, information, and access to markets. To present a solution to these issues and many more, TechnoServe Ethiopia has been managing different programs and projects in different areas of the country.

TechnoServe Ethiopia has collaborated with farmers, cooperatives, suppliers, agro-processor buyers, other market actors, and the government to develop competitive and inclusive agricultural market systems. They work with farmers to increase their productivity through training on improved agricultural practices, cooperatives and businesses to strengthen their operations, governance, and sustainability, and multinational companies to sustainably source from smallholders. TechnoServe Ethiopia works to improve the country's green economy and environmental well-being, as well as gender equality (TechnoServe, 2020).

One of the major programs launched by TechnoServe was Coffee Initiative. It collaborated with East African farmers to enhance agronomy and business practices, organize new coffee cooperatives and expand existing ones, and assist cooperatives in developing business plans and obtaining financing for wet mills (TechnoServe, 2016).

In order to address the issues of low productivity, low quality, low sales and sustainability different programs were commenced through the coffee initiative. One was the “Farm College” farmer training program which was designed to educate smallholder coffee farmers on sustainable agronomic practices that will increase yields. The agronomy program aimed to increase coffee tree productivity through a two-year training program by raising farmers' knowledge and skills in sustainable and yield-increasing farming practices (TripleLine, 2017).

The coffee initiative worked to improve food security and nutrition of smallholder farmers' and their families'. As a result, the coffee initiative lobbied for improved maize yields. A module was included for training on best maize farming practices that was offered through the farm college. Additionally, the farm college included a training curriculum to help farmers recognize the benefits of feeding their young children healthy meals prepared from food grown on their own farms or affordably purchased in their neighborhoods. In addition, the coffee initiative pushed on empowering women farmers on the farm by breaking down gender gaps and inequalities through training and supporting female leadership and membership in cooperatives (TechnoServe, 2016).

TechnoServe Ethiopia has a long-standing experience in managing programs and projects in different areas. Through the years, different projects have been initiated, planned, implemented, and completed. This study is designed to examine the effectiveness of monitoring and evaluation practices in the case of TechnoServe Ethiopia. The question "To what extent does the determining factors affect the effectiveness of Monitoring and Evaluation practices of TechnoServe Ethiopia: Coffee Initiative Program?" Will be answered thoroughly.

1.3.Statement of the problem

Hettmut (2002), quoted in Waithera & Wanyoike (2015), affirms that monitoring and evaluation assist those concerned to examine the project's progress and if it’s being carried out in line with expectations. Monitoring is the ongoing collection and assessment of information that reports projecting managers if the project’s progress is in fact toward the stated objectives. Evaluation is a complete appraisal that looks at the long-term impacts of a project and identifies the success, failures, and lessons learned which are significant to future projects. When planning for M&E, it

is necessary to think about whether suitable funds and staff time can be allocated to it, because M&E is an on-going process and requires an extensive commitment. Another relevant input in M&E is considering stakeholder's participation in the planning and implementation of M&E practices. Though most M&E experts can suggest the required professionals involving key stakeholders is the best way in signifying responsibility.

The most common mistakes in project management practices are using monitoring and evaluation interchangeably, overlooking M&E practices as a mere task instead of a core tool, and assuming that practicing M&E is a requirement not the foundation of the project as a whole.

Project managers should give major emphasis to effective planning, and implementing monitoring and evaluation, which in turn can play a key role in developing efficient and effective projects. According to Tadele (2017), a good plan can facilitate the way for project managers to focus on the significant outcome, whereas monitoring and evaluation can help in gaining knowledge from past successes and challenges and make an informed decision so that present and future projects can enhance people's lives and widen their choices.

Bido (2014), as quoted in Tadele (2017), claimed that there is excessive demand to attain development initiative outcomes and display the effectiveness of M&E practices to exploit the best of the organizational performance in Ethiopia to carry concrete change in the life of the community. This confirms that there are effective project monitoring and evaluation practices in place for sustainable improvement and high-quality performance in any organizational activities.

Nevertheless, in Ethiopia, the prominence given to monitoring and evaluation is almost to nothing while the world is making improvements to their M&E practices to provide the best outcome to their beneficiaries. According to Bido (2014), as quoted in Tadele (2017), Ethiopia hasn't yet understood the relevance of monitoring and evaluation to the result of the project. The planning and implementation of M&E and the follow-up that comes after the end of the project are provided with little priority, which in the end affects the expected outcome of the project.

Projects should undergo the necessary monitoring and evaluation processes which are often a requirement of the project management practices. Despite researchers agree that an effective

monitoring and evaluation practice leads to project success, there are very few studies carried out in relation to monitoring and evaluation practices, factors that determine the effectiveness of M&E practices such as tools and techniques; management's role; M&E training and skilled staff; stakeholder participation; allocation of funds; and external influence. And a few that have been carried out are in Kenya. Njama (2015), Wanjiru (2009) and Mushori (2015) had carried out their academic research, assessing the determinants of effective M&E practices. While carrying out their studies they have identified different kinds of predictor factors ranging from stakeholder's participation to organizational role and leadership, M&E plan, technical skills and knowledge of staff members, budgetary allocation, and selection of tools and techniques.

According to the literature and empirical review done, available studies in Ethiopia focus particularly on the practices and challenges faced during the implementation of M&E. However, little consideration has been given to understand factors affecting the effectiveness of monitoring and evaluation practices. There are different factors with a high tendency of distressing the effective practices of monitoring and evaluation in project-based organizations in Africa, but it was apparent that it was provided with little to none focus. As mentioned, most available research was conducted in Kenya with a focus on specific projects or specific districts and therefore making it difficult to generalize the practices in diverse projects in different countries. Therefore, another knowledge gap that was addressed by this study to add to the body of knowledge is to give the research an Ethiopian perspective.

So, in order to fill the gap, this study attempted to investigate the factors affecting the effectiveness of monitoring and evaluation practices of TechnoServe Ethiopia: Coffee Initiative.

1.4.Basic research questions

The purpose of these research questions was to quantify the factors affecting the effectiveness of Monitoring and Evaluation practices and to identify the scope of its effects in TechnoServe Ethiopia. The research questions the study sought to answer were:

1.4.1. How are the existing M&E practices in the case of TNS Ethiopia?

1.4.2. To what degree are the existing M&E practices effective in the case of TNS Ethiopia?

2. To what extent does the determining factors affect the effectiveness of M&E practices in the case of TNS Ethiopia?

1.5. Objectives of the study

1.5.1. General objectives

The main purpose of this study was to assess the practices of monitoring and evaluation present at TechnoServe Ethiopia. In doing that, the study attempted to examine the factors that affected the effectiveness of M&E practices in the organization.

1.5.2. Specific objectives

1. To assess the existing practice of M&E in the case of TNS Ethiopia
2. To evaluate the effectiveness of the existing M&E practices in the case of TNS Ethiopia.
3. To analyze the extent of the factors affecting the effectiveness of M&E practices in the case of TNS Ethiopia.

1.6. Research hypothesis

The following research hypotheses were constructed based on the statement of the problem, objectives of the study and research questions.

i. H_0: M&E plan does not have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

   H_1: M&E plan have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

ii. H_0: Availability of funds does not have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

   H_1: Availability of funds has a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

iii. H_0: Technical expertise of the project and M&E staff does not have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

H_1: Technical expertise of the project and M&E staff has a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

iv. H_0: Stakeholder's participation does not have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

H_1: Stakeholder's participation has a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

v. H_0: Role of management has no significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

H_1: Role of the management has a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia.

1.7. Significance of the study

The main purpose of this study was to investigate factors that affect the effectiveness of M&E practices. Factors that can determine the effectiveness of M&E practices were selected beforehand based on related literatures. These factors were then studied in relation to M&E practices in projects undertaken by TechnoServe Ethiopia. The study aimed to spot out the extent these factors affected M&E practices and thus made recommendations. Project managers, M&E experts, and project teams who are involved in the planning and implementation of monitoring and evaluation practices at TechnoServe Ethiopia could make use of the acquired information of this study. Lastly, it hoped to contribute to monitoring and evaluation knowledge areas and be a reference material for further study.

1.8. Scope of the study

This research was conducted on TechnoServe Ethiopia. It focused on assessing the factors that affect the effectiveness of M&E practices. The research focused on projects/programs carried out by the organization particularly Coffee Initiative Program that comprises multiple projects. The study aimed to answers the research questions. The study attempted to assess and examine the determinants that affect the effectiveness of M&E practices. The research was contextually narrowed to the factors that affect the effectiveness of monitoring and evaluation practices. Five predictor factors were selected carefully for the purpose of the study according to available related literatures which limited the number of factors examined. For the research, project managers, project staffs and M&E experts, of TechnoServe Ethiopia were considered as respondents.

1.9. Limitations of the study

Due to time and budget constraints, study was limited to one organization, TechnoServe Ethiopia and one program, coffee initiative. This might impede the number and variability of the respondents that the study could have targeted. The number of respondents was minimized due to the remote working area and unavailability of most project staff members, stakeholders and other concerned bodies.

1.10. Organization of the study

This study sought to examine the factors affecting the effectiveness of monitoring and evaluation practices in the case of TechnoServe Ethiopia. Like other similar research, this study was structured into five chapters.

The first chapter discusses the background of the study and organization, statement of the problem, research questions, objectives of the study, significance of the study, scope, and limitations of the study. Chapter two outlines the review of all the literature that is relevant to the study variables. The chapter contains the empirical and theoretical review in addition to the conceptual framework which outlines the association between the study variables and ends by

discussing the research gap. Research hypothesis the researcher plans to test were included as well. Chapter three is research methodology specifically focused on the research approach and method, sources of data, the population of the study and the target population, sampling techniques, methods of data collection, validity and reliability, and a method of data analysis and presentation. The chapter finally describes the ethical considerations and provides a tabular explanation of the operational definitions of the research variables. Chapter four is data analysis, presentation, and interpretation. The quantitative data collected was analyzed using SPSS (statistical package for social sciences). The qualitative data collected was analyzed through content and narrative analysis.

The last chapter, which is chapter five, describes the summaries of findings concerning the objectives of the study. Main findings are discussed at length with linkages to existing knowledge. The chapter finally presents a conclusion of the study and suggests possible recommendations of the study problem.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviews all the literature related to the study variables. The chapter will first provide a definition on monitoring and evaluation and what the roles of M&E are. Then it will review the concept of effectiveness of monitoring and evaluation practices followed by factors that affect its effectiveness (M&E planning, availability of funds, Technical expertise, stakeholders' participation and role of management) and how they determine effectiveness of monitoring and evaluation practices in projects. The chapter also outlines the theory that anchors the study. In addition, it also presents empirical review of related studies. Finally, the chapter offer a graphical representation of the association between independent and dependent variables in the form of a conceptual framework.

2.1 Definition of project monitoring and evaluation

M&E is the continuous gathering of data and assessment of it in order to determine whether development is being made towards the pre-specified goals and objectives. It highlights whether there are any unintended (positive or negative) outcomes from a project and its activities. It is an essential part of the project cycle and of good management practice.

Monitoring is carried out in order to track the growth and overall performance as a foundation for decision-making at the different steps in the procedure of a project. Evaluation, on the other hand is a more generalized assessment of information or experience to set up to what extent the initiative has achieved its goals or objectives (Smith et.al., 2016).

2.1.1. Monitoring

UNDP (2009) describes monitoring as the ongoing process where stakeholders gain regular feedback on the progress being made towards accomplishing the desired objectives. Many definitions deal with monitoring as merely reviewing progress made in enforcing actions or activities, but one must recognize that monitoring is the method of reviewing progress against

the predetermined objectives. In different words, monitoring experts should not just ask the question “Are we taking the actions we stated we would take?” but additionally “Are we making progress on accomplishing the outcomes that we stated we desired to achieve?” The distinction between these two strategies is extraordinarily important. In the more constrained approach, monitoring may focus on tracking projects and the use of the organization’s resources. In the broader approach, monitoring also entails tracking strategies and actions being taken and figuring the new techniques and actions that are required to be taken to assure the progress towards the most desired outcome.

Smith et.al. (2016) explained that monitoring provides managers and key stakeholders with the required data on a timely basis relative to the project objectives and outcomes. This allows managers to maintain the tune of progress, discover any problems, and modify operations to take account of experience, and enhance any budgetary requests and justify them. This permits the early identification of problems so that options can be proposed. It is an essential part of good management.

2.1.2. Evaluation

UNDP (2009) portrays evaluation as a meticulous and impartial assessment of either finished or ongoing activities to decide the extent of attaining predetermined objectives and contributing to decision making. Evaluations, like monitoring, can be applied to different situations, such as activities, projects, strategies, policies, ideas and organizations. The key difference between the two is that evaluations are carried out independently to provide managers and project personnel with the foundation for an objective assessment to determine if they are on the right path. They are also more thorough in their procedures, layout and methodology, and commonly involve more substantial analysis.

According to Otieno (2019) evaluation is a system of objectively determining the significance, effectiveness, efficiency, sustainability and impact of activities of a project performance, emphasizing more on the investigation of the progress made towards the achievement of the stated objectives.

Periodic assessment is also regarded as a suitable practice and can be used to examine and analyze why goals are or are not being achieved. It looks at the cause and effect of conditions and developments which are recorded within monitoring (Smith et.al., 2016).

2.1.3. Roles of M&E

Biwott et. al. (2017) described monitoring as an instrument that offers incessant feedback on the implementation of the project as it spots out possible achievements and constrictions that may guide in suitable decisions. It assesses the technique which accounts for growth of activities or success of output production. In addition, it assesses the influence through quantifying the preliminary responses to project activities and their instantaneous temporary effects.

Biwott et.al. (2017 cited Zweekhorst, 2004 & Cartland et al., 2008) which affirms that projects are monitored to guarantee that the stakeholders are aware about the project; to reduce the risk of project failure; to promote systematic and expert management; and to investigate implementation progress.

Otieno (2019) acknowledged the purposes of monitoring documents as to provide records to help stakeholders in comparing overall performance against plans so that current or possible issues can be recognized and analyzed. Additionally, he stated that project monitoring reports are beneficial in recording completion of project activities; discovering considerable deviations from objectives; exposing problems to key stakeholders. Monitoring are key elements in corrective decision-making. It presents ideas for implementation of corrective actions and determines deficiency of current management and monitoring practices. Reference materials for planning future endeavors and data related current projects for future evaluators are provided through monitoring practices.

Both monitoring and evaluation are essential practices to achieve one’s project targets, but project administrations and stakeholders give little emphasis to evaluation which have great effect in the closure of the project and possible future endeavors.

According to Otieno (2019) evaluation has multiple purposes. Evaluation supports projects in determining the level of success of the objectives. It discovers the difficulties related to the planning and implementation of the project. Evaluation also develops data that commends for collective learning which, later, contributes to design a good project, have better administration and an improved evaluation practice. It aids project objectives, policies, and strategies to be reformulated as required.

In short, the aims of both monitoring and evaluation are to provide information that can aid in making informed decisions, improve performance and achieve planned results.

2.2.The concept of effectiveness of monitoring and evaluation practices for projects

M&E as comprehensive support for those involved in the project implementation requires: Building M&E processes which will lead to a transparent and consistent learning for all people involved in project and operational strategies; Understanding of the ties between M&E and management functions; Using existing learning, communication and decision-making processes among stakeholders as a basis for project-oriented M&E; Enforcing the required M&E practices related to the conditions and capacities.

The four interlinked components to an effective M&E practice are: Planning which identifies the project strategy information, ensures efficiency and fulfills external reporting requirements. Then it decides how the information is collected, analyzed and documented to the M&E system plan; Implementation is the process of data collection and management through informal and more organized methods. It's where knowledge is extracted from the analysis of outputs, outcomes and impacts and the management of project operations; Participation is the involvement of project parties in critical analysis. After the collection of the information, the stakeholders of the project must evaluate and discuss it and Communication is the process of conveying M&E findings to those who need to use them (European Commission Civil Society Fund in Ethiopia, 2017).

2.3.Factors affecting the effectiveness of M&E practices

This section discusses the relationship between M&E practices and different factors that affect its effectiveness.

2.3.1. M&E plan

Data from routine and scheduled monitoring and evaluation activities involve accurate and timely decision-making. Monitoring and evaluation planning must begin at the time of program or project preparation and must be designed together. While monitoring provides real-time data on the current program or project execution needed by management, evaluation offers an in-depth assessment. The monitoring technique produces questions that need to be addressed by evaluation (UNDP, 2009).

To obtain the cheapest approach and achieve the desired objectives, the design of M&E system should start simultaneously as the overall project planning and implementation, subject to the same economic and financial evaluation. Recently, such practices in projects have been observed. Older M&E programs were developed after the beginning of the project presented issues. Often, that was left alone to the administrators, who already had too little time, money, or energy to deal with it and could not deliver the expected outcomes effectively (Smith et. al., 2016). This is supported by PMI (2004) in the argument that practices of project monitoring and evaluation can produce useful results if incorporated into the project design stage. The planning and design of projects should go in parallel to achieve sustainable and proper monitoring and evaluation. A team of project stakeholders, project managers, and project design teams must be in place to develop a cohesive, coordinated monitoring and evaluation plan.

PMI (2004) describes monitoring and evaluation plan as a dynamic guide for the different phases of the project which supports the documentation of project activities, provides solutions to monitoring and evaluation issues, and shows progress towards a project's goals and purposes. The plan defines the concrete goals and the ultimate purpose, thus documenting the evaluation questions, implementation plans, the indicators of expected results, schedules, M&E data collection instruments, and the processes to be followed.

According to European Commission Civil Society Fund in Ethiopia (2017), project planning sets the critical framework for project M&E and these can have a huge impact on the success or failure of M&E process. Inadvertently, M&E is often set up to fail during the initial project phase. Initial project design essentially affects M&E through the success of M&E will be greatly influenced during implementing the project by the attitude and engagement of local people and stakeholders involved in the project, and how they connect and interact with each other. In most cases, a poorly planned project will not create positive relationships.

The second design fault is when the project loses the logic of having realistic goals in its plan, making it impossible to have quality M&E practice. This is because the questions and indicators on the evaluation often become very irrelevant and will not yield useful information. If you don't know clearly where you're going, you won't know how to best use any information that could be generated. The third is when the design team does not devote sufficient resources to the M&E program. The fourth element is important if M&E systems are to produce the learning to improve the implementation and strategy of a variety of project partners continuously. The more static the nature of the project is, the more complex it is to adapt the team to the environment and understand the transitional consequences due to the change. Fifthly, the broad M&E structure is to be defined during conception. Unfortunately, most projects do not pay adequate attention to M&E preparation, resulting in M&E being 'tagged on 'as an afterthought. (European Commission Civil Society Fund in Ethiopia, 2017)

Smith et.al. (2016) confirms this by stating that the establishment of an M&E project involves fundamental nine steps. These are: assessing the current readiness and ability for monitoring and evaluation, defining the intent and scope of M&E, identifying and agreeing with stakeholders on the objectives and progress goals of the project, choosing key indicators and an assessment framework, setting baselines and preparing for the collection and analysis of data, selecting outcome targets, monitoring, data analysis, communication, and reporting plan, plan the structure and schedule of critical reflection and preliminary evaluations, and finally plan the conditions and capacities required.

2.3.2. Availability of fund

According to Kaburu (2012) mentioned in Onyango (2017), funding refers to the finances allocated for M&E activities which include funds to ensure regular collection of monitoring and evaluation data, staff morale well as funds to ensure that the evaluation report recommendations are fully implemented.

Chaplowe (2008), states that the main planning task for M&E is to estimate the cost, personnel requirement, and other resources for M&E operations. At the project design stage, M&E experts should carefully consider M&E budget requirements so that funding is explicitly allocated to M&E and be used to carry out critical M&E tasks. UNDP (2009) affirms this by stating that it is important to allocate sufficient financial and human resources in the planning phase to ensure effective and quality monitoring and evaluation practices. The financial and human resources needed for monitoring and evaluating should be considered in the overall cost and not as an additional cost of achieving the expected results. At the time of preparation for monitoring and evaluating, financial resources for monitoring and evaluating practices should be determined realistically. Although joint monitoring and evaluating plans are important, specific resources should be given for each task. Two separate budget lines for each project should be implemented and evaluated.

Project managers frequently ask what share of the project's budget should be allocated to M&E activities. According to Kaburu (2012) cited in Onyango (2017), it is recommended that 10% of the project cost should be allocated specifically for M&E practices. This is affirmed by Frankel and Gage (2007) cited in Chaplowe (2008) that though there is no formula in place, but multiple sponsors and organizations propose that the budget for M&E activities should be distributed between 3% and 10% of the project budget. They add that the basic rule is that the M&E budget should not be insignificant that the quality and reliability of the findings are undermined, but nor should it reduce project resources to the degree that programming is affected.

Mushori (2015) noted that M&E is usually budgeted for, but its practices are not allocated specifically. Thairu (2014) cited in Onyango (2017) argues that organizations must be aware of

the possibility of affordable and readily available funding for M&E by defining key funding needs; recognizing the range of funding means available plus the means of obtaining them and the funding providers to meet the identified M&E requirements.

Chaplowe (2008), suggests that to build a realistic budget, M&E experts should list all M&E activities and overall duties, evaluate the necessary items and define their costs for each task, staffing budget (full-time staff, external consultants, capacity building/ training, and other human resource expenses), ensure that the budget covers all capital costs including costs of facility and equipment, travel and accommodation and computerized services. Determine if activities such as support to the information management systems, transportation, maintenance of equipment, interpretation, and publishing of M&E documents/tools have been included in the overall project budget.

2.3.3. Technical expertise

Human resources are essential to successful monitoring and assessment, even after sufficient financial resources have been secured. The skilled staff should have the required technical know-how in M&E practices (UNDP, 2009).

Staffing is a particular concern for M&E work, as it requires special training and a combination of skills in research and project management. In addition, the success of M&E research is often dependent on support from staff and volunteers who are not experts in M&E. Capacity building is thus a critical aspect of successful M&E practice being introduced (Chaplowe, 2008).

Gorgens & Kusek (2009) states that the M&E program cannot operate without qualified people conducting the M&E activities that they are responsible for effectively. Therefore, the core of the M&E system is the understanding of the skills required and the capacity of people involved in M&E and the management of capacity gaps efficiently. According to UNAIDS (2008), a functional M&E system in addition to having committed and enough M&E experts, it is important that it has the right skills for the job. Capacity building should concentrate on all levels; have measurable performance targets; include a capacity building strategy with consistent results, with forms of measuring progress over time. The design of M&E involves a wide range

of work, such as formal training, in-service training, mentorships, coaching, and internships. M&E capacity building should not only concentrate on the technical aspects of M&E but also leadership, financial management, facilitation, supervision, advocacy, and communication skills.

Chaplowe (2008) states that to guarantee adequate M&E support one should first identify the various tasks and skills set necessary for ensuring appropriate data recovery mechanisms in the field, research design, data input, and analysis. Second, it should assess the relevant skills of the project team, partner organizations, and the community beneficiaries. Then it must determine the degree to which the local stakeholders will engage in M&E processes. Finally, it should delegate team members and appoint an overall M&E manager, and recruit experts to supervise progress and manage data interpretation and statistical analysis. Besides, it is necessary to attend and organize training sessions as required. One should always keep in mind that it is imperative to give specific focus to building local M&E capacity.

According to Gorgens & Kusek (2009), enhancing the quality of the M&E program should be done with a focus on human resources. An ideal scenario would be to design the M&E program, define skills specifications for it and plan and improve human capacity before implementing the M&E system. But it is well known that M&E skills are often developed during the implementation of the M&E program.

2.3.4. Stakeholder's participation

Stakeholders are groups of individuals or organizations that will impact the project or be influenced by it. Stakeholders include community members (beneficiaries), project staff, project managers, donors, governmental and nongovernmental organizations and other decision-makers (Davies 1998) cited in (Mushori, 2015).

EMI (2014) cited in Mulugeta (2018) states that failure to identify appropriate stakeholders for monitoring and evaluation can lead to low ownership of the outcomes and reduces the chances of the project manager incorporating the findings into decision-making processes. In this way, the beneficiaries, monitoring and evaluation experts, government, donors and project managers can also lose cooperation or even develop conflict relations. This is acknowledged by UNDP (2009)

by stating that lack of stakeholder engagement is one of the most common causes for the failure of projects. Each effort should therefore be made to promote a wide and active participation of stakeholders in planning, monitoring and assessment processes. It especially applies to emergencies, in which a sense of security and insecurity can be reinforced, and conflicts and divisions can arise. The planning process should strive in such circumstances to include as many stakeholders as possible (especially those who are unable to promote their own interests) so that the various parties may hear the viewpoint of one another in an open manner.

Setting goals in isolation allows internal and external stakeholders to lose responsibility. It is important to create a participatory and consultative mechanism that involves the stakeholders when selecting results. The participatory process will begin with setting goals and outcomes and develop an indicator framework. A consultative, cooperative approach to building consensus is needed to establish the new realities of governance, globalization, funding and beneficiary expectations. Stakeholder views and viewpoints should be actively solicited. Participation of key stakeholders helps to reach consensus and gain dedication to the desired results (World Bank, 2004).

Gorgens & Kusek (2009) further notes that a constructive participation of all stakeholders in all aspects of the project contributes to successful M&E practices. Project partners must commit themselves to creating a national M&E work plan. This can be achieved by including program coordinators and implementers, state departments, research and academic institutions, the team responsible for evaluating the national program policy and work plan, and the representatives of beneficiaries while designing the work plan.

The involvement of stakeholders in discussions on what, how and why of project activities inspires them and, in turn, encourage inclusion and promote active participation of different stakeholder groups (Donaldson & Lipesy, 2003) mentioned in (Mushori, 2015). According to Chaplowe (2008), in order to ensure the adequacy of the M&E system the practitioners should be able to specify the extent of local stakeholder's involvement. After all people engaged in a development intervention will make it succeed or fail. European Commission Civil Society Fund in Ethiopia (2017) in its training manual on introduction to monitoring and evaluation utilizing

the logical framework approach to project design, states that the role of stakeholders in learning how to develop a project is vital throughout its lifetime. It involves listening carefully and consistently to the opinions of different groups of people about what works and what doesn't, why there are issues and what needs to be improved. Learning certainly requires more than only "listening". To discuss and analyze the experiences of project staff, implementing partners and key stakeholders, platforms should be developed.

2.3.5. Role of management

Project outcomes are obtained through the efforts of leaders and managers who applied the concepts, procedures, tools and techniques of project management to their projects. In order to satisfy the needs of their beneficiaries and stakeholders, the project managers employed key skills and applied knowledge (PMI, 2017).

According to PMI (2017), to achieve the project goals, the project manager plays a critical role in the management of the project team which makes it an evident task in lifecycle of the project. From beginning to closure, many project managers are involved in a project. Nonetheless, before the project is started, a project manager in certain organizations can engage in assessment and analysis activities. Such tasks can include consulting with members of management and business units on strategies to advance strategic targets, increasing organizational efficiency or meet customer needs. The project manager may also be asked to handle and support business research, business case design and portfolio management in certain organizational settings. A project manager can also engage in follow-up work relating to the project's sustainability. The project management job is essentially tailored to fit the company as are the project management processes.

Georgieva & Allan (2008) mentioned in Kamau & Mohamed (2015), shows that some of the best practices of project management include: communication management, stakeholder management, motivation and the transfer of knowledge. The project planning, monitoring and evaluation of the project progress are some of the main methods used for project management.

Management plays the role of helping the monitoring and evaluation team in optimizing project performance. Factors like communication, dedication, management style, management of politics, community expectations and encouragement facilitate such assistance.

But it is also apparent that project management in Africa faces problems including political interference and strong societal demands (Kamau & Mohamed 2015). An organization's ability to strengthen strategic and organizational decision-making has an impact on the success of the M&E program. The efforts a project manager puts to create a consistent M&E system and the enhanced use of outcomes within the program will reflect these rates. M&E systems basically are an ongoing work (Molapo, 2019 cited in Kusek & Rist, 2004).

2.4.Theoretical framework

Grant & Osanloo (2014) define that a theoretical framework is the road map of the research project. It is used as a guide to build and help a thesis provide the basis for deciding how you approach the research in its entirety philosophically, epistemologically, methodologically and analytically. The authors add that a concept and vision of a thesis is vague without a theoretical framework, much like a home that is impossible to build without a design. So, employing a theoretical framework allows the thesis to be clear and organized with a structured flow from one chapter to the next.

2.4.1. Theory of change

Theories of change are based on abstract premises as to whether the strategy or plan can succeed. Theories of change are the cornerstone of the systematic study of strategy (Auriacombe, 2011). According to Anderson (2005 cited in Wanjiru, 2009), theory of change is used to develop solutions to complex social problems. It provides an overview of early and mid-term improvements necessary to achieve a long-term goal.

CARE (2012) explains that an explicit articulation of theory of change leads to the desired behavior (the' if' part) and bring about the anticipated change (the' then' part). Implementing theory of change to one's project offers a clearer picture of what the intervention

aims to succeed in and how the project activities and outcomes are linked to the outcomes at multiple levels. In other words, a well-developed change theory is a testable hypothesis as to how the events that will be conducted can lead to the program's desired results.

Njama (2015) claimed that this theory helps to explain how disruptions can arise during various project stages without a certain prediction. It further highlights how strategic intervention measures can alter these changes. This theory is key to this study as it will allow project team and stakeholders to focus energy on specific future realities that are essential to project's success.

This research established the theory of change as the basis of its theoretical structure work, as it aims to define the factors that lead to effectiveness of monitoring and evaluation practices of TechnoServe Ethiopia. The factors that researcher identified are: M&E planning, availability of funds, M&E technical expertise, stakeholder's participation and role of management.

2.5.Empirical review

Different researchers conducted a study to assess and analyze the factors affecting the effectiveness of monitoring and evaluation practices in different nations and sectors of industries. These scholars mentioned that the factors include planning monitoring and evaluation, availability of funds, technical expertise, stakeholder participation and role of management. Thus, this part of the literature review will discuss related articles and journals to the topic under study.

A 2013 research conducted by Wanjiru, discussed the determinants of effective monitoring and evaluation systems in non-governmental organizations within Nairobi County, Kenya. The objectives of the study were to find out how the effectiveness of the M&E system was influenced by the selection of tools and techniques; the role of management; M&E training and the technical expertise of the staff. To demonstrate how the factors affect each other the researcher applied descriptive research design and used a mixed research method. The sample size of the study was 200 NGOs, and the study had a 94% response rate to the questionnaires administered. The selection of tools and techniques ranked as the highest factor contributing to the difficulties faced in the use of the M&E system, the role of management ranked 2nd, technical expertise of the staff

was ranked 3rd and M&E training was named as being the least determining factor. The results of the study indicated that an appropriate selection of tools and techniques determines the success or failure of an M&E system; the role of management have a great impact on the effectiveness of M&E system; staff training is relevant to effectively manage an M&E system and an M&E system should be handled by people with the required expertise.

Njama (2015) conducted a study on Determinants of Effectiveness of a Monitoring and Evaluating System for Projects: a case of AMREF Kenya Wash Program. The researcher adopted descriptive survey research design and mixed data collection procedures. The sample size of the study consisted of all the 66 employees working under the Wash Program. The study identified that availability of funds has a positive relationship with effectiveness of M&E systems. It added that it is critical that an organization should ensure that adequate funds are set aside for M&E because it is from this basis that projects will have a lasting impact on the beneficiaries. Secondly, the study acknowledged that stakeholders' participation has a positive influence on effectiveness of an M&E system. However, it was noted that their participation is limited to some lower-level activities and stakeholders are not adequately involved in key areas and higher-level activities. It was found out that increased stakeholders' participation results to an increase in effectiveness of M&E system. Lastly, the study recognized that the level of commitment of top leadership and management in the organization determines to a great extent the effectiveness of M&E system for projects. Most leaders don't clearly communicate M&E results and don't take active part in designing the M & E systems. In addition, most of the respondents also agreed that management doesn't ensure that sufficient resources are allocated to M&E practices.

Mushori (2015) carried out a study on Determinants of Effective Monitoring and Evaluation of County Government Funded Infrastructural Development Projects, Nakuru East Constituency, Nakuru County, Kenya. The study was conducted through a descriptive survey design. The study adopted stratified random sampling for the stakeholders and census sampling for the technical experts. Based on the sampling procedure applied the sample size engaged was 387 plus the technical team of 6 personnel. The researcher administered questionnaires as a data collection instrument. The dependent variable of the study was effective M&E while independent variables

were staff technical skills in M&E, budgetary allocation in M&E and stakeholder participation in M&E. In addition, the study had a moderating variable which were government policy and political stability. From the findings it was noted that technical expertise of the staff influences the effectiveness of M&E practices. Secondly, it was confirmed that though the projects have a budgetary allocation for M&E, the process is threatened by the low financial resources allocated to it. The budgeting team seems to give little to no attention to the financial need for facilitation of the M&E processes. The respondents added that sufficient allocation of budget to M&E activities would facilitate smooth running of the M&E processes and facilitate training of the stakeholders. Last, it was revealed that stakeholder's participation has significant influence on the effectiveness of M&E. Majority of the respondents agreed to a large extent that participation of stakeholders reflects the community needs and stimulates people's interest in the implementation of M&E processes.

2.6.Conceptual framework

A conceptual structure defines and summarizes the factors, indicators and literature in relation to the research goals. The framework is summarized in a way that clearly explains the relationship between the variables and their hypotheses. This reveals the relationship between the variables analyzed and helps to keep the focus of the analysis on the study's objectives (Njama, 2015). According to Liehr & Smith, (1999) cited in Adom, Hussien & Agyem (2018), conceptual framework outlines how the research problem would be examined which provides a comprehensive look at the problem to be studied.

The study has identified five independent variables that are believed to be critical to the dependent variable which is effectiveness of monitoring and evaluation. The independent variables which are factors that affect the dependent variable effectiveness of M&E are: M&E planning, availability of funds, M&E technical expertise, stakeholder's participation and role of management. The study aims to establish the extent to which these factors influence the effectiveness of monitoring and evaluation practices.

Source: Adapted from Wanjiru (2013), Njama (2015) & Mushori (2015).

Figure 2. 1 Conceptual framework of the dependent and independent variables

2.7.Summary of the chapter

The chapter reviewed information from past studies on M&E practices and determinants that affect its effectiveness. In addition, both theoretical and conceptual frameworks were presented clearly on which the study is based on. Following the review of the literature, there are several factors that affect the effectiveness of M&E practices. For the purpose of this research, five crucial factors were identified. This includes M&E Planning, Technical expertise, and availability of funds, stakeholder's participation and role of management. These factors were discussed broadly in relation to the dependent factor effective M&E which is an assurance point to one's project that the implementation and delivery stage can be successful.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presents a detailed description of the study's research methodology. It clearly presents the approach and method the researcher followed. The different sources the study used to collect the necessary data in relation to the study objectives are explained. The population of the study, sample size and what sampling procedures the study employed are all well clarified. In addition, this chapter explains the kind of data collection method this research utilized. It also provides all the details of how validity and reliability of the research instrument were met, identifies the method of data analysis and presentation used, provides the ethical consideration and further gives the operational definition of the variables.

3.1.Research design and approach

3.1.1. Research design

Since the main objective of this research was to determine and explain the influence of the factors that affect the effectiveness of monitoring and evaluation practices, descriptive and explanatory research design were employed.

In 2008, Babbie described descriptive design as a research purpose that answers questions of what, where, when, and how while explanatory studies address questions of why. And according to Kothari (2004), descriptive design defines the research goals, in which case enables necessary and appropriate data collection to resolve the study problem. In addition, descriptive research design allows researchers to carry out the data collection process in a way that reduces cost by integrating quantitative and qualitative data collection procedures. Babbie (2008) added that the major concern of descriptive research design is to clearly describe the characteristics of a phenomenon, population or area under study.

Babbie (2008) defined explanatory as a research purpose that focuses on pursuing novel ideas, providing an insight to effectively breakdown unclear problem statements into a precise and manageable research question.

Consequently, the descriptive design contributed by analyzing a representative population sample to draw inferences on factors that influence the effectiveness of monitoring and evaluation practices in TechnoServe Ethiopia. Carefully planned, descriptive design allows researchers analyze the phenomenon in the natural environment, remove inconsistencies and improve the reliability of collected knowledge (Kothari, 2004).

Accordingly, the researcher utilized explanatory design to better understand the problem and respond to the collected data effectively during the analysis. As a result, it is expected that these designs will enable to portray the objectives of the research successfully.

3.1.2. Research approach

Based on the nature of the research questions, objectives, and the availability of pertinent data, this study applied quantitative methods to successfully carry out the research.

Quantitative research is a structured and systematic process that defines the relationship between variables. Quantitative approach emphasizes accurate measurements and statistical interpretation of data obtained through questionnaires. Therefore, to address the research question, and explore the relation between the dependent and the independent variables the researcher applied quantitative approach with the intention of effectively achieving the aim of the study. Questionnaire was used to acquire the necessary data and information for the purpose of the research. Respondent's data were obtained through Likert Scale Questionnaire. The results obtained from the questionnaire were analyzed through SPSS. In addition, secondary data was also used to better understand, analyze and interpret the problems of the study.

3.2.Data type and source

In the compilation of the study data, both primary and secondary data type were in play. As a primary data source, a questionnaire was employed and as secondary data source the researcher acquired M&E documents for review. Then these data sources assisted to triangulate information in relation to the research perspectives. In addition, the secondary data sources also provided the conceptual structure and an overview of the research problem.

The primary data sources included project staff, project managers, M&E experts, admin and finance staff members by administering a Likert scale questionnaire that was carefully prepared for the purpose of the research. The questionnaire was then put into Google forms: a free online survey tool to distribute to available respondents through email addresses.

Secondary data sources included different reports of TechnoServe: Coffee Initiative, published journals, books, the internet and project documents which contributed to the findings.

3.3.Target population of the study

Population of study refers to the group of people, organization or events the researcher intends to study. TechnoServe Ethiopia was selected as the target area for the study. And coffee initiative which is one of the major programs implemented by TechnoServe and comprises different projects namely HERZ- Agronomy, JDE, Mother Parker and Nespresso was chosen as a specific target program. Target populations of the study were 81 TechnoServe Ethiopia staff members of coffee initiative program.

3.4.Sampling technique and sample size

3.4.1. Sampling technique

Saunders et. al. (2007) defined census as “the collection and analysis of data from every possible case or group member in a population”. Taking the target population of the study in to consideration, census is the best applicable method. Census was used because the target group was small in size and easy to manage.

3.4.2. Sample size

The researcher considered the respondents of study to be project/program staff, project managers and M&E staff of TechnoServe Ethiopia, coffee initiative program. This is due to the fact that they are the ones responsible for the major aspects of the projects, including the M&E practices, which consequently puts them in a better position to provide the information required by this

study. As stated above, there are 81 staff members that are currently working as part of the coffee imitative program.

Because of the manageability of the target population of the study which comprised of TechnoServe Ethiopia, coffee initiative program staff the researcher decided to apply census. The study's population included workers with experience and background in project management in general, and project M&E in particular. Therefore, the sample size consisted of staff members of coffee initiative program including quality advisors, training advisors, stakeholder manager, and program support coordinator project managers, M&E experts and admin and finance assistants.

3.5.Method of data collection

Questionnaire was employed as the main primary data gathering instrument based on the purpose of the study.

In order to collect information on the M&E activities and the factors that affect the effectiveness of the practices a questionnaire with Likert scale questions was prepared prior to the data collection process. The questionnaire contains questions that ask about the demographic data of the target population. Questions about the dependent variable which is the effectiveness of M&E practices and the independent variables factors that affect the effectiveness of M&E practices in the organization were prepared. The factors (M&E planning, availability of funds, M&E technical expertise, stakeholder's participation and role of management) have already been defined in accordance with available literature.

The questionnaire was administered online via Google Docs. An electronic questionnaire was uploaded onto Google Docs: Forms and respondents were invited to participate by sending them an email which contained a link to the questionnaire with written instructions. The link was as follows: https://forms.gle/eTjr5WuebU781BV59

Necessary documents such as program reports and evaluation reports in relation to the area of the study were also reviewed.

3.6.Methods of data analysis and presentation

Bhattacherjee (2012) outlines that there are two quantitative analysis techniques that analyze numerical data using statistical tools. Descriptive analysis is the statistical description, aggregation, and presentation of constructs of interest or associations between them. Inferential analysis is the statistical testing of hypotheses or theory testing.

The data was analyzed using the responses from the distributed questionnaire. Simple frequency distribution was applied to organize the collected responses using Google Sheets (a free web-based spreadsheet application). To ensure that the questionnaire responses were complete, the researcher manually edited and sorted them. IBM SPSS STATISTICS version 20.0 was used for data entry and analysis. The questionnaires were gathered, coded, and entered into a template for data entry. Multiple regression analysis was carried out to see the association between each independent variable (factors that affect the effectiveness of M&E practices) with the dependent variable (effectiveness of M&E practices). Descriptive statistics such as mean, standard deviation, frequency distribution and percentages were used to describe the data. CI (confidence interval) was set at 95% and P-value at 0.05 in order to assess the degree of statistical significance.

The results were presented in the form of tables, charts, graphs and figures followed by clear and through explanations.

3.7.Validity and reliability

3.7.1. Validity

According to Jupp (2006), validity refers to the degree to which research findings give an accurate explanation of what happened and why. To ascertain validity of the data collection instruments, the researcher referred to similar research and their instruments. The questionnaire was constructed in line with the research objectives and available literature shaped in a precise and concise manner to ensure the authenticity of the collected data. Data were collected from

reliable sources who have the necessary knowledge and experience in project management and monitoring and evaluation practices.

In addition, after consulting with my advisor who evaluated and commented on the instrument, any unclear and ambiguous questions were reworded and rechecked before they were distributed to the respondents.

3.7.2. Reliability

The degree to which a construct's measure is consistent or dependable is referred to as its reliability (Bhattacherjee, 2012). In other words, reliability estimates the accuracy of the measurements or, more precisely, the degree of uniformity of the results obtained from repeated measurements.

A reliability test was used by the researcher to ensure the accuracy of the data obtained. Cronbach's or coefficient alpha, as described by UCLA Statistical Consulting (2021), is a measure of internal consistency i.e., how closely connected a collection of items are as a group. It is regarded as a test of scale reliability.

Accordingly, a reliability test called Cronbach's Alpha Test was conducted on all measures for the independent and dependent variables with a threshold of 0.7 as shown in table below. Cronbach's alpha of 0.7 and above is considered acceptable, 0.8 and above is generally preferred, and 0.9 and above is considered excellent.

Table 3. 1 Croanbach's Alpha reliability test for the dependent and independent variables

Variable	Croanbach's Alpha Test	No. of Items
Effectiveness of M&E Practices	0.707	7
M&E Plan	0.77	6
Availability of Funds	0.789	5

Technical Expertise of M&E Staff	0.719	5
Stakeholder's Participation	0.819	5
Role of Management	0.721	6
Overall	0.903	34

Source: Survey data (2021)

3.8.Ethical research considerations

The study was conducted in an extremely ethical manner. Research ethics were put into consideration when developing and administering data collection tools and techniques, to avoid any form of ethical violation. A research clearance permit and letter of authorization from the St. Mary's University were acquired in advance to be used for data collection. This was to clarify the aim of the research and the nature of the study thus improving cooperation from the respondents during data collection. In the beginning of the data collection tool, the questionnaire, the researcher explained in written form the purpose of the thesis to the respondents and gave guarantee that the information they provided be treated as confidential. No information was gathered before receiving informed consent from all the participants that agreed to participate in the research. Only after the researcher has acquired approval from all the staff members associated with the study did the data collection start.

3.9.Operational definition of variables

Factor: is something that seeks to generate or impact an outcome or result of a process.

Effectiveness: is the ability to produce a desired result or the targeted output. When something is deemed effective, it means it has accomplished its intended or expected outcome.

Monitoring: is a continued role aimed mainly at providing early indications of progress, or lack in the achievement of results for the management and key stakeholders of an ongoing intervention including project, program or other kind of support to an outcome.

Evaluation: is a structured method aimed at measuring development and achievement of a goal in a systematic and objective way. It is not a one-time event, but rather an activity requiring assessments of varying scope and depth at several times to meet the increasing demands for interpretative knowledge and learning to reach a result.

Practice: refers to the practical application of monitoring and evaluation within an organization.

M&E planning: should start before the project's design phase. The plan should contain information on how the monitoring and evaluation practices will be carried out. The planning process is useful to explain the underlying assumptions on which the achievement of project goals will depend including the anticipated linkages between activities, outcomes and results; conceptual measures; baseline data; monitoring and evaluation schedule; data sources; cost estimates for M&E activities; project staff members; and the plan on how the acquired information will be disseminated and utilized.

Availability of funds: includes all the available financial resources allocated for monitoring and evaluation practices.

Technical expertise: includes knowledge, skills and proficiencies required for a smooth application of monitoring and evaluation.

Stakeholders' participation: is the process by which an organization involves people who may be affected by the decisions it makes or can influence the implementation of its decisions in the planning and implementation of monitoring and evaluation.

Role of management: Management is the process of planning, sustaining and allocating resources in order to achieve organizational objectives. Managers are the people who establish and execute this management processes in the company. Thus, the role of management can entail anticipating and designing plans to address potential problems or opportunities; coordinating and

resource allocation for the implementation of plans; guiding staff through the implementation process and; reviewing results and making all required changes.

Table 3. 2 Operational definition of dependent and independent variables

Objectives	Type of Variables	Indicators	Level of Scale	Data Collection Tools	Data Analysis Techniques
To determine the factors that affect the effectiveness of M&E practices	**Dependent Variable** Effectiveness of M&E Practices	- Relevant and timely results - Activities within schedule - Cost within budget - Economical use of resources - Attainment of objectives - Clear duties & responsibilities - Beneficiaries' satisfaction	5 point Likert Scale	Questionnaire	Descriptive & Inferential Statistics
To determine to what extent planning M&E affects the effectiveness of M&E practices.	**Independent Variable** M&E Planning	- Well-articulated M&E plan - Identification of objectives and key indicators - Key stakeholder's involvement in the planning process	5 point Likert Scale	Questionnaire	Descriptive & Inferential Statistics
To determine the extent to which the availability of funds influences the effectiveness of M&E practices.	Availability of Funds	- Sufficient allocation of budget for M&E practices - Timely allocation of funds for M&E purposes. - Independent budgetary decisions	5 point Likert Scale	Questionnaire	Descriptive& Inferential Statistics
To establish to what extent technical expertise of the staff can influence the effectiveness of M&E practices.	Technical Expertise of Staff	- Availability of training and capacity building sessions - Availability of trained expertise in M&E	5 point Likert Scale	Questionnaire	Descriptive& Inferential Statistics

To identify the extent of stakeholder's participation in M&E affects the effectiveness of M&E practices.	Stakeholder's Participation	- Identification and designing stakeholder's participation - Use of key stakeholder's feedback - Level of participation	5 point Likert Scale	Questionnaire	Descriptive& Inferential Statistics
To establish the extent to which the role of management impact the effectiveness of M&E practices.	Role of Management	- Decision making - Communication of findings - Distribution of resources - Designing the system - Organization policy	5 point Likert Scale	Questionnaire	Descriptive& Inferential Statistics

CHAPTER FOUR

RESULTS AND DISCUSSION

The results of data collected through questionnaires and documents are presented in this chapter. The results are drawn together to show how they apply to the literature and theoretical context. The data was analyzed using descriptive and inferential statistical methods and the results were presented in figures and tabular summaries with their implications addressed. The questionnaire was created using ordinal measurement, i.e., a Likert scale, with 1 indicating strongly disagree, 2: disagree, 3: neutral, 4: agree, and 5: strongly agree. Statistical methods were used to interpret the collected data in relation to the research objectives using Google Spreadsheet and IBM SPSS Statistics version 20.

4.1.Response rate

Out of the total 81 questionnaires distributed, only 72 respondents answered and returned their questionnaires contributing to 89% response rate.

4.2.Demographic information

The first section of the questionnaire comprised of five items in regard to the respondents background (demographic) information. General questions about respondent's age, gender, academic qualification, work experience in TechnoServe, and current working position were included. This section will present the analyzed data.

Table 4. 1 Demographic information of respondents

Response	Frequency	Percent
Gender		
Male	60	83.3%

Female	12	16.7%
Total	72	100%
Age		
21 – 30	20	37.5%
31 – 40	70	52.8%
41 – 50	18	9.7%
Total	72	100%
Academic qualification		
BA/BSc	55	76.4%
MA/MSc	17	23.6%
Total	72	100%
Work experience		
0-3	24	33.3%
4-5	32	44.4%
6-10	13	18.1%
>10	3	4.2%
Total	72	100%

Working position		
Project staff	58	80.6%
Project manager	5	6.9%
M&E staff	6	8.3%
Admin & Finance staff	3	4.2%
Total	72	100%

The study involved both female and male respondents. As presented in the above table 4.1, most of the respondents were male at 83.3% (60) while 16.7% (12) were female.

The above table shows that 37.5% (27) of the respondents were in the age between 21-30 years; 52.8% (38) of the respondents were between 31-40 years, and 9.7% (7) of the respondents were in the 41-50 years age category.

As shown in the above table, the responses indicated that majority of the respondents were BA/BSc holders with 76.4% (55) while the remaining 17 (23.6%) have MSc/MA. This entails that the respondents were knowledgeable and can comprehend and answer the questionnaire correctly.

Out of the total respondent, 24 (33.3%) have 0-3 years' work experience, 32 (44.4%) of them have 4-5 years' work experience, 13(18.1%) have an experience of 6-10 years and 3 (4.2%) have more than 10 years of experience. This shows that the respondents have the required experience regarding project management and M&E practices and that they are capable to answer the questionnaire.

With regards to the respondent's current working position, majority of them were project staffs with 80.6% (58). This comprised of different kinds of experts such as quality advisors, training

advisors, stakeholder managers and program support coordinators. As it can be seen in the above figure, 6 (8.3%) respondents were M&E staff members and 5(6.9%) were project managers. This implies that the respondents were from different work position with the ability to review the subject matter related to project management and M&E practices. The remaining 3 (4.2%) respondents were Admin & Finance staff members.

4.3.Effectiveness of M&E practices

The dependent factor, effectiveness of monitoring and evaluation practices, was operationalized to be measured based on achieving the overall objectives of M&E, timely and on budget completion of M&E activities, involvement of management, staff and key stakeholders, beneficiary satisfaction, and relevancy of M&E results. The respondents were required to indicate on the level of agreement regarding each attribute as associated with the independent variables. Descriptive statistics such as mean and standard deviation were in play to summarize the data.

Table 4. 2 Effectiveness of M&E practices

Statements	M	SD
M&E objectives are achieved effectively.	3.97	0.8
M&E activities are carried out with in schedule.	3.93	0.69
Results and findings from M&E are relevant for the success of projects.	4.2	0.82
The cost of M&E practices is within budget.	3.44	1.09
Stakeholders are accordingly responsible for the effectiveness of M&E practices.	3.79	0.76

The level of beneficiary satisfaction is high due to the effectiveness of M&E.	3.84	0.74
The involvement of management enhances the effectiveness of M&E activities and credibility of the findings.	3.98	0.81

Source: Survey data (2021)

From the research findings the study established that majority of the respondents agreed with the above statements. They agreed that M&E objectives are achieved effectively, M&E activities are within schedule, M&E results and findings are relevant for the success of projects, stakeholders are responsible for its effectiveness, that beneficiary's satisfaction is high due to the effectiveness of M&E practices, and that the involvement of management is necessary for not only its effectiveness but also for its credibility. This was proved by mean of 3.97, 4.2, 3.79, 3.84, and 3.98, respectively.

The respondents had a neutral opinion on the cost of M&E practices being within budget and this is shown in the above table with mean of 3.44 and standard deviation of 1.09.

4.4.Factors affecting M&E practices

The purpose of this study was to measure the factors affecting the effectiveness of monitoring and evaluation practices in TNS Ethiopia. To achieve this, the respondents were requested to indicate their levels of agreement on several parameters of the independent factors (factors affecting the effectiveness of M&E practices). The responses ranged from strongly disagree to strongly agree. Descriptive statistics (mean and standard deviation) were utilized to summarize the collected data.

4.4.1. M&E plan

The study's first objective was to establish the impact M&E planning has on the effectiveness of TNS Ethiopia's M&E practices. The responses have been summarized into the table below.

Table 4. 3 M&E plan

Statements	M	SD
Projects have functional M&E plan available.	3.84	0.79
The design of M&E system starts simultaneously as the overall project planning and implementation.	3.29	1.08
Project staff and key stakeholders are involved in the preparation of M&E plan.	3.3	0.97
M&E plan have indicators that are linked to the objectives of the project.	4.34	0.58
Planning for M&E considers all project activities and is open for adjustments.	3.26	0.88
Project Managers ensures that there is M&E Plan in place before starting a project.	3.47	0.96

Source: Survey data (2021)

The study sought to establish the impact M&E plan has on the effectiveness of M&E practices of Coffee Initiative Program in TNS Ethiopia. As per the findings, it was agreed by the respondents that projects have M&E plan in place with a mean of 3.84 and standard deviation of 0.79.

The respondents also agreed that M&E plans have indicators which are linked to the objectives of the project with a mean of 4.34 and standard deviation of 0.58.

The respondents had neutral opinion on the design of M&E system starting concurrently with the project planning and implementation with a mean of 3.29 and standard deviation of 1.08. They were also impartial about project staff and key stakeholders being involved in the preparation of M&E plan, whether planning for M&E considers all project activities and project managers ensures that M&E plan is available before the start of a project. This was shown with a mean of 3.3, 3.26 and 3.47, respectively.

4.4.2. Availability of funds

The second objective of the research was to determine the extent to which allocation of funds for M&E activities affects the effectiveness of M&E practices in the case of TNS Ethiopia. In order to accomplish that, 5 items were prepared in regard to availability of funds. The responses were reviewed, and the below table presents the summary.

Table 4. 4 Availability of funds

Statements	M	SD
The organization allocates sufficient fund for M&E practices.	3.51	0.88
There is independency in the budgetary decisions for M&E practices.	3.75	0.66
The organization ensures there is timely provision of funds for M&E.	3.83	0.82
Funds allocated for M&E are used for M&E activities only.	3.94	0.85
Funds allocated for M&E practices are carefully estimated and the actual expenditure is carefully monitored.	3.79	0.8

Source: Survey data (2021)

The study established that the organization allocates sufficient funds for M&E practices and that the budgetary decisions for M&E are carried out independently from other project tasks. This was confirmed with a mean of 3.51 and 3.75, respectively.

The respondents also agreed that there is timely provision of funds, funds allocated for M&E are used for M&E activities only, and that the funds are carefully estimated, and the expenses are monitored with a mean of 3.83, 3.94, and 3.79 correspondingly.

4.4.3. Technical expertise

The third purpose of the study sought to measure the extent to which technical expertise of M&E staff affects the effectiveness of M&E practices In TNS Ethiopia. The findings from the questionnaire are as presented below.

Table 4. 5 Technical expertise

Statements	M	SD
There's adequate supply of skilled human resource for projects and M&E practices.	3.76	0.66
Project and M&E staffs are given clear roles and responsibilities befitting their expertise.	4.11	0.68
M&E staffs can determine how project's lessons learned are produced, communicated and perceived.	4.18	0.61
M&E staff plays a key role in providing a functional advice in an implementation of a project.	3.91	0.59
The organization provides opportunities for project staff to take part in capacity building or training.	3.31	0.74

Source: Survey data (2021)

Majority of the respondents agreed that there are enough skilled project and M&E staff with a mean of 3.76 and standard deviation of 0.6. They also agreed that clear roles and responsibilities

are provided to project and M&E staff members with a mean of 4.11 and standard deviation of 0.68.

In addition, majority of the respondents concurred that M&E staffs can determine how to produce, communicate and perceive project lessons learned and that M&E staff plays a key role in an implementation of a project by providing practical advice as required with the mean of 4.18 and 3.91.

But they had neutral opinion about the organization providing opportunities for trainings on M&E with a mean 3.31.

4.4.4. Stakeholder participation

The fourth objective of the study was to analyze the extent stakeholder participation in M&E influences the effectiveness of M&E practices at TNS Ethiopia. The results have been summarized and presented in the table below.

Table 4. 6 Stakeholder's participation

Statements	M	SD
Stakeholders are adequately involved in designing and planning M&E activities.	3.66	0.96
The organization involves the stakeholders in the identification of indicators.	3.54	1.09
Stakeholders are involved in M&E decision making process.	3.25	1.23
Stakeholder's feedback is sought during M&E processes.	3.72	0.96
M&E results and findings are communicated to the	3.8	0.94

stakeholders.		

Source: Survey data (2021)

The study was able to establish that stakeholders are involved in the designing and planning process of M&E activities with a mean of 3.66 and standard deviation of 0.96. They also agreed on the stakeholders being involved in the identification of indicators with a mean of 3.54 and standard deviation of 1.09.

The findings also showed that the respondents concurred that stakeholder's feedback are indeed required and necessary for the effectiveness of M&E practices with the mean of 3.72. Majority of the respondents conformed that results and findings from M&E are communicated to key stakeholders.

But they had impartial view about stakeholders taking part in the decision-making process with a mean of 3.25.

4.4.5. Role of management

The fifth objective of the study was to evaluate the degree role of management in M&E impacts the effectiveness of M&E practices in TNS Ethiopia. The findings are summarized and presented in the table below.

Table 4. 7 Role of management

Statements	M	SD
Management actively participates in designing and planning M&E activities.	4	0.88
Management ensures the provision of adequate resources to M&E practices.	3.54	0.9
Management guarantees that project staff and M&E	3.45	0.91

are provided with the required training in M&E.		
Management properly uses M&E findings in decision making processes.	3.81	0.75
Management clearly communicates M&E results.	4.3	0.7
Organization's policy supports M&E activities.	4.43	0.49

Source: Survey data (2021)

From the results presented in the above table, most of the respondents agreed that management are also involved in the designing and planning process of M&E with the mean of 4 and standard deviation of 0.88. They also agreed that sufficient resources were provided for M&E practices by the management which was confirmed by mean of 3.54 and standard deviation of 0.9.

In addition, the study findings showed that the respondents concurred that management utilizes M&E outcomes in the process of decision making and communicates it to the concerned body which was confirmed with a mean of 3.81 and 4.3.

Many of the respondents agreed that M&E activities are strongly supported by the organization's policies with a mean of 4.3.

Majority of the respondents had a neutral attitude about management offering training in M&E to project staff and M&E with a mean of 3.45and standard deviation of 0.91.

4.5.Effectiveness of M&E and factors affecting its effectiveness

Table 4. 8 Overall mean and SD of the dependent and independent variables

Variables	N	Mean	SD
Effectiveness of M&E practices	72	3.88	0.45

M&E Plan	72	3.58	0.51
Availability of Funds	72	3.76	0.46
Technical Expertise	72	3.85	0.45
Stakeholder's Participation	72	3.59	0.58
Role of Management	72	3.92	0.4

Source: Survey data (2021)

Descriptive statistics were in play to measure mean and standard deviation of the dependent and independent variables. The above table contains the overall mean and standard deviation of the dependent variable (effectiveness of M&E practices) and independent variables (factors affecting the effectiveness of M&E practices).

The researcher sought to determine the extent the independent factors affect the effectiveness of M&E practices. As displayed in the above table, the distribution of scores for the samples contained acceptable standard deviation and showed its normality for use in consequent analyses. All the mean values are three and above which validates how close to the central tendency they are, articulating the contribution of factors affecting M&E practices to the overall effectiveness.

4.6.Correlation analysis

According to Burns & Burns (2008) correlation is the measure of correspondence between variables which can entail whether the relation is a mutual one or not. Pallant (2016), described correlation analysis as a test employed to outline the strength and direction of the linear relationship between two variables.

Pallant (2016) added that the strength of a relationship between the variables can be indicated by a value that ranges from -1.00 to 1.00. Cohen (1988) cited in Pallant (2016), adds that the values between -1.00 and 1.00 can be interpreted as: r= .10 - .29 as small or weak correlation, r= .30 -

.49, medium or moderate correlation, and r=.50 – 1.0 as large or strong correlation where if the coefficients are positive the relation is accordingly positive and vice versa.

The Pearson's Correlation test was conducted to assess the relationship between the dependent variable (Effectiveness of M&E Practices) and the five independent factors mentioned in the following table.

Table 4. 9 Pearson correlation between M&E practices and factors affecting its effectiveness

Factors Affecting M&E Practices		Effectiveness of M&E Practices
M&E Plan	Pearson Correlation	.531**
	Sig. (2-tailed)	.000
	N	72
Availability of Funds	Pearson Correlation	.497**
	Sig. (2-tailed)	.000
	N	72
Technical Expertise	Pearson Correlation	.526**
	Sig. (2-tailed)	.000
	N	72
Stakeholder's Participation	Pearson Correlation	.302**
	Sig. (2-tailed)	.010
	N	72
Role Of Management	Pearson Correlation	.312**
	Sig. (2-tailed)	.008

	N	72
**. Correlation is significant at the 0.01 level (2-tailed).		

Source: Survey data (2021)

Correlation results presented in the above table shows that there is significant relation between effective M&E practices and factors that determine its effectiveness. There is significant strong positive relation between effective M&E practices and M&E plan (sig= .000, r= .531). There is strong positive relation between the effectiveness of M&E practices and availability of funds (sig= .000, r= .497). According to the above table there is a strong positive correlation between effective M&E practices and technical expertise of project staff and M&E staff (sig= .000, r= .526). The results implied that there is moderate positive association between the effectiveness of M&E practices and stakeholders' participation (sig= .010 r= .302). The findings indicated that the correlation between effective M&E practices and role of management to be moderately positive (sig= .008, r=3.12).

4.7.Regression analysis

Griffth (2007) explained regression analysis as a process that involves forecasting the future (the uncertain) based on past records (the known). A regression analysis defines the mathematical equation that is to be used under a certain probability to find out what will happen. It analyzes the dependent variable, taking account of the influence of the one or more independent variables. The study determines that some independent variables have more influence than others, and so their weights must be considered when the forecast is based on them. Consequently, regression analysis is the method of seeking predictors and evaluating how well they predict.

Multiple regression analysis was employed to determine the extent of M&E factors that affect the effectiveness in relation to the dependent variable, effectiveness of M&E practices.

First the assumption of correlation between the independent variables was tested. The correlation between independent variables is referred to as multi collinearity. A collinearity diagnostic has

been performed in SPSS to test whether there is some relationship between the independent variables (factors affecting effectiveness of M&E practices). Tolerance and VIF (variance inflation factor) values are given by Collinearity Statistics. Tolerance is simply the inverse of VIF. A VIF value greater than five (or a Tolerance value less than 0.2) suggests the existence of multicollinearity. A VIF value of 10 is sometimes considered suitable in social science studies (Gaur & Gaur, 2009).

Table 4. 10 Multicollinearity test

Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
1	"M&E Plan"	.759	1.318
	"Availability of Funds"	.779	1.284
	"Technical Expertise"	.735	1.360
	"Stakeholder's Participation"	.746	1.340
	"Role of Management"	.824	1.214
a. Dependent Variable: "Effectiveness of M&E"			

Source: Survey data (2021)

The above table presents the result of the collinearity diagnostics conducted to test if there are multiple correlations among the independent (predictor) factors. The test confirmed that there is no collinearity between the variables.

Table 4. 11 Tests of Normality

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.075	72	.200*	.973	72	.123

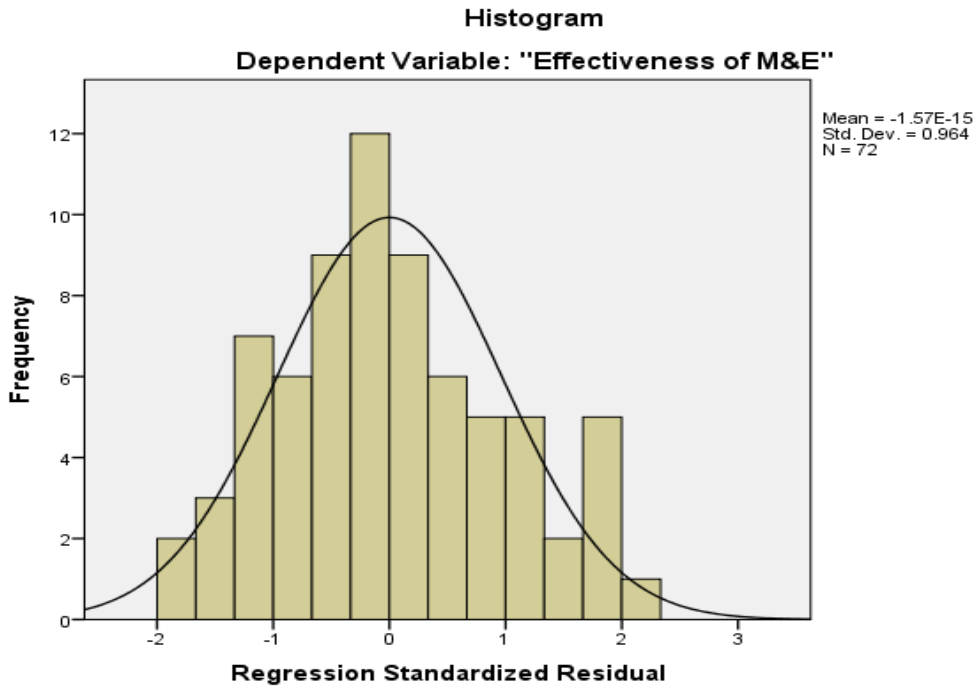
*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Survey data (2021)

SPSS conducts two different tests of normality, namely, Kolmogorov-Smirnov and Shapiro-Wilk. According to these tests, a data is assumed to be normally distributed if the p-value is > 0.05. In this case, the collected data can be accepted as approximately normally distributed because p-values for both tests was greater than 0.05.

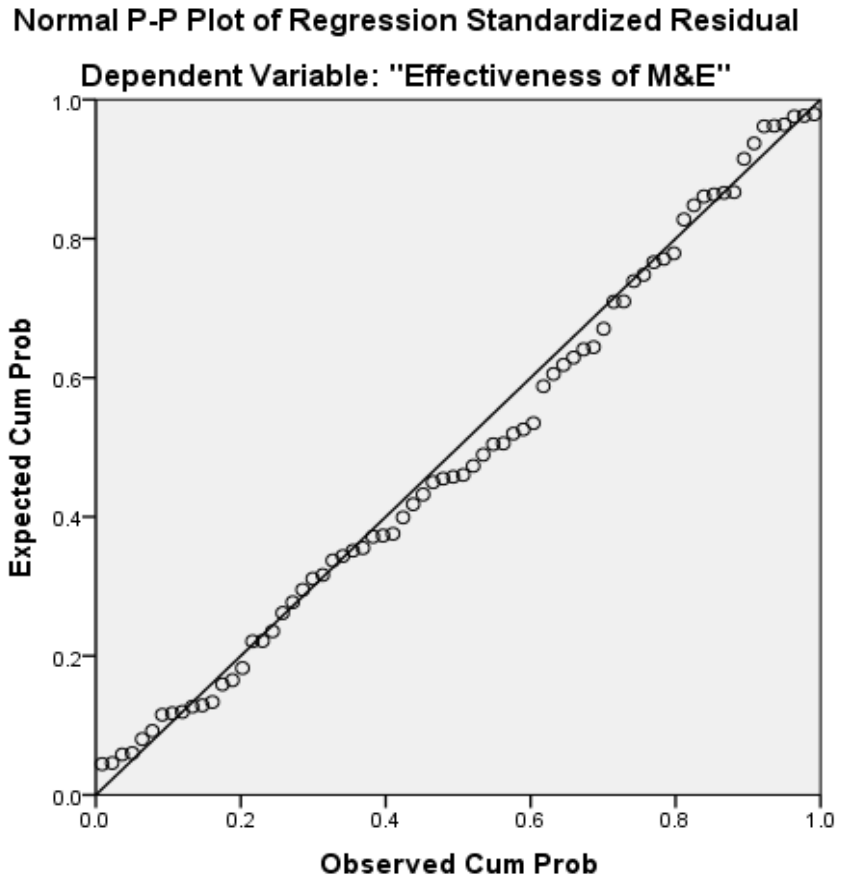
Figure 4. 1 Normality graph



Source: Survey data (2021)

The above figure illustrates that the data is normally distributed.

Figure 4. 2 Linearity graph



Source: Survey data (2021)

As it is indicated in the above graph, the relation between the dependent (Effectiveness of M&E Practices) and predictor variables (M&E planning, availability of funds, technical expertise, stakeholder's participation and role of management) is linear which demonstrates that there is normal distribution.

Gaur & Gaur (2009) explained R-squared as a statistical indicator that demonstrates how similar the data is to the fitted regression line. It is also known as the coefficient of determination or, for multiple regressions, the coefficient of multiple determinations. It is a common statistic for assessing model fit. R-square equals 1 minus the residual variability ratio. The modified R^2, also

known as the coefficient of multiple determinations, is the percentage of the variance in the dependent that can be clarified by the independent variables alone or jointly.

Table 4. 12 Multiple Linear Regression: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.745[a]	.555	.521	.31497

a. Predictors: (Constant), "Role of Management", "M&E Plan", "Availability of Funds", "Stakeholder's Participation", "Technical Expertise"
b. Dependent Variable: "Effectiveness of M&E Practices"

Source: Survey data (2021)

According to the above table 4.9, the value of R-square the model estimated is 0.555 which show that there is 55.5% positive variation in effectiveness of M&E practices as a result of changes in the project monitoring and evaluation factors. This explains that taken as a set, the predictors M&E plan, availability of funds, technical expertise, stakeholder's participation and role of management account for 55.5% of the variance in the effectiveness of M&E practices. The remaining 44.5% is determined by other unaccounted factors in this study.

Table 4. 13 Multiple Linear Regression: ANOVA (Analysis of Variance)

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.160	5	1.632	16.450	.000[b]
	Residual	6.547	66	.099		
	Total	14.707	71			

a. Dependent Variable: "Effectiveness of M&E"

b. Predictors: (Constant), "Role of Management", "M&E Plan", "Availability of Funds", "Stakeholder's Participation", "Technical Expertise"

Source: Survey data (2021)

The overall regression model was significant, F (5, 66) = 16.450, p< .001, R^2= .56.

This entails that the regression analysis was statistically significant in predicting how M&E plan, availability of funds, technical expertise of project and M&E staff, stakeholder's participation and role of management taken together as a group determine whether M&E practices are effective or not.

Table 4. 14 Multiple Linear Regression: Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.254	.574		2.184	.033
	"M&E Plan"	.221	.083	.251	2.664	.010
	"Availability of Funds"	.290	.092	.294	3.158	.002
	"Technical Expertise"	.287	.097	.284	2.965	.004
	"Stakeholder's Participation"	.195	.074	.250	2.630	.011
	"Role of Management"	.271	.102	.241	2.658	.010

a. Dependent Variable: "Effectiveness of M&E"

Source: Survey data (2021)

The above table 4.11 presents the results of multiple regression coefficient which looks at each of the variables individually. This can show whether each predictor variable was significant on its own. Accordingly, each variable was tested at $p < .05$. M&E plan was significant at 0.01, availability of funds was significant at 0.002, technical expertise was significant at 0.004, stakeholder's participation was significant at 0.011 and role of management was significant at 0.01 all at 95 percent confidence interval. This implies that the amount of unique variance a predictor accounts for is statistically significant.

The equation of multiple regression on this study is generally built on two sets of variables, namely dependent variable (Effectiveness of M&E Practices) and independent variables (M&E plan, availability of funds, technical expertise, stakeholder's participation and role of management).

Multiple regression analysis was used to determine the relationship between dependent and independent variable by employing the following multiple regression formula. And the regression mathematical model was as demonstrated below.

$Y = \beta o + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + e$

The regression model for this study can be derived from the above table as follows:

$Y = 1.254 + 0.221X1 + 0.290X2 + 0.287X3 + 0.195X4 + 0.271X5$

Where, Y= Effectiveness of M&E Practices (dependent variable)

βo = Constant (coefficient of intercept)

X1= M&E Plan

X2= Availability of Funds

X3= Technical Expertise

X4= Stakeholder's Participation

X5= Role of Management

e = Standard Error

β1, β2, β3, β4, β3= regression coefficient of the five independent variables.

The regression model offered statistical control, allowing the research to determine the impact of each independent variable. Holding all variables at zero will result in an effectiveness of M&E practices equaling to 1.254.

Keeping all other predictors constant, a unit change in M&E plan will result in 0.221 increases in effectiveness of M&E practices. The case of availability of funds while holding all other variables constant, would lead to 0.29 increments in the effectiveness of M&E practices. A growth in the effectiveness of M&E practices by 0.287 can be achieved by holding all the predictor factors constant excluding technical expertise of project and M&E staffs. Stakeholder's participation while holding all independent variables constant would lead to 0.195

increments in effectiveness of M&E practices. A 0.271 increments in the effectiveness of M&E practices is caused by role of management while holing all predictors constant.

4.8.Hypothesis testing

H_0: M&E plan does not have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia was rejected at t= 2.669 and p-value = 0.010 and the alternative hypothesis accepted.

H_0: Availability of funds does not have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia was rejected at t= 3.158 and p-value = 0.002 and the alternative hypothesis accepted.

H_0: Technical expertise does not have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia was rejected at t= 2.965 and p-value = 0.004 and the alternative hypothesis accepted.

H_0: Stakeholder's participation does not have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia was rejected at t= 2.630 and p-value = 0.011 and the alternative hypothesis accepted.

H_0: The role of management does not have a significant effect on the effectiveness of M&E practices in the case of TNS Ethiopia was rejected at t= 2.658 and p-value = 0.010 and the alternative hypothesis accepted.

4.9.Discussion of the results

The study overall aimed to determine the extent of factors affecting the effectiveness of M&E practices. In order to accomplish this goal, it took on different kinds of statistical analyses. The results were then interpreted and presented to better understand the objectives. The interpreted results were discussed to better capture the significance of the study.

The major objective was broken-down in to five specific objectives. To study the effect M&E planning, availability of funds, technical expertise, stakeholder's participation and role of management have on the effectiveness of M&E Practices. Different questionnaire items were prepared representing each objective in relation to M&E practices. SPSS software was employed to analyze the responses collected. Both inferential and descriptive analyses were carried out to interpret the data.

According to the findings, the mentioned predictor factors have influence over the effectiveness of M&E practices which in turn can determine the effectiveness of projects.

The first objective was to understand the extent to which M&E planning affected the effectiveness of M&E practices. According to the acquired results M&E practices can be affected by the M&E planning process. According to SFCG, M&E plan is a guide used by the project team to plan and coordinate all Monitoring and Evaluation activities throughout a project cycle. It can also be exchanged and used by all stakeholders, as well as donors. The M&E Plan is a versatile work plan that can be used to track project tasks, respond to assessment questions, and demonstrate progress against project goals. The goals and objectives of the plan are all included in this document in addition to M&E indicators and methodologies, implementation plan, and proposed schedule (SFCG, UKAID & USIP, 2017).

Frankel & Gage (2016) insinuated that the construction of M&E plans should be carried out during the design phase of a program. The plan for M&E should be considered a "living document" and be modified when deemed necessary.

The second objective was to determine whether the proper allocation and accessibility of funds for the practices of M&E affected the effectiveness of M&E performance. The results showed that availability of funds is a requirement in having an effective M&E system. In this regard, IFRC (2011) implied that it's best to start regularly preparing the M&E budget early in the project/program design phase. Detailing budget items should be simple, especially for baseline surveys and evaluations. Hiring (full-time staff and external consultants), capacity building, facility costs and all other associated costs should be calculated as well.

IFRC (2011) adds that routine project monitoring and evaluations should be included in the project budget. As a result, the budget will accurately represent the true cost of a project or program. Incorrectly implying M&E expenses as an administrative or organizational expenditure can make donors hesitant to cover such costs when they are project related.

The third objective of the research aimed to examine the degree of technical expertise and to know how the organization's project and M&E staff affected the effectiveness of M&E practices. The results implied that staff's skill and knowledge set can have a great impact on the effectiveness of M&E practices. This coincides with Hagens and Sharrock (2008), who implied that the need for monitoring and evaluation (M&E) staff for a project/program poses both a significant opportunity and a serious challenge. Finding the right employees is critical from a strategic standpoint; it necessitates careful consideration and a significant time commitment.

Norem & McCorkle (2008) clarified that training, seminars, and capacity building exercises are vital to building staff capacity. Moreover, it is essential to develop the requisite expertise on the go, including on-the-job preparation, a training process that usually involves in house technical assistance from organizational staffs and from external consulting agencies contracted to provide training services. It offers practical examples of the skills and expertise needed for the work.

The fourth objective of the study was to examine the scope of stakeholder's participation effect on the effectiveness of M&E practices. The results indicated that M&E practices can surely be affected by the adequacy of stakeholder's involvement in the M&E system. UNFPA stated that participatory M&E as a process maintains individual and mutual learning and capacity building that makes individuals more aware of their strengths and limitations broaden social dynamics, visions and outlooks for progress. This learning process provides an environment that encourages progress and action. It's a versatile method that focuses on negotiating beneficiary needs and desires while changing and adjusting to the project's/program's unique requirements (Estrella, 1997 cited by UNFPA, 2004).

IFRC (2011) affirms that planning a monitoring and evaluation framework focused on stakeholder's needs and preferences aids in ensuring understanding, ownership, and use of M&E

data. It is important to consider the goals and knowledge needs of those who are involved in or impacted by the project/program. When planning M&E functions, it is critical to seek local knowledge to ensure that they are applicable to and practical in the specific setting, and that M&E information is reliable and supported.

According to the results it was concluded that role of management is accountable for the effectiveness of M&E practices in an organization. This includes active participation of management in the M&E system and organization culture that supports M&E practices. The result collaborates with the findings from Njama's (2015) research on the "determinants of effectiveness of monitoring and evaluation system for projects: a case of AMREF Kenya WASH Program," which stated that a smoother process can be ensured through the organization's leadership in the M&E system by involving in the design of the M&E systems and allocating adequate resources.

The results were also supported by Wanjiru (2013) which findings proved that due to the prompt action in decision making on suitable improvements, effective management of personnel, in addition to participating in the designing of policies, planning process, and impact assessment as necessary can affect the effectiveness of M&E practices in a constructive way. The role of management is necessary to ensure whether the required tools and techniques for an effective M&E system are in place.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECCOMENDATIONS

This chapter presents the summary of findings, conclusions drawn from the findings and recommendations. The researcher also indicated areas of further research.

5.1 Summary of key findings

The summary below presents the research findings in brief according to the research objectives. The aim was to examine the effect selected factors such as M&E plan, availability of funds, technical expertise, stakeholder's participation and role of management had on the effectiveness M&E practices in the case of TechnoServe Ethiopia. This was done by utilizing different kinds of analysis such as descriptive and inferential statistics to determine the relationship between each determinant factor and the effectiveness of M&E practices.

5.1.1 Background Information

The study was conducted in TNS Ethiopia and had 72 respondents which represents 89% response rate. The gender distribution of the respondents indicates that there are more male (83.3%) staff members than females (16.7%). The age distribution of the respondents show that they were mature enough to provide their insights with majority (52.8%) in 31-40 age group, 37.5 were in the 21-30 age group and the remaining 9.7% in the 41-50 age group. The findings also indicated that the respondents had the required capacity and skills for their working positions with majority (76.4%) being BA/BSc holders and 23.6% being MA/MSC holders. The respondents were also experienced enough to provide their honest and unbiased responses with 33.3% having a working experience of 0-3 years, 44.4% of the respondents having 4-5 years of experience, 18.1% of the respondents had 6-10 years' experience working and the remaining 4.2% had more than ten years of experience. The current working position of the respondents showed that majority of them had the necessary knowledge and skill set to provide responses to the provided questionnaire with majority (80.6%) of them belonging to project staff, 8.3% were M&E staff members, 6.9% were project managers and 4.2 were part of Admin and Finance.

5.1.2 Effectiveness of M&E Practices

Concerning the effectiveness of M&E practices in the case of TNS Ethiopia, as per the collected data from the respondents, the mean value showed that there is a good practice seen by reaching the stated M&E objectives successfully and completing the M&E activities on schedule. The findings attained about M&E practices being completed within budget had a neutral result. The results also showed that the organization had delegated responsibilities to the concerned parties including stakeholders and the management which improved the satisfaction of beneficiaries, the results, and finding acquired. The arithmetic mean of the items is 3.88, which is strongly positive.

5.1.3 M&E Plan

The first objective of the study sought to examine how planning M&E can affect the effectiveness of M&E practices. From the findings it was noted that M&E plans were made available for projects and the plan had all the required indicators. But the respondents were neutral about design of M&E system starting simultaneously with project's planning. They were also impartial whether the project staff and stakeholders were involved in preparing the M&E plan or not. They were unsure if the M&E plan was open for modifications when necessary. It was also noted that project managers do ensure the availability of M&E plan before initiating projects. The overall mean was 3.58. The values generated in Pearson correlation (r= .531 and p= .000) showed that M&E plan is significantly and positively correlated with the effectiveness of M&E practices. According to the regression results, a change in the unit in the M&E plan holding all predictors constant will lead to 0.251 increases in the effectiveness of M&E practices which implies that the M&E plan had a strong impact on the M&E practices in the study organization, making it the third strongest. The statistically significance level of the variable was at 0.010 at 95% confidence interval. The hypothesis test implied that M&E plan did affect the effectiveness of M&E practices in TNS Ethiopia, CI Program.

5.1.4 Availability of Funds

The second objective of the study was to establish the degree to which the availability of funds influences the effectiveness of M&E practices. According to the study findings, the respondents weakly agreed that the organization oversees the adequate provision of funds for practicing M&E effectively. Although they agreed that the budgetary decisions for M&E practices were timely and independent, the funds allocated for M&E practices were used to smoothly manage M&E practices, and the funds were carefully estimated and monitored. The arithmetic mean was 3.76. The values generated in Pearson correlation (r= .497 and p= .000) showed that there is a moderate positive relationship between the availability of funds for M&E practices and the effectiveness of M&E practices. According to the regression results, a change in the unit in the availability of funds holding all predictors constant will lead to 0.294 increments in the effectiveness of M&E practices which implies that the availability of funds had the strongest effect on the M&E practices compared to the other predictors mentioned in the study. The statistical significance level of the variable was at 0.002 at a 95% confidence interval. The hypothesis test implied that the availability of funds affected the effectiveness of M&E practices in TNS Ethiopia, CI Program.

5.1.5 Technical Expertise

The third objective sought to measure the extent to which the technical expertise of the project and M&E staff can impact the effectiveness of M&E practices. The organization has an adequate number of project and M&E staff members with clear roles and responsibilities and the capability to determine the project's lessons learned how in producing and communicating those lessons learned. The M&E staff also plays a definitive role in providing functional advice in the project's implementation. But whether the organization offers opportunities in capacity building, the respondents were impartial. The overall mean was 3.85 and the values generated in Pearson correlation (r= .526 and p= .000) showed that there is a significant strong positive relationship between technical expertise of project and M&E staff and the effectiveness of M&E practices. According to the regression results, a change in the unit in technical expertise holding other independent variables constant will lead to 0.284 increments in the effectiveness of M&E

practices which makes technical expertise the second strongest in influencing M&E practices compared to the other predictor factors mentioned in the study. The statistical significance level of the variable was at 0.004 at a 95% confidence interval. The hypothesis test implied that technical expertise of project and M&E staff affected the effectiveness of M&E practices in TNS Ethiopia, CI Program.

5.1.6 Stakeholder's Participation

The fourth objective was to analyze the degree to which stakeholder's participation in M&E activities can affect the effectiveness of M&E practices. The findings stipulated that stakeholders took part in the designing and planning of M&E activities and identifying indicators. But they were impartial about the decision-making process. Their feedbacks were also sought after the M&E results and findings were communicated to them. The arithmetic mean was 3.59. According to the values generated in Pearson correlation (r= .302 and p= .010), the stakeholder's participation and the effectiveness of M&E practices are significantly related and moderately positive. The regression results showed that, while holding other independent variables constant, stakeholder participation will lead to 0.250 increments in the effectiveness of M&E practices which makes it the fourth strongest in influencing M&E practices compared to the other predictor factors mentioned in the study. Stakeholder participation has a statistical significance value of 0.004 at a 95% confidence interval. The hypothesis test established that stakeholder's participation in M&E activities positively influenced the effectiveness of M&E practices in TNS Ethiopia, CI Program.

5.1.7 Role of Management

The fifth and final objective of the study sought to evaluate the level to which the role of management impacts the effectiveness of M&E practices. The respondents agreed that management contributes to the designing and planning processes of M&E activities. Management also assures if resources are sufficiently allocated for M&E practices. Moreover, management properly utilizes M&E findings in the decision-making process and communicates them to the concerned bodies. Though the organization's policy supports M&E activities, the

results showed that the respondents were neutral whether or not project and M&E staff members are being provided with opportunities for training. The overall mean of the responses was 3.92. The Pearson correlation results (r= .302 and p= .010) showed that role of management and the effectiveness of M&E practices are significantly related and moderately positive. Holding all other predictor factors, the regression analysis shows that the constant role of management will lead to 0.241 growth in the effectiveness of M&E practices which makes it the weakest in influencing M&E practices in contrast to the other factors in the study. The role of management is statistically significant at 0.010 at a 95% confidence interval. The hypothesis test established that role of management in M&E activities positively influences the effectiveness of M&E practices in TNS Ethiopia, CI Program.

Lastly, the results acquired from multiple regression analysis showed that 55.5% of the changes in the dependent variable (effectiveness of M&E practices) can be attributed to the combined effect of the independent variables that the study aimed to examine. The probability value was 0.000 ($p<.001$) indicated that the regression relationship was highly significant in predicting the independent variables affecting the effectiveness of M&E practices.

5.2 Conclusion

Based on the acquired findings from the questionnaires, documents, and literature reviews, conclusions were drawn in line with the objectives and research questions of the study.

The main purpose of conducting this research was to determine the extent of the effect predictor factors have on the effectiveness of monitoring and evaluation practices. The major objective was further broken down into specific objectives. Based on the specific objectives, research questions and hypotheses were established. The study aimed to determine factors affecting the effectiveness of M&E practices of TechnoServe Ethiopia, Coffee Initiative Program.

Different kinds of analyses were conducted in line with the research objectives and methodology to provide a reliable result. The determining factors examined in this study were the M&E plan, availability of funds, technical expertise, stakeholder participation, and role of management in TNS Ethiopia CI program.

According to the correlation and regression results, M&E planning has a significant positive relation and positive significant effect on the effectiveness of M&E practices in TNS Ethiopia, CI Program. However, the organization should improve on ensuring the participation of all concerned, timely planning, and openness to modifications.

From the statistical analysis, it was learned that the availability of funds has a significant correlation with and as well as a significant positive impact on the effectiveness of M&E practices in TNS Ethiopia, CI Program. Thus, we can conclude that a positive change in the availability of funds can bring an improvement in the effectiveness of M&E practices.

Technical expertise also has a significant positive relationship with the effectiveness of M&E practices and has a positive effect on the organization. In this regard, the organization can get better performance if its project and M&E staff are provided with the necessary and suitable training.

Additionally, stakeholder participation has a positive correlation and significant positive impact on the effectiveness of M&E practices in the case of TNS Ethiopia, CI Program. Based on the

findings it can be inferred that there is a promising chance to alleviate the effectiveness of M&E practices if a participatory M&E system is ensured.

The final objective of the study was to examine the effect of the role of management on the effectiveness of M&E practices. This was confirmed through the results acquired and it showed that role of management has a positive significant relationship and positive effect on the effectiveness of M&E practices in TNS Ethiopia, CI Program. It can be deduced that a positive change in management's role in the M&E system has a corresponding positive change in the effectiveness of M&E practices.

Thus, it can be concluded that each variable individually influences the effectiveness of M&E practices positively and the correlation between the dependent and independent variables is significant. Thus, it can be implied that a positive change in any of the predictor variables (M&E plan, availability of funds, technical expertise, stakeholder's participation, and role of management) can bring a positive change in the effectiveness of M&E practices which is statistically acceptable and validated.

In addition, the overall bundle of determinant factors incorporated in this study has a strong positive effect in practicing M&E effectively. The result shows that in the study organization, M&E planning, availability of funds, technical expertise of project and M&E staff, stakeholder's participation, and role of management account for a portion of the effectiveness of M&E practices.

5.3 Recommendations

Results of the study showed the presence of a statistically significant relationship between the independent variables (M&E plan, availability of funds, stakeholder's participation, technical expertise, role of management) and the effectiveness of M&E practices. A significant rationale of this study was to generate findings that will improve M&E practices. And in doing so through the practices are considered good, areas that need improvement were also identified. Based on the major results and findings of the study, the following recommendations have been suggested.

Since planning for M&E was found to be a positive predictor of the effectiveness of M&E practices, TNS Ethiopia should engage in ways of advancing M&E planning by pushing for flexibility in the practices to minimize risks and raise positive performance.

The study concluded that allocating funds for M&E practices have a significant contribution to the ever needed effectiveness of M&E practices which implies that the organization should adopt methods to ensure the distribution of adequate funds to M&E activities using its budgetary policies and practice assurance of its adequacy by practically monitoring the final expenditure.

It was inferred that a positive change in technical expertise brings a positive change in the effectiveness of M&E practices in TNS Ethiopia. The researcher, therefore, recommends that the organization invests in cultivating the knowledge and skill set of its staff members. Training and capacity-building opportunities in monitoring and evaluation should be available to project and M&E staff to guide them on how to retain, improve and expand the skills, knowledge, and resources needed to do complete their tasks competently.

According to the results, stakeholder’s participation is key in achieving a positive change in the effectiveness of M&E practices in TNS Ethiopia. Participatory M&E guarantees ownership of findings and whether projects are relevant to the beneficiary's needs. Key stakeholders should be properly involved in M&E activities. The participation of different types of stakeholders should be required at different stages (low or high) be it in the initiating phase, the identification of key indicators, and carrying out M&E activities.

Management contributes to the positive change in the effectiveness of M&E practices in TNS Ethiopia. Which entails the involvement and leadership of management in M&E practices is required to offer timely guidance, ensure the provision of required resources (human and financial), guarantee the proper execution of the planned M&E activities. Management also assures that project and M&E personnel receive capacity-building training and that they are kept up to date about M&E practices, software, and systems.

Concerning implication for further studies, this study was limited to one program, the Coffee Initiative program. The study showed that this program doesn't have major issues while practicing M&E but others may lack efficient ways. Although M&E is a sensitive area both in Ethiopia and Africa there is a lack of extensive studies. So, to close this gap, the research should be replicated to other programs or projects in different kinds of organizations such as public organizations, private companies, and NGOs. The study was also limited in terms of the number of variables examined. Only five variables (M&E plan, availability of funds, technical expertise, stakeholder's participation, and role of management) and their influence on the dependent factor (effectiveness of M&E practices) were studied. There are more than five factors that can affect the effectiveness of M&E practices and those should be researched as well.

REFERENCES

Adom, D., Hussien, E. K., & Agyem, J. A. (2018). Theoretical and Conceptual Framework: Mandatory Ingredients of a Quality Research. *International Journal of Scientific Research*, *7*(1), 438–441. https://www.researchgate.net/publication/322204158_THEORETICAL_AND_CONCEPTUAL_FRAMEWORK_MANDATORY_INGREDIENTS_OF_A_QUALITY_RESEARCH/link/5a4b67d00f7e9ba868b0aaa2/download

Auriacombe, C. J. (2011). Role of Theories of Change and Programme Logic Models in Policy Evaluation. *African Journal of Public Affairs*, *4*(2), 36–53. https://repository.up.ac.za/bitstream/handle/2263/57708/Aurlacombe_Role_2011.pdf?sequence=1&isAllowed=y

Babbie, R. (2008). *The Basics of Social Research*. Thomson/Wadsworth.

Bechhofer, F., & Paterson, L. (2000). *Principles of Research Design in the Social Sciences (Social Research Today)* (1st ed.). Routledge.

Bhattacherjee, A. (2012). *Social Science Research: Principles, Methods, and Practices* (2nd ed.). CreateSpace Independent Publishing Platform.

Biwott, T., Egesah, O., & Ngeywo, J. (2017). Importance of Monitoring and Evaluation in the Sustainability of Constituency Development Fund (CDF) Projects in Kenya. *IRA-International Journal of Management & Social Sciences (ISSN 2455–2267)*, *7*(1), 45. https://doi.org/10.21013/jmss.v7.n1.p6

Burns, R. P., & Burns, R. (2008). *Business Research Methods and Statistics Using SPSS* (1st ed.). SAGE Publications Ltd.

CARE International UK. (2012). Defining Theories of Change. *Peace Building with Impact*. Published. https://www.international-alert.org/sites/default/files/publications/120123CAREDefiningTheoriesChange_FINAL.pdf

Chaplowe, S. G. (2008). *Monitoring and Evaluation Planning*. Catholic Relief Services & American Red Cross. http://www.stoptb.org/assets/documents/countries/acsm/ME_Planning_CRS.pdf

Creswell, J. W. (2014). *Research Design*. SAGE Publications.

Development Researchers' Network. (2003). *The Monitoring and Evaluation Manual of the NGOs of the Forum Solint*. http://www.cosv.org/echotrain/materiale/0B_ITA/ECHOTrain_Documenti/ECHOTrain_Documenti_Manuali/ECHOTrain_Documenti_Manuali_SOLINT/Manuale%20M&E-%20Solint.pdf

Frankel, N., & Gage, A. (2016). *M&E Fundamentals: A Self-Guided Minicourse*. https://www.measureevaluation.org/resources/publications/ms-07-20-en

Kamau, C. G., & Mohamed, H. B. (2015). Efficacy of Monitoring and Evaluation Function in Achieving Project Success in Kenya: A Conceptual Framework. *Science Journal of Business and Management*, *3*(3), 82. https://doi.org/10.11648/j.sjbm.20150303.14

Gaur, A. S., & Gaur, S. S. (2009). *Statistical Methods for Practice and Research: A Guide to Data Analysis Using SPSS (Response Books)* (Second ed.). SAGE Publications Pvt. Ltd.

Gorgens, M., & Kusek, J. Z. (2009). *Making Monitoring and Evaluation Systems Work: A Capacity Development Toolkit*. The World Bank. https://openknowledge.worldbank.org/handle/10986/2702

Grant, C., & Osanloo, A. (2014). Understanding, Selecting, and Integrating a Theoretical Framework in Dissertation Research: Creating the Blueprint for Your "House." *Administrative Issues Journal Education Practice and Research*, *4*(2). https://doi.org/10.5929/2014.4.2.9

Griffith, A. (2007). *SPSS for Dummies* (1st ed.). For Dummies.

Gudda, P. (2011). *A Guide to Project Monitoring & Evaluation*. AuthorHouseUK.

Gupta, V. (1999). *Spss for Beginners*. Authorhouse.

Hagens, C. (2008). *Hiring M&E Staff, Guidelines and Tools for Locating and Hiring Strong Monitoring & Evaluation Candidates* (G. Sharrock, Ed.). CRS and American Red Cross. http://static1.1.sqspcdn.com/static/f/752898/9984725/1296501643587/MEmodule_hiring.pdf?token=QXyaWA6a61YZs1ci%2B57uNX9g1WA%3D

IFRC. (2011). *Project/Programme Monitoring and Evaluation (M&E) Guide*. https://www.ifrc.org/Global/Publications/monitoring/IFRC-ME-Guide-8-2011.pdf

Igbokwe-Ibeto, C. J. (2012). Issues and Challenges in Local Government Project Monitoring and Evaluation in Nigeria: The Way Forward. *European Scientific Journal, 8*(18), 180–195. https://eujournal.org/index.php/esj/article/view/293

Jupp, V. (2006). *The SAGE Dictionary of Social Research Methods* (1st ed.). SAGE Publications Ltd.

Kothari, C. R. (2004). *Research Methodology: Methods and Techniques* (2nd Revised ed). New Age International (P) Ltd.

Kusek, Z. J., & Rist, R. C. (2004). *Ten Steps to a Results-Based Monitoring and Evaluation System: A Handbook for Development Practitioners*. The World Bank. https://openknowledge.worldbank.org/bitstream/handle/10986/14926/296720PAPER0100steps.pdf?sequence=1

Mishra, R. C., & Soota, T. (2005). *Modern Project Management*. New Age International Pvt Ltd Publishers.

Mugambi, F., & Kanda, E. (2013). Determinants of effective monitoring and evaluation of strategy implementation of community based projects. *International Journal of Innovative*

Research & Development, *2*(11), 67–73.
http://www.internationaljournalcorner.com/index.php/ijird_ojs/article/view/133979

Mulugeta, A. (2018). *Assessment of Practice and Challenges of Monitoring and Evaluation: The Case of Local NGOs Executing Health Projects.*
https://www.scribd.com/document/421694127/Gibi

Mushori, J. (2015). *Determinants of Effective M&E of County Government Funded Infrastructural Development Projects, Nakuru East Constituency, Nakuru County, Kenya*.
http://erepository.uonbi.ac.ke/bitstream/handle/11295/90535/Mushori_Determinants%20of%20effective%20monitoring%20and%20evaluation%20of%20county%20government%20funded%20infrastructural%20development%20projects,%20Nakuru%20east%20constituency,%20Nakuru%20county,%20Kenya.pdf;sequence=3

Njama, A. W. (2015). *Determinants of Effectiveness of a Monitoring and Evaluation System for Projects: A Case of AMREF Kenya Wash Programme*. University of Nairobi.
http://erepository.uonbi.ac.ke/handle/11295/92952

Norem, R. H., & McCorkel, C. (2008). *Capacity Building Guidance, Guidelines and Tools for Getting the Most from Your Technical Assistance*. CRS & American Red Cross.
http://static1.1.sqspcdn.com/static/f/752898/9984723/1296501640873/MEmodule_capbldg.pdf?token=6TKHqPbv9JF3d5o3O7%2FrhSV4nR0%3D

Onyango, C. O. (2017). *Assessing the Effectiveness of Monitoring and Evaluation System in the Implementation of Country Government Projects: A Case of Kirinyaga County, Kenya*.
https://www.coursehero.com/file/31742122/Masters-final-report-submissionpdf/

Otieno, F. A. O. (2019). The Roles of Monitoring and Evaluation in Projects. *Project Management Scientific Journal*, *1*(5), 41–44.
https://d1wqtxts1xzle7.cloudfront.net/59377842/PMSJ-05-019-00320190524-1885-g10hcx.pdf?1558687731=&response-content-disposition=inline%3B+filename%3DThe_Roles_of_Monitoring_and_Evaluation_i.pdf&Expire

s=1622421790&Signature=a0h~EFm6p7phv5mkqW1-Buuc2lB-iGkMC7ob7M9pkRCjlTGoFpcUqwAQGZPymJpEr9ItLksN7c~fZCA8X3i9ZtW~QzlYGN79oIt0sFwAu1NyQp6nlYHiJvilXwoLbJtAcNnm8~hIa5gLAapfNyP9Z7CTR5cWsgkGNVAE01yzaukQtmL0l2ucb4HbXTmo6zc45UJo1P6JqXKe626~UvB~VjXLUEMWoHoXwR~FXCYhkDsq4dOKyl1TGrg9Buugooi0xiMcI~hX2p~6S5Yf1u96JqM0uC4xBs2j55AjLRnsV9KtellqIw7w8gbD~eEyKlUwCdDNUAkgnXI96laQf7fRxA__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

Pallant, J. (2016). *SPSS Survival Manual* (6th ed.). Routledge.

Project Management Institute. (2017). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)–Sixth Edition* (Sixth Edition, Sixth edition). Project Management Institute.

Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students*. Prentice Hall.

Search for Common Good (SFCG), UKAID, & United States Institute of Peace. (2017). *Monitoring and Evaluation Plan Module*. https://www.dmeforpeace.org/sites/default/files/3.10%20Monitoring%20and%20Evaluation%20Plan%20Module.pdf

Smith, L., Macartney, J., & Turrall, S. (2016). Project Planning and Management. *Center for Development Environment and Policy*. Published. https://www.soas.ac.uk/cedep/ipa/file38128.pdf

Tadele, M. (2017). *Challenges of Monitoring and Evaluation of Development Programs: A Case Study of the United Nations Population Fund (UNFPA) Ethiopia*.

TechnoServe. (2016). *Brewing Prosperity in East Africa*. https://www.technoserve.org/wp-content/uploads/2016/08/Coffee-Initiative-Final-Report.pdf

TechnoServe - Homepage - Business Solutions for Fighting Poverty. (2020). TechnoServe. https://www.technoserve.org/

TripleLine. (2017). *Evaluation of the TechnoServe East Africa Coffee Initiative*. https://www.technoserve.org/wp-content/uploads/2017/04/triple-line-evaluation-of-the-coffee-initiative.pdf

Umhlaba Development Services & European Commission Civil Society Fund in Ethiopia. (2017). *Introduction to Monitoring and Evaluation Using the Logical Framework Approach*. https://eeas.europa.eu/archives/delegations/ethiopia/documents/eu_ethiopia/ressources/m_e_manual_en.pdf

Joint United Nations Programme on HIV/AIDS (UNAIDS) & Monitoring & Evaluation Reference Group (MERG). (2010). *Organizing Framework for a Functional National HIV Monitoring and Evaluation System*. https://files.unaids.org/en/media/unaids/contentassets/documents/document/2010/20080430_JC1769_Organizing_Framework_Functional_v2_en.pdf#:~:text=Organizing%20Framework%20for%20a%20Functional%20National%20HIV%20Monitoring,3%29%20identify%20areas%20for%20programme%20improvement.%20In%20addition%2C

United Nations Population Fund (UNFPA). (2004). *Programme Manager's Planning Monitoring & Evaluation Toolkit, Tool Number 4:Stakeholder Participation in Monitoring and Evaluation*. https://www.betterevaluation.org/sites/default/files/stakeholder.pdf

United Nations Development Program (UNDP). (2009). *Handbook on Planning Monitoring and Evaluating for Development Results* (Illustrated ed.). United Nations Development Program. http://web.undp.org/evaluation/handbook/documents/english/pme-handbook.pdf

Waithera, S. L., & Wanyoike, D. M. (2015). Influence of Project Monitoring and Evaluation on Performance of Youth Funded Agribusiness Projects in Bahati Sub-County, Nakuru, Kenya. *International Journal of Economics, Commerce and Management*, *3*(11), 375–394. http://ijecm.co.uk/wp-content/uploads/2015/11/31126.pdf

Walliman, N. (2011). *Research Methods*. Routledge.

Wanjiru, W. E. (2013). *Determinants of Effective Monitoring and Evaluation Systems in Non-Governmental Organizations within Nairobi County, Kenya*. Kenyatta University Institutional Repository. https://ir-library.ku.ac.ke/bitstream/handle/123456789/10205/Determinants%20of%20effective. . ..pdf?sequence=1&isAllowed=y

What does Cronbach's alpha mean? | SPSS FAQ. (2021). UCLA Statistical Consulting. https://stats.idre.ucla.edu/spss/faq/what-does-cronbachs-alpha-mean/

World Bank Operations Evaluation Department, Evaluation Capacity Development. (2004). *Monitoring & Evaluation: Some Tools, Methods & Approaches*. The World Bank. https://www.fsnnetwork.org/sites/default/files/monitoring__evaluation_-_world_bank.pdf

APPENDICES

Appendix A: letter of request for cooperation

ቅድስት ማርያም ዩኒቨርስቲ
ድኅረ-ምረቃ ት/ቤት

St. Mary's University
School of Graduate Studies

☎+251-11-552-45 37/66 ✉1211, 18490 Fax 552 83 49 e-mails: sgs@smuc.edu.et, Addis Ababa, Ethiopia

Ref No: smu-0785/20
Date: Jan 17, 2020

Request for Cooperation

To: Techno Serve Ethiopia
Addis Ababa, Ethiopia

Ms. **Emnet Solomon,** ID No. **SGS/0561/2011A** is a graduate student in the department of **Project Management**. She is working on her Thesis entitled **"The Effectiveness of Monitoring and Evaluation Practices in the case of Techno Serve Ethiopia."** and would like to collect data from your organization.

Therefore, I kindly request your good office to allow her to access the data she needs for her research.

Any assistance rendered to her is highly appreciated.

Sincerely

Hamere Yimer
Guidance Counselor & Thesis Coordinator

Appendix B: research questionnaire for respondents

Dear Respondents,

I am a postgraduate student pursuing my master's degree in Project Management at St. Mary's University, Addis Ababa. As part of my studies, I am researching **"FACTORS AFFECTING THE EFFECTIVENESS OF MONITORING AND EVALUATION PRACTICES: IN THE CASE OF TECHNOSERVE ETHIOPIA, COFFEE INITIATIVE PROGRAM".**

In this regard, you have been selected to take part in this study as a respondent. Your response will contribute a lot to 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. All information provided will be treated with utmost confidentiality as the data collected will be used for this academic research only. I thank you in advance for your time and cooperation.

Sincerely,

Emnet Solomon

Email: emasolsw@gmail.com

Mobile: +251911442747

N.B. Please fill in the required information in the spaces provided or tick (√) where necessary.

SECTION I: BACKGROUND INFORMATION OF THE RESPONDENTS

1. Gender: Male ☐ Female ☐

2. Age: 20-30 ☐ 31-40 ☐

   41-50 ☐ >51 ☐

3. Academic Qualification: Diploma ☐ BSc/BA ☐

   MSc/MA ☐ PhD ☐

4. Work experience in TechnoServe Ethiopia: 0-3 ☐ 4-5 ☐

   6-10 ☐ > 10 ☐

5. Current working position: Admin & Finance ☐ Project Manager ☐

   Project Staff ☐ M&E ☐

SECTION II: EFFECTIVNESS OF M&E PRACTICES

The following statements are related to M&E practices and its effectiveness in projects or programs implementation in the organization. Please indicate your level of agreement using the scale:

5 – Strongly agree 4 – Agree 3 – Neutral 2 – Disagree 1 – Strongly disagree.

Statements	5	4	3	2	1
M&E objectives are achieved effectively.					
M&E activities are carried out with in schedule.					
Results and findings from M&E are relevant for the success of projects.					
The cost of M&E practices is within budget.					
Stakeholders are accordingly responsible for the effectiveness of M&E practices.					
The level of beneficiary satisfaction is high due to the effectiveness of M&E.					
The involvement of management enhances the effectiveness of M&E activities and credibility of the findings.					

SECTION III: FACTORS THAT AFFECT THE EFFECTIVNESS OF M&E PRACTICES

A) M&E Plan

The following statements relate to the influence of M&E Plan on the effectiveness of M&E practices. Please indicate your level of agreement using the scale:

5 – Strongly agree 4 – Agree 3 – Neutral 2 – Disagree 1 – Strongly disagree.

Statements	5	4	3	2	1
Projects have functional M&E plan available.					

The design of M&E system starts simultaneously as the overall project planning and implementation.					
Project staff and key stakeholders are involved in the preparation of M&E plan.					
M&E plan have indicators that are linked to the objectives of the project.					
Planning for M&E considers all project activities and is open for adjustments.					
Project Managers ensures that there is M&E Plan in place before starting a project.					

B) Availability of Funds

The following statements relate to how Availability of Funds can affect the effectiveness of M&E practices. Please indicate your level of agreement using the scale:

5 – Strongly agree 4 – Agree 3 – Neutral 2 – Disagree 1 – Strongly disagree.

Statements	5	4	3	2	1
The organization allocates sufficient fund for M&E practices.					
There is independency in the budgetary decisions for M&E practices.					
The organization ensures timely provision of funds for M&E.					
Funds allocated for M&E are used for M&E activities only.					
Funds allocated for M&E practices are carefully estimated and the actual expenditure is carefully monitored.					

C) M&E Technical Expertise

The following statements relate to how Technical Expertise of M&E staffs can affect the effectiveness of M&E practices. Please indicate your level of agreement using the scale:

5 - Strongly agree 4 - Agree 3 – Neutral 2 - Disagree 1 - Strongly disagree.

Statements	5	4	3	2	1
There's adequate supply of skilled human resource for projects and M&E practices.					
Project and M&E staffs are given clear roles and responsibilities befitting their expertise.					
M&E staffs can determine how project's lessons learned are produced, communicated and perceived.					
M&E staff plays a key role in providing a functional advice in an implementation of a project.					
The organization provides opportunities for project staff to take part in capacity building or training.					

D) Stakeholder's Participation

The following statements relate to how active participation of stakeholders can have an effect on the effectiveness of M&E practices. Please indicate your level of agreement using the scale:

5 - Strongly agree 4 – Agree 3 – Neutral 2 – Disagree 1 - Strongly disagree.

Statements	5	4	3	2	1
Stakeholders are adequately involved in designing and planning M&E activities.					
The organization involves the stakeholders in the identification of indicators.					
Stakeholders are involved in M&E decision making process.					
Stakeholder's feedback is sought during M&E					

processes.					
M&E results and findings are communicated to the stakeholders.					

E) Role of Management

The following statements relate to how role of management can have an effect on the effectiveness of M&E practices. Please indicate your level of agreement using the scale:

5 – Strongly agree 4 – Agree 3 – Neutral 2 - Disagree 1 – Strongly disagree.

Statements	5	4	3	2	1
Management actively participates in designing and planning M&E activities.					
Management ensures the provision of adequate resources to M&E practices.					
Management guarantees that project staff are provided with the required training in M&E.					
Management properly uses M&E findings in decision making processes.					
Management clearly communicates M&E results.					
Organization's policy supports M&E activities.					

End!

Thank you again for your genuine and honest response!!!

Appendix C: SPSS output

Regression Results for the Dependent and Independent Variables

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	"Role of Management", "M&E Plan", "Availability of Funds", "Stakeholder's Participation", "Technical Expertise	.	Enter

a. Dependent Variable: "Effectiveness of M&E"

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.745[a]	.555	.521	.31497

a. Predictors: (Constant), "Role of Management", "M&E Plan", "Availability of Funds", "Stakeholder's Participation", "Technical Expertise"

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.160	5	1.632	16.450	.000[b]
	Residual	6.547	66	.099		
	Total	14.707	71			

a. Dependent Variable: "Effectiveness of M&E"

b. Predictors: (Constant), "Role of Management", "M&E Plan", "Availability of Funds", "Stakeholder's Participation", "Technical Expertise"

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.254	.574		2.184	.033		
	"M&E Plan"	.221	.083	.251	2.664	.010	.759	1.318
	"Availability of Funds"	.290	.092	.294	3.158	.002	.779	1.284
	"Technical Expertise"	.287	.097	.284	2.965	.004	.735	1.360
	"Stakeholder's Participation"	.195	.074	.250	2.630	.011	.746	1.340
	"Role of Management"	.271	.102	.241	2.658	.010	.824	1.214

a. Dependent Variable: "Effectiveness of M&E"

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	"M&E Plan"	"Availability of Funds"	"Technical Expertise"	"Stakeholder's Participation"	"Role of Management"
1	1	5.940	1.000	.00	.00	.00	.00	.00	.00
	2	.023	15.986	.00	.03	.16	.01	.42	.03
	3	.017	18.968	.02	.47	.01	.00	.09	.16
	4	.009	25.055	.02	.43	.22	.11	.38	.19
	5	.008	27.701	.01	.00	.36	.87	.10	.00
	6	.003	44.125	.95	.07	.25	.00	.00	.62

a. Dependent Variable: "Effectiveness of M&E"

Results for Tests of Normal Probability and Linearity

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.075	72	.200*	.973	72	.123

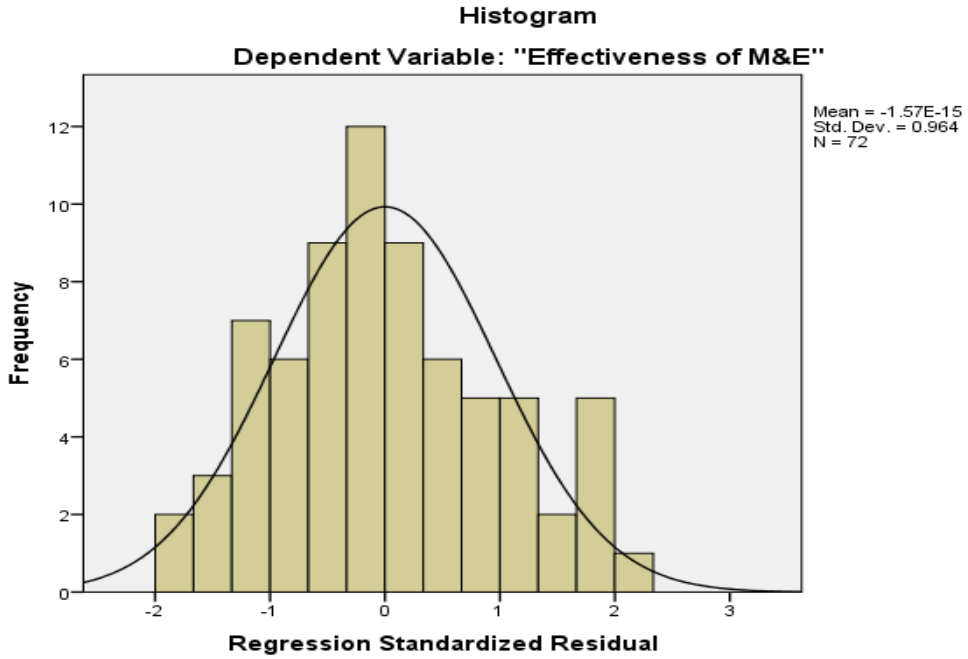
*. This is a lower bound of the true significance.

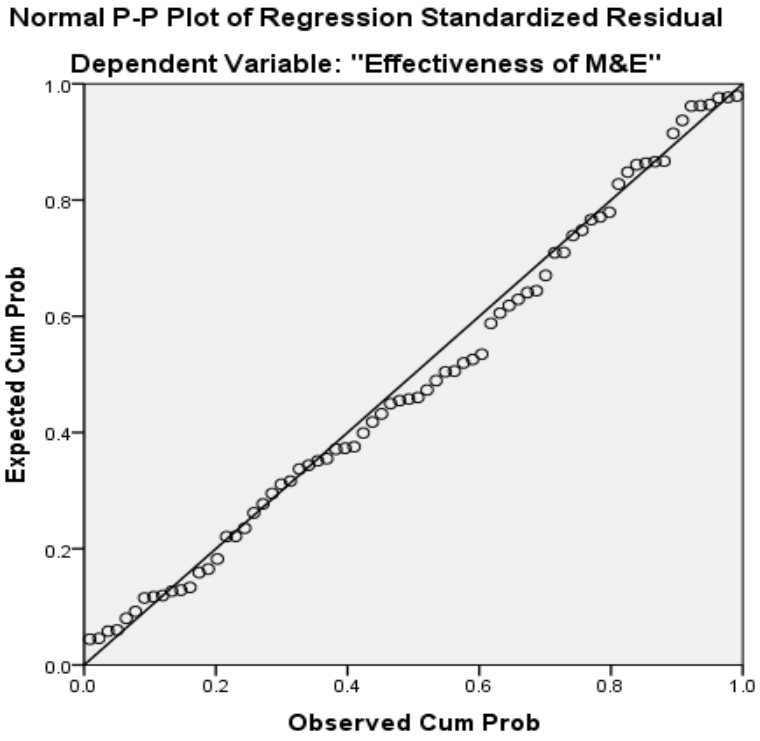
a. Lilliefors Significance Correction

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.2934	4.6566	3.8829	.33901	72
Residual	-.53608	.64077	.00000	.30367	72
Std. Predicted Value	-1.739	2.282	.000	1.000	72
Std. Residual	-1.702	2.034	.000	.964	72

a. Dependent Variable: "Effectiveness of M&E"




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: "Effectiveness of M&E"
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0