



SEEK WISDOM, ELEVATE YOUR INTELLECT AND SERVE HUMANITY !

**Addis Ababa University**  
**አዲስ አበባ ዩኒቨርሲቲ**



**An Assessment of Monitoring and Evaluation of Participatory  
Small-Scale Irrigation Development Program (PASIDP) at the  
Ministry of Agriculture & Natural Resources**

**By: BEKALU GENENE**

**A Project Work submitted to Addis Abeba University College of Business and  
Economics School of Commerce in Partial fulfillment of the requirements for  
the Master of Arts Degree in Project Management**

**June 2017**

**ADDIS ABEBA UNIVERSITY**  
**SCHOOL OF COMMERCE**

**An Assessment of Monitoring and Evaluation of Participatory  
Small-Scale Irrigation Development Program (PASIDP) at the  
Ministry of Agriculture & Natural Resources**

**By: BEKALU GENENE**

**A Project Work submitted to Addis Abeba University College of Business and  
Economics School of Commerce in Partial fulfillment of the requirements for  
the Master of Arts Degree in Project Management**

**Advisor: Abdurazak Mohammed (PhD)**

**June 2017**

**Addis Abeba, Ethiopia**

**ADDIS ABEBA UNIVERSITY**  
**SCHOOL OF COMMERCE**

**An Assessment of Monitoring and Evaluation of Participatory Small-Scale  
Irrigation Development Program (PASIDP) at the Ministry of Agriculture &  
Natural Resources**

**A Project Work submitted to Addis Abeba University College of Business and  
Economics School of Commerce in Partial fulfillment of the requirements for  
the Master of Arts Degree in Project Management**

**By: Bekalu Genene**

**Approved by:**

Advisor	Signature	Date
<u>Abdurazak Mohammed (PhD)</u>	_____	_____

Internal Examiner	Signature	Date
<u>Teklegiorgis Assefa (Asst. Prof.)</u>	_____	_____

External Examiner	Signature	Date
<u>Afework Getachew (PhD)</u>	_____	_____

## DECLARATION

I, Bekalu Genene, declare that this project work entitled— An Assessment of Monitoring and Evaluation of Participatory Small-Scale Irrigation Development Program (PASIDP) at the Ministry of Agriculture & Natural Resources is the outcome of my own effort and that all sources of materials used for the study have been duly acknowledged.

I have produced it independently with the guidance of my advisor. This study has not been submitted for any degree in this University or any other University. It is prepared for the partial fulfillment of the degree of Master of Art in Project Management.

Bekalu Genene

Signature \_\_\_\_\_

Date\_\_\_\_\_

## **Statement of Certification**

This is to certify that Bekalu Genene has carried out this project work titled “**An Assessment of Monitoring and Evaluation of Participatory Small-Scale Irrigation Development Program (PASIDP) at the Ministry of Agriculture & Natural Resources**” under my supervision. This work is original and sufficient for submission for the partial fulfillment for the award of Master of Art Degree in Project Management.

**Abdurazak Mohammed (PhD)**

**Signature** \_\_\_\_\_

**Date** \_\_\_\_\_

## **ACKNOWLEDGEMENT**

I would like to praise the lord for having always been by my side in every stride I had taken in life. What has been done for me has always been greater than what I asked for. Now; he made this possible, THANK YOU LORD. My beloved wife and children, thank you for your motivation and understanding through the time of my study.

Realization of this project work wouldn't have been possible without referring to the works of several scholars; my appreciation goes to them all. I would also like to thank my advisor for his resourceful comments that shaped the project work. My gratitude goes to all respondents of the study for providing me their precious time and effort. Last but not least, hats off to Ato Dagim Kassahun for his support during the course of undertaking the study.

## Table of Content

Declaration.....	i
Statement of Certification.....	ii
Acknowledgement.....	iii
Table of Contents .....	iv
List of Figures .....	vi
List of Tables .....	vii
Acronyms and Abbreviations.....	viii
Abstract.....	ix
<b>CHAPTER ONE: INTRODUCTION</b>	
1.1. Background of the Study.....	1
1.2. Statement of the Problem.....	3
1.3. Research Questions .....	4
1.4. Objectives of the Study .....	4
1.5. Significance of the Study .....	5
1.6. Delimitation of the Study .....	5
1.7. Limitations of the Study .....	6
1.8. Operational Definitions .....	6
1.9. Organization of the Study.....	7
<b>CHAPTER TWO: LITERATURE REVIEW</b>	
2.1. Theoretical Literature Review	
2.1.1. Monitoring & Evaluation.....	8
2.1.2. Differences & Complementarities of M&E.....	13
2.1.3. M&E Frameworks.....	15
2.1.4. Importance of M&E.....	17
2.1.5. Methods & Techniques of M&E.....	18
2.1.6. Steps to Conduct Project M&E.....	18
2.1.7. Overview and Types of Indicators.....	25
2.1.8. Drivers of M&E Worldwide.....	26
2.1.9. M&E Practices.....	28
2.1.10. Approaches of M&E.....	32

2.1.11. Designing M&E Systems.....	32
2.1.12. Data Management in M&E System.....	33
2.2. Empirical Literature Review.....	35
2.3. Conceptual Framework of the Study.....	39

### **CHAPTER THREE: RESEARCH METHODOLOGY**

3.1. Research Design.....	40
3.2. Target Population.....	40
3.3. Sample Size.....	40
3.4. Sampling Technique.....	41
3.5. Data Source & Data Collection Tools and Techniques .....	42
3.6. Procedure of Data Collection.....	43
3.7. Data Analysis Method.....	43
3.8. Ethical Consideration.....	43

### **CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, AND INTERPRETATION**

4.1. Response Rate.....	44
4.2. Demography & General Background of Respondents.....	45
4.3. Monitoring & Evaluation Plan.....	46
4.4. M&E Staff Capacity.....	48
4.5. M&E Data Management and Quality.....	50
4.6. Program Progress Monitoring.....	53
4.7. Baseline Survey.....	55
4.8. M&E Practice.....	56
4.9. M&E Challenges of PASIDP at the NPCMU.....	59
4.10. Interview Analysis.....	60
4.11. Document Analysis.....	63

### **CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS**

5.1. Conclusions.....	65
5.2. Recommendations.....	67

### **References**

#### **Annexes**

Annex I: Questionnaire

Annex II: Interview Questions to the Program Coordinator

Annex III: Interview Questions to IFAD

Annex IV: Interview Questions to Member of the National Steering Committee

## List of Figures

Figure 1.1. Map of the Program Area.....	2
Figure 2.1. Monitoring Questions & the Log frame.....	9
Figure 2.2. Evaluation Questions & the Log frame.....	11
Figure 2.3. Conceptual Framework of the Study.....	39

## List of Tables

Table 2.1. Major Differences of M&E .....	14
Table 2.2. Types of Indicators & Purpose.....	25
Table 4.1. Demography and General Background of Respondents.....	45
Table 4.2. Stakeholders Involvement n the M&E Plan.....	46
Table 4.3. Type of M&E Plan.....	47
Table 4.4. Reason for not having M&E Plan.....	47
Table 4.5. Was there Adequate Budget for M&E Training.....	48
Table 4.6. Was there Adequate & Consistent M&E Training at the NPCM.....	49
Table 4.7. Were there Adequate M&E Experts.....	49
Table 4.8. Experience Sharing & Adaptation of best Practices.....	50
Table 4.9. MIS to Assist M&E.....	50
Table 4.10. Data Quality Controlling Mechanism.....	51
Table 4.11. Standard Data Collection Tools Exist.....	51
Table 4.12. Consistent use of Data Collection Tools at all Levels.....	52
Table 4.13. Document Lessons Learnt.....	52
Table 4.14. Regular Data Collection based on the Plan.....	53
Table 4.15. Monitoring Actual Progress of the Program against the Plan.....	53
Table 4.16. Monitoring Progress of Project Activity Schedule.....	54
Table 4.17. Monitoring Financial Performance.....	54
Table 4.18. Timely Reporting.....	54
Table 4.19. Baseline Survey Conducted.....	55
Table 4.20. All Stakeholders Satisfied with the Baseline.....	56
Table 4.21. Reporting Practice of the NPCMU.....	56
Table 4.22. Indicators Linked to the Objectives.....	57
Table 4.23. Indicators Linked to Inputs, Outputs, Outcomes and Impacts.....	57
Table 4.24. Consistent Indicators at all levels .....	58
Table 4.25. Mechanism to Measure Indicator Performance.....	58
Table 4.26. M&E Challenges of PASIDP at the NPCMU.....	59

## **Acronyms and Abbreviation**

ADLI	Agricultural Development Led Industrialization
CRS	Catholic Relief Services
DAs	Development Assistants
ECPE	Ethiopia Country Program Evaluation
EMI	Ethiopian Management Institute
FAO	Food and Agricultural Organization
IFC	International Finance Corporation
IFAD	International Fund for Agricultural Development
IFRC	International Federation of Red Cross and Red Crescent Societies
IUCN	International Union for Conservation of Nature
MIS	Management Information Systems
MoANR	Ministry of Agriculture and Natural Resources
MoFED	Ministry of Finance and Economic Development
MoWR	Ministry of Water Resources
NASA	National Aeronautics and Space Administration
NGO	Non Governmental Organization
NPCMU	National Project Coordination and Management Unit
NSC	National Steering Committee
OECD	Commerce Organization for Economic Cooperation and Development
PASDEP	Plan for Accelerated and Sustainable Development to End Poverty
PASIDP	Participatory Small-Scale Irrigation Development Program
PSNP	Productive Safety Net Program
RPCMU	Regional Project Coordination and Management Unit
RSC	Regional Steering Committee
SNNPR	Southern Nations Nationalities and Peoples' Region
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WPC	World Parks Congress
WUAs	Water User Associations (WUAs)

## ABSTRACT

*This project work was prepared with the objective of identifying challenges that affected the M&E system of PASIDP at the Ministry of Agriculture & Rural Development-National Program Coordination and Management Unit. To achieve its objective, the study employed descriptive research approach and used both primary and secondary data. Questionnaire, interview, and document review were used as data collection tools. Furthermore, it employed purposive or judgmental sampling technique. Data was analyzed using Statistical Package for Social Science (SPSS) and was presented in the form of tables showing frequencies & percentages with detail interpretation. The study revealed that the M&E system of PASIDP at the NPCMU had several challenges. Some of the M&E problems identified were lack of separate M&E plan, lack of MIS to facilitate the M&E activities, staff capacity limitation, inability to prepare baseline survey to facilitate program evaluation, problem of ensuring data quality coming from regions, and inadequate project progress monitoring. Based on the findings of the study, recommendations were given to strengthen the M&E system of PASIDP II, which is in the first of its seven years program, at the NPCMU. Recommendations include preparing separate M&E plan for PASIDP II, developing MIS system to facilitate M&E activities, providing adequate & relevant training to develop capacity of M&E and other experts at the NPCMU, preparing baseline survey within the first year of PASIDP II implementation, developing mechanism to ensure data quality coming from regions, conducting timely and consistent project progress monitoring.*

**Key Words:** *M&E plan, MIS (Management Information System), Project Progress Monitoring, Data Quality, Staff Capacity,*

## CHAPTER ONE

### INTRODUCTION

#### 1.1. Background of the study

Agriculture is the back bone of the Ethiopian economy in terms of income, employment and generation of export revenue, its contribution to GDP, although showing a slight decline over the years has remained very high at approximately 44% (Fitsum et al., 2009). Ethiopia's agricultural policy is based on the agricultural development led industrialization (ADLI), where increasing agricultural productivity in smallholder agriculture is the government's top priority (MOA, 2010).

However, in many parts of the country, agricultural development is hampered by recurrent drought, which over the year has increased both in frequency and severity. In government policy documents, irrigation development has already been identified as a means for sustainable economic growth and rural development, and is considered as a cornerstone of food security and poverty reduction (MoWR 2002, MoFED 2006). According to FAO (2003), smallholder irrigation development has shown throughout the developing world that it can be used as a key drought mitigation measure and as a vehicle for long-term agricultural development.

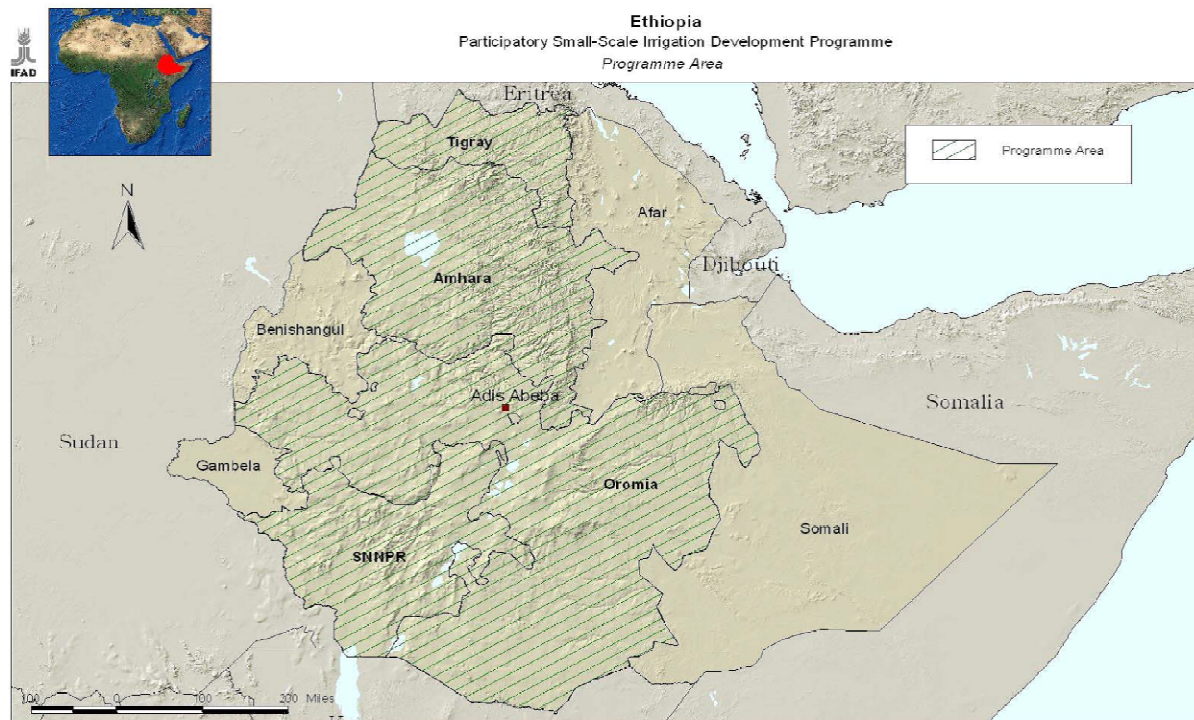
In light of this, the International Fund for Agricultural Development (IFAD) and Ministry of Agriculture and Rural Development (MoANR) had been working on Participatory Small Scale Irrigation Development program (PASIDP), which was a seven year program (March 2008 to March 2015) with a total cost of US \$57.7 Million. It was financed by International Fund for Agricultural Development (IFAD) through loan & grant, Government of Ethiopia, and beneficiaries. The program's main goal was to improve food security, family nutrition and poor farming households in Amhara, Oromia, Tigray and SNNPR regional states. Its primary objective was to develop a sustainable, farmer-owned and managed, system of small-scale irrigated agriculture. It had three components: (i) institutions' development; (ii) small-scale irrigation development; and, (iii) agricultural development (PASIDP design document, 2007).

The Program was supervised directly by IFAD while the National Steering Committee (NSC) provided guidance in management, coordination, and implementation of the program. The National Program Coordination and Management Unit (NPCMU) at the MoANR were responsible for the overall project coordination and ensured that the proposed program was

executed in accordance with the plan. Program Coordination and Management Unit (RPCMU) at regional agriculture bureaus, Woreda, and kebele organizations were also key implementers of the program.

It is important that such huge projects with very critical objectives should have a strong Monitoring and Evaluation system. According to Berhanu et al. (2011), implementation of development project is important to reduce poverty and achieve sustainable livelihood. The success and speed with which development project is achieved depends in part on the performance of the institution working to promote the development project. Thus, any institution working in implementing development project is concerned with the need to assess and understand its performance and to improve relevance, effectiveness and efficiency of project through M&E.

Consequently, it is very crucial to assess challenges that affected M&E system of PASIDP at the NPCMU and provide recommendations to strengthen M&E system of PASIDP II, the program that is in its first year of implementation at the MoANR. PASIDP II has three times the budget of PASIDP hence, needs a very strong M&E system.



Source: IFAD  
The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof

**Fig 1.1: Map of the Program Area**

## **1.2. Statement of the Problem**

The Ethiopian government is undertaking several development programs with and without the support of International partners. Most of these projects are intended to alleviate social and economic burdens of the society. The stakes of properly managing and supervising these projects goes beyond the mere purpose of completing projects on time, cost, quality or meeting desired expectations. For a country like Ethiopia where there is shortage of resources, especially finance, development projects don't afford to blunder. However, assessment of monitoring and evaluation capacity in Ethiopia reveal gaps in both institutional and individual skills development for monitoring and evaluation, according to a report on capacity building in Africa (Ethiopia) by the World Bank (2006). According to Ethiopia Country Program Evaluation (ECPE, 2010), in Ethiopia, most of the government organizations do not have appropriate monitoring and evaluation system for their projects. There are many misconceptions and myths surrounding M&E like; it's difficult, expensive, requires high level skills, time and resource intensive, only comes at end of a project and it is someone else's responsibility (International Finance Corporation, IFC,2008). IFC evaluated that there is often a sense of frustration because expectations of M&E activities appear to outstrip resources and skill sets (IFC, 2008).

The researcher's preliminary review on M&E system of the program found out that there was no written policy framework for carrying out the M&E activities at the NPCMU. For US \$57.7 Million program, it was wrong not to have a formal written M&E policy framework. In addition, even though the program was completed in September 2015, there was no separate study conducted on the efficiency and effectiveness of the M&E system at the NPCMU that was managing and supervising the program for seven years. For this reason, challenges that affected M&E activities at the NPCMU were not properly identified.

According to supervision report conducted by IFAD, the M&E activities of the program required strengthening. The same document recommended the strengthening of the M&E system at the National Program Coordination and Management Unit (NPCMU). In addition, the design document of the project indicated that there would be a delay in deploying the services of M&E experts both at national and regional program coordination and management units (PCMUs).

Despite the fact that one of the program components of PASIDP was assisting Program Management, M&E, and Knowledge Management, the program completion report stated that there were significant challenges with the M&E system of the program. These facts call for conducting a study on the M&E system of PASIDP at the NPCMU. Consequently, these challenges had to be identified and recommendation should be given to strengthen the M&E system at the NPCMU that is currently managing second phase of the program, PASIDP II; US \$145.3 Million seven years program, which is in its first year of implementation.

It is critically important that development projects such as PASIDP with pertinent development objectives and huge budget have to be monitored and evaluated strictly. Failure to seriously set up sound Monitoring and Evaluation (M&E) policies, procedures, guidelines, and tools to conduct project monitoring and evaluation would result in a very catastrophic situation and the country can't afford to waste scarce resources that could be used on other highly strategic development projects. As a result, the study is aimed to assess M&E practices at the NPCMU and to identify challenges that affected the M&E system of PASIDP. The study findings are believed to strengthen M&E system of PASIDP II at the NPCMU.

### **1.3. Research Questions**

In order to investigate issues stated in the problem statement, the following research questions were addressed:

- What were the Monitoring and Evaluation practices/activities at the National Program Coordination and Management Unit
- What were the challenges that affected Monitoring and Evaluation system of PASIDP at the NPCMU

### **1.4. Objectives of the study**

The study has the following general and specific objectives:

#### **1.4.1. General Objective**

The general objective of the study was to identify challenges that affected the M&E system of PASIDP at the National Program Coordination and Management Unit in the Ministry of Agriculture & Rural Development.

### **1.4.2. Specific Objectives**

Based on the general objective of the study and the research questions above, the study had the following specific objectives.

- To assess the M&E practice at the NPCMU.
- To identify challenges that affected the monitoring and evaluation system of PASIDP at the NPCMU

### **1.5. Significance of the Study**

Monitoring and evaluation is an important ingredient of the project management concept. If implementation of projects is not regularly monitored, the path that will take the project to attain its objectives will not be paved and corrective actions shall not be taken in case projects are off track. Besides, program evaluation will help organizations to assess whether they have met the purposes of the entire project. If evaluations are not properly conducted with clear and precise baseline indicators, impact of the program would not be identified. Hence, the research had studied the M&E practice and identified challenges that affected the M&E system of PASIDP at the NPCMU and forwarded recommendations to strengthen the M&E system of PASIDP II. Findings of the study would help the Ministry of Agriculture and Rural Development (MoANR) to strengthen the M&E system of PASIDP II which is in its first year of implementation. In addition to this, the study has the following significance:

- Development partners of the project such as International Fund for Agricultural Development may find results of the study useful to strengthen the M&E system of PASIDP II or to draw lesson for future projects
- The study would be reference to other government or NGO owned development projects to strengthen their M&E system
- Other researchers who are interested to conduct a research in M&E may find important points from the findings of the study

### **1.6. Delimitation of the Study**

PASIDP was implemented in four regional states and the M&E system was stretched from the National program Coordination and Management Unit (NPCMU) to the regional program Coordination and Management Units (RPCMU), woredas, and kebeles. These bodies play their own roll to complete the full picture of the M&E system of the project. However, the study was

limited to the National Program Coordination and Management Unit situated at the federal level. The study didn't investigate M&E system at four regional bureaus, woredas, and kebeles rather focused on the project coordination unit at the federal level.

### **1.7. Limitations of the Study**

The study has the following limitations:

- Ministry of Agriculture and Natural Resources (MoANR) has several projects. The study is limited to PASIDP project.
- The study is based on data collected from people at the NPCMU and IFAD and did not contact regional program coordination and management unit (RPCMU), woreda and Kebele implementers.
- The time available to review the M&E system in each region, woreda, and kebele is limited

### **1.8. Operational Definitions**

The definitions of terms according to the context they are used in the research are stated as follows:

**Monitoring:** It is the routine collection and analysis of information to track progress against set plans and check compliance to established standards. It helps identify trends and patterns, adapt strategies and inform decisions for project/program management (IFRC M&E Guide 2011).

**Evaluation:** is an assessment, as systematic and objective as possible, of an ongoing or completed project, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, developmental efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors (IFRC M&E Guide 2011).

**Project/Program:** is a temporary endeavor undertaken to create a unique product or service (Project Management Body of Knowledge 2001).

**Irrigation:** FAO briefly defines irrigation as the supply of water to agricultural crops by artificial means, designed to permit farming in arid regions and to offset the effect of drought in semi-arid region (FAO, 1997).

**Practice:** Is meant to mean the actual application or use of monitoring and evaluation system within the organization.

### **1.9. Organization of the study**

The study is organized in five chapters. The first chapter discusses about the introduction of the study. The second chapter presents theoretical literature, empirical evidence and conceptual framework of the study. Chapter three discusses the research methodology. Chapter four presents data presentation, analysis and interpretation while the fifth and final chapter discusses about conclusions and recommendations of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter presents the related literature review, empirical evidences and conceptual framework of the study. It is organized in three sections. The first section presents theoretical review of related literature in Monitoring and Evaluation. The second section presents empirical literature review while the third and final section presents conceptual framework of the study.

#### **2.1. Theoretical Literature Review**

##### **2.1.1. Monitoring and Evaluation**

###### **2.1.1.1. Project Monitoring**

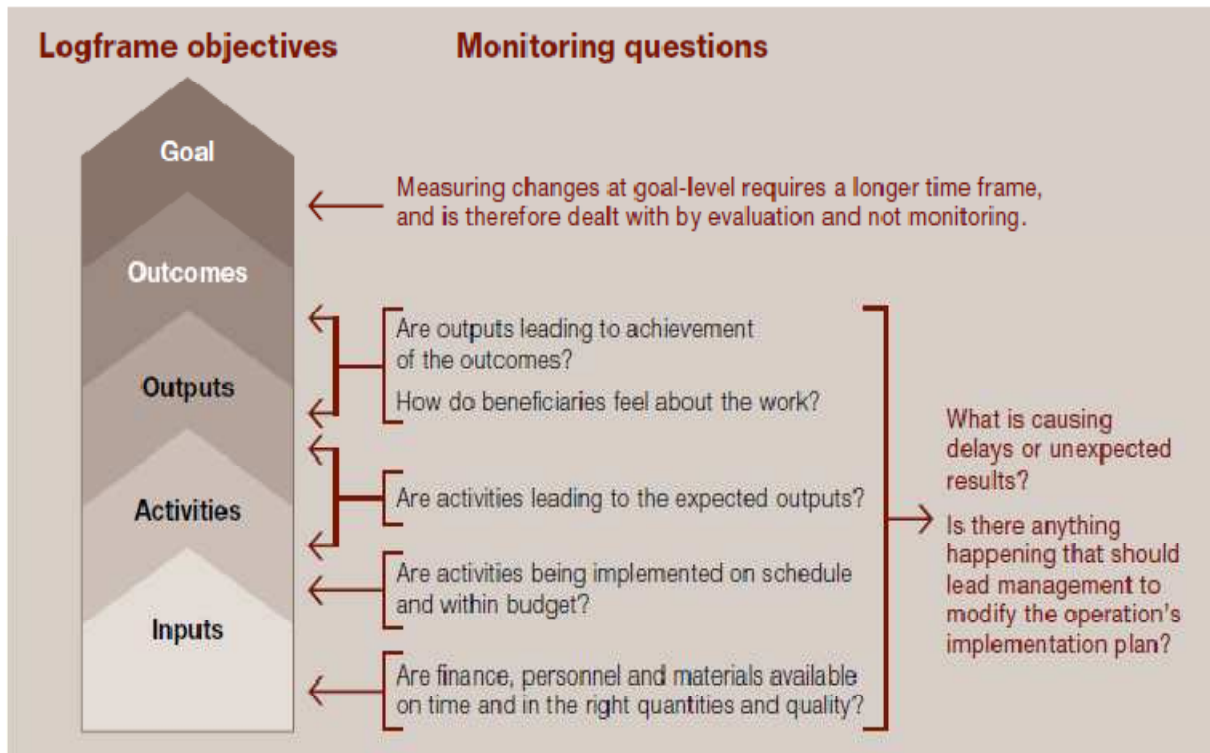
Different scholars and organizations have given several definitions to project Monitoring. (USAID, 2012) defines it as an ongoing process that indicates whether desired results are occurring or not. It aims to measure progress toward planned results, usually through preselected indicators. World Bank (2011) defines it as a continuing function that uses systematic collection of data on specified indicators to provide management and main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds. (UNDP, 2009, 16) defines Monitoring as a continuing function that aims primarily to provide the management and main stakeholders of an ongoing intervention with early indications of progress, or lack thereof, in the achievement of results. (EMI, 2014) defines Monitoring as a tool for project managers to use in judging and influencing the progress of implementation, it is a management activity carried at different levels aimed at ensuring that the progress of a project conforms to its plan. International Federation of Red Cross and Red Crescent Society M&E guide 2011 states that Monitoring is the routine collection and analysis of information to track progress against set plans and check compliance to established standards.

According to MoFED (2008), Monitoring is defined as a systematic and continuous process of collecting, analyzing, and using information for the purpose of management and decision making. Moreover, Berhanu et al. (2010) and MoFED (2008) stated that monitoring involves the collection of routine data that measures progress towards achieving project objectives and helps to understand progress in the intervention performance over time. It is an internal project activity

and an integral part of day-to-day activities which involves establishing indicators of efficiency and effectiveness, analyzing information and using information to inform day-to-day management.

According to International Union for Conservation of Nature [IUCN] (2005), the main aim of monitoring is to be able to detect problems at an early stage where it is still possible to change aspects of the project and thus turn it towards a successful outcome. Furthermore, monitoring contains elements of accountability in that it confirms whether projects conform to agreements and project plans. However, it is important that the problem solving and forward looking perspective is stressed.

International Federation of Red Cross and Red Crescent Societies M&E Guide 2011 defines Monitoring as the routine collection and analysis of information to track progress against set plans and check compliance to established standards. It helps identify trends and patterns, adapt strategies and inform decisions for project/program management. Key monitoring questions in relation to the log frame are depicted in the following diagram.



Source: International Federation of Red Cross and Red Crescent Societies M&E Guide 2011

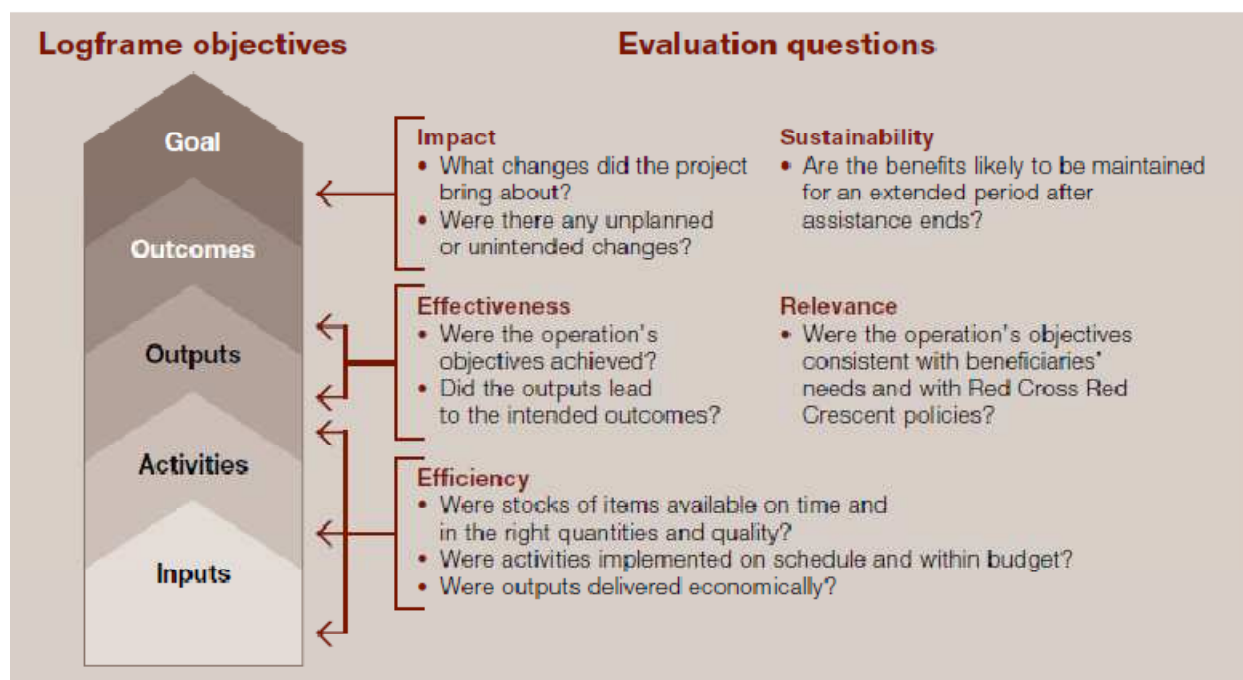
**Fig 2.1: Monitoring Questions and the log frame**

### **2.1.1.2. Project Evaluation**

Different scholars and organizations have given several definitions to Evaluation. MoFED (2008) and Berhanu et al. (2010) defined it as a process that attempts to determine, as systematically and objectively as possible, the achievement of result in light of relevance, efficiency, effectiveness, impacts and sustainability of project activities. It is the process of determining the worth or significance of a development activity, policy or program to determine the relevance of objectives, the efficiency of design and implementation, the efficiency of resource use, and the sustainability of results. An evaluation should incorporate lessons learned into the decision-making process of both partner and donor. Ethiopian Social Accountability Program II (ESAP II, 2013) defines Evaluation as the systematic and objective assessment of ongoing or completed interventions, covering the design, implementation and results.

UNDP (2009) define evaluation as a selective exercise attempting to systematically and objectively assess progresses toward achievement of outcome, meaning evaluation is not a onetime event, but an exercise involving assessments of differing scope and depth carried out at several points in time in response to evolving needs for evaluative knowledge and learning during the effort to achieve an outcome. Evaluation ensures assessment of the projects and their variables in terms of their: relevance to expected outcomes, effectiveness in dealing with identified problems, efficiency of the use of resources, impact of the project outcome, and sustainability.

The IFRC's M&E guide 2011 defines evaluation as an assessment, as systematic and objective as possible, of an ongoing or completed project, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, developmental efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors. The following diagram summarizes key evaluation questions as they relate to the log frame's objectives, which tend to focus more on how things have been performed and what difference has been made.



Source: International Federation of Red Cross and Red Crescent Societies M&E Guide 2011

**Fig. 2.2: Evaluation Questions and the log frame**

Evaluation can be divided in terms of periods on which the evaluation is conducted, who conducts the evaluation and evaluation Technicality or Methodology. In terms of the periods on which the evaluation is conducted there are four types of evaluations: Ex-ante evaluation, mid-term evaluation, terminal evaluation and ex-post evaluation.

- 1. Ex-ante Evaluation (Start-up evaluation):** is a form of evaluation conducted prior to start up of implementation of a project/program. It is carried out in order to determine the needs and potentials of the target group and its environment, and to assess the feasibility, potential effects and impacts of the proposed program/project. At a later stage the effects and impacts of the program/ project can be compared with this base line data (EMI, 2014).
- 2. Mid-term Evaluation:** This type of evaluation is carried out while the project is underway or in progress. Such evaluations are conducted relatively early in the mid-term of the project life and are usually external assessments. What distinguishes it from terminal and ex-post evaluations is that it facilitates correction to the project based on findings and recommendations after the evaluation (EMI, 2014).

3. **Terminal/Summative Evaluation:** It is conducted when the funding for the intervention or the whole project activity comes to an end. But this may not mean that the services and inputs being supplied by the program/project terminate. In the terminal evaluation, in addition to the existing records, documents and outputs, an inquiry should be made for secondary data that are relevant for comparison. Recommendations from terminal evaluation are primarily directed to improve the planning and design of future projects.
4. **Ex-post /Impact Evaluation:** is an in-depth study carried out after the program is completed to assess the impact of the program. It is usually conducted within 3-5 years after the program is completed. Its purpose is to assess the program's impact on the target groups. However, it is rarely done due to lack of willingness to fund from the financiers of the program/project.

Based on who conducts the evaluation, evaluation can be internal or external.

1. **Internal Evaluation:** is performed by people involved in the program/project. On-going or formative evaluation is usually carried out by the program implementation office or main financier of the program.

2. **External Evaluation:** it is carried out by people from outside the program/project. Terminal and ex-post evaluations are often conducted by external evaluators. Donors often prefer external evaluators because it is believed that they can bring a range of expertise and experience that might not be available within the organization, and they may have more independence and credibility than an internal evaluator.

Based on evaluation Technicality or Methodology, evaluation can be Real-time evaluations, Meta-evaluations, thematic evaluations, Cluster/sector evaluations, and Impact evaluations. AAUSC, project Monitoring and Evaluation, distance module 2016 discuss each of the above evaluations as follows:

1. **Real-time Evaluations (RTEs)** are undertaken during project/program implementation to provide immediate feedback for modifications to improve ongoing implementation. Emphasis is on immediate lesson learning over impact evaluation or accountability. RTEs are particularly useful during emergency operations
2. **Meta-Evaluations** are used to assess the evaluation process itself. Some key uses of meta-evaluations include: take inventory of evaluations to inform the selection of future evaluations; combine evaluation results; check compliance with evaluation policy and

good practices; assess how well evaluations are disseminated and utilized for organizational learning and change, etc.

3. **Thematic Evaluations** focus on one theme, such as gender or environment, typically across a number of projects, programs or the whole organization.
4. **Cluster/Sector Evaluations** focus on a set of related activities, projects or programs, typically across sites and implemented by multiple organizations (e.g. National Societies, the United Nations and NGOs).
5. **Impact Evaluations** focus on the effect of a project/ program, rather than on its management and delivery. Therefore, they typically occur after project/program completion during a final evaluation or an ex-post evaluation. However, impact may be measured during project/program implementation during longer projects/ programs and when feasible.

### **2.1.2. Differences and Complementarities of Monitoring and Evaluation**

According to IFRC M&E guide 2011, the main difference between monitoring and evaluation is their timing and focus of assessment. Monitoring is ongoing and tends to focus on what is happening. On the other hand, evaluations are conducted at specific points in time to assess how well it happened and what difference it made. Monitoring data is typically used by managers for ongoing project/program implementation, tracking outputs, budgets, compliance with procedures, etc. Evaluations may also inform implementation (e.g. a midterm evaluation), but they are less frequent and examine larger changes (outcomes) that require more methodological rigor in analysis, such as the impact and relevance of an intervention.

Hunter (2009) stated that project monitoring is an on-going activity that tracks the progress of the project during its lifetime. Therefore, monitoring is an integral part of our day-to-day operational management. Berhanu et al. (2010) stated that evaluation information is necessary to address questions of change being achieved and issues related to strength and weaknesses of the project design and implementation that remain unanswered by monitoring activities. They further noted that evaluation is a more reflective process aimed at assessing an intervention and its results according to agreed criteria such as effectiveness, efficiency, quality, relevance, impact and sustainability. For them, in terms of scope, evaluation is wider than monitoring as it deals with making an assessment of overall achievements. Hunter (2009) added that monitoring continuously assess the progress made with the project when viewed against its goals and

objectives. Thus, project monitoring helps us to improve the efficiency and effectiveness of project works. One can understand that monitoring data does not provide the basis for attribution and causality for change, nor for evidence of how changes are being achieved. Monitoring cannot address the strengths and weaknesses in the design and implementation of a project.

Monitoring as depicted in table 2.1, it is a basic part of project management objectively focus on determining efficiency so as to facilitate an early adjustment, is a continues feedback system, involve tracking of inputs, process, output and work plan, whose result primarily used by project implementers. Evaluation on the other hand objectively focuses on assessing impact, carried out periodically, and its result usually is used by donors and other stakeholders in future program/project design.

**Table 2.1 Major differences of Monitoring and Evaluation.**

<b>Differences</b>	<b>Monitoring</b>	<b>Evaluation</b>
Objectives	To determine the efficiency. To facilitate an early adjustment	To determine whether objectives set were realistic or not and assess impacts of project activities
Frequency	Continuous	Periodical
Focus	Inputs, process, output & work plan	Relevance or impact and cost-effectiveness
Primary Users	Mainly project implementers	External such as donors, Government
Type of Data	Primarily quantitative	Primarily qualitative
Actors	Internal	Internal/External
Analysis	Simple	In-depth and Comparative

**Source: - USAID/Ethiopia, Performance Monitoring Workshop Handout, March 1997.**

Though monitoring and evaluation as illustrated on the above table have differences, they have complementary function in development programs/projects. Berhanu et al. (2010) stated that monitoring and evaluation are two different functions, and yet complimentary to each other. EMI (2014) stated the relationship and complimentary features of the two as follows:

- Both monitoring and evaluation employ similar data collection and analysis system

- Indicators for monitoring could be included in the range of information required for evaluation.

Recognizing their differences, it is also important to note that both monitoring and evaluation are integrally linked; monitoring typically provides data for evaluation, and elements of evaluation (assessment) occur when monitoring. For example, monitoring may tell us that 200 community facilitators were trained (what happened), but it may also include post-training tests (assessments) on how well they were trained. Evaluation may use this monitoring information to assess any difference the training made towards the overall objective or change the training was trying to produce (IFRC M&E guide, 2011).

The document released by MoFED (2008) noted that project monitoring and evaluation is synergistic and indispensable project management tool and tends to be used as a single phrase, and in many ways closely linked. Thus, there is no much point in doing monitoring if one cannot evaluate it, and one cannot evaluate something unless monitoring is conducted earlier (MoFED, 2008).

### **2.1.3. Monitoring & Evaluation Frameworks**

As there is no such thing as perfect framework, different frameworks are used for different organizations, three of the most common are: - conceptual frameworks, results frameworks and logical frameworks/logic models (Frankel & Gage, 2007). The main purpose of using one of these frameworks for monitoring and evaluation system is: developing a clear understanding of the goals and objectives of a project, focusing on identifying measurable objectives, short-term and long-term, to define the relationships between key factors for the implementation and success of the project (Frankel & Gage, 2007). The three types of frameworks are discussed briefly in the next session.

#### **2.1.3.1 Conceptual Frameworks**

Conceptual frameworks are diagrams that clarify and illustrate relationships among relevant organizational, individual and other factors that may influence a program and the successful achievement of goals and objectives (Frankel & Gage, 2007). They assist to determine which factor highly influence the project or mainly the program, and sketch how each factors interact with each other like culture, economy, politics, believes and so many others that might relate to and influence the outcome. They cannot be used as bases for monitoring and evaluation instead they can help to explain program results (Frankel & Gage, 2007). According to Frankel and

Gage (2007), conceptual framework places health problem in a wider context, one that considers the various factors that can affect the program or intervention, clarifies the causal relationships between these factors and identifies those that the intervention may affect. It is used for program design rather than for program M&E.

### **2.1.3.2 Result Frameworks**

Result framework sometimes called strategic framework explains the direct relationships between the result outputs or the intermediate results of activities and the overall objectives and goals. They show the causal relationship between program objectives and outline how each of the intermediate results/ outputs and outcomes relates to and facilitate the achievement of each objective, and how objectives relate to each other and the ultimate goal. Result frameworks do form the basis for monitoring and evaluation activities at the objective level (Frankel & Gage, 2007). They stated that Result frameworks show the causal relationships between the various intermediate results that are critical to achieving the strategic objective. The effectiveness of these activities can be measured at each step along the way.

### **2.1.3.3 Logical Frameworks**

Logical frameworks or logic models provide a linear, logical interpretation of the relationship between inputs, activities, outputs, outcomes and impacts with respect to objectives and goals. Logical frameworks outline the specific inputs needed to carry out the activities/processes to produce specific outputs which will result in specific outcomes and impacts. It can be used as the basis for monitoring and evaluation activities throughout the program (Frankel & Gage, 2007). The authors stated that Logic models help to show the logical connections between the inputs, processes and outputs of an activity, and how they link to the program's objectives (outcomes) and goals (impacts). They also clarify the linear relationships between program decisions, activities and products.

According to Gage and Dunn (2010), Logic models are valuable tools for:

- **Program Planning and Development:** in consideration to the program strategy the logic model helps to clarify where the program is and where the program should be.
- **Program Management:** Because it "connects the dots" between resources, activities, and outcomes, a logic model can be the basis for developing a more detailed management plan. Using data collection and an evaluation plan, the logic model helps track and

monitor operations to better manage results. It can serve as the foundation for creating budgets and work plans.

- **Communication:** A well-built logic model is a powerful communications tool. It can show stakeholders at a glance what a program is doing (activities) and what it is achieving (outcomes), emphasizing the link between the two.

Reaching at a decision to which framework is best to use is not simple. Programs should select the type of framework that best suits their strategies and activities and responds to institutional requirements.

#### **2.1.4. Importance of Monitoring and Evaluation**

A well-functioning monitoring and evaluation system is a critical part of good project management and accountability. As Berhanu et al, (2010) noted timely and reliable monitoring and evaluation have the following importance: First, to provide timely and useful information to decision-maker and stakeholder feedback, especially beneficiaries, to provide input into and perceptions of work, modeling openness to criticism, and willingness to learn from experiences and to adapt to changing needs. Secondly, good monitoring and evaluation system helps governments and organizations to develop knowledge base of the types of projects, programs and policies that have worked and did not work, and why. Thirdly, monitoring and evaluation systems can be used to promote greater transparency and accountability within organizations and governments.

According to MoFED (2008), the major objective of project monitoring and evaluation is to serve the following five basic purposes. These are to create good ground for day-to-day informed decision making in all matters of the project, provide information to key stakeholders, enable accountability requirements to be met, help improve performance and achieve results and to enhance the promotion of institutional learning and knowledge sharing. With regard to purposes of M&E, The Ethiopian Management Institute summarized the multiple purposes of M&E as: forecasting performance, gather information for early warning, identify lessons, asses beneficiaries, asses output/results, track progress, check schedule, asses project activities, asses objectives, enhance team work, mobilize stakeholders, plan program improvement, practice benchmarking, ensure accountability, and ensure quality management (EMI, 2014).

### **2.1.5. Methods and Techniques of Monitoring and Evaluation**

The core of monitoring and Evaluation, in general, comprises data gathering and analysis and so as to gather data properly one need to employ appropriate methods. Addis Ababa University (2009:17) defines Methods as the range of approaches used in research to gather data which are to be used as a basis for inference and interpretation, for explanation and prediction. There are many kinds of methods to gather monitoring and evaluation data. Some are used to monitor & evaluate the progress of the project targets; some help to asses project/program structure and organization and others serve to assess the effects of the program activities on people. Depending on the type of data in need, two major categories of methods can be employed: Qualitative & quantitative.

According to Hunter (2009) and MoFED (2008), project monitoring and evaluation methods include keeping project records, formal surveys, interviews, direct observation, focus-group discussions and mapping. The project evaluation and review technique organize schedules and coordinates all project events in the form of a network chart.

### **2.1.6. Steps to Conduct Project Monitoring and Evaluation**

According to International Federation of Red Cross & Red Crescent Societies (IFRC) M&E guide 2011 there are six steps to conduct project Monitoring and Evaluation. These steps are to guide planning for and implementing an M&E system for the systematic, timely and effective collection, analysis and use of project/program information. The steps are stated as follows:

1. Identify the purpose and scope of the M&E system
2. Plan for data collection and management
3. Plan for data analysis
4. Plan for information reporting and utilization
5. Plan for M&E human resources and capacity building
6. Prepare the M&E budget

#### **Step 1 – Identify the Purpose and Scope of the M&E System**

The purpose and scope of the M&E system answers, why do we need M&E and how comprehensive should it be? It includes the following points:

**A. Review the project/program’s operational design (log frame):** The log frame is a summary of the project/program’s operational design, based on the situation and problem analysis conducted during the project/ program’s design stage. It summarizes the logical sequence of objectives to achieve the project/program’s intended results (activities, outputs, outcomes and goal), the indicators and means of verification to measure these objectives, and any key assumptions. When reviewing the log frame, it is important to check it for logic and relevance. An important consideration in the log frame is the use of industry-recognized, standard indicators.

**B. Identify key stakeholder information needs and expectations:** Planning an M&E system based on stakeholder needs and expectations helps to ensure understanding, ownership and use of M&E information. It is essential to have a clear understanding of the priorities and information needs of people interested in or affected by the project/program. This includes stakeholder motivations, experience and commitment, as well as the political and other constraints under which various stakeholders operate. It is especially important that local knowledge is sought when planning M&E functions to ensure that they are relevant to and feasible in the local context, and that M&E information is credible, accepted and more likely to be supported.

**C. Identify any M&E requirements:** Important informational needs worth specific attention are those that arise from any donor guidelines and requirements, governmental laws and regulations, and internationally- agreed-upon standards. These requirements can include very detailed procedures, formats and resources, and are often non-negotiable. Therefore, it is best to identify and plan for them early in the M&E planning process.

**D. Scope of major M&E events and functions:** The scope of the M&E system refers to its scale and complexity. It can be highly complex with a variety of activities and requiring considerable expertise and resources, or it can be relatively simple, relying on internal resources and capacities. Each of the topics discussed above plays a key role in determining the scope of the M&E system. For example, the complexity of a project/program’s design (e.g. how many and the type of outcomes it seeks to achieve) can have a significant impact on the scale and complexity of the M&E system. Likewise, donor requirements can largely determine the precision and methodological rigor needed in the M&E system. Some other important considerations for the scope (size) of the M&E system include:

- The geographic scale of the project/program area, including accessibility to program areas
- The demographic scale of the project/program, including specific target populations and their accessibility
- The time frame or duration of the project/program, including any pre- and post-project M&E needs
- The available human resources and budget

Scoping the M&E system helps to identify major M&E activities and events – the overall scope (size) of the M&E system. While specific M&E functions should be addressed in more detail later in the planning process, an initial inventory of key activities at this stage provides an important overview or “map” to build upon for planning for funding, technical expertise, capacity building, etc.

## **Step 2 – Plan for Data Collection and Management**

Once you have defined the project/program’s informational needs, the next step is to plan for the reliable collection and management of the data so it can be efficiently analyzed and used as information. Both data collection and management are firmly linked as data management begins the moment it is collected. The following should be considered under the second step:

- Develop an M&E plan table:** M&E plan is a table that builds upon a project/program’s log frame to detail key M&E requirements for each indicator and assumption. It summarizes key indicator (measurement) information in a single table: a detailed definition of the data, its sources, the methods and timing of its collection, the people responsible and the intended audience and use of the data.
- Assess the availability of secondary data:** Secondary data refers to data that is not directly collected by and for the project/program, but which can nevertheless meet project/program informational needs.
- Determine the balance of quantitative and qualitative data:** When planning for data collection, it is important to plan for the extent quantitative and qualitative data will be used.
- Triangulate data collection sources and methods:** Triangulation is the process of using different sources and/or methods for data collection. Combining different sources and

methods (mixed methods) helps to cross-check data and reduce bias to better ensure the data is valid, reliable and complete.

- E. **Determine sampling requirements:** Sampling (the process of selecting a sample) is a critical aspect of planning the collection of primary data.
- F. **Prepare for any surveys:** Surveys are a common method of gathering data for project/program M&E.
- G. **Prepare specific data collection methods/tools:** The best practices for preparing data collection methods/tools will ultimately depend on the specific method/tool
- H. **Establish stakeholder complaints and feedback mechanisms:** A complaints and feedback mechanism provides a means for stakeholders to provide comment and voice complaints
- I. **Establish project/program staff review mechanisms:** project/program staff and volunteer performance information is an important source of data for ongoing project/program monitoring and management.
- J. **Plan for data management:** Data management refers to the processes and systems for how a project/program will systematically and reliably store, manage and access M&E data.
- K. **Use an indicator tracking table (ITT):** An ITT is an important data management tool for recording and monitoring indicator performance to inform project/program implementation and management. An important function of the ITT is that it helps to determine variance, a key measure of indicator performance. Variance is the difference between identified targets and actual results – the percentage of target reached.
- L. **Use a risk log (table):** While the ITT tracks planned indicator performance, it is also important to track any risks that threaten project/program implementation. Such risks can include those identified and expressed as assumptions in the project/program log frame, as well as any unexpected risks that may arise.

### **Step 3 – Plan for Data Analysis**

Data analysis is the process of converting collected (raw) data into usable information. This is a critical step of the M&E planning process because it shapes the information that is reported and its potential use. It is a continuous process throughout the project/program cycle to make sense of gathered data to inform ongoing and future programming. Such analysis can occur when data is

initially collected, and certainly when data is explained in data reporting. It includes the following activities:

**A. Develop a data analysis plan, identifying the:**

- Purpose of data analysis
- Frequency of data analysis
- Responsibility for data analysis
- Process for data analysis.

**B. Follow the key data analysis stages:**

- Data preparation
- Data analysis (findings and conclusions)
- Data validation
- Data presentation
- Recommendations and action planning.

**Step 4 – Plan for Information Reporting and Utilization**

Having defined the project/program’s informational needs and how data will be collected, managed and analyzed, the next step is to plan how the data will be reported as information and put to good use. Reporting is the most visible part of the M&E system, where collected and analyzed data is presented as information for key stakeholders to use. Reporting is a critical part of M&E because no matter how well data may be collected and analyzed, if it is not well presented it cannot be well used – which can be a considerable waste of valuable time, resources and personnel. Sadly, there are numerous examples where valuable data has proved valueless because it has been poorly reported on. The following points should be considered in this step:

**A. Anticipate and plan for reporting:**

- Needs/audience
- Frequency
- Formats
- People responsible.

**B. Plan for information utilization:**

- Information dissemination
- Decision-making and planning.

Good reporting should be relevant & useful, timely, complete, reliable, simple & user-friendly, consistent and cost effective.

### **Step 5 – Plan for M&E Human Resources and Capacity Building**

An effective M&E system requires capable people to support it. While the M&E plan identifies responsibilities for the data collection on each indicator, it is also important to plan for the people responsible for M&E processes, including data management, analysis, reporting and M&E training. This section summarizes key considerations in planning for the human resources and capacity building for a project/program's M&E system. When planning for M&E human resource and capacity building, we have to consider the following:

- **Assess the project/program's human resources capacity for M&E**
- **Determine the extent of local participation:** Ideally, data collection and analysis is undertaken with the very people to whom these processes and decisions most relate
- **Determine the extent of outside expertise:** Outside specialists (consultants) are usually employed for technical expertise, objectivity and credibility, to save time and/or as a donor requirement.
- **Define the roles and responsibilities for M&E:** It is important to have well-defined roles and responsibilities at each level of the M&E system.
- **Plan to manage project/program team's M&E activities:** Whether project/program staff, volunteers, community members, or other partners involved in the M&E system, it is important to develop tools and mechanisms to manage their time and performance.
- **Identify M&E capacity-building requirements and opportunities:** Once roles and responsibilities have been determined, it is important to specify any M&E training requirements.

### **Step 6 – Prepare the M&E Budget**

It is best to begin systematically planning the M&E budget early in the project/program design process so that adequate funds are allocated and available for M&E activities. The following summarizes key considerations for planning the project/program's M&E budget.

- **Itemize M&E budget needs:** such as human resources, capital needs (facility costs, office equipment and supplies, any travel and accommodation, computer hardware and software, printing, publishing and distributing M&E documents, etc.)

- **Incorporate M&E costs into the project/program budget**
- **Review any donor budget requirements and contributions**
- **Plan for cost contingency**

Some documents state that the following points should be considered when using M&E steps stated above:

- **The M&E steps are interconnected and should be viewed as part of a mutually supportive M&E system.** For example, what data is collected will largely depend on the data needed to be reported – one step is integral to the other step and would be planned at the same time.
- **M&E planning should be done by those who use the information.** Involvement of project/program staff and key stakeholders ensures feasibility, understanding and ownership of the M&E system.
- **Begin planning for your M&E system immediately after the project/program design stage.** Early M&E planning allows for preparation of adequate time, resources and personnel before project/program implementation
- **A project/program M&E system builds upon the initial assessment and project/program design.**
- **When appropriate, it is useful to build on existing M&E capacities and practices.** If existing M&E practices are accurate, reliable and timely, this can save time/resources and build ownership to coordinate with and complement them.
- **Particular attention should be given to stakeholder interests and expectations throughout the M&E process.** In addition to local beneficiaries, it is also important to coordinate and address interests and concerns from other stakeholders.
- **M&E should be tailored and adjusted to the real-world context throughout the project/program's life cycle.** Projects/programs operate in a dynamic setting, and M&E activities need to adapt accordingly. Objectives may change, as will the M&E system as it refines its processes and addresses arising problems and concerns. Like a project/program itself, the M&E system should be monitored, periodically reviewed and improved upon.

- **Only monitor and evaluate what is necessary and sufficient for project/program management and accountability.** It takes time and resources to collect, manage and analyze data for reporting. Extra information is more often a burden than a luxury. It can distract attention away from the more relevant and useful information. It can also overload and strain a project/program’s capacity and ability to deliver the very services it is seeking to measure.

Berhanu et al. (2010) stated that M&E system include selecting indicators at different level of performance chain, setting baselines and targets, collecting data on indicators about inputs, activities and results, analyze and comparing progress against baseline and targets, identifying deviations from work plans, explaining causes of deviations and sharing results with others.

### 2.1.7. Overview and Types of Indicators

Indicators are critical component of an effective M&E system. It provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention or to help assess the performance of a development actor. Indicators are required for each aspect (monitoring, evaluation and impact) and at all levels of a project (inputs, outputs, outcomes and impact). There are several types of indicators - quantitative and qualitative, direct and indirect, activity and process and representing the diversity of stakeholders – it is likely that a mix will be required. Indicators can be expressed in quantitative terms-where numbers are used to measure changes (such as percentage, rate, and ratio) and in qualitative terms-where words are used to describe changes for example, perception on well being, quality of life and quality of diet. Indicators do not have to be many, a few good indicators are better than having many indicators.

**Table 2.2: Types of Indicators and Purpose**

<b>Types of Indicators</b>	<b>Purpose</b>
Impact Indicators	Measure the extent to which the overall program goals are being achieved
Outcome Indicators	Measure the extent to which the project objectives are being met
Output Indicators	Measure project deliverables
Input Indicators	Measure the extent to which the planned resources e.g. money, materials, personnel are

	being utilized
Performance Indicators	Measures of inputs, processes, outputs, outcomes, and impacts for development projects. Performance indicators enable managers to track progress, demonstrate results, and take corrective action to improve project objectives and goal achievements.

**2.1.8. Drivers of Monitoring and Evaluation Worldwide**

Building on Segone (2006) division of M&E evolution stages, it can be inferred that the start of M&E adoption was mainly by US-based development agencies then by European development organizations and finally it reached other developing countries after the Paris Declaration on Aid Effectiveness which led to country-led M&E Systems. Drivers and reasons for adopting M&E from a worldwide perspective are presented as follows:

**a) *Monitoring and Evaluation for Accountability:*** One of the main and most significant drivers for conducting M&E is accountability towards different actors for different purposes (Loveridge, 2011). According to Edwards and Hulme (1995), accountability is the mechanism by which individuals and organizations are responsible in front of a recognized authority and accordingly, are held responsible for their acts. OECD (2010) defines accountability, in development terms, as the obligations of partners to act according to clearly defined responsibilities and roles with an efficient and effective use of the resources. For evaluators, it implies the responsibility of providing accurate, objective and credible monitoring reports and performance assessment (OECD, 2010). Ebrahim and Weisband (2007) further identify four core components of accountability, which are: transparency, answerability or justification, compliance, and enforcement.

**b) *Monitoring and Evaluation for Learning and Knowledge Acquisition:*** Learning and knowledge acquisition is another main driver for conducting M&E in non-profit organizations (Unicef, 2006). The Inter-American Development Bank (1997) clarified lessons generated from M&E findings are transformed into knowledge when they are analyzed, systematized, disseminated and internalized within an organization. However, before transforming the lessons to knowledge, lesson learnt should meet certain criteria in order to have effective results.

According to NASA (2001) lesson learnt is knowledge or understanding gained by experience. The experience may be positive, as in as successful test or mission, or negative, such as failure. A lesson must be significant in that it has a real impact on operations and valid that is factually and technically correct. It should be applicable in that it identifies a specific design or process that reduces or eliminates the potential failures and reinforce a positive result (NASA, 2001). Patton (2001) observed that M&E has moved from merely generating findings about certain programs to meet donor requirement to generating knowledge.

**c) *Organizational Learning, Change and Strategic Planning:*** (Preskill and Torres, 1997; Lysyk, 1997; Cousins, 1995) stated that the new concept of evaluation as a function of organizational learning and strategic planning is being accepted at both the development agency level and at the academic level. Preskill and Torres (1997) defined organizational learning as a continuous process of organizational growth and improvement that is integrated with work activities. It uses information and feedback about processes and outcomes to make changes. Organization learning does not imply only the use of information, but is based on the concept of knowledge construction. This means gathering relevant information, processing, analyzing and communicating it to other members inside the organization, and it is being understood and accepted and internalized as part of the organizational culture. This process facilitates behavior and attitude change among organization members and enables continuous adaptation of the organization according to internal and environmental changes (Lysyk, 1997). However, it is argued that the continuous improvement process requires a commitment to learning; therefore, the absence of a learning culture within an organization can prevent M&E results from being used for program improvement. The knowledge and lessons acquired, learned and built through the M&E process is a fundamental input to and support for this strategic organizational process (Segone, 2006).

**d) *Improving Program Performance and Effectiveness:*** M&E systems provide an extremely useful tool for all stakeholders to manage ongoing activities, identify successes, and plan effectively for new initiatives and programs, and thus using the allocated resources most efficiently (UNICEF, 2006). According to Rossi and Freeman (1982), the purpose of M&E is to improve planning, administration, implementation, effectiveness, and utility of social interventions. For the U.S. Environmental Protection Agency (2004), program M&E determines how well a program is working and why these results are occurring. It can help program

managers and staff: identify areas needing improvement as well as those that are working well; design strategies to effectively achieve program goals; and improve program data collection and measurement of results.

According to Kellogg Foundation (1998), to ensure program effectiveness, M&E should focus on the following three aspects: Examine how the project functions within the economic, social, political environment of its community and project setting (context evaluation); Help with the planning, setting up and carrying out of a project, as well as the documentation of the evolution of a project (implementation evaluation); and assess the short and long term results of the project (outcome evaluation)

### **2.1.9. Monitoring and Evaluation Practices**

(Toitske et al., 2009) stated that Monitoring and evaluation programs have become a big industry within the development sector, but practices seem less developed with regard to government sector interventions. Toitske et al. (2009) described terms such as—impact, performance, results and accountability— have assumed a new prominence in M&E over the last five years. Generally, the following are best practices associated with monitoring and evaluations.

**I. Monitoring and Evaluation Plan:** The project should have a monitoring and evaluation plan. The plan should be prepared as an integral part of project plan and design (Palestinian Academic Society for the Study of International Affairs (PASSIA, 2004) and (McCoy, Ngari and Krumpke, 2005). The integration is for clear identification of project objectives for which performance can be measured.

**II. Coherent Framework:** Monitoring and evaluation should be aided by a coherent structured conceptual framework. The framework aids in identifying the logic behind project elements and performance measurement, how they are related and the underlying assumptions. One of the best practices that have been adopted because of its structured approach is the use of the logic framework approach (LFA) as a tool to aid both the planning and the monitoring and evaluation functions during implementation (Aune, 2000 and FHI, 2004).

**III. Monitoring and Evaluation Budget:** The project budget should provide a clear and adequate provision for monitoring and evaluation activities. A monitoring and evaluation budget can be clearly delineated within the overall project budget to give the monitoring and evaluation function the due recognition it plays in project management (McCoy et al., 2005). Some authors

argue for a monitoring and evaluation budget to be about 5 to 10 percent of the total budget (Kelly and Magongo, 2004). The intention with this practice is not to be prescriptive of the percentage that is adequate, but to come up with sufficient funds to facilitate the monitoring and evaluation activities. Provision of a budget for monitoring and evaluation ensures that monitoring and evaluation are not treated as peripheral function.

**IV. Schedule of Monitoring and Evaluation:** The monitoring and evaluation activities of the project should be included in the project schedule so that they are given the due importance they require, not only done at the whims of the project manager (Handmer and Dovers, 2007; and McCoy et al., 2005).

**V. Individuals for Monitoring and Evaluation Activities:** There should also be an individual who is directly in charge of the monitoring and evaluation as a main function (Kelly and Magongo, 2004) and an identification of different personnel for the different activities of the monitoring and evaluation such as data collection, analysis, report writing, dissemination of the monitoring and evaluation findings (AusAID, 2006 and McCoy et al., 2005).

**VI. Specification of the Frequency of Data Collection:** There should be a clear specification of how often monitoring and evaluation data is to be collected and from whom. There should also be a specification of a schedule for monitoring and evaluation reports to be written (Walter, 2014). The monitoring should be done regularly in order to be able to track the project and identify problems early enough before they go out of hand. The regularity of monitoring could be a function of the size of the project, but a monthly frequency would be adequate, monitoring every 3 months would still be acceptable (AusAID, 2006). The monitoring would involve collecting data, analyzing and writing a report at the specified frequency.

**VII. Stakeholder Involvement:** Involvement of all stakeholders (beneficiaries, implementing staff, donors, wider communities) in the monitoring and evaluation process of the project is very important. Participatory approach to monitoring and evaluation is viewed as an empowerment tool for the beneficiaries and other stakeholders of project who in most cases are not consulted in this function. It is also demonstration of downward accountability i.e. accountability to the beneficiaries. There is a lot of emphasis on upward accountability (Aune, 2000). This obsession with upward accountability creates a barrier between the project and other stakeholders in terms of monitoring and evaluation, this result in the process being geared

towards satisfying the demands of the donor at the expense of the other stakeholders. Involvement of the beneficiaries in monitoring and evaluation gives them a sense of ownership and contributes to long term sustainability long after the project donor has ceased financing the project and also increases the chance of more beneficiaries to take up the services of the project. Other key neglected stakeholders are the field staff involved in implementing the project.

**VIII. Inputs:** The different inputs of the project need to be monitored effectively to ensure that they are used optimally on project activities in order to produce the desired outputs. The recommended practices for monitoring each of the inputs as identified by the log frame approach include the following.

a) **Financial Resources:** Financial resources should be tracked with a project budget with the project activities having cost attached to them, with comparison of what has been spent on project activities with what should have been spent as per planned expenditure in the budget (Crawford & Bryce, 2003). This information of expenditure is obtained from the individual in charge of project accounts. This comparison of actual expenditure versus planned expenditure should be done regularly to determine if the project is not going over budget. Norman (2005) stated that M&E should have a separate budget. Some projects have a specific budget for M&E activities, in others a specified percent of total budget might be set aside, whilst in others nothings is provided and all activities must be funded from—regular budget.

b) **Human Resources:** Human resources on the project should be given clear job allocation and designation that is suitable to their expertise. If there is skill gap, training should be given to them. For projects with staff that are sent out in the field to carry out project activities on their own there is a need for constant and intensive on site support to the outfield staff (Reijeret, Chalimba and Nakwagala, 2002). Norman (2005) explained that it is important to identify a capable person in the project office who serves as the coordinator for all M&E activities.

**IX. Activities:** There are activities that are very important for the practicality of monitoring and evaluation system. Processes or activities to be done on the project are tracked with aid of a project schedule or project timeline. At regular intervals actual schedule of activities done is compared with the planned schedule to determine whether the project is within schedule or over schedule (Crawford and Bryce, 2003).

X. **Outputs:** For monitoring outputs of the project, it is important to use a mix of both qualitative and quantitative indicators. *Quantitative indicators* look at outputs in terms of numbers, such as number of people reached, number of trainings carried out, number of materials distributed (Hughesd" Aeth, 2002). Quantitative information such as attendances, people served, is best captured by a standardized form then information is aggregated at regular intervals (Gyorko, 2002). *Qualitative Indicators* describe situations and give an in-depth understanding of issues of the outputs. Methods such as focus group discussions, observation, interviews are used with qualitative methods of monitoring. For evaluation of both the outcomes and goals, both qualitative and quantitative methods are recommended in order to get clear in-depth understanding into the success of the project (Hughes-d" Aeth, 2002)

XI. **Outcomes and Goals:** Outcomes and goals are best evaluated with both qualitative and quantitative data. Data from project records is very vital and should be kept securely up to the end of the project and even longer (Muzinda, 2007). This helps in getting the whole picture of the project and is cost effective.

XII. **Capture and Documentation of Lessons Learned:** Lessons learned from the implementation should be captured and documented for incorporation into the subsequent projects and sharing with other stakeholders. The lessons would include what went right in implementation and what went wrong and why so that the mistakes are not repeated in the subsequent projects (Reijeret et al., 2002). These lessons should be shared with the implementing staff.

XIII. **Dissemination of Monitoring and Evaluation Findings:** There should be a monitoring and evaluation findings dissemination plan. M&E findings should be disseminated to stakeholders by way of a report. Depending on the requirement, disseminate report to the community and beneficiaries and to the implementing staff to improve their implementation practices and strategies (McCoy et. al., 2005).

XIV. **Reporting and Follow up of Monitoring and Evaluation:** MoFED (2008) stated that, once project monitoring and evaluation is planned and implemented, thoroughly analyzed findings must be reported. Based on provided recommendations, follow up activity is very crucial to take corrective measures, to take lesson and re-planning.

**XV. Objectivity by an External Facilitator:** Objectivity in evaluations is enhanced by an outside facilitator that would come in to aid the evaluation. This is in contrast to the fully participatory advocating authors who argue that objectivity is not that important, but empowering the stakeholders to learn from the evaluation, so evaluations should be subjective and done by the stakeholders (Aune, 2000). A compromise position is recommended, whereby an external facilitator comes in for objectivity and an outward opinion but the stakeholders are actively involved in the process for learning and empowerment.

#### **2.1.10. Approaches of Monitoring and Evaluation**

It is important to consider the prevailing M&E approaches available for project management. There are two types of approaches to monitoring and Evaluation: Traditional approach and participatory approach.

##### **2.1.10.1. Traditional Approach**

The traditional approach to monitoring and Evaluation according to the World Bank (2004) is an approach to monitoring and evaluation where by specially trained experts are involved. This approach is criticized by planners by the fact that it understates the central idea that projects belong to beneficiaries.

##### **2.1.10.2. Participatory Approach**

Jerry & Anne (2008) define participatory M & E as a process in which primary and other stakeholders collaborate and take an active part in assessing and evaluating the performance and achievement of a project or an intervention. In this approach, ideally all the stakeholders are involved in identifying the project, setting objectives, and identification of indicators that will be used in monitoring and evaluation. Participation could be enhanced if Monitoring and Evaluation systems are simple and easy for application by the stakeholders. Thus, during project formulation stage organizations need to give adequate attention to design simple and locally applied systems and tools.

#### **2.1.11. Designing Monitoring & Evaluation Systems**

Monitoring and evaluation system is the primary document to guide the design of the monitoring system in terms of the detailed tasks and resources that need to be controlled in order for the project to achieve its time, cost, and performance goals. Samuel J. et.al (2001) define monitoring and evaluation system as an action plan that identifies what is being done, when, and the planned level of resource usage for each task and sub task in the project. Setting up monitoring and

evaluation system is an important management tool because it helps in providing insights in achievement and lessons learned on what works and what does not.

The main elements of an M&E system, according to VNG international are: logical framework, instructions for data collection, timeframes and frequency of data collection, Reporting system as well as the responsible persons for data collection. The common errors in setting up monitoring systems are monitoring easy measures instead of relevant measures, monitoring activity in place of results, monitoring inputs as surrogates for outputs, and monitoring measures that don't change from one period to the next.

### **2.1.12. Data Management in M&E System**

International Red Cross and Red Crescent Societies M&E guide book 2011 defined Data management as the processes and systems for how a project/program will systematically and reliably store, manage and access M&E data. It is a critical part of the M&E system, linking data collection with its analysis and use. Poorly managed data wastes time, money and resources; lost or incorrectly recorded data affects not only the quality and reliability of the data but also all the time and resources invested in its analysis and use. Data management should be timely and secure, and in a format that is practical and user-friendly. It should be designed according to the project/program needs, size and complexity. Typically, project/program data management is part of an organization's or project/program's larger data management system and should adhere to any established policies and requirements. The following are seven key considerations for planning a project/program's data management system (IFRC M&E Guide 2011):

1. **Data Format.** The format in which data is recorded, stored and eventually reported is an important aspect of overall data management. Standardized formats and templates improve the organization and storage of data. Generated data comes in many forms, but are primarily:

- a. Numerical (e.g. spreadsheets, database sets)
- b. Descriptive (narrative reports, checklists, forms)
- c. Visual (e.g. pictures, video, graphs, maps, diagrams)
- d. Audio (recordings of interviews, etc).

Data formats can be physical, such as written forms stored in an office filing cabinet, or electronic, such as a spreadsheet stored in a computer database. Sometimes, donors or key partners, such as government ministries, may define how the data should be recorded and stored.

Whatever format, it is important that it is user-friendly, whether its user is a community member, field staff member or project manager.

2. **Data Organization.** A project/program needs to organize its information into logical, easily understood categories to increase its access and use. Data organization can depend on a variety of factors and should be tailored to the users' needs. Data is typically organized by one or a combination of the following classification logic:

- a. Chronologically (e.g. month, quarter, year)
- b. By location
- c. By content or focus area (e.g. different objectives of a project/ program)
- d. By format (e.g. project reports, donor reports, technical documents).

3. **Data Availability.** Data should be available to its intended users and secure from unauthorized use. Key considerations for data availability include:

- a. Access. How permission is granted and controlled to access data (e.g. shared computer drives, folders, intranets). This includes the classification of data for security purposes (e.g. confidential, public, internal, and departmental).
- b. Searches. How data can be searched and found (e.g. according to keywords).
- c. Archival. How data is stored and retrieved for future use.
- d. Dissemination. How data is shared with others

4. **Data Security and Legalities.** Projects/programs need to identify any security considerations for confidential data, as well as any legal requirements with governments, donors and other partners. Data should be protected from non-authorized users. This can range from a lock on a filing cabinet to computer virus and firewall software programs. Data storage and retrieval should also conform to any privacy clauses and regulations for auditing purposes.

5. **Information Technology (IT).** The use of computer technology to systematize the recording, storage and use of data is especially useful for projects/programs with considerable volumes of data, or as part of a larger program for which data needs to be collected and analyzed from multiple smaller projects/ programs. Some examples of IT for data management in M&E include:

- Handheld personal digital assistants (PDAs) to record survey findings
- SPSS, Excel spreadsheets, or other tools for storing, organizing and analyzing data
- Microsoft Access to create user-friendly databases to enter and analyze data

- Share point, a web-based intranet to store, share and discuss M&E data
- An integrated planning management system with an internet platform for inputting, organizing, analyzing and sharing information

IT can help to reorganize and combine data from various sources, highlighting patterns and trends for analysis and to guide decision-making. It is also very effective for data and information sharing with multiple stakeholders in different locations.

**6. Data Quality Control.** It is important to identify procedures for checking and cleaning data, and how to treat missing data. In data management, unreliable data can result from poor typing of data, duplication of data entries, inconsistent data, and accidental deletion and loss of data. These problems are particularly common with quantitative data collection for statistical analysis. Another important aspect of data quality is version control. This is how documents can be tracked for changes over time. Naming a document as “final” does not help if it gets revised afterwards. Versions (e.g. 1.0, 1, 2.0, 2.1, etc.) can help, but it is also recommended to use dates as well.

**7. Responsibility and Accountability of Data Management.** It is important to identify the individuals or team responsible for developing and/or maintaining the data management system, assisting team members in its use and enforcing any policies and regulations. Also, for confidential data, it is important to identify who authorizes the release/access of this data (IFRC M&E Guide 2011).

## **2.2. Empirical Literature Review**

Even though there was no material found on monitoring and evaluation of irrigation projects that is related with this study, the researcher reviewed other important Monitoring and Evaluation researches conducted on development, natural resource conservation, and business organization projects.

The first empirical review was on a thesis paper by Temesgen in 2004 titled “An Assessment of Project Monitoring and Evaluation: The case of Oromia Health Bureau Hospitals Construction Projects”. The objective of the study was to assess the project monitoring and evaluation of Oromia Health Bureau in relation to hospital construction. The study employed descriptive research approach and the participants were selected through judgmental sampling. Data was analyzed both qualitatively and quantitatively. The findings of the study showed that there was

no organized monitoring and evaluation plan, lack of well-organized monitoring and evaluation unit for Hospitals construction projects in the bureau, lack manuals which shows procedure, principle, criteria and standards of monitoring and evaluation for Hospital construction projects. Generally, findings of the study indicated that there was weak monitoring and evaluation practice in Hospital construction projects in the Bureau. Finally, the study recommended that, the Bureau should organize well-structured monitoring and evaluation department, prepare monitoring and evaluation guidelines, using systematically organized planning.

The second review was on a thesis by Eckman. In addressing development projects monitoring and evaluation practices and gaps, Eckman (1994) conducted case study on how non-governmental organizations monitor projects for impacts. The study was guided by three research objectives: to describe current monitoring and evaluation practices, to identify gaps and to identify the degree of local participants involved in the project monitoring and evaluation process. The study employed descriptive research design and used mailed questionnaires, interviews and document reviews. It involved a total of 172 respondents selected through purposive sampling. Findings of the study suggested that both socio-economic and environmental impacts are inadequately monitored, insufficient time, transport, and resources for project monitoring, poor local participation both in the process of project monitoring and decision making, and monitoring is generally overlooked as a management tools. Based on the findings Eckman (1994) forwarded the following major remedies: decentralizing the monitoring process to local communities, provide adequate resources for monitoring; create organizational flexibility and use precautionary monitoring approaches.

The third review was on a thesis prepared by Ouma Duncan in 2010 titled “Factors Influencing Effective Monitoring & Evaluation of Small and Medium Enterprise Projects in Rachuonyo District”. The study was aimed to analyze factors that influenced the monitoring and evaluation effectiveness of projects in Rachuonyo District. Specific objective of the study was to determine the effect of project management training of key project officers on M&E effectiveness, find the effect of original project design on the subsequent M&E exercise, identify the specific M&E practices that are implemented in SME projects, determine the role of project stakeholders in M&E effectiveness. The study adopted a descriptive research design and judgmentally selected 50 samples out of a total of 150. Results showed that M&E officers are crucial in the achievement of organizational goals, and that their training, knowledge and skills are also

important. However, in many businesses in Rachuonyo, trained expertise in this area are lacking, even though on the ground many of the M&E activities can be seen being played by informal personnel who happen to have experience in the M&E areas. In addition, stakeholders were also seen helping in the evaluation and monitoring activities. Recommendations of the researcher includes providing training for M&E officers, conduct workshops, seminars and conferences on the significance of M&E activities in organizations, increase networking and collaboration between organizations and stakeholders so as to improve M&E activities in organizations, urge stakeholders to actively support M&E activities in organizations.

The fourth review was on a study by Uisso. The study conducted by Uisso (2009) in Tanzania sought to explore the effectiveness of the local community participation in forest management and conservation project monitoring and evaluation, in Kisarawe and Kibaha districts of Tanzania. A total of 86 respondents were involved in the study from which data was obtained through questionnaires, structured & unstructured interviews and focus group discussion. Data was analyzed using both quantitative and qualitative approaches. The findings of the study marked that there were ineffective participation of the local community in project monitoring and evaluation. The study recommended the importance of capacity building and motivating the local community to ensure the sustainability of forest management and conservation projects.

The fifth review was on a research conducted by Emel et al. (2012). The case study conducted in Tanzania by Emel et al. (2012) under the title "problems with reporting and evaluating mining community development project" raised question about reporting and evaluation of community development project that was undertaken by Anglo gold Ashanti Company in a community of Nyakabale and Nyamalembu, Geita District, mining project in the Lake Victoria goldfield of Tanzania. They employed descriptive research design and obtained data through field visit, interviews, questionnaires and use of archival and applied both quantitative and qualitative analysis approach. Their findings revealed that the corporate reporting is misleading, ambiguous and avoided some parts. They proposed the following remedies: increasing government inspection and fines, citizen involvement in monitoring and reporting process.

The final review was on a thesis by Lyons. Lyons (2000) conducted a case study on Administrative Management Design (ADMAD) Program in Zambia. This study examined an effective monitoring framework for community based natural resource management project in relation to game management areas. It was guided by three research objectives: (1) to test the

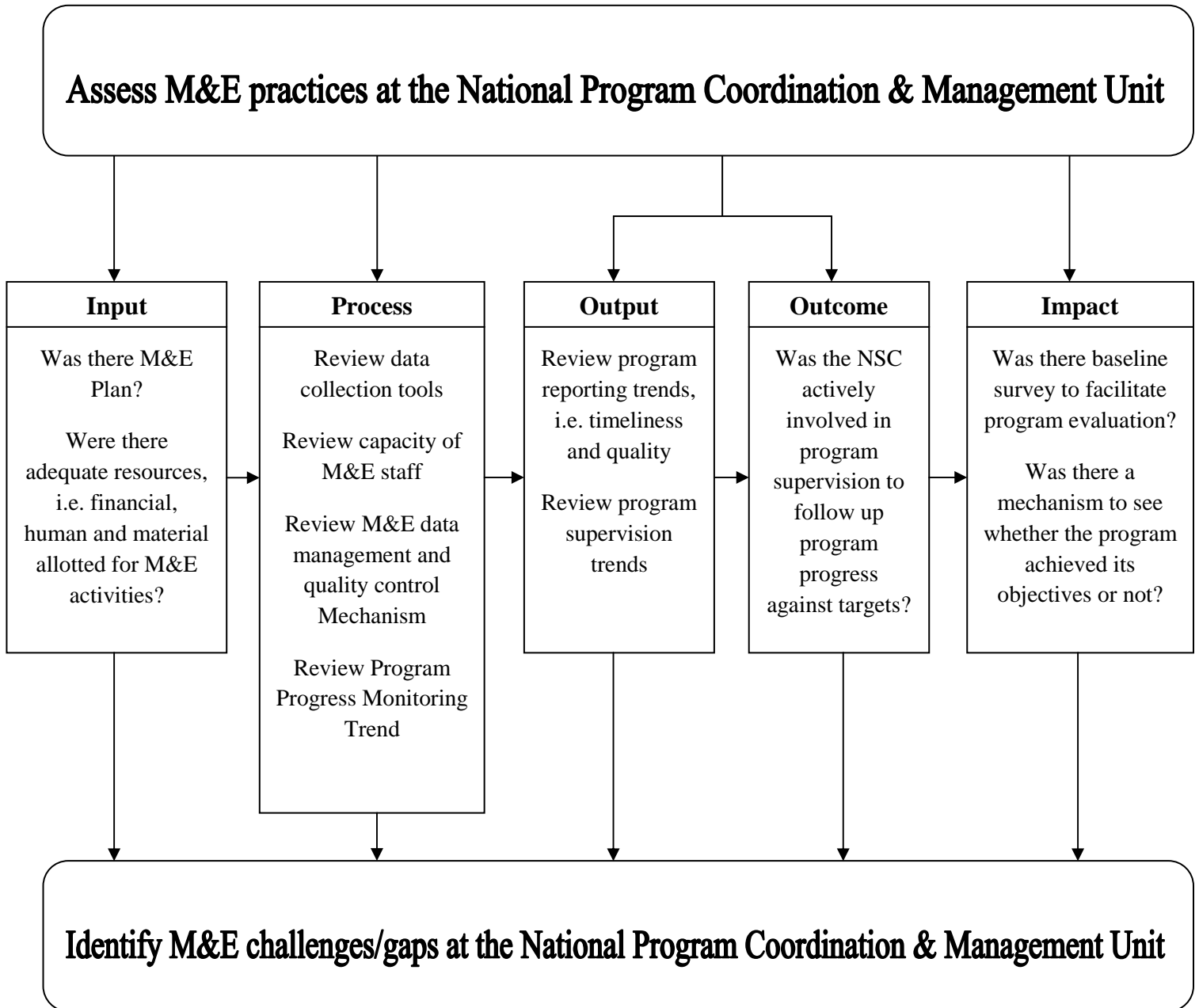
adequacy of the effective monitoring framework (2) to describe and guide analysis of the monitoring system of an actual community based natural resource management project and (3) to describe the components of ADMADE's monitoring program, to analysis its major bottlenecks and strength and plan intervention. The study employed descriptive design taking a total of 540 respondents through purposive and random sampling methods. Data was analyzed qualitatively and quantitatively. The study findings showed that there were M&E reporting; lack of transparency in financial flow which breeds confusion and mistrust; the impact of the community development project has not been well studied; poor community capacity building to participate in monitoring and evaluation activities. The study forwarded recommendations on the need to improve financial monitoring, importance of project impact evaluation to ensure the benefits of the project to the community and the need of coordination with the concerned monitoring initiatives and stakeholders.

Findings of the researchers suggests that development projects' monitoring and evaluation tools are inadequate for addressing complex projects which are aimed at changing socio-economic well-being of the community. In addition, the monitoring and evaluation systems should have a mechanism to involve all stakeholders of the projects and develop capacity of those involved in the monitoring and evaluation activities.

### 2.3. Conceptual Framework of the study

A conceptual framework maps out the actions required in the course of undertaking the study. As McGaghie *et al.* (2001) put it: The conceptual framework “sets the stage” for the presentation of the particular research question that drives the investigation being reported based on the problem statement.

**Fig: 2.3. Conceptual Framework of the study**



**Source:** Adopted from UNDP Handbook on Planning, Monitoring and Evaluation for Development (2009, p55) with modification

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This chapter presents the research methodology utilized in the study. Research methodology considers the context of the research and the results in order to achieve meaningful research outcomes. Moreover, the selection of an appropriate research design involves several steps, beginning with identifying the problem, purpose of the study and in depth literature review. This process of conducting research can either be quantitative or qualitative. Accordingly, this chapter presents details of the methods employed in the study; it has different sub sections that describes and justifies the method and processes that were used in order to answer the research questions.

#### **3.1. Research Design**

Designing a study helps researchers to plan and implement the study in a way that will help them obtain the intended results, thus increasing the chances of obtaining information that could be associated with the real situation Burns and Grove (1993). The design used in the study was descriptive research. Descriptive research design was used to describe an event or phenomena as it exists at present and is appropriate when the study is concerned in specific predictions, narrative of facts and characteristics concerning individuals or situations (Kothari, 2003). The study utilized a mixed research approach. Hence, both qualitative and quantitative data were used in the course of undertaking the study.

#### **3.2. Target Population**

The target population for this study was employees of the National Program Coordination and Management Unit at the Ministry of Agriculture and Rural Development. This included program coordinator, M&E specialists, and other experts. In addition, the study involved member of the National Steering Committee and concerned individual from International Fund for Agricultural Development who was supervising the program. The target population is believed to obtain sound M&E experience and provide necessary information to carry out the study.

#### **3.3. Sample Size**

According to Neuman (2006), the question of how large a sample should depend on the kind of data analysis the researcher plans to use, how accurate the sample has to be for the researcher's purposes and the population characteristics. Due to the nature of the research, only those involved in the Monitoring and Evaluation system of the project at the National Program Coordination and Management Unit and those who were responsible for supervising the project

were selected as sample of the study. Hence, sample of the study constituted all employees at the National Program Coordination and Management Unit that had direct relation with the project M&E system and those involved in the overall management and supervision of the program. Concerned individuals from International Fund for Agricultural Development who was supervising the program were also samples of the study. In addition, member of the National Steering Committee that had the overall responsibility of providing program coordination, guidance and policy direction was sample of the study.

As a results, samples of the study were those in the NPCMU that were involved in the M&E system, such as M&E experts, other experts, technical Officers, Program Coordinator, and higher level supervisor in the National Steering Committee (NSC). In addition, the sample included an individual from IFAD. Data was taken in the form of questionnaire and in-depth reviews from the samples.

### **3.4. Sampling Technique**

The study adopted a purposive sampling technique, i.e. the participants were selected using judgment sampling technique. Judgmental sampling is a form of sampling in which the population elements are selected based on the judgment of the researcher. The researcher, by exercising judgment of expertise, chooses the elements to be included in the sample because he or she believes that they are representative of the population of interest or otherwise appropriate (Naresh, 2007, p. 390). According to Price (2009), purposive sampling is a form of non-probability sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research. Some types of research design necessitate researchers taking a decision about the individual participants who would be most likely to contribute appropriate data, both in terms of relevance and depth.

Purposive or judgmental sampling enables you to use your judgment to select cases that will best enable you to answer your research question(s) and to meet your objectives. This form of sample is often used when working with very small samples (Neuman, 2005) cited in (Saunders et al, 2009). Accordingly, total number of employees working at the NPCMU was ten out of which eight were selected as samples to respond to the questionnaire and one, the program Coordinator for the interview. In addition, an individual from IFAD and member of the National Steering

Committee were judgmentally chosen for the interview considering their well versed experience and understanding of the program reviewed.

### **3.5. Data Source & Data Collection Tools and Techniques**

#### **3.5.1. Data Source**

Both Primary and secondary data sources were used to collect data for the study. Questionnaires and interviews were used as primary data sources while document review was used as secondary data source.

#### **3.5.2. Data Collection Tools and Techniques**

The main data gathering instruments implemented in the study was questionnaire, in-depth interview and document review.

##### **a. Questionnaire**

Wilkinson and Birmingham (2003) stated that questionnaire is a preferred data gathering tool which enables to effectively collect data in a planned and manageable ways. Furthermore, the questionnaire can be very detailed, help to cover many subjects or issues and can be easily and quickly analyzed once field data gathering work completed. Therefore, the researcher developed questionnaire to collect detailed information about M&E system of PASIDP in the National Program Coordination and Management Unit at the MoANR. Questions in the questionnaire were in the form of multiple choice, rating and open ended. Respondents were requested to clarify their response in some questions in order to obtain a descriptive opinion of the participant and for triangulation purpose.

##### **b. Interview**

The researcher used interview to gather data regarding the study problem from program stakeholders at the NPCMU and International Fund for Agricultural Development. Interview was appropriate to get depth information from better positioned individuals. The interview was held with several prominent individuals involved in the overall coordination and supervision of the program. These include the Program Coordinator at the NPCMU, member of the National Steering Committee, and an individual from IFAD. During the interviews, a set of compiled questions with brief background for conducting the research study was presented to each respondent.

### **c. Document Review**

Almost all necessary documents related to area of the study were reviewed. It included PASIDP design Document, PASIDP mid-term review, PASIDP Impact Assessment, sample semi-annual and annual reports, etc.

### **3.6. Procedure of Data Collection**

Questionnaire of the study was hand delivered to respondents and collected once respondents had filled them to ensure that they received the questionnaire and returned it appropriately. This administration method is believed to ensure very high response rate. Another advantage of self-administration method of questionnaire is that the researcher will have a personal contact with the respondents to clarify issues that might arise.

### **3.7. Data Analysis Method**

Data analysis is the process of collecting, modeling and transforming data in order to highlight useful information, suggesting conclusions and supporting decision making (Sharma, 2005). The data gathered from several sources was analyzed by Statistical Package for Social Science (SPSS). The findings of the study were presented in figures & tables with frequencies and percentages and brief interpretation.

### **3.8. Ethical Consideration**

The researcher took into account the ethical obligations to all involved in the study. The researcher had gained consent of all respondents prior to administering the questionnaire and maintained their anonymity. In addition, the researcher ensured that findings of the study shall only be used for academic purposes. No ethical issues were identified in study.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

This chapter deals with presentation, analysis and interpretation of data obtained through questionnaire, interview and document review. The results of the study are presented in the form of figures and tables by using Statistical Package for Social Science (SPSS). The data was obtained from M&E and other experts in the National program office, the program coordinator in the National program Office, an individual from IFAD and member of the National steering committee of the program.

The presentation, analysis and interpretation are depicted in three sections. The first section shows presentation, analysis and interpretation of respondents' response to the questionnaire. The second section presents interviews conducted with the National program Coordinator, an individual from IFAD and member of the National steering committee. The third and final section presents results of documents analyzed.

#### **4.1. Response Rate**

Questionnaires were distributed to all M&E and other experts at the National program Coordination and Management Unit. In addition, interviews were undertaken with concerned stakeholders of the program, i.e. IFAD and the National Steering Committee. Accordingly, all selected for the questionnaire had responded to all the questions. Hence 100% response rate was achieved. In addition, all of the planned interviews, i.e. three interviews had been accomplished.

## 4.2 Demography and General Background of Respondents

The demography and general background of the respondents is summarized in the following table:

**Table 4.1. Demography and General Background of Respondents**

No.	Items	Category	Frequency	Percentage
1	Gender	Female	1	12.5%
		Male	7	87.5%
		<b>Total</b>	<b>8</b>	<b>100%</b>
2	Age	31-40	2	25%
		41-50	4	50%
		Above 50	2	25%
		<b>Total</b>	<b>8</b>	<b>100%</b>
3	Academic Qualification	BA/B.sc.	2	25%
		MA/M.sc.	6	75%
		<b>Total</b>	<b>8</b>	<b>100%</b>
4	Position	Middle Management	2	25%
		M&E Expert	2	25%
		Other Expert	4	50%
		<b>Total</b>	<b>8</b>	<b>100%</b>
5	Service year in the NPCMU	Below 2 years	1	12.5%
		3-5 Years	3	37.5%
		6-10 Years	3	37.5%
		Above 10 Years	1	12.5%
		<b>Total</b>	<b>8</b>	<b>100%</b>

**Source: Own Source May 2017**

As shown in the above table, out of the total number of staffs at the National Program Coordination and Management Unit (NPCMU) there is only one female (12.5%) the rest, i.e. 87.5% are Male. Out of the total staff at the NPCMU four are within 41-50 years of age category (50%), there are two staffs above fifty years of age (25%) and two staffs are within 31-40 years of age category (25%). It can be inferred that the NPCMU contains mature staffs that can have extended years of experience to handle activities at the NPCMU. Out of the total staff at the NPCMU six of them have MA/M.sc degree (75%) while two staffs have BA/B.sc degree (25%). Considering the academic qualification of the respondents, it can be stated that the National program office obtains qualified personnel. As a result, there shall be a good opportunity for the program to utilize the qualification of its staff to realization of the program objectives. The

NPCMU has two M&E Experts (25%), two middle level Management staffs (25%), and four other experts (50%). The other experts are comprised of two Engineers, a Watershed Specialist, and Training officer. During the interview with both the National program Coordinator and employee of IFAD, it was identified that the program had only one M&E expert at the beginning of the program. They stated that currently, there is adequate number of staff at the NPCMU comprised from relevant disciplines to fulfill the requirements of the proceeding program, i.e. PASIDP II. There is one staff that has below two years experience (12.5%), there are three staff with 3-5 years and 6-10 years experience (both at 37.5%), and there is one staff with above 10 years experience (12.5%) in the NPCMU. It can be seen from the table that majority of the program's staff have experience of more than or equal to three years of experience in the NPCMU with the exception of one staff who has below two years experience. As a result, it can be inferred that the program has experienced staff to undertake M&E and other program activities.

#### 4.3. M&E Plan

This part contains response of respondents regarding the type of M&E approach and Plan that the NPCMU utilized in the execution of the program. A question aimed at investigating whether the NPCMU had written M&E plan was asked to respondents and their response is presented in the table below.

**Table 4.2. Stakeholders Involvement in the M&E Plan**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Only National & Regional program Coordination and Management Units are involved	1	12.5	12.5	12.5
Valid Only done by National Program Coordination and Management Unit	1	12.5	12.5	25.0
Valid There was no Separate M&E plan	6	75.0	75.0	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As depicted in the above table, six respondents (75%) stated that there was no separate M&E plan designed by the NPCMU. One (12.5%) respondent stated that the M&E plan was only done by the NPCMU while another staff (12.5%) responded that the M&E plan was designed by

National and regional PCMUs. Majority of the respondents disclosed that the NPCMU did not have separate M&E plan to guide the M&E system of the program. Differences in respondents' response indicate that all staff at the NPCMU didn't have similar information on the M&E plan.

**Table 4.3. Type of M&E plan**

	Frequency	Percent	Valid Percent	Cumulative Percent
Incorporated within main proposal	1	12.5	12.5	12.5
Incorporated into the routine work plan of the NPCMU	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As shown in the above table, 87.5% of the respondents stated that the M&E plan of PASIDP was incorporated into the routine work plan of the NPCMU while 12.5% responded that M&E plan was incorporated within the main proposal of the project. It can be understood from the response that PASIDP had no separate M&E plan rather it is either incorporated with the main proposal or was part of the routine plan of the program. The fact that the NPCMU had no separate M&E plan shows that the unit had not given the M&E system the emphasis needed considering the magnitude of the program budget and objectives.

**Table 4.4. Reason for not Having M&E Plan**

	Frequency	Percent	Valid Percent	Cumulative Percent
Lack of Expertise at the NPCMU	7	87.5	87.5	87.5
Not sure of the Reason	1	12.5	12.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As shown in the above table, seven respondents (87.5%) stated that lack of expertise at the NPCMU was the reason for not having a separate M&E plan at the NPCMU while a single respondent (12.5%) stated that the reason for not having the M&E plan is not known. This shows that the NPCMU did not give the required emphasis to designing M&E system of the program.

All respondents replied that the program used logical M&E framework. The government M&E system that the program was using was mainly focused towards outputs of the program. This contradicts with the response of respondents that the program was using logical framework, which is input, process, output, outcome and impact focused. In addition to this, majority of respondents have agreed that the routine M&E work plan used by the NPCMU had identified important components such as what data to be collected, how often data is collected, and person in charge of M&E activities. However, they stated that the work plan missed important components such as clear roles & responsibilities for M&E staff and schedule of M&E activities. Lack of having schedule for M&E activities might have caused delays in program execution. Project completion report of IFAD confirmed that there were execution delays in some components of the program.

#### 4.4. M&E Staff Capacity

The following four tables show respondents' response regarding adequacy of budget allotted for M&E capacity building, adequacy & consistency of training provided to M&E staff, adequacy of number of M&E experts and experience sharing & adaptation of best practices of M&E at the NPCMU.

**Table 4.5. Was there Adequate Budget for M&E Training**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	6	75.0	75.0	75.0
Valid No	2	25.0	25.0	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As shown in the above table, six respondents (75%) stated that there was adequate budget allotted for M&E training while two respondents (25%) stated that there was no adequate budget allotted for M&E training at the NPCMU. Majority of the respondents believe that the budget for M&E training was adequate. Interviews conducted with the Program Coordinator and employee of IFAD had also asserted that the budget for M&E capacity building of the program was adequate.

**Table 4.6. Was there Adequate and Consistent M&E  
Training at the NPCMU**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	1	12.5	12.5	12.5
Valid No	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As depicted in the above table, majority of the respondents (87.5%) answered that they have not received adequate and consistent M&E training while one respondent (12.5%) answered that the training was adequate and consistent. Even though majority of respondents think that there was adequate budget allotted for capacity building (training), most of them were not satisfied with the M&E training they received. The interview with the Program Coordinator also suggested that there were problems with content of the M&E training provided and there was a gap in that regard.

**Table 4.7. Were there Adequate M&E Experts**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	3	37.5	37.5	37.5
Valid No	1	12.5	12.5	50.0
Not as Expected	4	50.0	50.0	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As shown in the above table, three respondents (37.5%) stated that there were adequate M&E experts at the NPCMU. One respondent (25%) answered that there were no adequate M&E staff while four respondents (50%) stated that the number of M&E staff at the NPCMU was not as expected or demanded. Majority of the respondents (62.5%) think that there was either inadequate number of staff at the NPCMU or their number was not as expected or desired by the program. Interview with the program coordinator revealed that there was only one M&E officer at the NPCMU for PASIDP and adequate manpower was not fulfilled in time to facilitate the

M&E of the program. For this reason, there were drawbacks in the first three to four years of the program. Interview with employee of IFAD also confirmed that there were problems regarding recruitment of M&E and other pertinent staff at the NPCMU before the commencement of the program.

**Table 4.8. Experience Sharing & Adaptation of Best Practices**

	Frequency	Percent	Valid Percent	Cumulative Percent
Absent	3	37.5	37.5	37.5
Valid Only to some extent	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As shown in the above table, three respondents (37.5%) stated that there was no experience sharing and adaptation of best practices of PASIDP at the NPCMU and five respondents (62.5%) stated that the experience sharing and adaptation of best practices was done but not in a sound manner. Interview conducted with the Program Coordinator revealed that there were some discussions on experiences of the program but was not well documented so that it can facilitate adaptation of best practices of the program.

#### **4.5. M&E Data Management and Quality**

Respondents' response regarding M&E data or information management and quality related questions are summarized as follows.

**Table 4.9. MIS to Assist M&E**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	8	100.0	100.0	100.0

**Source: Own source May 2017**

As indicated in the above table, all of the respondents (100%) stated that there was no MIS to assist the M&E and knowledge sharing activities of the program. The interview with the program coordinator and employee of IFAD also revealed this as one of the biggest challenges of the program at the NPCMU. For this reason, the NPCMU couldn't be able to facilitate the M&E activities especially in recording, analysis, reporting, and storing of the program effectively and

efficiently. Project completion report prepared by IFAD also revealed that lack of MIS at the NPCMU had contributed to failure in detecting challenges early on and slowed decision-making.

**Table 4.10. Data Quality Controlling Mechanism**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	2	25.0	25.0	25.0
Valid No	6	75.0	75.0	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As indicated in the above table, six respondents (75%) answered that there was no mechanism to control data quality coming from regional PCMUs while two respondents (25%) stated that there was a mechanism to control data quality coming from regional PCMUs. Majority of the respondents believe that there was no mechanism to control data quality coming from regional, woreda, and kebele levels. Low quality of data coming from federal, regional, woreda and kebele levels was stated as one of the challenges of the M&E in project completion report conducted by IFAD. Low quality of data compromises quality of reporting from the NPCMU and reliability of overall program performance.

**Table 4.11. Standard Data Collection Tools Exist**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	3	37.5	37.5	37.5
Valid No	2	25.0	25.0	62.5
Partially	3	37.5	37.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As shown in the above table, three respondents (37.5%) stated that there was standard M&E data collection tools at all levels of the program while another three respondents (37.5%) answered that there was partial use of standard data collection tool at all levels. One respondent (25%) replied that there was no standard data collection tool used at all levels of the program. Majority of the respondents (62.5%) believed that there was no or inconsistent M&E data collection tool

at all level of the program. In addition, the interview with the program coordinator revealed that there was inconsistent use of M&E data collection tool that caused problems in monitoring progress of the program especially in the first three to four years of the program. This might have led to data quality problems that were reported in project completion report prepared by IFAD.

**Table 4.12. Consistent use of Data Collection tools at all levels of M&E System**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	37.5	37.5
	No	2	25.0	62.5
	Partially	3	37.5	100.0
	Total	8	100.0	100.0

**Source: Own source May 2017**

The above table shows that three respondents (37.5%) replied that other M&E levels use consistent data collection tools to that used by the NPCMU. Two respondents (25%) stated that there was no consistent usage of data collection tool at lower M&E level to that used at the NPCMU. Three respondents (37.5%) answered that there was partial utilization of data collection tool by lower level M&E offices to that used at the NPCMU. Majority of the respondents (62.5%) had stated that there was either partial consistency in usage of data collection tools or no consistency at all. The fact that there are inconsistent data collection tools might have lead to collection of wrong data that was irrelevant to the M&E system.

**Table 4.13. Document Lessons Learnt**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	12.5	12.5
	No	4	50.0	62.5
	Partially	3	37.5	100.0
	Total	8	100.0	100.0

**Source: Own source May 2017**

As indicated in the above table, one respondent (12.5%) stated that there was documentation of lessons learnt during the program execution. Four respondents (50%) stated that there was no documentation of lessons learnt from the program while three respondents (37.5%) responded

that there was partial documentation of lessons learnt in the course of executing the program. Majority of the respondents (87.5%) stated that there was either partial recording or no recording of lessons learnt during the program execution. During analyzing documents the researcher couldn't find documentation regarding lessons learnt from PASIDP.

#### 4.6. Program Progress Monitoring

Questions were asked with the aim of identifying M&E process of the program. The following four tables illustrate the respondents' response regarding time, cost, evaluation and actual progress monitoring of the program.

**Table 4.14. Regular Data Collection based on the Plan**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	25.0	25.0
	No	2	25.0	50.0
	Partially	4	50.0	100.0
	Total	8	100.0	100.0

**Source: Own source May 2017**

As shown in the above table, two respondents (25%) stated that there was regular data collection at all levels of the program based on the plan. Four respondents (50%) revealed that there was partial execution of regular data collection at all levels of the program while two respondents (25%) answered that there was no regular data collection at all level of the program based on the plan. Majority of the respondents (75%) believe that there was either irregular or partial execution of data collection at all levels of the program based on the plan.

**Table 4.15. Monitoring actual progress of the program against the Plan**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quarterly	3	37.5	37.5
	Bi-annually	5	62.5	100.0
	Total	8	100.0	100.0

**Source: Own source May 2017**

As shown in the above table, three respondents (37.5%) replied that actual performance of the program was monitored quarterly while five respondents (62.5%) stated that actual performance of the program was monitored semi annually. The program coordinator also stated that the actual progress of the program was monitored semi annually. However, during document review it was

found out that the NPCMU was not making adequate progress review meetings with all level implementers as per the plan. This would have a problem because actual progress couldn't be monitored and timely corrective action couldn't be made if program was derailed.

**Table 4.16. Monitoring Progress of Project Activity Schedule**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	3	37.5	37.5	37.5
Valid No	5	62.5	62.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As depicted in the above table, five respondents (62.5%) replied that there was no monitoring of project activity schedule while three respondents (37.5%) stated that there was monitoring of project activity schedule. The interview with the Program Coordinator reveal that there were problems with monitoring progress of project activity schedule because of this there were delays especially in the first three to four years of the program. The fact that majority of the respondents and the program coordinator revealed that there was poor project activity monitoring indicates that there was a gap in monitoring of some program progress in the allotted timeframe.

**Table 4.17. Monitoring Financial Performance**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Quarterly	8	100.0	100.0	100.0

**Source: Own source May 2017**

As depicted in the above table, all of the respondents stated that financial performance of the program was monitored every quarter. Document analysis made also shows that there was consistent follow up of the financial performance of the program.

**Table 4.18. Timely Reporting**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	6	75.0	75.0	75.0
Valid No	2	25.0	25.0	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As shown in the above table, six respondents (75%) stated that there was timely reporting to all program stakeholders from the NPCMU while two respondents (25%) answered that there was no timely reporting from the NPCMU. Interview with the National Program Coordinator at IFAD revealed that there was timely reporting from the NPCMU. However, considering inconsistency in using similar data collection tools at all levels raises eyebrows about quality of reports presented to stakeholders. In addition, the mid-term evaluation report prepared by IFAD and Ministry of Agriculture revealed that completion of the report, data consistency and timely submission of quarter reports are common problems of the regions that the NPCMU had to deal with.

#### 4.7. Baseline Survey

The following table illustrates the response of respondents whether the NPCMU prepared baseline survey for the program. The second table illustrates whether the baseline survey satisfied all stakeholders' requirements. The third table shows whether there had been an external consultant to do the evaluation of the program.

**Table 4.19. Baseline Survey Conducted**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	1	12.5	12.5	12.5
Valid No	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

The above table shows that seven respondents (87.5%) stated that there was no baseline survey prepared for the program while only one person (12.5%) replied that there was a baseline survey prepared. The fact that baseline survey of the program was not prepared made it impossible to conduct meaningful evaluation. Both interviews conducted with the program coordinator at the NPCMU and IFAD Country Program Officer revealed that the NPCMU did not prepare baseline survey of the program. Hence, mid-term and post program evaluation was a big challenge for all stakeholders.

**Table 4.20. All stakeholders Satisfied with the Baseline**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	8	100.0	100.0	100.0

**Source: Own source May 2017**

The above table depicts that all of the respondents stated that all stakeholders were not satisfied with the baseline survey. The interview with the Program Coordinator revealed that the baseline survey that the NPCMU tried to prepare couldn't facilitate the impact evaluation of the program as it was prepared very late. Interview with the Program Coordinator and employee of IFAD revealed that there was mid-term and summative evaluation of the program by external consultant. However, both revealed that due to poor baseline survey, conducting the evaluations was a problem, especially the mid-term evaluation.

#### **4.8. M&E Practices**

This part contains response of respondents regarding M&E practices or activities at the National Program Coordination and Management Unit (NPCMU).

**Table 4.21. Reporting practice of the NPCMU**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Lenient	3	37.5	37.5	37.5
Valid Strict	4	50.0	50.0	87.5
Valid Very Strict	1	12.5	12.5	100.0
Valid Total	8	100.0	100.0	

**Source: Own source May 2017**

As depicted in the above table, three respondents (37.5%) stated that there was leniency of M&E reporting from the NPCMU while four respondents (50%) and one respondent (12.5%) stated that there was strict and very strict M&E reporting practice from the NPCMU respectively. It can be analyzed that majority of the respondents (62.5%) believe that the M&E reporting practice of the NPCMU was strict. However, during document review it was found out that the NPCMU was facing problems of getting timely reports from regional bureaus.

**Table 4.22. Indicators linked to the Objective**

	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid Yes	5	62.5	62.5	62.5
No	3	37.5	37.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As indicated in the above table, majority of the respondents (62.5%) stated that the indicators were clearly linked to the objectives of the program while three respondents (37.5%) stated that the indicators were not linked to the objectives of the program. The response shows that the indicators of the program were linked to the objectives. This was verified by looking into the program design document of IFAD and during interview conducted with different stakeholders.

**Table 4.23. Indicators linked to Inputs, Outputs, Outcomes and Impact of the Program**

	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid Yes	1	12.5	12.5	12.5
No	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As shown in the above table, seven respondents (87.5%) answered that indicators of the program were not linked to Inputs, Outputs, Outcomes, and impact of the program while only one respondent (12.5%) stated that indicators were linked to Inputs, Outputs, Outcomes, and impact of the program. It was found out in the document analysis that the program was using government M&E system which was mainly output focused. Consequently, other important components such as inputs, outcomes, and impact of the program were not linked to the indicators. This was also identified during the interview with program coordinator.

**Table 4.24. Do you use Consistent Indicators at all levels of the M&E system**

	Frequency	Percent	Valid Percent	Cumulative Percent
No	2	25.0	25.0	25.0
Valid Partially	6	75.0	75.0	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As shown in the above table, 75% of the respondents answered that there was only partial use of consistent indicators at all levels of the M&E system while 25% of the respondents answered that there was no consistent usage of indicators. This indicates that there was problem with using consistent indicators at all levels of the program. This is a big hurdle in monitoring progress of the program.

**Table 4.25. Mechanism to measure Indicators Performance**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	1	12.5	12.5	12.5
Valid No	7	87.5	87.5	100.0
Total	8	100.0	100.0	

**Source: Own source May 2017**

As depicted in the above table, seven respondents (87.5%) stated that there was no mechanism to measure performance of each indicator while only one respondent (12.5%) stated that there was a mechanism to measure performance of indicators. The interview with Program Coordinator also revealed that there was no mechanism to measure performance of each indicator of the program.

#### 4.9. M&E Challenges of PASIDP at the NPCMU

The following table summarizes response of respondents to an open ended question of challenges that affected M&E system of PASIDP at the NPCMU.

**Table 4.26 M&E Challenges of PASIDP at the NPCMU**

<b>No.</b>	<b>Reason</b>	<b>Frequency</b>	<b>Percentage</b>
<b>1</b>	No separate M&E plan designed	7	87.5%
<b>2</b>	Capacity shortage of M&E staff	8	100%
<b>3</b>	Lack of MIS to facilitate efficient and effective M&E and knowledge management	8	100%
<b>4</b>	Poor data quality and timely collection of data	5	62.5%
<b>5</b>	Inadequate training and awareness creation to all program staff	7	87.5%
<b>6</b>	Inadequate supervision	2	25%
<b>7</b>	Staff turnover	3	37.5
<b>8</b>	Commitment and attention from all stakeholders at all levels	1	12.5%

**Source: Own source May 2017**

As depicted in the above table, majority of respondents had given lack of separate M&E plan, capacity of staff, inadequate training, poor data quality and timely data collection and staff turnover as major challenges that affected M&E system of PASIDP at the NPCMU.

#### **4.10. Interview Analysis**

As planned in the methodology section of this study, about three individuals were planned to be interviewed. Accordingly, the Program Coordinator of PASIDP at the NPCMU, an employee of IFAD, and member of the National Steering Committee were interviewed. The overall interview result is presented as follows

##### **Interview with an employee of IFAD on 03 May 2017**

The country program Officer responded that all stakeholders of the program had participated in the course of undertaking the program design of PASIDP. He stated that IFAD outlined the roles and responsibilities of staffs in the NPCMU and regional PCMU in the program design document. However, the NPCMU together with branch PCMUs had the responsibility to devise M&E plan of the program. Nevertheless, separate M&E plan was never fully functional principally due to lack of human resource capacity and high staff turnover.

In response to adequacy of M&E budget, he responded that the amount of money allotted for setting up the M&E system of the program was adequate. He stated that the budget for M&E was included together with budget for learning and knowledge management, training and capacity building. He stated that budget allotted was adequate for setting up well functioning M&E system suiting the M&E requirements of the program.

Regarding capacity issues, he responded that there was capacity gap concerning M&E staff and other staff at the NPCMU. He emphasized that the M&E system was not designed by the NPCMU due to lack of staff capacity. He stated that as the amount of payment provided to these staff is increased, the better it will be to find more capable staff to handle the M&E activities of the program at the NPCMU. He also revealed that the same problem exists at regional PCMUs. Regarding number of staff at the NPCMU, the country program manager responded that the unit was equipped with adequate number of staff however; capacity of staff had to be strengthened.

Regarding training provided by IFAD, he replied that IFAD had provided all necessary training to staff of both national and regional PCMU on M&E standard and indicators of the program at the beginning of the program and at different phases of the program. He stated that NPCMU on its own had training plan to provide to its staff depending on the circumstances of the program.

Regarding reporting trend of the NPCMU, he stated that the NPCMU provides timely reports to IFAD, i.e., quarterly and annual reports. Regarding the baseline survey, the country program officer responded that the NPCMU was late to prepare the baseline survey of the program and what had been prepared was not up to the standard and couldn't facilitate proper evaluation of the program. He stated that the unit was 3 to 4 years late to prepare the baseline survey that should have been prepared within the first year of the program's commencement.

Regarding challenges that affected M&E of PASIDP at the NPCMU he stated that the main challenges were lack of MIS to facilitate the M&E activities, capacity gap of M&E staff, and low quality of data from all levels of the program. He stated that these problems have to be addressed by the national and regional PCMUs in order to strengthen the M&E system of PASIDP II which is in its first year of operation.

#### **Interview with Program Coordinator (NPCMU) on 11 May 2017**

The program coordinator responded that PASIDP completed on schedule and budget. However, there were problems in the first four years of the program implementation. Regarding M&E plan, the program coordinator stated that there was no separate M&E plan carried out by the NPCMU. For this reason, the first four years were especially a challenge to coordinate the monitoring and evaluation activities of the program.

In response to M&E budget adequacy, the program coordinator stated that the budget allotted for M&E system and capacity building was adequate. He replied that the NPCMU tried to provide training to its staff but there were challenges in preparing training need assessment and designing content of M&E trainings. In addition, he stated that there was staff capacity problem at the NPCMU and also at regional bureaus. Consequently, performance of the unit in carrying out routine M&E activities was limited especially in the first three to four years. Moreover, fact that there was only one M&E staff at the beginning, it piled up the pressure of the NPCMU.

In response to the question of baseline survey, the program coordinator responded that baseline survey was not made and what has been made after the first three to four years was not adequate and couldn't facilitate evaluations conducted. Regarding report dissemination of the unit, he stated that the NPCMU produced quarterly reports to stakeholders and conducted semi-annual supervision aimed at assessing program progress. He replied that during supervision, quality of

data coming from regions, woredas, and kebeles were checked for their quality. However, he admitted that there were data quality problems and conducting semi-annual supervision was not enough to guarantee the quality of data coming from regions, woredas, and kebeles.

The program coordinator at the NPCMU stated that lack of MIS, poor quality of data coming from branches, capacity of M&E staff, and commitment of higher level stakeholders especially those in the National Steering Committee in terms of providing direction and solving problem were among the challenges that affected the M&E system of PASIDP at the NPCMU.

### **Interview with member of the National Steering Committee (NSC) on 11 May 2017**

The National Programme Steering Committee (NPSC) member started by elaborating the structure of the NPSC and the Regional Programme Steering Committee (RPSC) that were established under Ministry of Agriculture (MoA) and in the regional agriculture bureaus respectively. He stated that NPSC committee included the State Minister of Natural Resources, MoA as chair person and members of the committee, Head of the Marketing Department, Head of Small-scale Irrigation Department from MoA, Cooperative agency, senior representative from MOFED, representatives from the Agriculture Research Institute and (Environmental Protection Agency) EPA. The regional PSC had similar composition and responsibilities as the NPSC. He stated that the committee's main responsibility was as to: provide policy guidance on small-scale irrigation development; ensure the timely implementation of the program; review financial statements, progress and audit reports; and provide management guidance to the NPCMU and RPCMU.

Regarding questions related to the involvement of the NSC in program design, he stated that some members of the NSC were involved. As to the program baseline survey, he stated that there were hurdles because the NPCMU didn't make the baseline survey where as he replied that majority of program indicators were appropriate to measure progress of the program. Regarding capacity of staff, he answered that the NPCMU reports disclosed that there were challenges related to staff capacity at the NPCMU and at regions.

Regarding the budget allotted for the M&E system of the program, he responded that there was adequate budget allotted. Regarding timing and quality of reporting, he responded that the NPCMU sent semi-annual reports and the committee had held semi annual meetings. He

revealed that there were problems from the NSC to carry out consistent review meetings to assess program progress. In addition, since the committee was organized with staff of several governmental ministries, there were gaps in having the intended level of commitment from all committee members. In response to challenges that affected M&E system of PASIDP at the NPCMU the NSC committee member stated that lack of adequate staff capacity, computerized MIS to facilitate the M&E activities, failure to prepare baseline survey, and data quality problems were among the challenges.

The mid-term review report disclosed that that the committee at all levels was not working proactively to its responsibility and that they did not have periodical review meetings.

#### **4.11. Document Analysis**

In the course of undertaking the study, the researcher tried to review several documents regarding the program. This includes PASIDP program Design document, PASIDP Mid-Term review report, PASIDP program Completion Report, PASIDP Impact Assessment Report, and Reports (Annual and Quarterly). The design document of PASIDP comprehensively presented details of the program design, i.e. all components necessary in the overall undertaking of the program. It also included details regarding the M&E system of the program, responsibilities of stakeholders in M&E system, indicators of the program, etc. in the opinion of the researcher, the design document could have been a good stepping stone for the NPCMU to design the M&E system of the program.

The mid-term evaluation report prepared by IFAD and Ministry of Agriculture in 2013 provided a comprehensive overall assessment at mid-point of the program and critically assessed administrative, technical, strategic issues and related constraints. The review made recommendations relating to strategies, approaches and activities that would improve the chance of the program to meet its objectives and achieve expected outcomes within the set time frame. The findings of the Review were incorporated in the remaining period of the program implementation to improve the program performance. It provided an opportunity to re-think the different program components, realigned institutional arrangements and re-program or redistribute the resources for the remainder of three years.

PASIDP program completion report was prepared in June 2016 after closure of the program. The document identified that M&E system of the program was never fully in place and weaknesses in monitoring and low quality of data collected at federal, regional, Woreda, and Kebele levels. The document also stated that there was no MIS to facilitate M&E and knowledge sharing activities. The document asserted that the program was using existing government M&E system which was mainly output oriented and it varies from region to region. According to the document, the MIS system was not functional due to lack of human resources capacity and high staff turnover. In addition, it was reported that even though implementations of the program should have been discussed by all stakeholders quarterly, it had not been done adequately as planned.

PASIDP Impact Assessment Report June 2016 stated that the program has been using existing government M&E system, though it varies from region to region. The document stated that the mid-term review was undertaken by the NPCMU through consultants and about 70% of the project achievements were carried out after bottlenecks was solved based on the midterm review results.

Sample annual reports of the program prepared by the NPCMU were reviewed by the researcher. The report included information regarding progress of the program, other activities performed, and constraints faced. In the opinion of the researcher, contents of the annual report prepared by the NPCMU contained relevant information that stakeholders can use to make informed decisions.

## CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

The final chapter presents the findings of the study after data gathered through questionnaire; interview and document review is analyzed. Accordingly, conclusion and recommendation of the study are presented as follows.

#### 5.1. Conclusions

Based on the findings analyzed from questionnaires, interviews and document review, conclusion is made in line with the objective and research questions of the study. It was identified that M&E activities at the NPCMU were not up to the expected standard; they were not planned and coordinated. Staff capacity limitation, problem of timely reporting from regions, inconsistent use of indicators, poor data quality, inadequate program monitoring, poor baseline survey, lack of MIS to facilitate the M&E activities were among the challenges at the NPCMU. It was identified that there was no separate M&E plan to guide the monitoring and evaluation activities at the NPCMU. In addition, support and guidance of the National Steering Committee to the NPCMU was not adequate. The following conclusion is made regarding challenges that affected PASIDP's M&E system at the NPCMU:

- ❖ It was found out that the M&E system of the program didn't have M&E plan of its own. What it had was a routine work plan and the program was basically using the government's M&E system which was entirely output oriented. This means that other necessary contents such as inputs, outcomes, processes, and impact was not properly addressed in the course of undertaking the program M&E system as expected in the logical M&E framework.
- ❖ Lack of MIS in order to facilitate the monitoring and evaluation activities of the program. Well functioning MIS would have facilitated easy data recording, analysis, reporting, and storing (documentation). Having a computerized system to lead the M&E of the program would have been ideal as it would have added efficiency and effectiveness to the program's M&E system.
- ❖ There were staff capacity shortages at the NPCMU that hindered the unit from designing the program's M&E system, conducting baseline survey, devising a mechanism to

ensuring quality of data collected from regions, woredas and kebeles. In addition, in the course of reviewing documents, it was found out that staff capacity problem was also a problem at regional program coordination bureaus. The reason for this as identified in the interviews with the program coordinator and employee of IFAD was lack of competitive salary to hire and maintain better M&E experts.

- ❖ The NPCMU didn't prepare baseline survey of the program. Consequently, there were problems during the mid-term program review conducted jointly by IFAD and the NPCMU through external consultants. Both the NPCMU and IFAD were not satisfied by the fact that there was no baseline survey.
- ❖ Majority of respondents have stated that there were problems in maintaining data quality collected from all levels of the program. Although the program coordinator revealed that quality of data was maintained during semi-annual supervision, it was not enough to ensure quality of data collected from regions. The fact that there were problems in data quality was confirmed by Project completion report of IFAD. In addition, majority of respondents answered that there was no mechanism to ensure quality of data coming from regions, woredas, and kebeles.
- ❖ It was identified that there were gaps in adequately monitoring project progress. Project completion report of IFAD stated that weaknesses in supervision were witnessed. This was confirmed by the less number of supervision (progress monitoring) meetings that the NPCMU & NSC undertook with concerned implementers. The number of supervision & review meetings conducted was less than the planned supervision and review meeting.
- ❖ It was observed that there was inadequate training to staff at the NPCMU and also at regional PCMUs. Majority of the respondents were not satisfied with the M&E training they had received according to the questionnaire results. The program coordinator confirmed that there were problems related with training; especially in conducting training need assessment and in designing contents of the training materials by the NPCMU.
- ❖ The interview with the employee of IFAD revealed that there was high staff turnover both at the national and regional program coordination and management units. The problem was also mentioned by respondents of the questionnaire.

- ❖ There was also issues of inadequate stakeholder commitment and provision of the required support from all stakeholders at all level. Problem of providing the required attention and guidance was raised by the program coordinator during the interview session.

## **5.2. Recommendations**

The following recommendations are given to strengthen the M&E system of PASIDP II that is in the first year of execution.

- ❖ Prepare a separate M&E plan and avoid using the M&E system of the government which is output oriented. The NPCMU should use the logical framework that incorporates inputs, activities, outputs, outcomes, and goals of the program. The NPCMU must ensure that indicators are linked to inputs, outputs, outcomes, and impacts of the program. Furthermore, the M&E approach that the NPCMU uses should be participatory, i.e. collaborating with all stakeholders in assessing and evaluating the performance and achievement of the program. This will ensure the central idea that projects belong to beneficiaries. The NPCMU can take into account, the NPCMU should take into account the six steps in designing the program's M&E plan i.e. Identifying the purpose & scope of the M&E system, Planning for data collection & management, Planning for data analysis, Planning for information reporting & utilization, Planning for M&E human resources and capacity building, Preparing the M&E budget
- ❖ Develop MIS to facilitate the M&E system of PASIDP II. The MIS will assist in efficient and effective data recording, analysis, reporting and storing. It can benefit the M&E activities at all levels of the program. Besides, a well functioning MIS will have a mechanism to document lessons learnt and best practices during program execution that shall be used for experience sharing. Furthermore, MIS facilitates timely reporting that will be used to make prompt decisions. This will help all stakeholders to obtain timely reports and take corrective action if the program is out of schedule, cost or expectation. The NPCMU should start by preparing requirements for the MIS system. The requirement document is key input for negotiation with system developers and it should be developed by involving all stakeholders of the program.

- ❖ Strengthen capacity of NPCMU's staff by providing relevant training. Conduct careful training needs assessment, prepare appropriate training documents with relevant contents and provide training. If the NPCMU still is not in a position to do this, it can contract it to consultants. In addition, provide general awareness creation training to all members of the project team at the NPCMU in order to update them on current program progress and to acquaint them with what is required from each individual to strengthen the M&E system.
- ❖ Prepare proper baseline survey within the first year of the program execution. As baseline survey is the most important tool used during project evaluation, it is important to design it appropriately and timely. A consultant can be hired to perform this with active participation of all stakeholders.
- ❖ Devise a mechanism to ensure quality of data coming from regions, woredas, and kebeles. Effective way of ensuring data quality is by using a uniform MIS system at all levels of the program with user management and controlling features such as user access right, check and balance features. Until the NPCMU deploys an effective MIS, another way of ensuring data quality could be designing a mechanism to ensure that all levels of the program M&E uses similar data collection tool and making sure that all staffs receive adequate training on the data collection tools or formats. Strengthening and increasing the number of supervision to the regions would be another solution.
- ❖ Plan for project supervision and make timely and adequate supervision to identify program progress according to the plan. Encourage regions to do the same. One method that the NPCMU can use is Indicator Tracking Table that puts all indicators in a table and controls their performance or progress. Indicator Tracking Table helps to determine the difference between identified targets and actual results – the percentage of target reached.
- ❖ Devise a mechanism to curb staff turnover by paying competitive salary or identifying other means such as providing favorable working environment, providing education opportunities, organizing exchange visits to countries where similar programs are being implemented, etc.
- ❖ Provide awareness creation training to all stakeholders especially those in the National and regional Steering Committees to build their commitment towards seriously following program progress. The Regional and Federal Steering Committees should have regular

review programs to create responsive and integrated project operation teams among program stakeholders by building capacities and providing all the facilities for work at all levels of the operation.

Finally, it is recommended that further studies should to be conducted to assess the Monitoring and Evaluation activities at regional, woreda and kebele level of the program. This will reveal M&E challenges at these levels and propose a remedy to set up a better and strong M&E system that is capable of effectively and efficiently handling monitoring and evaluation requirements of the program.

## References

- Atnafu, T. (2007).** Current and Future Plans of Irrigation and Drainage Development in Ethiopia. Addis Abeba: Ministry of Water Resources
- Aune, B. (2000).** Logical framework approach and PRA – Mutually Exclusive or Complementary tools for Planning. *Journal of Development in Practice*, 10 (5), pp. 687-690
- Australian AID (2006).** Monitoring and Evaluation Framework Good Practice Guide, [Online] Available at: <http://www.ausaid.gov.au/ngos/pages/ancp.aspx> [Accessed on 12 May 2017]
- Berhanu, G., Abraham, G. and Rebeka, A. (2011).** Result based Monitoring and Evaluation for Organizations Working in Agricultural Development: Guide for Practitioners, Improving Productivity and Market Success of Ethiopian Farmers. Addis Abeba: International Livestock Research Institute.
- Burns, N. and Grove, K. (1993).** The Practice of Nursing Research Conduct, Critique and Utilization. 2<sup>nd</sup> ed. Philadelphia: WB Saunders Company
- Crawford, P. and Bryce, P. (2003).** Project Monitoring and Evaluation: A Method for Enhancing the Efficiency and Effectiveness of Aid Project Implementation. *International Journal of Project Management*, 21(5), pp. 363-373
- Cousins, B. (1995).** Assessing Program Needs Using Participatory Evaluation.
- Ebrahim, A. and Weisband, E. (2007).** Global Accountabilities: Participation, Pluralism, and Public Ethics. Cambridge: Cambridge University Press.
- Eckman, K. (1994).** How NGOs Monitor projects for Impacts: Results of Recent Research, [Online] Available at: <http://www.eckmal00@maroon.te.umn.edu> [Accessed on 15 May 2017]
- Edwards, M. and Hulme, D. (1995).** Non-Governmental Organizations: Performance & Accountability. London: Save the Children UK.
- Emel, J., Makene, M. and Wangari, E.(2012).** Problems with Reporting and Evaluating Mining Industry Community Development Projects: A Case Study from Tanzania, [Online] Available at <http://www.mdpi.com/journal/sustainability> [Accessed on 15/05/2017]
- Ethiopian Management Institute, (2014).** Program Monitoring and Evaluation under P for R Program Training Manual. Addis Ababa: Unpublished.
- Ethiopia Country Program Evaluation, (2010).** Synthesis Report, [Online] Available at: <http://oecd.org/countries/Ethiopia/45875541.pdf> [Accessed on 25 May 2017]

**Ermias, H. (2007).** Monitoring and Evaluation of Projects in Government Organizations: Expectations and Practices: The Case of the Ministry of Mining and Geological Survey of Ethiopia. MA. AAU

**Family Health International, (2004).** Monitoring and Evaluation Fundamentals, A self guide Mini-Course. Addis Ababa: Unpublished.

**FHI, (2004).** Monitoring and Evaluation of Behavioral Change Communication Programs. Washington D.C: FHI

**Fitsum, H., Godswill, M., Regassa, E., Namara, D., Seleshi, B., Awulachew, H. (2009).** Importance of Irrigated Agriculture to the Ethiopian Economy: Capturing the Direct Net Benefits of Irrigation, [Online] Available at: [www.iwmi.org/pdf/H044133.pdf](http://www.iwmi.org/pdf/H044133.pdf) [Accessed 15 May 2017]

**Frankel, N. and Gage, A. (2007).** Monitoring and Evaluation Fundamentals: A Self-Guided Mini-Course, [Online] Available at: <http://www.cpc.unc.edu/measure/publication/ms-07-02> [Accessed 15 May 2017]

**Gage, A. and Dunn, M. (2010).** Monitoring and Evaluating Gender based Violence Prevention and Mitigation Programs: A Facilitator's Training Guide, [Online] Available at: <http://www.cpo.unc.edu/measure/training> [Accessed 13 May 2017]

**Geremew, D. (2016).** An Assessment of Public Projects Monitoring and Evaluation Practices of Oromia: The Case of Oromia Bureau of Finance and Economic Development. MA. AAU

**Gyorkos, T. (2003).** Monitoring and Evaluation of Large Scale Helminthes Control Programs. International Journal of Acta Tropica, [Online] 86(2), pp. 275-282 [Accessed 15 May 2017]

**Handmer, J. and Dovers, S. (2007).** Handbook of Disaster and Emergency Policies and Institutions, [Online] Available at: [http://www.iugg-georisk.org/presentation/IUGG2011-Dovers\\_handmer\\_3.pdf](http://www.iugg-georisk.org/presentation/IUGG2011-Dovers_handmer_3.pdf) [Accessed 15 May 2015]

**Hughes, A. (2002).** Evaluation of HIV/AIDS peer Projects in Zambia. Evaluation and Program Planning, [Online] 25(4): 397-407 [Accessed 16 May 2017]

**Hunter, J. (2009).** Monitoring and Evaluation: Are We Making Difference. Namibia : Namibia Institute for Democracy.

**Inter-American Development Bank, (1997).** Evaluation: A management tool for Improving Project Performance. Washington DC: IADB. Tropic, 86(2): 275-282

**International Fund for Agricultural Development, (2002).** A Guide for Project M&E: Managing for Impact in Rural Development, [Online] Available at <http://www.ifad.org/evaluation/guide/> [Accessed 15 May 2017]

- IFAD, (2007).** Participatory Small-Small Scale Irrigation Development Program Design Document. Addis Abeba.
- IFAD, (2014).** Participatory Small-Small Scale Irrigation Development Program Supervision Report. Addis Abeba.
- IFAD, (2016).** Participatory Small-Small Scale Irrigation Development Program II Design Document. Addis Abeba.
- International Finance Corporation, (2008).** The Monitoring and Evaluation Handbook for Business Environment Reform, [Online] Available at: [publicprivatedialogue.org/monitoring and Evaluation/M&E Handbook 2016.pdf](http://publicprivatedialogue.org/monitoring-and-evaluation/M&E-Handbook-2016.pdf) [Accessed 15 May 2017]
- International Federation of Red Cross and Red crescent Society, (2011).** M&E Guide. Geneva: IFRC
- International Union for Conservation of Nature, (IUCN). (2005).** Monitoring and Evaluation Systems Manual, [Online] Available at: [http://www.mekongwetlands.org /assets/systems/M&E manual.pdf](http://www.mekongwetlands.org/assets/systems/M&E-manual.pdf) [Accessed 12 May 2017]
- Kelly, K. and Magongo, B. (2004).** Report on Assessment of Monitoring and Evaluation Capacity of HIV/AIDS Organizations in Swaziland. Swaziland: NERCHA.
- Kothari, C. (2004).** Research Methodology Methods and Techniques. 2<sup>nd</sup> ed. New Delhi: New Age International Ltd.
- Lipton, M., Litchfield, J., and Faures, J. (2003).** The Effects of Irrigation on Poverty: A Framework for Analysis, [Online] Water Policy 5: 413-427 [Accessed 15 May 2017]
- Loveridge, D. (2011).** Theories of Change: Monitoring and Evaluation Capacity Development. Melbourne: Melbourne Graduate School of Education.
- Lyons, A. (2000).** An Effective Monitoring Framework for Community Based Natural Resource Management: A Case Study of the ADMADE Program in Zambia: University of Florida.
- Lysyl, M. (1997).** Organizational Consequences of Evaluation as a function of Strategic Planning.
- Mark, M. (2007).** Monitoring and Evaluation Practice and Changes of Gaborone Based Local NGOs Implementing HIV/AIDS Project in Botswana. University of Botswana
- McCoy, L., Ngari P. and Krumpke, E. (2005).** Building Monitoring, Evaluations and Reporting Systems for HIV/AIDS programs. Washington DC: USAID
- McGaghie, W., Bordage, G. and Shea, J., (2001).** Problem Statement, Conceptual Framework, and Research Question. [Online] Available at: <http://goo.gl/qLIUFg> [Accessed 19 June 2017]

**Ministry of Finance and Economic Development, (2006).** Building on Progress: A Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (2005/06 - 2009/10). Addis Ababa: MoFED

**Ministry of Finance and Economic Development, (2008).** Guidelines for Monitoring and Evaluation of Public Sector Project. Addis Ababa: MoFED

**Minister of Water Resource, (2002).** Water Sector Development Program 2002-2016 Irrigation Development Program, Main Report. Addis Abeba: MoWR.

**Muzinda, M. (2007).** Monitoring and Evaluation Practice and Changes of Gaborone Based Local NGOs Implementing HIV/AIDS Project in Botswana. MA. University of Botswana.

**NASA, (2001).** GAO-01-1015R Survey of NASA's Lessons Learned Process. NASA.

**Neuman, L. (2006).** Social Research Methods: Qualitative and Quantitative Approaches: Boston: Allyn and Bacon.

**Norman, W. (2005).** Monitoring & Evaluation Systems Manual (M&E Principles). Bangkok: The world conservation union (IUCN), [Online] Available at: [http://www.mekongwetlands.org/assets/systems/M&E\\_manual.pdf](http://www.mekongwetlands.org/assets/systems/M&E_manual.pdf) [Accessed 15 May 2017]

**OECD, (2010).** Glossary of Key Terms in Evaluation and Results Based Management. OECD/DCA.

**Ouma, O. (2010).** Factors Influencing Effective Monitoring & Evaluation of Small and Medium Enterprise Projects in Rachuonyo District. MA. Kenyatta University.

**Seleshi, B. and Daglus, J. Merry, K. (2007).** Assessment of Small Scale Irrigation and Water Harvesting in Ethiopian: Agricultural Development, [Online] Available at: [/http://www.asareca.orgswment/Maputo/Maputo\\_papers/IW\\_Pdf](http://www.asareca.orgswment/Maputo/Maputo_papers/IW_Pdf) [Accessed 14 May 2017]

**Palestinian Academic Society for the Study of International Affairs (PASSIA), (2004).** Civil Society Empowerment: Monitoring and Evaluation, [Online] Available at: [www.passia.org/seminars/2004/monitoring.htm](http://www.passia.org/seminars/2004/monitoring.htm) [Accessed 15 May 2017]

**Patton, (2001).** Evaluation, Knowledge Management, Best Practices, and High Quality Lessons Learned. American Journal of Evaluation, [Online] 22 (3) [Accessed 15 May 2017].

**Preskill, H. and Torres, R. (1997).** Building the Infrastructure for Evaluative Inquiry.

**Price, J. (2009).** The Conception and Operationalization of Leadership in Construction companies. MA. UNISA.

**Reijer P., Chalimba M., and Nakwagala. A. (2002).** Malawi goes full scale with anti AIDS clubs and popular media. Evaluation and Program Planning, [Online] 25(4): 357-363 [Accessed 16 May 2017]

- Rossi, P., Freeman, H., and Lipsy, M. (1999).** Evaluation: A Systematic Approach. New Delhi: SAGE Publications Inc.
- Saunders, M., Lewis, P. & Thornhil, A. (2009).** Research Methods for Business students. 5<sup>th</sup> ed. Italy: Rotolito Lombarda.
- Segone, M. (2006).** New Trends in Development Evaluation: UNICEF & International Program Evaluation Network.
- Temesgen, T. 2004.** An Assessment of Project Monitoring and Evaluation: The case of Oromia Health Bureau Hospitals Construction Projects. MA. Ethiopian Civil Service University
- Toitske, H., Mark, T. and Sibrenne, W. (2009).** Monitoring and Evaluating Knowledge Management Strategies, [Online] Available at: <http://www.wiki.i.memergen.net/files/9011301> [Accessed 15 May 2017]
- Uisso, H. (2009).** Assessment of the Case Study of South Ruvu Forest Reserve in Tanzania
- USAID, (2012).** United Nations Development Assistance Framework (2012- 2015), Monitoring and Evaluation Plan. Addis Ababa: Unpublished.
- UNICEF, (2006).** New Trends in Development Evaluation. UNICEF & International Program Evaluation Network.
- Wegayehu, H. (2014).** Monitoring and Evaluation Practices and Challenges of Local NGOs Executing Education Projects in Addis Ababa. MA. AAU
- World Bank, (2004).** Ethiopia General Education Quality Improvement Program: Project Appraisal Document. Washington: Unpublished
- World Bank, (2004).** Ten Steps to a results Based Monitoring and Evaluation. Washington: The International Bank for Reconstruction and Development
- World Bank Operations Evaluation Department, (2004).** Monitoring and Evaluation. Some Tools, Methods and Approaches.
- World Bank, (2006).** Managing Water Sources to Maximize Sustainable Growth: A World Bank Water Resource Assistance Strategy for Ethiopia. Addis Abeba: World Bank
- World Bank (2011).** Monitoring & Evaluation Capacity Development, [Online] Available at: <http://go.worldbank.org/1FASV17EC0> [Accessed 15 May 2017]
- World Parks Congress, (2003).** A Review of Monitoring and Evaluation Approaches and Lessons Learned in Conservation
- World Bank, (2004).** Monitoring and Evaluation. Some tools, Methods and Approaches. Operations Evaluation Department

# ANNEXES

**Questionnaire**  
**Addis Abeba University**  
**College of Business and Economics**  
**School of Commerce**

**Dear Respondents;**

This questionnaire is designed to gather data on Monitoring and Evaluation system of the PASIDP in MoANR at the National Program Coordination and Management Unit. The title of the study is An Assessment of Monitoring and Evaluation of PASIDP at the MoANR. The study will be used for partial fulfillment of the Master of Arts Degree in Project Management. The MoANR may use the study to alleviate Monitoring and Evaluation (M&E) challenges in the National Program Coordination and Management Unit.

I appreciate your collaboration in advance and expect your genuine response to the questions. Please note that your response will be held confidential. Please don't hesitate to contact me at 0911 72 22 13 or [bekalug@yahoo.com](mailto:bekalug@yahoo.com) for any queries you may have.

**Direction:**

- No need of writing your name;
- Put tick mark ‘/’ or circle the choice you select;
- For the open ended items, please give brief answer in the space provided.

**Part I: Demographic Characteristics of the Respondents and General Background**

1. Gender:

- a. Male
- b. Female

2. Age:

- a. 21-30
- b. 31-40
- c. 41-50
- d. above 50

3. Current Academic Qualification:

- a. High School completed
- b. Diploma
- c. BA/B.Sc.
- d. MA/M.Sc
- e. PhD

If other, please specify.....

4. Position in the Organization:

- a. Top Management
- b. Middle Management
- c. Program Coordinator
- d. M&E Expert
- e. Other Expert

5. Service year in the NPCMU

- a. Below 2 Years
- b. 3-5 Years
- c. 6-10 Years
- D. Above 10 Years

**Part II. General M&E Issues**

6. What type of M&E approach do you use?

- a. Traditional where outside consultant does the M&E
- b. Participatory where all stakeholders of the program collaborate in assessing & evaluating performance and achievements
- c. combination of both approaches (choice a and b)
- d. only done by M&E experts at the NPCMU

If your answer to the above question is c, please elaborate how it is done & why.....

7. What type of M&E plan did the program employ?

- a. Separate
- b. Incorporated within main proposal
- c. Incorporated into the routine work plan of the NPCMU

Other, please specify-----

**Part III: Monitoring and Evaluation Expectation**

- 8. M&E reporting expectations from MoANR, National Steering committee, and donor is:
  - a. Very Lenient
  - b. Lenient
  - c. Strict
  - d. Very Strict
- 9. The practice of reporting from the NPCMU, RPCMU, Woredas, and DAs is:
  - a. Very Lenient
  - b. Lenient
  - c. Strict
  - d. Very Strict

**Part IV. Monitoring and Evaluation Practices**

**A. Monitoring and Evaluation plan**

- 10. Are all stakeholders involved in the M&E plan of the program?
  - a. All stakeholders i.e., NSC, RSC, NPCMU, RPCMU, Woredas, and DAs are involved
  - b. Only National & Regional program Coordination and Management Units are involved
  - c. Only done by National Program Coordination and Management Unit
  - d. There was no separate M&E plan

Please specify other stakeholders involved in the M&E planning if there are any.....  
.....

- 11. If your answer to the above question is d, what is the reason?
  - a. It is irrelevant
  - b. Lack of expertise
  - c. Difficult to prepare
  - d. The Project is small
  - e. I don't Know

If there is any other reason, please specify.....  
.....

- 12. Is IFAD involved in the M&E system of the program?
  - a. Yes
  - b. No
  - c. Partially

If yes, how is IFAD involved?.....  
.....  
.....  
.....

Which of the following aspects were specified in the plan that guides M&E activities of the program? 5= Strongly Agree (SA) 4= Agree (A) 3= Neither Agree nor Disagree (N) 2= Disagree (D) 1= Strongly Disagree (SD)

No.	Questions	Response				
		SD	D	N	A	SA
13	Data to be collected is identified					
14	Frequency of data collection defined					
15	Individual(s) in charge of M&E assigned					
16	Roles and responsibility of staff in M&E clearly stated					
17	Plan/schedule for dissemination of findings					
18	Resources needed for M&E assigned					
19	Schedule of M&E activities prepared					

20. Does PASIDP have separate budget for its M&E system?

- a. Yes                      b. No

21. What percentage of the total program budget allocated for M&E?

- a. Less than 5%          b. 5-10%          c. More than 10%          d. I don't know

22. Were there indicators clearly linked to the objectives of the program?

- a. Yes                      b. No

23. Were M&E indicators linked to inputs, outputs, outcomes and impact of the program?

- a. Yes                      b. No

24. Do you use consistent indicators at all level of the M&E system?

- a. Yes                      b. No                      c. Partially

25. Did the NPCMU use logical framework to plan for M&E system of the program?

- a. Yes                      b. No

If no, what framework did you use.....

26. Have you made baseline survey to facilitate M&E activities in the course of undertaking the program? a. Yes b. No

If yes, who participated in the process (Were all stakeholders involved).....

27. Are all the stakeholders satisfied with the baseline survey?

a. yes b. No c. Partially

28. What tools and techniques does the NPCMU use to collect data? (*You can select more than one choice if you use more than one technique*)

a. Questionnaire b. Interview c. Observation d. Case study e. Designed templates  
f. Focus group discussion g. Document review h. No standard tools/techniques used

29. Are data collection tools and techniques used by the NPCMU consistently used by all M&E stakeholders of the program at lower levels?

a. Yes b. No c. partially

30. How often do you disseminate M&E findings?

a. Fortnightly b. Monthly c. Quarterly d. Semi annually e. annually

## **B. Capacity Building**

31. Was there adequate budget allotted for the program's M&E training and capacity development?

a. Yes b. No

32. Were there adequate and regular M&E training for Monitoring and Evaluation staff at the NPCMU?

a. Yes b. No

33. Are there adequate M&E experts at the NPCMU working on the program?

a. Yes b. No c. Not as expected

34. Experience sharing and adoption of best practices of M&E in the NPCMU is:

- a. Absent                      b. Only to some extent                      c. Well developed

**C. Project Monitoring and Evaluation Process**

35. Do you regularly monitor planned project activities schedule against actual schedule in order to determine project schedule performance.

- a. Yes                      b. No

If yes, how often do you monitor?.....

If No, why not.....

36. Do you have a mechanism to measure indicator performance such as Indicator Tracking Table?                      a. yes                      b. No

If yes, please specify what tool you use.....

.....

37. How often is the financial performance of the project monitored by comparing the planned budget with actual expenditure?

- a. Fortnightly    b. monthly    c. Quarterly    d. Semi-annually    e. annually    f. Never

38. Does NPCMU ensure whether project resources like equipment are effectively deployed to the M&E activities of the program or not?

- a. Yes                      b. No                      c. partially

39. How often do you conduct program monitoring to assess actual program progress against the plan?

- a. Fortnightly    b. Monthly    c. Quarterly    d. Semi-annually    e. annually    f. Never

40. Which type of evaluation do you normally carry out? (You can choose more than one choice)

- a. Ex-ante evaluation (beginning of the project)
- b. Midterm (interim) evaluation
- c. Summative evaluation (end of project)
- d. Ex-post Evaluation(3-5 years after the end of the project)
- e. We never conducted an evaluation

41. Do you involve an external facilitator to carry out evaluation of the program?

- a. yes
- b. No

(a) If you involve an external facilitator, please explain why?

.....  
.....

(b) If you conduct evaluation on your own, please explain why?

.....  
.....

**D. Data/Information Management**

42. Do you have a standard data collection tools that are consistently used at each level of the M&E system of the program?

- a. yes
- b. No
- c. Partially

43. Does the NPCMU regularly collect and analyze data from all RPCMU based on the plan?

- a. Yes
- b. No
- c. Partially

44. Is there timely and accurate M&E reporting from the NPCMU to all stakeholders to facilitate prompt decision making by assessing achievements and challenges?

- a. Yes
- b. No

45. Does the NPCMU document lessons learned in the project execution?

- a. Yes
- b. No
- c. Partially

If yes, please explain how .....

.....

46. Do you have a computerized system (MIS) to facilitate the M&E system especially in data recording, analysis, reporting, and storing?

- a. Yes
- b. No

47. If not, what tools do you use to record, analyze, report, and store M&E data?

.....

48. If your answer to q.45 is no, what is the reason for not having a computerized system?

.....  
.....

49. Do you have data quality control mechanism to ensure quality of data coming from RPCMU?

- a. Yes
- b. No

If yes, how do you ensure data quality.....  
.....

50. What challenges affected M&E activities of PASIDP at the NPCMU?

.....  
.....  
.....  
.....

51. What do you recommend to strengthen the M&E system of PASIDP II at the NPCMU?

.....  
.....  
.....  
.....

**Thank you for your cooperation!!!**

**Interview Questions to Program Coordinator of PASIDP at the NPCMU**  
**Addis Abeba University**  
**College of Business and Economics**  
**School of Commerce**

**Interview Date:** \_\_\_\_\_

**Dear Respondent, Greetings**

The Purpose of this interview is to provide pertinent information to carry out a study titled An Assessment of Monitoring and Evaluation of PASIDP in national program coordination unit at the MoANR. The study will be used for partial fulfillment of MA Degree in Project Management.

1. Have you started and completed PASIDP according to the specified time, budget and stakeholder's expectation? Why?
2. What did you consider when setting up the M&E system of the program and who else was involved with you? Was the M&E system of the program operational in time with all the necessary resources to facilitate M&E activities of the program?
3. What was the budget allotted for M&E system of PASIDP at the NPCMU? And at all level of the M&E system in general? Do you think the budget is adequate to set up an effective M&E system at the NPCMU?
4. Did you have adequate and capable M&E staff at the NPCMU? Were there adequate and regular trainings provided to them? If not, why?
5. Were all the indicators of the program linked to inputs, outputs, outcomes and impact of the program? Do you think the baseline survey is adequate to facilitate impact assessments and satisfied all stakeholders?
6. Was there timely and accurate reporting to all stakeholders? How did you check data quality of NPCMU? Do you use computerized system to facilitate M&E activities? If not, why?
7. What were the challenges that affected M&E of PASIDP at the NPCMU? What should be done to strengthen the M&E activities of PASIDP II at the NPCMU?

**Thank you for your Cooperation!!!**

## **Interview Questions to IFAD**

**Addis Abeba University**

**College of Business and Economics**

**School of Commerce**

**Interview Date:** \_\_\_\_\_

### **Dear Respondent, Greetings**

The Purpose of this interview is to provide pertinent information to carry out a study titled An Assessment of Monitoring and Evaluation of PASIDP in national program coordination unit at the MoANR. The study will be used for partial fulfillment of MA Degree in Project Management.

1. Have you involved all stakeholders of the program in the course of undertaking the M&E design and plan of PASIDP? Whose responsibility was it to design and plan the M&E system of the PASIDP program in general and at the National Program Coordination and Management Unit in particular?
2. Was the M&E system at NPCMU operational in time to facilitate M&E activities of the program? If not, why?
3. Was there adequate budget allotted for setting up the M&E system of the program in general and at the NPCMU in particular? How much was allotted?
4. Did the M&E experts at the NPCMU have the capacity to handle M&E activities to the level required by IFAD? Were there adequate personnel at the NPCMU to facilitate M&E activities?
5. Was there adequate training provided to staff at the NPCMU on M&E standards and indicators?
6. Do you receive timely and accurate program reports from the NPCMU as per the requirement? Were you satisfied with the baseline survey?
7. What were the challenges of the M&E system at the NPCMU? How can it be improved in PASIDP II? Do you think PASIDP was a successful program?

**Thank you for your Cooperation!!!**

## **Interview Questions to Member of the National Steering Committee**

**Addis Abeba University**  
**College of Business and Economics**  
**School of Commerce**

**Interview Date:** \_\_\_\_\_

### **Dear Respondent, Greetings**

The Purpose of this interview is to provide pertinent information to carry out a study titled An Assessment of Monitoring and Evaluation of PASIDP in national program coordination unit at the MoANR. The study will be used for partial fulfillment of MA Degree in Project Management.

1. Were you involved in the design and plan of the PASIDP M&E system? How were you involved?
2. Do you believe all the indicators of the program are appropriate to measure progress of the project? Do you think the baseline survey was adequate to facilitate impact assessments?
3. How was the capacity of the M&E experts at the NPCMU? Was the unit well organized in terms of number of staff and resources?
4. Do you think the budget allotted for the M&E system of the program was adequate?
5. Do you timely and accurate obtain M&E reports from the NPCMU to facilitate prompt decision making?
6. What were the challenges of the M&E system of PASIDP at the NPCMU? What should be done to alleviate M&E challenges at the NPCMU? What is expected from the MoARD, IFAD, and other stakeholders?
7. Do you think PASIDP was a successful program?

**Thank you for your Cooperation!!!**