NATIONAL MONITORING AND EVALUATION MANUAL

REPUBLIC OF GHANA

GOVERNMENT OF GHANA

NATIONAL DEVELOPMENT PLANNING COMMISSION

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LIST OF ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
APR	Annual Progress Report
APRM	African Peer Review Mechanism
CBO	Community-Based Organisation
CG	Consultative Group
CRC	Citizen Report Card
CSC	Community Score Card
CSO	Civil Society Organisation
CSPG	Cross-Sectoral Planning Group
CWIQ	Core Welfare Indicators Questionnaire
CWSA	Community Water and Sanitation Agency
DA	District Assembly
DAC	Development Assistance Committee
DACF	District Assemblies Common Fund
DBO	District Budget Officer
DCD	District Coordinating Director
DCE	District Chief Executive
DFO	District Finance Officer
DISCAP	District Assemblies Capacity Building Project
DMTDP	District Medium-Term Development Plan
DP	Development Partner
DPCU	District Planning Coordinating Unit
DPO	District Planning Officer
EIA	Environmental Impact Assessment
ERR	Economic Rate of Return
FBO	Faith-Based Organisation
GDHS	Ghana Demographic and Health Survey
GDP	Gross Domestic Product
GES	Ghana Education Service
GHS	Ghana Health Service
G-JAS	Ghana Joint Assistance Strategy
GLSS	Ghana Living Standards Survey
GNP	Gross National Product
GoG	Government of Ghana
GPRS I	Ghana Poverty Reduction Strategy
GPRS II	Growth and Poverty Reduction Strategy
GSGDA	Ghana Shared Growth and Development Agenda
GSS	Ghana Statistical Service
HIV	Human Immunodeficiency Virus
ICT	Information and Communications Technology
IDGs	International Development Goals
IGF	Internally Generated Funds

ISD	Information Services Department
JICA	Japan International Cooperation Agency
M&E	Monitoring and Evaluation
MDAs	Ministries, Departments and Agencies
MDBs	Multi-Donor Budget Support
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MIS	Management Information System
MLGRD	Ministry of Local Government and Rural Development
MMDA	Metropolitan, Municipal and District Assemblies
MoFA	Ministry of Food and Agriculture
MoF	Ministry of Finance
MoIMR	Ministry of Information and Media Relations
MoGCSP	Ministry of Gender, Children and Social Protection
MTEF	Medium-Term Expenditure Framework
NCCE	National Commission on Civic Education
NDPC	National Development Planning Commission
NDPF	National Development Policy Framework
NGO	Non-Governmental Organisation
NMC	National Media Commission
OECD	Organisation for Economic Cooperation and Development
OoP	Office of the President
PLA	Participatory Learning and Action
PM&E	Participatory Monitoring and Evaluation
PMU	Project Management Unit
PPMED	Policy, Planning, Monitoring and Evaluation Division
PRA	Participatory Rural Appraisal
PRSC	Poverty Reduction Support Credit
PSIA	Poverty and Social Impact Analysis
RCC	Regional Coordinating Council
RPCU	Regional Planning Coordinating Unit
RSIM	Research, Statistics, Information Management
SMTDP	Sector Medium-Term Development Plan
SWG	Sector Working Group
TA	Traditional Authority
TOR	Terms of Reference
WHO	World Health Organisation

ACKNOWLEDGEMENTS

PART ONE

NATIONAL MONITORING AND EVALUATION:

RATIONALE AND LINKAGES

CHAPTER ONE

INTRODUCTION

1.1 Background

The Government of Ghana is committed to effective public service delivery, strengthening government accountability to its citizens, ensuring that policy formulation and decision making are based on evidence, and obtaining results in relation to its growth and development targets. To this end, the government has over the years committed significant resources to supporting a wide range of development interventions designed to improve the welfare of all people living in Ghana. It is, therefore, critical to know through monitoring and evaluation (M&E) the extent of progress being made towards the objectives of interventions. M&E is the main instrument for assessing the extent to which the government has done what it pledged to do in its development policy framework and plans at national, sector, regional and district levels. It is widely recognised that M&E is an indispensable tool for measuring performance and development outcomes. The National Development Planning Commission (NDPC), as the apex body responsible for M&E, has produced 11 Annual Progress Reports (APRs) for the years 2002 to 2013 to review government performance and to provide policy options for discussion.

Over the past few years, the Commission has increased its efforts to establish a functional national M&E system and to instil a culture of M&E in the public sector. The system is hinged on successive four-year Medium-Term Development Policy Frameworks (MTDPFs) and Sector and District Medium-Term Development Plans. NDPC has produced three national M&E plans in line with the Ghana Poverty Reduction Strategy (GPRS I: 2002-2005), the Growth and Poverty Reduction Strategy (GPRS II: 2006-2009) and the Ghana Shared Growth and Development Agenda (GSGDA: 2010-2013). The Commission further produced M&E Guidelines and Report formats for all Metropolitan, Municipal and District Assemblies (MMDAs) and sector Ministries, Departments and Agencies (MDAs) to prepare corresponding M&E Plans for their Medium-Term Development Plans. Nearly all MMDAs and MDAs now prepare M&E Plans and APRs. The Commission uses a checklist to review all the draft M&E Plans and APRs submitted by MMDAs and MDAs to ensure compliance with the key requirements of the M&E Guidelines and Report formats. Feedback is provided to all MMDAs and MDAs in the form of general and specific comments on their M&E Plans and APRs. By so doing, the NDPC has streamlined the national M&E processes, provided a yardstick for measuring progress and established the minimum requirements for a functional M&E system in this country. Other efforts made by the Commission in the process of building the national M&E system include the following:

1) Poverty and Social Impact Analysis (PSIA) to assess the consequences of some government policy reforms on the poor and vulnerable under the Ghana Poverty Reduction Strategy (GPRS I: 2002-2005).
2) Participatory M&E exercises on selected national issues and production of Citizens Assessment Reports in 2005 and 2008.
3) Basic M&E training workshops for staff of Policy, Planning Monitoring and Evaluation Divisions (PPMEDs), Regional Planning Coordinating Units (RPCUs) and District Planning Coordinating Units (DPCUs) to enhance their understanding and ability to prepare and implement their M&E Plans.
4) Technical backstopping for Ministries, Departments and Agencies (MDAs) to prepare M&E Plans for their Medium-Term Development Plans (MTDPs).
5) M&E training programmes for the newly created districts in 2008.

A key recommendation from participants of M&E training workshops organised by the Commission was the need to build the capacity of policy and decision makers such as Ministers, Members of Parliament (MPs), Chief Directors, District Chief Executives and Presiding Members of the District Assemblies. This M&E Manual will form the basis for M&E awareness creation and capacity building. It is expected the political leadership at all levels of governance will increasingly understand and appreciate the value of M&E and provide greater support for the establishment of the national M&E system.

1.2 Purpose of the National M&E Manual

The main purpose of this manual is to enhance the understanding and practice of M&E at all levels of governance in Ghana. The manual is an M&E resource handbook that can be used as a reference document by practitioners as and when necessary. It will also serve as a guide to all public servants with little experience or knowledge of M&E approaches and practices. It supplements the District and Sector M&E Guidelines, the National M&E Plan and other M&E documents published by NDPC in collaboration with its key stakeholders.

The National M&E Manual will serve the following specific purposes at all levels of governance:
1) Guide the building of M&E capacities of public servants and political leaders in the MDAs and MMDAs;
2) Facilitate the preparation and implementation of district and sector M&E plans;
3) Enhance the understanding and development of M&E indicators and their corresponding baselines and targets;
4) Strengthen M&E data collection, analysis and utilisation of results;
5) Facilitate development evaluations and participation in M&E processes;
6) Guide the preparation of project, programme, district and sector progress reports;
7) Enhance the dissemination and communication of M&E results.

1.3 Who should use the Manual?

This manual can be used by anyone interested in M&E. However, its intended primary users include the following: Sector and Regional Ministers, Members of Parliament, District Chief Executives, Chief Directors, staff of the Policy, Planning Monitoring and Evaluation Divisions (PPMEDs), Regional Coordinating Directors, Regional Planning Coordinating Units (RPCUs), District Coordinating Directors, District Planning Coordinating Units (DPCUs), District Assembly members, development partners, academia and other training institutions, civil society organisations (CSOs), traditional authorities and other opinion leaders in Ghana.

Specifically:
1) Sector and Regional Ministers, Members of Parliament, District Chief Executives and Presiding Members of the Assemblies can use the manual to understand the national M&E system and use M&E results for more informed government policy formulation and decision making. Appreciating the importance of M&E will enable them to create the necessary supporting conditions for their technical staff to do M&E.
2) The DPCUs, RPCUs and PPMEDs can use the manual as a supplementary document to the district and sector M&E Guidelines when preparing their M&E Plans. The manual will also be a useful reference during the implementation of their M&E Plans, in the conduct of evaluations and in the writing of reports and communication of M&E results.
3) Academic and other training institutions (especially at the tertiary level) can use this manual as a reference to understand the national M&E system and to design M&E courses to meet the specific needs of their institutions and their students.
4) Development partners can use the manual to understand the national M&E system and assist government agencies to build M&E capacities and develop efficient information and reporting systems at the project, programme, district, regional and sector levels.
5) CSOs, traditional authorities and other opinion leaders can use the manual to enhance their understanding of the national M&E system and strengthen their advocacy work on transparency, accountability and effective delivery of public goods and services.

1.4 Structure of the National M&E Manual

This manual covers all the essential elements of a national M&E system within the context of the public sector of Ghana. The main themes of the manual are discussed in four parts, subdivided into 17 chapters as follows:

Part One – National M&E Rationale and Linkages

This covers the rationale behind the national M&E system and its linkages with the NDPF, development plans and the national budget. Chapter One presents the background and rationale for establishing a national M&E system. It discusses the purpose and target users of the manual and concludes with a summary and outline of the participatory process used to prepare the document.

Chapter Two provides information on the national development planning system. It places M&E within the development planning cycle and discusses the importance of policy, planning, M&E and their linkages with the national budget.

Part Two – Understanding Key Concepts
This defines and explains the meaning of monitoring, evaluation and participatory monitoring and evaluation (PM&E) and their types and characteristics. Chapter Three discusses the process, levels, frequency and principles of good monitoring and the relationship between monitoring and evaluation. Chapter Four details the design and implementation phases of the evaluation process. The topics discussed include planning and managing evaluations, how to develop an evaluation Terms of Reference (TOR), selection of the evaluation team and how to engage stakeholders.
Chapter Five focuses on participatory M&E. It starts by making a distinction between participatory monitoring and participatory evaluation and the differences between participatory and traditional evaluation. It also clarifies the circumstances in which the use of PM&E is appropriate. The rest of the Chapter discusses in detail some of the tools for conducting PM&E such as: Participatory Rural Appraisal (PRA), Citizens Report Card (CRC), Community Score Card (CSC) and Participatory Expenditure Tracking Surveys (PETS).

Part Three – Understanding M&E as a System
Chapter Six introduces the notion of M&E as a system, dissects the components of an M&E system and explores their interconnections and performance as a system. It outlines the main components of the national M&E system at four levels of governance and examines the characteristics of a functional national M&E system. The chapter concludes with the risks and assumptions inherent in the national M&E system.

Chapter Seven looks at the institutional framework for the national M&E system and responsibilities at the national, sector, regional and district levels. It concludes with some suggestions on how to strengthen the national M&E institutional architecture.

Part Four – Steps to Developing an M&E System
This discusses the 10 steps to developing an M&E system at the national, sector, district, programme or project level. While the numbering of these steps is meant as a guide, it does not mean the M&E system must be established following a chronological order. For example, it may be expedient to use an expert to define indicators or prepare a draft M&E budget before stakeholders' identification and analysis. However, the stakeholders identified must be involved in the validation of the indicators or draft budget prepared earlier.

Chapter Eight is the first step and concentrates on stakeholder identification and analysis. Chapter Nine examines how to assess capacities and create the necessary conditions for effective M&E. Chapter Ten focuses on indicators and their corresponding baselines and targets. It discusses the steps in defining indicators, and their classification and characteristics. Chapter Eleven provides guidance on how to link goals and objectives to indicators and targets in a monitoring results matrix. Chapter Twelve gives directions on developing a work plan for all M&E activities with their associated costs on an annual basis. Chapter Thirteen discusses the importance of an M&E budget and provides guidance on how to prepare one.

Chapter Fourteen distinguishes between data and information and provides details on M&E data collection methods and sources of data. It outlines data collection responsibilities, appropriate sampling techniques and M&E information systems for data storage, analysis, retrieval and presentation. Chapter Fifteen discusses M&E data processing and analysis in detail, including presentation, validation and interpretation of the findings. Chapter Sixteen deals with the preparation of M&E reports, their purpose and audience, the types and formats of M&E reports for MMDAs and MDAs,

and how to assess the quality of an M&E report. Chapter Seventeen focuses on dissemination and communication of M&E results, expected feedback through communication as well as communication for action and accountability.

The manual attempts to answer the following key questions:

What?   Provides definitions and explanations of key M&E concepts, terms and topics.
Why?   Discusses the purpose and intentions underlying various M&E topics and issues.
How?   Provides a step-by-step approach for undertaking M&E in general and how to conduct participatory M&E.
Who?   Identifies and assigns roles and responsibilities of individuals and institutions for specific M&E tasks and actions.
Where?   Explains and provides pointers to sources of M&E data and information.
When?   Suggests timelines and frequencies for undertaking specific M&E activities and when to report on results.

The manual gives prominence to environmental and gender issues throughout the document and stresses the need to disaggregate M&E data to show age, sex, disability and other social factors.

1.5   Process of Preparing the M&E Manual

NDPC adopted a participatory process in the preparation of this M&E manual. The process commenced in October 2007 when a consultant was engaged to prepare the first draft in collaboration with the M&E Division. This draft M&E manual was subjected to an internal review process. The Commission discussed and revised the draft manual at a workshop in March 2008. M&E experts and peers were also invited to review and make inputs to the second draft at a workshop in June 2008. Staff of the M&E Division pre-tested the third draft by using its contents as the basis for a one-week training programme it organised in July 2009. This draft was used again for pilot training programmes for DPCUs from 28 newly created districts in August 2009. In October 2012, the M&E Division resumed the process of completing work on the manual. The internal review process included a series of retreats and discussions. This was followed by a peer review workshop in November 2012. The M&E Division held a final retreat in April 2013 to edit and format the document. The Sub-Committee on M&E and Enabling Environment of the Commission met in April 2013 to discuss the final draft and provided comments for improvement. Members of the M&E Division and Statistics Sector Working Group (SWG) also reviewed the document and provided their comments at a meeting of the Group in June 2013. National consultation meetings were organised in July 2013 to complete the consultation process on the final draft manual.

CHAPTER TWO

THE NATIONAL PLANNING SYSTEM

2.1 Legal Framework

Article 86 of the 1992 Constitution of the Republic of Ghana established the National Development Planning Commission (NDPC) while its core mandate – development policy, planning and M&E – is enshrined in Article 87. These Articles form the basis for the National Development Planning Commission Act, 1994 (Act 479) and the National Development Planning System Act, 1994 (Act 480). Other supporting legislation includes the Local Government Act, 1993 (Act 462); Local Government (Urban, Zonal and Town Councils and Unit Committees) (Establishment) Instrument, 1994 (LI 1589); Local Government (Departments of District Assemblies) (Commencement) Instrument, 2009 (LI 1961); Civil Service Act 1993 (PNDC Law 327); Institute of Local Government Studies Act 2003 (Act 647); and Local Government Service Act, 2003 (Act 656). These laws regulate the decentralised planning system, defining the planning activities and functional relationships between the various planning authorities and thereby give meaning to the vertical (bottom-up and top-down) and horizontal relationships in the planning process.

Specifically, Section 1(2) of the National Development Planning System Act, 1994 (Act 480) stipulates that the decentralised national development planning system shall comprise District Planning Authorities at the district level, Regional Coordinating Councils (RCC) at the regional level and sector agencies, ministries and the NDPC at the national level. The NDPC is the apex body of the national development planning system. This system is to be regulated with legislative instruments and guidelines issued by the Commission as indicated under Section 1(3). On the basis of Sections 1 to 11 of Act 480, the key deliverables of this system have been: National Development Policy Frameworks which form the basis for the Planning and M&E Guidelines at the district and sector levels; District and Sector Medium-Term Development Plans; District and Sector M&E Plans; District and Sector Progress Reports; Harmonised Regional Reports; the National M&E Plan; Citizen Assessment Reports; and National Annual Progress Reports.

2.2 Policy, Plans, M&E Cycle and Budget Linkages

Policy formulation is the first step in the development planning cycle. As the first output, the National Development Policy Framework plays a critical role in the national development planning process at all levels of governance. It identifies and analyses national development issues in the context of their linkages and development impact. It then prescribes strategies to achieve the policy objectives.

The realisation of the policy objectives depends largely on how well they are linked to the sector and district development plans and to the national budget. Consequently, effective M&E systems provide valuable feedback and lessons for the continuous improvement of development policies, plans and the national budget. The critical linkages among these national development building blocks are depicted in Figure 2.1.

There should be a strong linkage between the national development policy framework, the district and sector development plans, the district and sector M&E plans as well as the national budget (during their formulation, execution, and reporting). Currently, these linkages are not very strong in practice in Ghana. For example, best practices from Botswana, India, Malaysia and Indonesia give direct responsibility to the national planning authorities to allocate the service and investment portions of their national budgets. The same authorities further manage all external resource inflows for development purposes. The M&E results from the national planning authorities also form the basis for the quarterly release of funds to the sectoral and decentralised agencies. These arrangements contribute to the appreciable levels of development in those countries.

Figure 2.1: Policy, Plan, M&E Cycle and Budget Linkages
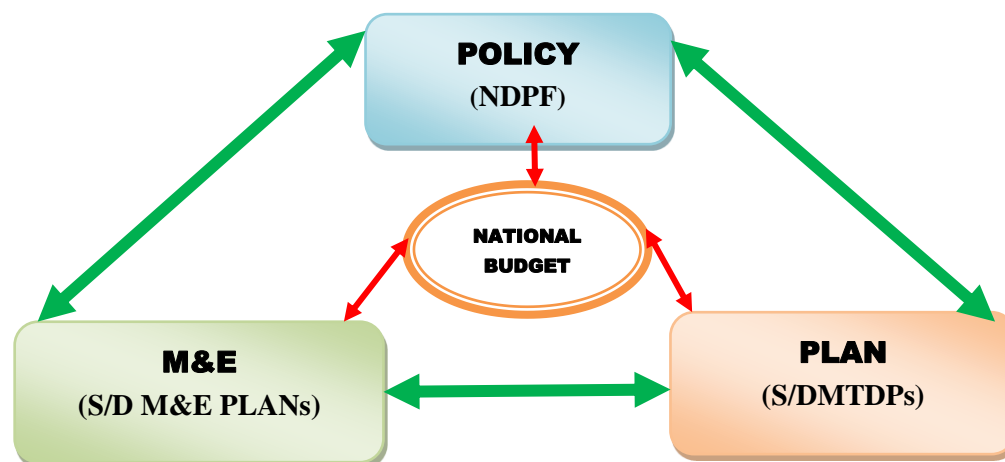
2.3 The National Development Policy Framework

The purpose of every government is to add value to the lives of the people it serves and this can be achieved through good policy making. A public policy is a statement of intent (usually a written document) in which the government stipulates decisions, actions and other matters that will be beneficial to society. It can also state the principles (values, interests) and resources that underlie the actions that should be taken to resolve public issues in a sustainable manner. The National Development Policy Framework (NDPF) (Figure 2.1) is the principal development policy blueprint, prepared at national level by NDPC with inputs from the Cross-Sectoral Planning Groups (CSPGs) made up of Ministries, Departments and Agencies (MDAs), CSOs, the private sector and other relevant bodies.

The pursuit of evidence-based policy formulation is founded on the premise that policy decisions should be better informed by systematic evidence from the national M&E system. The evidence can also come from national data emanating from the Ghana Statistical Service (GSS). Data from the GSS include those collected from the national population and housing census and other surveys. Academic and research institutions as well as national and international organisations that conduct rigorous evaluations and studies also provide some useful information for policy formulation.

2.4 District and Sector Development Plans

Plan preparation follows policy formulation within the planning cycle (Figure 2.1). The sector and district development plans are the medium for translating the policy objectives and strategies of the NDPF into implementable projects and programmes. They integrate the spatial, social, economic and environmental issues into specific actions within the decentralised planning system. In this respect, guidelines are issued by the Commission in line with the NDPF to the districts and sectors, prescribing the process, format and content of their development plans. Medium-Term Development Plans (MTDPs) are then produced by all the Metropolitan, Municipal and District Assemblies (MMDAs) and MDAs – namely, District Medium-Term Development Plans (DMTDPs) and Sector Medium-Term Development Plans (SMTDPs). The national development plan then emanates from collation of the plans, programmes and projects from the districts and sectors. The total cost of the programmes, projects and activities in the district and sector development plans forms the basis for the costed version of the NDPF.

2.5 District and Sector M&E Plans

M&E processes begin after plan preparation (Figure 2.1). Effective M&E systems are based on good planning and budgeting systems and provide valuable feedback to those systems. M&E is the main instrument for assessing the extent to which the government has done what it pledged to do in its national policy statements and development plans. The Commission issues M&E guidelines to MDAs and MMDAs after they have prepared their development plans. The Commission then organises basic M&E training programmes for all the District Planning Coordinating Units (DPCUs) to enhance their understanding and capacity to prepare their M&E plans. The sector and district M&E plans form the basis for their M&E systems and serve as the road map for monitoring and evaluating the implementation of their SMTDPs and DMTDPs.

The key outputs of M&E plans are the quarterly and annual progress reports from the districts and sectors. The reports show the progress being made to achieve development goals and targets. NDPC collates these reports and harmonises them to produce the national Annual Progress Report (APR) which shows the progress being made to meet the policy objectives of the NDPF.

2.6   The National Budget and its Linkages

The national budget as a financial expression of the development plans is prepared at the various levels of governance. It is prepared to inform the government on the volume of financial resources needed for the implementation of planned programmes, projects and activities in each financial year. Budget preparation goes through elaborate processes at all levels with different stakeholders. Implementation of programmes and projects is highly dependent on the budgets allocated to them. It is, therefore, important to ensure that adequate budgets are prepared at all levels to influence successful implementation of the SMTDPs and DMTDPs and their corresponding M&E plans (Figure 6.2).

In setting budget targets, M&E information on the impact of previous budgets and on the achievement of set targets is considered. This information is derived from the M&E results of past programmes and projects. This information is used to address the weaknesses within the planning and budgeting systems of the country.

The key state actors in the national budget preparation process include the Cabinet, Parliament, Ministry of Finance (MoF), NDPC other MDAs. The budgeting process at the national level involves seven main stages, namely:

1) Issuance of planning and budget guidelines by NDPC and MoF respectively.
2) Preparation of draft budgets by MDAs and MMDAs.
3) Policy and technical hearings on the draft budgets submitted by MDAs
4) Allocation of budget ceilings to MDAs by MoF.
5) Cabinet approval of budget ceilings for MDAs and MMDAs by MoF
6) Parliamentary hearings on national budget and approval of Appropriations Bill.
7) Implementation of budget by MDAs and MMDAs.

PART TWO

UNDERSTANDING KEY CONCEPTS

CHAPTER THREE

MONITORING

3.1   What is Monitoring?

Broadly, monitoring consists of operational and administrative activities that track resource allocation, utilisation and delivery of goods and services as well as intermediate outcomes. Monitoring provides government officials, development managers and civil society organisations with better justification for allocating resources, improving service delivery and demonstrating results as part of accountability to stakeholders. Monitoring is not only concerned with asking the question, "Are we taking the actions we said we would take?" but also, "Are we making progress in achieving the results that we said we wanted to achieve" (UNDP, 2009). In its more limited scope, monitoring may focus on tracking projects and programme implementation and the use of resources. In its broader scope, monitoring also involves tracking policies, strategies and actions being taken by implementing institutions, stakeholders and non-stakeholders and figuring out what new strategies and actions need to be taken to ensure progress towards the most important results. Monitoring therefore supports management decisions by providing data for regular comparison of actual performance of policy, programme and project with their original design and intentions.

The Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD) defines monitoring as*: "A continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an on-going development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds". (*OECD, 2002)

3.2   Purpose of Monitoring

The purpose of monitoring is to:
1) Provide programme or project management staff and other stakeholders with information on whether progress is being made towards achieving stated objectives.
2) Provide regular feedback to enhance learning and to improve the planning process and the effectiveness of interventions.
3) Increase programme or project accountability to donors and other stakeholders.
4) Enable managers and staff to identify and reinforce initial positive results, strengths and successes.
5) Enable managers to make timely adjustments and corrective actions to improve the programme or project design, work plan and implementation strategies.
6) Check on conditions or situations of a target group and changes brought about by programme or project activities, as well as on the continued relevance of the project.

3.3   Types of Monitoring

Table 3.1 provides examples of the different types of monitoring. It is important to remember that these often occur simultaneously as part of an overall monitoring system.

Table 3: 1 Types of Monitoring

Performance Monitoring	Tracks the use of inputs, the progress of activities and the delivery of outputs. It examines how activities are delivered – the efficiency in time and use of resources. Common ways to do performance monitoring to check on progress against specific indicators include supervision, inspection, review of progress reports, administrative records and audit reports.
Financial Monitoring	Tracks revenue, disbursements and cash flow to assess cost efficiency and the correct use of funds.

Diagnostic Monitoring	Examines methods used to implement the intervention, identify problems that cause delays, affect quality or make it difficult for the intervention to achieve its objectives and provide solutions.
Operation Monitoring	Assesses the capacity of the project or programme to continue delivering the intended services and benefits throughout the planned duration.
Compliance Monitoring	Assesses compliance with donor regulations and expected results, grant and contract requirements, local governmental regulations, laws and ethical standards. For example, a building supervisor may monitor and ensure that shelters adhere to agreed national and international safety standards in construction.
Situation Monitoring	Tracks the setting in which the project or programme operates with regard to identified risks, assumptions and any unexpected considerations that may arise. It includes the operation area as well as the larger political, institutional, funding and policy context that could affect the project or programme. For example, a project in a conflict-prone area may be monitored for potential fighting that could endanger project staff and volunteers.
Beneficiary Monitoring	Tracks beneficiary perceptions of a project or programme. It includes beneficiary satisfaction or complaints, their participation, treatment, access to resources and their overall experience of change. This is sometimes referred to as Beneficiary Contact Monitoring (BCM) and often includes a stakeholder complaints and feedback mechanism.
Organisational Monitoring	Tracks the sustainability, institutional development and capacity building of a project or programme staff and its partners.

3.4   Principles of Good Monitoring

Good monitoring should be:
1) **Focused on results** – it should look for what is going on well and what is not in terms of progress towards intended results. Observations are recorded in reports with recommendations and decision for appropriate follow-up action.
2) Based on **verification and validation of progress** – there should be continuous follow-up and documentation of achievements and challenges as they occur without waiting until the last moment.
3) **Participatory** – to ensure commitment, ownership and feedback on performance.
4) Based on **indicators,** baseline data and realistic targets.
5) Based on **good programme or project design, with** a realistic chain of activities, outputs and outcomes.
6) Based on the most appropriate **monitoring frequency** for each indicator.
7) Sensitive to **social, economic, political, religious, environmental, gender and cultural** issues.

3.5   Levels of Monitoring

Monitoring can be conducted at various levels based on the scope of the monitoring exercise. Information gathered from project level usually forms the basis for monitoring results at higher levels. The following is an outline of levels of monitoring in Ghana.

National Level
Monitoring at the national level is usually carried out by a central planning agency. NDPC is the institution mandated to periodically assess the overall progress and impact of the NDPF. The Commission has produced APRs since 2003 mainly by collating and harmonising the monitoring results from the sectors, regions and districts to report on progress made in achieving the policy objectives of the NDPF. It involves the definition and selection of core national indicators and the establishment of performance reporting systems at the sector and district levels. The APRs have been the main source of information on selected national outputs and outcomes. Further, the APRs have provided useful information to guide various government policy reviews and decision-making processes as well as providing important inputs to various evaluations conducted in the country.

Sector Level

Monitoring at the sector level observes the implementation of sector-specific projects and programmes at regional and district levels. The key objectives of sector-level monitoring are to:
- Track performance of sector projects and programmes in the districts;
- Assess the complementarities between different sector programmes and projects in the districts and regions;
- Determine whether broader sectoral objectives are being achieved and cross-cutting issues addressed.

Each sector ministry produces quarterly and annual progress reports using a format prescribed in the Sector M&E Guidelines. Copies of these reports are sent to NDPC and the results from the core indicators are reported in the national APR.

The results from sector-level monitoring are also used to:
- Review and formulate evidence-based sector policies;
- Identify the most effective sector programmes and projects and best practices;
- Identify inequalities and geographic areas requiring greater attention.

Regional Level

One of the core functions of the Regional Coordinating Council is to monitor the performance and implementation of development plans of all districts in the region. The specific monitoring responsibilities of various bodies at this level are discussed in Chapter Seven. Monitoring at the regional level helps the RCC to:

1) Track performance and progress of projects and programmes in the districts.
2) Identify the most effective district programmes and projects and best practices.
3) Determine weaknesses, gaps, inequalities and districts requiring greater attention.
4) Assess the complementarities between different programmes and projects.
5) Determine whether broader sectoral objectives are being achieved and cross-cutting issues addressed.
6) Take evidence-based decisions at regional level.

District Level

MMDAs are mandated to prepare their development plans and monitor their implementation. The specific monitoring responsibilities carried out by various bodies at this level are also discussed in Chapter Seven. The basis for monitoring at this level is the district specific indicators and the core indicators disaggregated from the national level. Each MMDA produces quarterly and annual progress reports from the monitoring exercises using a prescribed format provided in the District M&E Guidelines. Copies of these reports are sent to NDPC through the Regional Planning Coordinating Units (RPCUs). The results from the core district indicators are reported in the national APR. The quarterly and annual progress reports from monitoring of development interventions in the district are indispensable sources of information for the:
- Review and formulation of evidence-based district policies and decisions;
- Identification of the most effective district programmes and projects and best practices;
- Determination of inequalities and areas requiring greater attention in the district.

Programme and Project Levels

Monitoring the implementation of projects and programmes is critical because the results are transmitted to the higher levels discussed above. The focus of monitoring exercises at this level is usually on programme or project goals and objectives. This usually involves assessment of the quality and timeliness of the production of outputs, identification and correction of problems and ensuring that benefits and services are accessible to the intended target groups. Monitoring at this level may also consider other aspects as discussed in Table 3.2.

Benefits from programme and project monitoring include:

1) Building and enforcing partnership and ownership of the project or programme.
2) Learning valuable lessons.

3) Using lessons to effect changes and improve project or programme planning and decision making.
4) Using project results to enhance transparency and accountability.
5) Better goods and service delivery from programme or project implementation.

Examples of monitoring activities at project level

Within the context of a development project or programme, monitoring can be classified into administrative, financial and output monitoring as outlined in Tables 3.2 to 3.4.

Table 3.2: Management and Administrative Monitoring

What to monitor	Information to be collected	Sources of information	Use of information
Staff and Personnel	• Performance • Achievement • Absenteeism • Problems • Expectations • Team work spirit • Whether supervision structures work	• Staff meetings • Performance reviews • Supervision reports • Informal meetings • Observation(s) • Attendance register	• Staff support and feedback • Training and staff development • Improve management practices • Modify and clarify job descriptions • Staff rewards and sanctions
Vehicles	• Fuel consumption • Mileage • Servicing done • Repairs made • New parts purchased • Capital and running costs • Performance	• Log book of fuel and mileage • Record sheets of services, repairs and spare parts fitted • Records of money spent on each vehicle • Meetings with drivers • Observation(s)	• Decisions on replacing old vehicles when they become uneconomical to run • Compare different makes of vehicles • Check mechanics' performance, i.e. parts fitted, frequency of repairs, etc. • Identify problems, e.g. excessive fuel consumption
Supplies	• Where to obtain supplies • Cost from different suppliers • Stock levels • Re-order levels • Time needed to supply • Order quantities	• Suppliers' catalogues • Inventory of stocks • Records system	• Obtain best value supplies • Obtain supplies on time

What to monitor	Information to be collected	Sources of information	Use of information
Budget and expenditure	• Expenditure by project or programme • Expenditure by budget line • Balance of budget remaining this year • Recurrent items of expenditure, e.g. rent • Previous year's budget and expenditure • Inflation rates • Exchange rates	• Invoices and vouchers • Budget breakdown • Analysis of budget and expenditure, e.g. using computer spreadsheets • News media • Bank statements	• Predict expenditure for budgeting • Compare costs of different projects • Identify areas of excessive expenditure • Identify any savings • Compare costs with project achievements to assess cost-effectiveness

Staff salaries	• Salaries • Tax, insurance, etc. • Net salary • Other payments: e.g. health allowance, staff loans, etc.	• Staff records • Payslips • Salary records	• Ensure staff are paid according to pay scale reflecting nature of job and length of service • Ensure other payments are made according to correct procedures • Ensure all staff know what benefits they are entitled to
Cash flow analysis	• Cash need for the project • Sources of cash inflows (including loan repayments, community contributions, etc.) • Cash flows (how much and when, regular and irregular) • Timing of cash inflows and outflows • Order quantities	• Cash record system	• Ensure sufficient but not excessive cash is available

Table 3.3: Financial Monitoring

Table 3. 4: Output Monitoring

What to monitor	Information to be collected	Sources of information	Use of information
Information on target population	• Political, economic, and environmental condition of the target population • Any developments that could affect the project • Population characteristics and dynamics the project could influence	• Baseline surveys • Sources of political and economic information • Meetings with other agencies, government officials • Observation(s)	• Use of baseline data as the basis to evaluate progress • Response to changing situations and rapid response to emergencies • Networking with relevant agencies and government
Project inputs	• What is needed and where it can be found • When it is needed and when it will be available • Cost of inputs	• Suppliers, other organisations, government agencies, etc.	• Plan and schedule activities • Monitor the costs and budget accordingly
Project activities	• What has been done • What was planned but not done • What was not planned but done • What problems have been encountered • How the problems have been addressed • How the external situation has changed • Any other information relevant to work of the project	• Regular records of activities • Supervision reports • Periodic reports • Meetings, workshops with staff, project partners, and people affected by the project • Staff reviews • News media reports and discussions • Informal discussions • Observation(s) • Surveys	• Plan future work • Identify project successes • Identify opportunities to build on the strengths • Identify problems and weaknesses • Develop better strategies • Review priorities • Identify training needs • Identify the needs for information, research, review or evaluation
How the project is managed	• How are decisions made?	• Review meetings	• Identify the need for inclusiveness

	• Are the people who are supposed to be involved really involved • Do the partners, people and staff affected by the project feel a sense of ownership?	• Minutes of management meetings • Indicators which show degree of participation • Meetings and discussions • Observation(s)	• Change policy • Show need to change management style • Identify problems between stakeholders and address them
Progress towards objectives	• Progress towards achieving objectives • Are objectives still relevant?	• Information about key indicators • Observation(s) • Supervision • Progress reports • Inspection	• Modify strategies or objectives if necessary • Feedback • Determine the need for review or evaluation • Identify need for further information or improvements in monitoring systems

3.6   Frequency of Monitoring

Generally, monitoring is a continuous activity during policy, plan, programme or project implementation. Monitoring frequency refers to the time intervals at which data are collected on a particular indicator. The frequency of monitoring is largely determined by the information and communication requirements of stakeholders with respect to the intervention. Some interventions require information daily, weekly, monthly, quarterly, semi-annually, annually or even biennially. How often monitoring is undertaken will also depend on several other factors which include:

1) Scope of the intervention.
2) Resource availability.
3) Communication needs.
4) Level of risk associated with the intervention.
5) The life span or time frame of the intervention.

The decision on the frequency of monitoring for a given indicator will depend largely on the availability of data and the cost of data collection. Data on input indicators (Chapter 10) such as public expenditures can be tracked daily and reported on monthly or quarterly. Data on output indicators are most often available on a quarterly basis but it is highly desirable to have information on key outputs throughout the year. Data on some outcome indicators could be available annually. However, data on some impact indicators may not be available annually and would have to be collected every two-to-five years through household surveys or through participatory approaches.

3.7   Steps to Conducting Monitoring

Monitoring is a continuous and repetitive process. As discussed above, monitoring depends on the scope of the exercise. However, the following steps are key in every effective monitoring plan or cycle:

1) Prepare for monitoring (see Section 3.7.1).
2) Construct or select and prioritise the indicators (Section 10.4).
3) Determine baselines and targets for each indicator (Sections 10.4 and 10.8).
4) Determine which categories of staff will be responsible for the collection of data on each indicator.
5) Develop a timetable for frequency of monitoring (Sections 3.6 and 11.1).
6) Develop or strengthen the M&E information system for data capture, storage, analysis, retrieval and presentation (Sections 14.7 and 15.1).
7) Develop other monitoring instruments, such as questionnaires (Chapter 10).

8) Conduct monitoring activities – field visits, supervision, inspection, administrative records, rapid assessments, review of audit or progress reports, etc. (Chapter 14).
9) Analyse the monitoring data collected (Chapter 15).
10) Write monitoring reports (Chapter 16).
11) Make recommendations (Chapter 16).
12) Implement recommendations (Sections 4.12 and 6.5).
13) Identify new indicators based on the recommendations (Chapter 10).
14) Modify the monitoring system if necessary.

3.7.1   Prepare for Monitoring

Monitoring is an iterative process but each exercise must be well planned to achieve the desired results. Preparation towards monitoring will include the following:

1) Review existing information related to the project or programme.
2) Identify the purpose and scope of the monitoring (e.g. check ongoing works and activities, goods and services delivered, immediate and intermediate outcomes, etc.).
3) Establish the time schedule for monitoring (e.g. the first Tuesday of every month).
4) Determine who must be involved in each monitoring exercise with due consideration to age, gender, disability and other social factors.
5) Organise a meeting or workshop with stakeholders before field monitoring.
6) Determine specific projects and expected results and/or components to be monitored as well as cross-cutting themes and success factors to be applied.
7) Assemble the necessary materials that will be used in the field (e.g. cameras, raincoats, hats, flipchart with stand, markers, masking tape, documents, etc.).
8) Prepare a big chart on the wall or billboard to present the field findings – pictures, data tables and graphs, etc.

CHAPTER FOUR

EVALUATION

4.1   What is Evaluation?

In simple terms, an evaluation may be defined as the process of making judgements about a policy, programme or project before, during and after implementation. The assessment is usually based on a systematic and objective collection and analysis of data and information relative to such issues as effectiveness, efficiency, relevance, sustainability and impact on its stakeholders. Depending on the type of evaluation, the assessment can cover the design, implementation and results of the project or programme (OECD, 2002).

The Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD) defines evaluation as: *"The systematic and objective assessment of an on-going or completed project, programme or policy, its design, implementation and results in relation to specified evaluation criteria".*

The important outcome of evaluation is a set of recommendations to address issues relating to the design or plan (e.g., objectives), and implementation (e.g., allocation of human and financial resource), and lessons learned to guide future policy making, planning and budgeting.

4.2   Purpose of an Evaluation

The principal aim of an evaluation is to improve decision making, resource allocation and accountability. However, an evaluation may be conducted for many other reasons, including the following:

1) Provide management with information regarding policy, programme and project performance.
2) Determine strengths and weaknesses of the intervention and thereby enable managers to improve future planning, delivery of services and decision making.
3) Assist managers, staff and other stakeholders to determine in a systematic and objective manner the relevance, effectiveness and efficiency of activities (expected and unexpected) in the light of specified objectives.
4) Serve as a means of validating the results of initial assessments obtained from project monitoring activities.
5) Determine the extent to which the programme interventions are successful in terms of their impact and sustainability of results.
6) Assist managers to carry out a thorough review and re-think of their programmes and projects in terms of their goals and objectives, and the means to achieve them.
7) Generate detailed information about the programme or project implementation process and results. Such information can be used for public relations, fundraising, improvement of service delivery, as well as identifying possibilities for replication of interventions.
8) Improve the learning process. Evaluations often document and explain the causes of success or failure of activities. Such documentation can help in making future activities more relevant and effective.

4.3   Classification of Evaluations

Evaluations can be grouped in four main categories based on: the objectives of the evaluation, the timing of the evaluation, the 'evaluator' (the person or body conducting the evaluation), and the technical specification and scope (IOM, 2006). However, any evaluation can be a mixture of the different categories outlined below:

1. Purpose of the evaluation
Evaluations can be grouped according to the main objective. *A **formative evaluation*** is conducted during the implementation of an intervention. It is intended to help rectify and improve the project or programme. A ***summative***

evaluation is conducted at the end of a project or programme. It provides insights on effectiveness and offers an opportunity to use the best practices identified for subsequent interventions.

2. Timing of the evaluation
Ex-ante evaluations are conducted before the implementation of projects and programmes. The objective is usually to determine the feasibility of the intervention. Some of the ex-ante evaluations include: cost-benefit analysis, economic rate of return (ERR), technical appraisal, policy analysis, environmental impact assessment (EIA), feasibility studies, and needs assessment.

A *mid-term evaluation* is conducted half-way into the implementation of any development plan or intervention. This type is done to consider the performance and first outputs of implementation and to propose modifications where necessary.

A *final or terminal evaluation* is carried out to assess the achievements or challenges recorded through the implementation of programmes and projects. The results from final evaluations are very useful in the formulation of policy.

An *ex-post evaluation* is conducted sometime after the implementation of any development intervention to assess the impact. Evaluations in this category include impact studies and beneficiary assessments.

3. Who is conducting the evaluation?
An *internal or self-evaluation* is conducted by a unit or individuals belonging to the organisation or government agency responsible for implementing a programme or project. An *external evaluation* is conducted by a unit or someone outside the implementing organisation or government agency. External evaluations require the recruitment of consultants and are therefore usually expensive.

4. Technical specification and scope
Other evaluations are based on their technical specifications and scope. These evaluations will include: programme evaluations, project evaluations, thematic evaluations, impact evaluations, participatory evaluation and strategic evaluation.

4.4   Building Evaluation Capacity

Evaluation capacity building includes both strengthening the technical capacity of M&E staff at all levels to conduct evaluations and also the capacity of stakeholders to interpret and use the findings of the evaluation. One of the most important components is to strengthen the motivation and capacity of policy makers to commission and supervise evaluations.

MDAs and MMDAs are the primary agents for policy, programme and project evaluations. One way to build their evaluation capacity is through workshops, meetings, conferences and seminars. Participation in more specialised evaluation courses within and outside this country is highly recommended.

From the perspective of enhancing stakeholders' evaluation capacity, the following are some recommendations:

1) Provide an opportunity to discuss important M&E concepts such as output indicators and measurement of impact with all stakeholders. This will help users understand the logic of the evaluation design and how the evaluation results will be used.
2) Invite interested stakeholders to participate in the evaluation training programmes or workshops organised primarily for evaluation practitioners.
3) Involve all key stakeholders in the periodic briefings on the progress of the evaluation.

4) Understand how different stakeholders like to receive information – as written reports, in a group meeting with presentation slides or through informal personal briefings. And clarify if users want "hard facts" (statistics) or whether they prefer photographs, video or narratives.
5) Ensure presentations are pitched at the right level of detail and technicality. Avoid overwhelming policy makers with statistical analysis or detailed discussion of evaluation designs.

4.5   Steps to Conducting the Evaluation

The following steps are just a guide and need not be followed in the sequence presented below. The steps are designed with an external evaluator (usually referred to as the **consultant**) engaged by a public sector organisation. The organisation (usually referred to as the **client or employer**) must have the technical capacity to understand each step and supervise the entire evaluation process.

Step 1 – Review the policy, programme or project documents
In conducting the evaluation, it is necessary for the client and consultant(s) to refresh their memory of the concept and objectives of the policy or project document. They should know how the policy or project was intended to be implemented and what it was intended to achieve. Unless these are known, it will be difficult to conduct an evaluation. Studying available policy, programme or project documents will reveal relevant information such as:

1) The stakeholders;
2) The management structure;
3) The general and specific objectives;
4) Key issues to be addressed;
5) Indicators to assess performance;
6) Work plan and budget, etc.

Step 2 – Assess the need for an evaluation
The client must determine the need for an evaluation and provide the background and rationale for the evaluation. Some evaluations such as appraisals, mid-term and terminal evaluations may be mandated in the policy or project documents. Certain challenges may also demand the commissioning of an evaluation. The needs assessment will lead to the development of clear ideas to justify the evaluation.

Step 3 – Define the purpose of the evaluation
Once the need for an evaluation has been established, the next step is to define the purpose of the evaluation. More often than not, the reasons for undertaking the evaluation of development programmes and projects involve viability, improvement, adaptability and lessons learned. Section 4.2 above discusses some of the reasons for conducting an evaluation.

Step 4 – Identify and analyse the stakeholders
Stakeholder identification and analysis has serious implications for the planning, execution and utilisation of the evaluation findings. The analysis should clearly assign roles and responsibilities to various groups of stakeholders throughout the evaluation process. Details on how to do this are discussed in Chapter 8.

Step 5 – Develop the evaluation questions
The questions represent what one wants to know through an evaluation. In other words, finding answers for those questions with supporting evidence directs the evaluation process. Details on how to develop evaluation questions are discussed in Section 4.6

Step 6 – Determine the type and scope of the evaluation
The type and scope of the evaluation will depend on the evaluation questions and many other factors such as the nature and duration of the project or programme and the objectives of the evaluation. Types of evaluation were discussed in

Section 4.3. The scope of the evaluation may have spatial or geographic dimensions, time and subject limitations. Irrespective of the scope, social, economic, political, religious, environmental, gender or cultural issues should be considered.

Step 7 – Decide on the evaluation design and methods
The most appropriate methods, deliverables and timing of the evaluation have serious cost implications and should be worked out with the assistance of stakeholders and experts with good evaluation experience. Details on impact evaluation designs are discussed in Section 4.9

Step 8 – Prepare the evaluation work plan and budget
To make sure that the evaluation process does not run into problems, it is essential to prepare a work plan and a budget to determine what can and cannot be done. Evaluation activities and anticipated costs should be determined through a participatory process. These processes are discussed in detail in Chapters 12 and 13.

Step 9 – Prepare a follow-up and utilisation action plan
The preparation of a follow-up action plan is an effective way to promote utilisation of the evaluation findings. What is needed before the evaluation is an agreed action plan with specific, time-bound actions, clear definition of responsibilities and procedures for compliance. How to enhance the utilisation of evaluation findings is discussed in Section 4.11.

Step 10 – Prepare the evaluation Terms of Reference (TOR)
The TOR forms the basis for the evaluation exercise and more importantly, the formal reference for the consultant(s). Whatever is agreed upon in the TOR is binding on both parties. Details on how to prepare a TOR are discussed in Section 4.7.

Step 11 – Recruit the evaluator – an individual consultant, a team or a firm
Determining the skills required for the evaluation is extremely important because it has a direct impact on the quality of the evaluation. Details on how to recruit a consultant(s) are discussed in Section 4.8.

Step 12 – Determine data requirements and sources
Quality data that relate to the evaluation question are essential for credible results. Searching for data may even give the evaluation team a better understanding of the programme or project and earlier recommendations that might have been made. Data types, sources and collection methods are discussed in Chapter 14.

Step 13 – Select data analysis methods
How to analyse and interpret evaluation data is discussed in Chapter 15.

Step 14 – Determining the reports to generate
Evaluation results should be reported in a simple and clear way to potential users. If the report is difficult to understand, evaluation results are not easily utilised. As a result, resources (namely time and money) invested in the evaluation might end up being wasted. See Chapter 16 for details on report writing.

Step 15 – Formulate a dissemination and communication strategy
The dissemination and communication should ensure that evaluation results reach all stakeholders. The evaluation findings should be customised to meet the needs of both primary and secondary stakeholders. The dissemination and communication strategies discussed in Chapter 17 should be used to act on the findings and recommendations of the evaluation.

4.6   Evaluation Questions

Many questions can be considered in planning an evaluation. The formulation of evaluation questions differ according to area of focus. Answering these questions with evidence determines the evaluation process. Evaluation questions

represent "what one wants to know through evaluation." For instance, the question of "whether a project was (or will be) meaningful" is an example of an evaluation question and a common question for project evaluation (JICA, 2004). More focused questions to verify the value of a project will be: "Were effects produced by the project?" or "Were resources efficiently used?" It is possible to formulate more specific questions focusing on the effectiveness of a project. By doing so, more concrete survey methods as well as the necessary data are easily identified. In the case of *ex ante* evaluations that contribute to the formulation of project plans, there is a high probability that evaluation questions will centre on the content of the project plan, its relevance to programmes, and its efficiency.

Evaluation questions can generally be grouped into three categories: **descriptive, normative and impact (cause-effect) questions** (IPDET, 2007). The design selected should be appropriate to the type of questions being asked. If for example, cause and effect questions are posed, a design that can answer cause-effect questions must be adopted. Many evaluations use only descriptive and normative questions, particularly if they are formative evaluations that focus on implementation of an intervention. Evaluations focusing on impact ask cause-effect questions, but they typically also include some descriptive and normative questions.

4.6.1 Descriptive questions

Descriptive questions refer to the current situation of the project or programme. They are the foundation of evaluations and usually provide a snapshot of what happened. These types of questions may also describe aspects of a process, a condition or a set of views.
Descriptive questions:
1) Seek to understand or describe a programme or process;
2) Provide a "snapshot" of what it is;
3) Are straight forward (who, what, where, when, how, how many);
4) Can be used to describe inputs, activities and outputs;
5) Are frequently used to gather opinions from programme clients (Morra Imas and Rist, 2009).

Examples of descriptive questions are the following:

1) What are the goals of the programme from the perspectives of different stakeholders?
2) What are the primary activities of the programme?
3) Where is the programme implemented?
4) Who received what services?
5) To what extent does the programme design reflect lessons learned from past similar programmes?

4.6.2 Normative questions

Normative questions compare the current situation to what should be and they need some criteria with which to compare. For instance, "Did a programme or project achieve its objectives?" is a common question for looking at performance in a normative sense. If the objectives are not clear, evaluators have to state the criteria to use in their evaluation. There is always a certain degree of subjectivity in answering normative questions. Examples of normative questions:

- Are we doing what we are supposed to be doing?
- Are we hitting our target?
- Did we accomplish what we said we would accomplish? (Morra Imas and Rist 2009)

4.6.3 Impact (Cause-Effect) Questions

Impact (cause-effect) questions determine what difference the intervention makes. Often referred to as attributional questions, they attempt to measure what has changed because of the project intervention although changes in the society might be caused by other interventions (Morra Imas and Rist (2009). Therefore, it is difficult to demonstrate that the outcomes were truly the result of that particular project or programme. There needs to be proof of a causal relationship through:

- A logical theory: the connection between the project and the project purpose or overall goal should make sense;
- Time-order: the project should come before the outcome;
- Co-variation: both the projects and outcome have the ability to change;
- Elimination of rival explanations: There is a need to be able to establish if it is the project rather than other factors that explain the changes measured.

Examples of impact (cause and effect) questions

- Did the microenterprise programme reduce poverty rates in the towns in which they operated?
- Did the increased tax on fuel improve air quality?
- Did the increase in financial penalties for firms in violation reduce the use of under-age children in the garment industry?
- As a result of the job training programme, do participants have higher paid jobs than they otherwise would have?

4.6.4 Evaluation questions that should be avoided

Some questions do not add value to the evaluation process and must be avoided. Table 4.1 provide some examples and how to rectify them.

Table 4.1: Types of Evaluation Questions that should be avoided

Type	Example	What to do
Double-Barrelled Questions	Did the project benefit you and what did you do to benefit from it?	Ask one question at a time. Do not combine questions and expect an answer
Two-in-one Questions	What are the advantages and disadvantages women participating in income-generating projects in the rural areas face in Ghana?	Do not combine opposite positions in one question, separate out the parts to make them clearer
Restrictive Questions	Do you think that female chief executives are as good as male chief executives?	This type of question eliminates the possibility that females might be better. Do not use questions that inherently eliminates some options
Leading Questions	The income-generating project has liberated women from economic dependence on their spouses. What do you think the income-generating project has done for women?	This type of question states the position or view of the interviewer. This tends to lead the respondent to the same direction. The question should be neutral
Loaded Questions	Would you favour or oppose gender mainstreaming by agreeing with the government's policy of affirmative action?	This question is loaded and emotionally charged and should be avoided. Break the question into two separate parts to make more sense out of it.

4.7 Terms of Reference

The terms of reference (TOR) contains specific issues and concerns that the evaluation must address. It normally includes the policy, programme or project background, objectives, the evaluation purpose, scope, questions to address, evaluation deliverables and schedule as well as the available resources for the evaluation. The TOR therefore provides a framework for the client, consultant and stakeholders to ascertain:
- What is to be done?
- Who is to do it?
- How should it be done?
- When should it be done?

The evaluation process has several stages to match the deliverables specified in the TOR. Payment schedules are also designed to tie these stages and deliverables. In most cases, an inception report is required to elaborate on the methodology, timelines, deliverables, etc. in the TOR. It is important to discuss the TOR with key stakeholders to have broad agreement on the way forward for the evaluation.

Table 4.2 presents a general outline for the TOR. A sample TOR is also provided in Annex C.

Table 4.2: General Framework for Evaluation Terms of Reference

Structure	Contents
Project Background	The background to the evaluation explaining its origin and broad purpose. A solid background description of the project, operation or theme to be evaluated
Project Status	An update on the current state of implementation
Purpose and Scope of the Evaluation	Clear statement of evaluation objectives and scope of work
Key Issues	Key evaluation issues to be covered
Method	Evaluation method(s) to be used. Identification of existing reports and performance information
Team Composition	Profile and mix of expertise required
Schedule and Logistics	Draft itinerary and logistical requirements
Evaluation Report	Guidance on expected reporting

4.8 How to Recruit an Evaluator

4.8.1 Determine the Composition of the Evaluation Team

It is important to consider the qualifications of evaluation team members before embarking on the recruitment process. Examination of the skills that team members should have is an extremely important task because it has a direct impact on the quality of the evaluation. People who are highly knowledgeable in the subject with relevant experience and are available to conduct the evaluation are required. However, a team of two or more is usually preferred. The appropriate human resource mix is determined by considering the relevant project content, evaluation purpose, evaluation method to be used and other issues. For example, it is important that team members should have skills in statistical analysis and social science if a survey is targeting a large population. If the evaluation is to focus on public participation, members will be required to have expertise in participatory evaluations and skills in qualitative analysis and facilitation.

4.8.2 Recruitment Process

The consultant(s) should be recruited in accordance with the provisions of the Public Procurement Act, 2003 (Act 663). On the basis of this Act, the Public Procurement Authority (PPA) of Ghana has produced clear guidelines on how to procure goods and services. The recruitment process usually begins with a targeted request or open advertisement for expression of interest (EOI). The respondents are then invited to submit proposals based on the TOR. The proposal usually has two components: (i) a technical proposal, and (ii) a financial proposal. A team of experts will first evaluate the technical proposal and award marks. Another team will evaluate the financial proposals. The winner is usually the one with the best combination of technical and financial proposals.

4.9 Design of Impact Evaluations

Evaluators have three broad categories of designs for impact evaluations from which to select: (i) experimental designs, (ii) quasi-experimental designs, and (iii) non-experimental designs. The main elements of an evaluation design are the timing and unit of analysis. Evaluation design seeks to ensure a well-organised evaluation and to facilitate the collection of comparative data. Table 4.3 depicts some types of evaluation designs.

Table 4 3: Types of Valuation Designs for Impact Evaluation

Design	Characteristics	Example
Randomised Pre-test and Post-Test	Subjects (families, individuals, communities etc.) are randomly assigned to project and control groups. Data are collected on both before- and after-project interventions. Additional observations could be made during programme implementation	Target beneficiaries of a project are divided into two groups using the simple random sampling technique (lottery). One group is provided with an income-generating project and the other group is not. Measures of incomes and other relevant data are taken before and after the project is administered
Quasi-Experimental Design with Before and After Comparisons of Project and Control Populations	When randomisation is not possible, a control group with similar characteristics to the project group is selected. Measures of key project variables are taken on both before and after the implementation of the project	Two villages or communities adjacent to each other are selected and one is given capacity building training in self-employable skills while the other is not. The employment levels are measured before and after training to see whether or not more of those given the capacity building are self-employed
Non- Equivalent Control Group Pre-Test – Post-Test Ex-Post Comparison of Project and Non-Equivalent Control Group	Data are collected on project beneficiaries and non-equivalent control group. Data are collected after the implementation of the project	Assessing the impact of micro-credit programmes in some villages where micro-credit was operating and comparing with similar villages without credit programmes
Single Group Time Series Design	Data are collected on project beneficiaries several times before and after	
Time Series With a Non-Equivalent Control Group	Data are collected on project group and a non-equivalent control group several times	
Before and After Design	Data are collected on project beneficiaries before and after. No control group	

4.10 Evaluation Matrix

The evaluation matrix is a concrete translation of the TOR into key issues of the evaluation, the main questions and sub-questions that must be addressed and the indicators and methods to be used for data collection and analysis. All components of the evaluation matrix are interrelated and help us develop the most appropriate work plan for conducting an evaluation. In the process of creating the evaluation matrix, we always have to keep in mind what is the most appropriate way to answer evaluation questions.

The evaluation matrix should be used flexibly. Column(s) (e.g., sampling method, gender ratio, etc.) can be added when necessary. Table 4.4 provides an example of an evaluation framework or matrix.

Table 4.4: Evaluation matrix

Evaluation Criteria	Evaluation Questions		Goals and Objectives	Data Needed	Data Sources	Data Collection Methods
	Main Questions	Sub-Questions				
Relevance						
Efficiency						

Effectiveness						
Impact						
Sustainability						
Others						

Adapted from JICA, 2004

Take the following steps to prepare the evaluation matrix:

1) First determine what we need to learn in the evaluation (evaluation questions). The five evaluation criteria will help us formulate evaluation questions as specifically as possible.
2) Next, consider the goals and objectives of the project or programme in order to make value judgements (basis for judgement).
3) Then, consider whom to contact, what data to collect and how to do it in order to answer evaluation questions (data source, necessary data and data collection methods).
4) There are various data collection and analysis methods. It is more effective to use several different approaches in order to offset the weakness of one approach by the strength of another
5) Finally, bring all planning elements together in an evaluation matrix. The matrix should be flexibly applied to meet the different purposes of each evaluation.

4.11 Utilisation of Evaluation Results

At the end of each evaluation, lessons are learned and recommendations are made. Recommendations include specific measures, suggestions and advice. Lessons are fed back to on-going or similar projects. It is important to reach some consensus among the stakeholders about the recommendations and lessons learned. Not many people will utilise the recommendations and lessons learned if they are not specific and practical enough. The following issues should be examined in making recommendations and drawing lessons from the evaluation:

1) Lessons learned and recommendations have to be made based on the information obtained through the process of data analysis and interpretation. The contents have to meet the evaluation purpose.
2) Lessons learned and recommendations have to be targeted at the potential users of the evaluation results.
3) Avoid vague and impractical recommendations and lessons learned.
4) Recommendations have to be specific and prioritised within a time frame (e.g., in the short term or a longer term) to the extent possible so that the next measures can easily be taken.
5) Lessons have to be generalised and conceptualised so that they will widely be applicable (JICA, 2004).

One of the key determinants of whether or not an evaluation will be useful and the findings will be used is the extent to which clients and stakeholders were involved in all stages of the evaluation process. The following actions will further improve the utilisation of evaluation findings:

1) The preparation of a follow-up action plan is an effective way to promote utilisation of the evaluation findings. What is needed before the evaluation is an agreed action plan with specific, time-bound actions, clear definition of responsibilities and procedures for compliance.
2) Promoting a positive attitude towards evaluation findings often involves ensuring that clients face "no surprises". The client should be kept informed of the progress of the evaluation and of preliminary findings as they emerge. In particular, the client should be fully briefed and should have a chance to react to the final conclusions and recommendations before they are presented or made available to others. Clients tend to react more defensively to negative findings if they are sprung on them in a formal meeting with other agencies, or even worse, if they learn the findings from the press or another agency.
3) As always, there is the need to involve clients while maintaining neutrality. This is particularly the case where some negative or sensitive results are emerging which the client may wish to suppress.

4) Each evaluation should focus on a limited number of critical issues and produce recommendations based on a clear understanding of the information needs of clients and how the evaluation findings will be used.

4.12 Criteria for Assessing the Evaluation Process and Results

The theory on evaluation has developed basic principles, norms and standards in order to guarantee the quality, reliability and validity of evaluations. The following are some of the criteria to ensure that evaluations at all levels meet minimum quality standards:

1) **Independent –** The organisation or government agency commissioning the evaluation should not impose restrictions on the recommendations of any evaluation report.
2) **Transparent –** The rationale for an evaluation should be clear from the onset (no hidden agenda). Meaningful consultation with stakeholders is essential for the credibility and utilisation of the evaluation results.
3) **Ethical –** The evaluator should avoid conflicts of interest and personal interests. Evaluators must respect the right of institutions and individuals to provide information in confidence. Evaluators should be sensitive to local beliefs and customs and to the prevailing social, cultural and physical environment.
4) **Impartial –** The evaluation should be free of political or other biases and deliberate distortions. The evaluation results should be presented with a description of its strengths and weaknesses.
5) **Timely –** The evaluation must be designed and completed in a timely fashion so as to enhance the usefulness of its findings and recommendations
6) **Relevant –** The evaluation information must be relevant and written in a simple way.
7) **Value for money –** The cost of the evaluation needs to be proportional to the overall cost of the initiative. The evaluator must avoid using expensive methods for data collection when less expensive means are available.

4.13 Relationship between Monitoring and Evaluation

Although evaluation can be distinguished from monitoring, the two concepts are closely related, interactive and mutually supportive. Monitoring presents what is being delivered while evaluation answers the question, "what has changed as a result of the intervention?" Through routine tracking of progress, monitoring can provide quantitative and qualitative data useful for designing and implementing an evaluation. Indeed, monitoring forms the basis for a sound evaluation by providing essential data and information on inputs and outputs. Using the results of periodic evaluations, monitoring tools and strategies can be refined and further developed.

Table 4.5: Differences between Monitoring and Evaluation

Criterion	Monitoring	Evaluation
Rationale	Provides basis for corrective action	Provides assessment of continued relevance
Focus	• Was delivery according to plan? • What were the deviations? • Were they justifiable?	• Relevance • Efficiency • Effectiveness • Impact • Sustainability
Timing	On-going during the life span of the intervention	• Before, mid-point and at the end of the intervention • Impact evaluation – some years afterwards
Indicators	Often describes expected results for individual cases	Often aggregates data giving an overview of many cases
Number of people involved	Many people involved	Limited number of people involved

Information sources	Routine systems, field observations, progress reports, rapid assessments	Mostly surveys and studies
Undertaken by	Internal managers	Mostly external evaluator

CHAPTER FIVE

PARTICIPATORY MONITORING AND EVALUATION

5.1   What is Participatory Monitoring and Evaluation?

Participatory monitoring and evaluation (PM&E) is defined as a process in which primary stakeholders actively participate in tracking progress towards the achievement of self-selected or jointly agreed results and the drawing of actionable conclusions. Stakeholder participation can be broad, including a wide range of staff, beneficiaries and partners. It can also be narrow, targeting one or two groups of partners. Generally, all key stakeholders should be involved in the entire PM&E process, beginning with planning and design; gathering and analysing data; identifying the evaluation findings, conclusions and recommendations, disseminating results and preparing an action plan to improve performance.

Participatory M&E is based on the premise that programmes and projects have multiple stakeholders who have different perspectives on what constitutes programme success and failure. Examples of PM&E methods frequently used include Participatory Rural Appraisal (PRA), Participatory Learning and Action (PLA), Self-esteem, Association, Resourcefulness, Action planning and Responsibility (SARAR), Citizen Report Card and Community Score Card. These approaches recognise the importance of local knowledge in promoting successful community development planning, implementation, monitoring and evaluation. They are meant to create a positive learning environment, deepen public consultation and provoke thinking and action. They help release creativity in people and enable them to take a more active partnership role, especially in community projects aimed at improving the quality of life.

PM&E methods are characterised by:

1) Team work.
2) Interaction among team members, consisting of evaluation facilitators and key stakeholders (e.g., community members) to generate the data and information.
3) Team members examining their own experience and learning from it.
4) Organising the data or information and feeding these findings back to those people who reported the information, while allowing sufficient time for reactions.
5) Determining the real meaning and validity of the information gathered.
6) Deciding with the people plans for future actions.

Participatory methods and tools can be used to gather a wide range of quantitative and qualitative information including baseline data, gender equity and aspects of relevance, effectiveness, efficiency, impact and sustainability of an intervention. They are useful for assessing 'difficult issues' such as the participation of poor women, vulnerable and excluded groups as well as management and power relations.

5.1.1 Participatory Monitoring

Participatory monitoring is the systematic recording, sharing and periodic analysis of information that has been chosen and recorded by beneficiaries with the help of service providers. There is one key difference between participatory monitoring and conventional monitoring. In the case of participatory monitoring, stakeholders play an active role in the monitoring activities. They maintain records, analyse progress, and use the information generated to make decisions about project implementation.

5.1.2 Participatory Evaluation

Participatory evaluation refers to the involvement of all stakeholders in the evaluation of an intervention. Instead of having a team of service providers conduct the evaluation, the partners themselves conduct the evaluation. If any

outsiders are involved, their role is usually to facilitate the process as technical advisors. In an ideal situation, all key decisions regarding the evaluation are made by the project partners. These include:

- When to conduct the evaluation;
- Data collection, analysis and interpretation; and
- Reporting and using the findings.

5.1.3 When is it most appropriate to use Traditional or Participatory M&E?

Participatory evaluation is appropriate in the following conditions:

- When there are questions about implementation difficulties or effects on beneficiaries;
- When information is needed on stakeholders' knowledge of stated goals and their views of progress.

Traditional evaluation is appropriate in the following conditions:

1) When there is a need for independent external judgement;
2) When specialised information can be provided only by technical experts;
3) When key stakeholders have no time to participate;
4) When there is a lack of agreement among stakeholders.

5.2 Purpose of PM&E

The main purpose of PM&E is to provide stakeholders with regular information during the lifespan or long after the implementation of a development intervention. It allows adjustments to be made during implementation and provides information for future participatory evaluations. The benefits of PM&E include the following:

1) It promotes judicious use of resources.
2) It creates an information base for future evaluations.
3) It allows for the definition of more relevant local indicators.
4) Problems are identified and solutions sought early.
5) Good standards are maintained.

5.3 Steps to Conducting PM&E

The step-by-step process for doing PM&E depends on the tools and techniques discussed further below in Section 5.4. The steps outlined below provide general guidance on the PM&E process (Guijt, I., 2000).

Step 1 – Identify who should be involved

Identify the stakeholder groups to be involved in the planning of the PM&E process. Other issues to consider here relate to defining the responsibilities and roles to be played by service providers and beneficiaries. Table 5.1 suggests the respective roles that can be played by beneficiaries and service providers at different stages of the evaluation process.

Table 5.1: Roles of Beneficiaries and Service Providers in PM&E

Steps	Service Provider-Led	Jointly-Led	Beneficiary-Led
Planning the PM&E Process and Determining Objectives	• Service providers determine stakeholders to be involved; develop the M&E framework, including objectives, indicators; choose and develop data-collection instruments	• Service providers and beneficiaries jointly identify stakeholders to be involved; develop the M&E framework including objectives and	• Beneficiaries determine stakeholders and service providers to be involved; develop the M&E framework, including objectives and indicators;

and Indicators	• Beneficiaries provide feedback on proposed M&E framework, learn how to use the data collection tools	indicators; choose and develop data- collection instruments	choose and develop data-collection instruments • Service providers provide technical support to beneficiaries when called upon
Gathering Data	• Service providers coordinate data collection • Beneficiaries participate as data collectors and/or as interviewees	• Service providers coordinate data collection • Beneficiaries participate as data collectors	• Beneficiaries coordinate all data collection activities
Analysing Data	• Service providers analyse the data, summarise findings; formulate recommendations and prepare for presentation and discussion • Beneficiaries do not play any role	• Service providers and beneficiaries jointly analyse raw data, discuss results, summarise findings and develop recommendations	• Beneficiaries analyse the data, discuss results, summarise findings and develop recommendations • Service providers provide technical advice when called upon
Sharing the Information and defining Actions to be taken	• Service providers present findings and recommendations • Beneficiaries discuss findings and recommendations and provide feedback	• Service providers and beneficiaries present findings and recommendations to wider stakeholder group and elicit discussion of actions to be taken	• Beneficiaries present findings and recommendations to wider community and service providers • Service providers provide suggestions, recommendations on actions to be taken

Adapted from Aubel, 2004

Step 2 – Clarify expectations

This step can be a lengthy process of negotiation, contestation and collaborative decision making among various stakeholders according to their expectations of the process and their information needs.

Step 3 – Determine objectives and indicators

Identifying objectives and monitoring indicators can be the most difficult part of the PM&E process. In some cases, a common set of indicators is selected; in other instances, different stakeholder groups develop their own indicators.

Step 4 – Define the priorities

Stakeholders determine which goals, objectives and activities to focus on.

Step 5 – Collect the data

Stakeholders agree on data collection methodology, responsibilities and timing. Data collection may involve both quantitative and qualitative methods and tools. Quantitative methods include community surveys and interviews. Qualitative methods include participatory learning methods using visual, interviewing and group tools and exercises.

Step 6 – Analyse the data and decide on actions to be taken

While data analysis is often thought of as a rather mechanical and expert-driven task, PM&E offers stakeholders an opportunity to be actively involved in the critical analysis of successes and constraints and in the formulation of conclusions and lessons learned.

Step 7 – Agree on how the findings are to be used and by whom

The results of PM&E activities are shared with all stakeholders and there is discussion of appropriate actions to be taken based on the findings.

5.4   Tools and Techniques for PM&E

The tools and techniques available for use in PM&E include both more traditional tools from the social sciences and recently developed Participatory Rural Appraisal (PRA) tools. Most PRA tools were originally developed for use in community assessments (participatory rural appraisals, participatory learning and action etc.). However, most of them can also be used for planning, documenting and reporting on M&E activities. The purpose of these tools is to elicit group discussion, reflection and sharing and to stimulate groups of programme stakeholders to formulate conclusions and plans for action.

> **Box 5.1: Participatory Rural Appraisal Techniques and Tools**
> - Mapping
> - Transect Walks
> - Seasonal Calendars
> - Impact Flow Diagrams
> - Venn Diagrams
> - Ranking
> - Stakeholder Analysis

5.4.1 Participatory Rural Appraisal

Participatory Rural Appraisal (PRA) consists of a range of largely qualitative and flexible techniques employed by key stakeholders to monitor and/or evaluate programme performance. The techniques comprise a range of visualisation, interviewing and group work methods. These techniques have proven valuable in enabling people to express their views and share information, in uncovering their realities and priorities, and in stimulating discussion and analysis.

Mapping

Maps are defined as spatial data-gathering tools which provide a visual representation of geographical scope, either of the whole community or part of it. They depict the boundary of the community, the social facilities available in the community. Maps in PRA are different from conventional maps. They are made by the people on the ground with local materials, not to scale. They depict what the local people believe to be relevant and important to them.

How to conduct mapping

1) The team should visit the community to ensure that there is broad participation by community members.
2) The team should carefully explain the purpose and process of mapping to community members.
3) Using simplified examples, the concept of mapping is demonstrated by means of locally available materials such as sticks, leaves and stones.
4) Once the concept is understood, the team should ask the community members to do the mapping exercise by identifying facilities and features on the map.
5) In the process, the team should encourage community members to have some discussions. The team should observe and listen, and may ask people who come late not to interfere.

> **Box 5.2: Practical Example of Mapping**
> Daniel Foster, a social forestry volunteer, used sketch mapping as a training tool for community forestry. The activities were done in a village. The purpose of the sketch maps was to select suitable sites for:
> - demonstrating techniques of forest management;
> - estimating the quantity and quality of the resource.
>
> He applied this tool with groups of mixed gender in the village. The difficulties he encountered were that sometimes the more educated members of the group would try and make a "proper" map, with a scale etc., until it was explained to them that it was not the right approach. The activity was highly appreciated by the participants and the forest rangers alike.
> *Source: VSO participatory approaches: A facilitator's guide, 2009*

6) When the map is done, the team should ask the participants some questions and obtain feedback from them. In the same vein the team would have learned about local features and facilities in the community. If there are differences in the maps made by different groups, the facilitator should resolve the differences.

Maps can be used to:
1) Do an informal census of how many people or households are in a given community.
2) Learn about the presence and location of community resources.
3) Identify which resources are important to different community groups.
4) Learn about general community problems.
5) Provide a visual resource that can be used as a baseline for assessing change.
6) Make a list of households to sample for in-depth interviews.

The findings from mapping can be cross-checked through other methods such as spot visits, key informant interviews, rating scales and transect walks.

Strengths of Mapping
1) Powerful method that catches the attention of participants.
2) Generates detailed information needed for good management decisions.
3) Allows persons outside the community and community members to assess rapidly resource use practices.
4) Community members can analyse the links, patterns and inter-relationships of different facilities and resources.

Weaknesses of Mapping
- If not facilitated properly, this method could raise expectations or generate conflict with neighbouring stakeholders;
- The maps will only be as good or as valid as the knowledge base of participants;
- One person may dominate or direct the drawing, if mapping is done by the whole group.

Transect Walk
These are systematic walks with key informants through the area of interest, while observing, asking, listening, and seeking out problems and solutions. There are different types of transect walks such as walking across an area, looping, or walking from one point to another. Walking through a community leads to observation of some indicators and an understanding of the issues of concern, for example, soil erosion or environmental sanitation. It should be conducted early in the PRA process, after the mapping exercise. It provides the team with an overall view of the community and helps it identify issues that might merit further exploration. A transect walk is a relatively inexpensive method that provides many valuable insights. It can be used for quantitative and qualitative information gathering.

Transect walks are useful for monitoring the following:
1) Reliability of water sources, quality of construction, hygiene around water points, use of water.
2) Assessing environmental conditions.
3) Assessing types of farming systems and techniques used.
4) Household and personal hygiene (for the latter, particularly in discussion with children).
5) Solid waste management and environmental hazards such as industrial waste.
6) Control of animals.

How to conduct a Transect Walk
1) Based on the topics or indicators to be observed, decide who should be involved in the transect walk. For example you can involve community leaders, farmers and extension agents, etc. The indicators form the basis of observations and measurements during the walk.
2) Decide transect route with the aid of a map of the community if it is available. The same route should be taken each time to keep a stable basis for observing changes.
3) Keep a good record of what emerges from the transect walk.

4) Sketch what has been seen and discussed and use that as the basis for subsequent transect walks.
5) Compare the different observations for each transect walk and use that as the basis for further discussion.

Strengths of Transect Walks
- Allow first-hand observations to validate information from secondary sources;
- Offer flexible and spontaneous opportunities to gather rich and varied data in a relatively short space of time;
- Verify whether conditions differ from what was suggested.

Weaknesses of Transect Walks
- Access to certain interesting areas is restricted, e.g.: sacred groves;
- The route or time available for a transect walk may not allow the team to investigate interesting features that emerge or to speak with local people.

Seasonal Calendars

Seasonal calendars are used to explore and record data for distinct time periods (season, year, month or even week) to show cyclical changes over time. From a PM&E perspective, calendars can help capture the seasonal dimensions and trends in activities, problems and opportunities. Seasonal calendars that include a range of indicators can reveal how different patterns of change are linked and can be good for discussing causality of certain changes. Seasonal changes are particularly important for rural communities. They may significantly affect labour, water supplies, food and income.

Box 5.3: Usefulness of Transect Walks
Transect walks enabled a community worker to train staff members and were used to increase the participation of local people in forestry projects. Sometimes the transect walk was done after a sketch map had been drawn, but often it simply followed discussions with local forest staff and village leaders. The community worker picked out key areas of interest from the discussion and asked local people to show him those places of interest. There were often great differences between what was said and what was on the ground.
Transects helped him to monitor forest projects, and enabled him to make observations on the feasibility of new activities, for example, in terms of appropriate land use, species or agricultural practices. The informal setting of these walks was also a great way to share important local knowledge and skills between colleagues.
Source: VSO, participatory approaches: A facilitator's guide, 2009.

How to construct Seasonal Calendars
1) Clarify with those involved whether the calendar will monitor changes between weeks, months, seasons, or years. This will depend on the indicators that have been selected and the rate at which they change.
2) Construct the calendar either to depict one or several years, or the minimum number of months or seasons over which monitoring is to occur. The calendar can be represented either horizontally or as a circle, though the latter is not suitable for multi-year trend analysis.
3) When the calendar has been constructed, data entry can be done.
4) After several data entries, the calendar will show variations over time. This will stimulate discussion to understand what the changes are and why they are occurring. By monitoring various types of changes simultaneously in one seasonal calendar, certain patterns may become apparent.

Impact Flow Diagrams

Impact Flow Diagrams (**Cause-Impact or Flow Diagrams**) are used to explain the contributing causes or reasons for a particular problem, to identify the effects or impact of a particular change. For example, have the School Feeding Programme and the Capitation Grant enhanced primary school enrolment? From a PM&E perspective, this method can reveal the impact of a development intervention on the beneficiaries.

How to construct Impact Flow Diagrams
1) Decide on a specific topic such as a project activity or an event.

2) Ask what has happened as a result of that activity or event. The answers, either positive or negative, indicate the consequences of that activity or event. Those consequences are noted as symbols or with words. They are placed on the diagram to show, with arrows or lines, how cause and effect are linked. Try also to probe for indirect consequences or, if someone mentions something that is an indirect consequence, ask them to explain what caused this more directly.
3) A previous diagram can be used as a basis for comparison to generate a discussion on why changes might have occurred and the rate of change.
4) Compile group flow diagrams into a single diagram.

Strengths of Flow Diagrams

- Record problems, relationships surrounding problems, the group's perceptions and analysis of these problems and the value or weight they give to these problems;
- Enable local people to express understanding of their situation. They reveal which problems should be given priority in planned development efforts;
- Help raise awareness among group or community members regarding the causes of their problems.

Weaknesses of Flow Diagrams

1) Controversial issues may lead to a breakdown of the group.
2) Use of unfamiliar, confusing or inappropriate illustrations or symbols.
3) Flow diagrams assume linear chains of cause and effect. Relationships may be more complex in reality.

Box 5.5: Practical Example
This tool was used to assess the linkage between an NGO and its stakeholders. Participants were asked to draw circles to represent the NGO and its stakeholders whilst annotated arrows were added to identify key relationships. The tool provided a much better insight into an organisation than its own organogram. It highlighted communication channels and bureaucratic structures that may influence access to resources and decisions
Source: VSO, participatory approaches: A facilitator's guide, 2009.

Venn Diagrams

Venn diagrams are used to illustrate the extent to which individuals, organisations, projects or services interact with each other. Overlapping circles of various sizes are used to indicate the relative importance of different issues. The degree of overlap or non-overlap indicates the inter-relatedness of the issues.

How to construct Venn Diagrams

1) Start by ensuring that the topic is completely clear for everyone – that you are discussing the relative importance of groups/ people/organisations and their interactions.
2) Have a general discussion during which the different groups, people and organisations relevant to the topic are identified. An appropriate number should be within the range of 15 to 20.
3) Represent each of the entities identified with a separate circle. First represent the central element to which the others are relating (e.g. primary stakeholders).
4) Use paper circles of different sizes and ask participants to do the drawing. Overlapping circles represent groups or people with shared functions and a small circle within a larger circle represents a unit within the larger group or organisation.
5) When working with more than one group, compare the diagrams and discuss if there are any differences. Further

Box 5.4: Flow diagram in practical use
A volunteer used the flow diagram to analyse the operation of health service in a community. The flow diagram was used in two stages. A "Why" flow chart explored why different problems occurred, from which some common causes were identified and A "How" flowchart identified strategies for putting proposed solutions to problems into action.
Source: VSO, participatory approaches: A facilitator's guide, 2009.

discussions may focus on areas where particular problems need to be resolved, such as conflict resolution or organisational capacity building.

6) Subsequent monitoring events can be tackled as follows:
   a. Make a new diagram at each monitoring event that can be compared with previous diagrams in order to make an analysis of any changes and the causes.
   b. Use the first diagram to discuss how the current situation is different and why this is the case. These changes can be symbolised, for example, with arrows pointing up to show increase or down to show a decrease, eliminating a circle, adding others, etc.
7) Whatever approach is used, discussions should focus on the quality, frequency, appearance or disappearance of linkages between the groups.

This method, if facilitated well, provides valuable insights into power structures and decision-making processes. It may help to highlight contrasting perceptions of different roles, responsibilities and linkages, pointing to areas of conflict and dispute and also pointing to ways of resolving these. This method can help identify ways to improve the working relationships of organisations or groups.

Strengths of Venn Diagrams
- Quick to construct;
- Interactive and visual;
- Easy for most people to do;
- Provides a forum for discussing the roles and relationships of stakeholders;
- Helps stakeholders identify power relations among themselves.

Weaknesses of Venn Diagrams
- The results are difficult to communicate or document other than visually;
- The information may be difficult to analyse;
- The information may be difficult for service providers to understand.

5.4.2   Citizen Report Card (CRC)

The Citizen Report Card is a participatory evaluation tool used to obtain summative feedback from citizens on the performance of the government, service providers, programmes or projects to form the basis for joint reflection and correction among key stakeholders. In strategic terms, Citizen Report Card seeks to discover weak processes in service delivery, poor services and areas of dissatisfaction to form the basis for community mobilisation to demand improvements and ultimately administrative reforms for better performance by service providers.

Key Phases of the Citizen Report Card

The implementation of Citizen Report Card initiative involves seven key phases:
1) **Identification of Scope**
   The first step in carrying out a CRC is to be clear on the scope of the evaluation. The administration of the report card initiative is a technical exercise hence there is the need to identify a credible organisation or NGO that can undertake the exercise.
2) **Design of Questionnaires**
   The design requires input from the service providers and users. After the questionnaire is designed, it must be pre-tested before it is administered in full scale.
3) **Sampling**
   The sample size has to be determined. Usually the larger the sample size the better. However, this has to be weighed against resource constraints. More importantly, the purpose is to aim for greater representation.
4) **Execution of Survey**
   A special group of survey personnel must be selected and trained to be thoroughly informed about the purpose of the survey and also knowledgeable in the art of questioning.

5) Data Analysis

In analysing data, respondents should rate government services on a scale of, for example, 1-5. The ratings of the various questions are aggregated and expressed as a percentage. This is what will be read as a "report card".

6) Dissemination

The findings of the survey should be disseminated in the print and electronic media. Making the findings widely known and available to the public makes it difficult for the service provider to ignore the results.

7) Institutionalisation

Citizen Report Card initiatives will serve little purpose unless implementation is followed by efforts at institutionalisation on a sustained basis. For example, the government can use report cards for programme-based budgeting and therefore link the results with public spending.

Content of the Citizen Report Card

The content is the feedback from actual users of services and generally covers the following:
1) Availability, access and use of service.
2) Satisfaction with service.
3) Responsiveness of service provider
4) Hidden costs (corruption)
5) Willingness to pay
6) Quality of life.

The Citizen Report Cards provide conclusions on the following:
1) Citizen satisfaction with the quality of each service.
2) Comparison of service providers on reliability and user satisfaction.
3) Responsiveness and quality of problem-solving agencies.
4) Estimate of hidden costs incurred by citizens.

Table 5.2, 5.3 and 5.4 present a survey of citizen satisfaction with the services of seven agencies, involving 1,036 households. Table 5.5 shows the hidden costs that were paid.

Table 5. 2: Citizen Satisfaction with Services

Agency	No. of Users	% Satisfied	% Dissatisfied
Telephone Company	1,027	47	14
Water Company	871	42	18
Insurance Company	793	52	10
Police Service	424	67	07
Licensing Authority	174	32	27
Internet Service Provider	92	16	38
Electricity Company	65	34	26

Source: Singh and Shah, 2004

Table 5.3: Ranking of Services by Citizen Satisfaction

Agency	Rank
Telephone Company	3
Water Company	4
Insurance Company	2
Police Service	1
Licensing Authority	6
Internet Service Provider	7
Electricity Company	5

Adapted from Singh and Shah, 2004

Table 5.4: Agency Responsiveness (Survey of Households that had a Problem)

Agency	No. of Visits	% Satisfied
Telephone Company	3	51
Water Company	4	54
Insurance Company	3	60
Police Service	3	28
Licensing Authority	2	31
Internet Service Provider	8	15
Electricity Company	2	33

Adapted from Singh and Shah, 2004

Table 5.5: Hidden Costs (Survey of Households that interacted with Provider)

Agency	% of Users who paid	Average Amount (GH¢)	% Extorted
Telephone Company	9	1,563	75
Water Company	11	561	88
Insurance Company	0	0	0
Police Service	26	245	67
Licensing Authority	57	637	94
Internet Service Provider	40	1,643	94
Electricity Company	18	2,603	89

Adapted from Singh and Shah, 2004

Application of the Citizen Report Card

There are diverse ways in which the CRC can be applied. These include:

1) Urban service delivery.
2) National or regional service delivery.
3) Sector service delivery.
4) Programme evaluation, for example, rural food security.
5) Inter-regional comparisons on access, use, reliability and satisfaction with public services.

5.4.3   Community Score Card (CSC)

The CSC is a participatory tool which uses focus group discussions to collect data from community members for analysis, with the main objective being to influence the quality, efficiency and accountability with which services are provided at local level.

Main Features of the Community Score Card Technique

1) It uses the community as the unit of analysis.
2) It generates information through focus group interactions.
3) It enables maximum participation of the local community.
4) It emphasises on immediate response and joint decision making.
5) It is conducted at the micro or local level.
6) It provides immediate feedback to service providers.
7) It initiates reforms through mutual dialogue.

Components of the Community Score Card

The Community Score Card involves four key components:

1) The input tracking score card
2) The community generated performance score card

3) Service providers' self-evaluation score card
4) Interface meeting between users and service providers.

Figure 5.1: Key Stages of the Community Score Card Process

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        ┌──────────────────────────────────────────┐
        │  Preparatory Groundwork and Organization │
        └──────────────────────────────────────────┘
                           │
                           ▼
              ┌──────────────────────────┐
              │   Community Gathering     │
              └──────────────────────────┘
                           │
       ┌───────────────────┼───────────────────┐
       ▼                   ▼                   ▼
  ╭──────────╮        ╭──────────╮        ╭──────────────╮
  │  Input   │        │  Self-   │        │  Community   │
  │ Tracking │        │Evaluation│        │ Performance  │
  │Score Card│        │Score Card│        │  Score Card  │
  ╰──────────╯        ╰──────────╯        ╰──────────────╯
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                     │  Interface   │
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              │  Feedback and Dialogue    │
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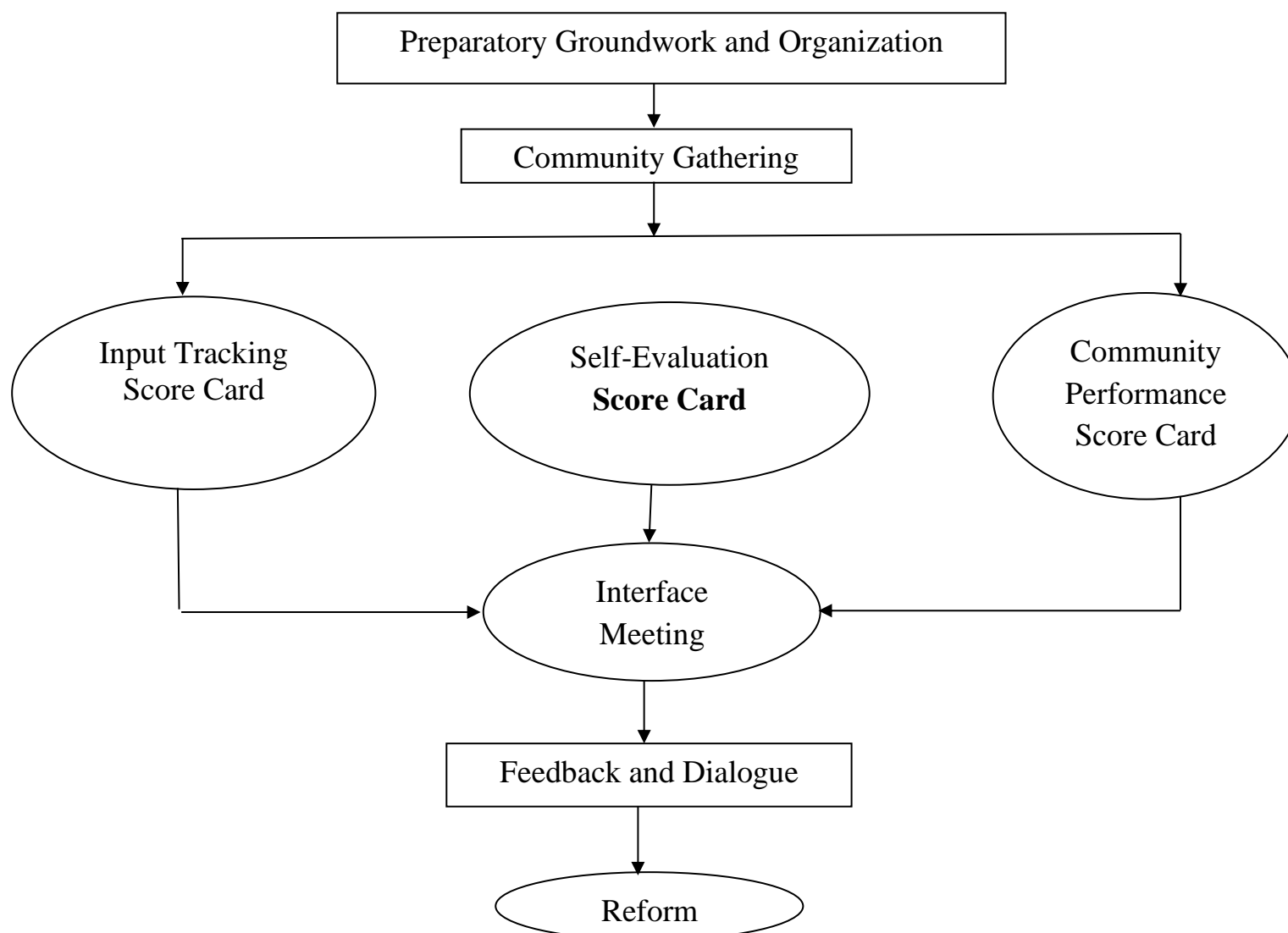
Source: Singh and Shah, 2004

Stages involved in implementing the Community Score Card

The CSC process can be divided into six key stages:

1. Preparatory groundwork.
2. Developing the input tracking score card.
3. Generation of the community performance score card.
4. Generation of the self-evaluation score card by service providers.
5. The interface meeting between community and service providers.
6. The follow-up process of institutionalisation.

Stage One: Preparatory Groundwork and Organisation

1) First identify the scope of the monitoring or performance evaluation – which sector (health, education, agriculture, etc.) is going to be evaluated?

2) The scope of the geographical unit (village or cohesive settlement) that will be used for the exercise must also be defined.
3) It is necessary to find people or groups within the sample area who can help implement the score card. This can include traditional leaders, District Assembly members, workers at the service facilities, community volunteers, and NGOs.
4) Ensure broad participation of all segments of the community in the process.
5) Identify and train facilitators.
6) Collect data using focus group discussions.

Stage Two: Development of the Input Tracking Score Card
1) In order to be able to track inputs, budgets or entitlements, it is important to start by having the supply side data. This can be in the form of:
   - Records of inputs;
   - Financial records;
   - Entitlements based on national policy (e.g., one meal per child per day under the school feeding programme).
2) Provide information on entitlements to the community; this indicates what is supposed to be provided by the service provider;
3) Participants should be divided into focus groups based on their involvement in the service or project (e.g. facility or project staff, users);
4) Discuss and agree on measurable input indicators that will be tracked – i.e. identify indicators for actuals and entitlements, for purposes of comparison;
5) Fill in the Input Tracking Score Card;
6) Inspect physical facility of input or output (optional where applicable) to see if it is of adequate quality.

Table 5.6 presents an Input Tracking Score Card.

Table 5.6: Input Tracking Score Card

Name of Inputs	Entitlements	Actuals	Remarks

Teachers:
  • Qualified
  • Unqualified
	6
	0
		2
		4
			Inadequate number of professional teachers

Furniture:
  • Desks
  • Chairs
	1:1
	1:1
		1:3
		1:2
			Overcrowded

Learning Materials (Books):
  • English
  • Mathematics
  • Science
  • French
	1:1
	1:1
	1:1
	1:1
		1:2
		1:4
		1:3
		1:5
			Inadequate core text books for teaching and learning

Teacher-Pupil Ratio	1:45	1: 70	Overcrowded

Source: Singh and Shah, 2004

Stage Three: Generation of Community Performance Score Card
1) Once the community has gathered, the facilitators must arrange the participants in focus groups. The most important basis for the grouping is extent of usage of the service. There must be a significant number of users in each of the focus groups. Each group should also have a heterogeneous mix of participants based on gender, age and occupation.

2) Each of the focus groups must brainstorm to develop performance criteria with which to evaluate the facility and services under consideration. The facilitators must use appropriate guiding questions to facilitate the group discussion. Examples of community-generated health indicators include the following:

a) Availability of nurses;
b) Environmental cleanliness;
c) Punctuality;
d) Staff discipline;
e) Proper lighting systems;
f) Availability of ambulances;
g) Waiting time.

3) The set of community-generated performance indicators should be prioritised in an order of importance to the community
4) After the selection of performance criteria, the facilitators must ask the focus groups to score each of them. The scoring process can either be by consensus in the focus group or through individual voting followed by group discussion. The scoring can either be with numbers or symbols
5) When the scoring is done, it is important for the facilitators to ask the reasons for low and high scores
6) The facilitators ask the community to come up with its own suggestions as to how things can be improved based on the performance criteria it developed. This is the final task during the community gathering and completes the generation of data required for the CSC. Table 5.6 depicts a community-generated performance score card within a focus group.

Table 5.7: Community Generated Performance Score Card for Health

Indicators	Very Bad 1	Bad 2	OK 3	Good 4	V. Good 5	Remarks
Availability of Required Medicine	%	%	%	%	%	
Availability of Ambulance	%					
Availability of Nurses	%					
Staff Discipline	%					
Environmental Cleanliness	%					

Adapted from Singh and Shah, 2004

Stage Four: Generation of Self-Evaluation Score Card by Service Providers
1) In order to get the perspectives of the service providers, it is important to choose which facilities will undertake self-evaluation. This choice depends on the extent to which service providers will be receptive to the exercise. Some advocacy is needed.

2) As with the community, service providers will need to brainstorm to come up with their own set of performance indicators. This should be comparable with the indicators chosen by the community. Examples of possible indicators include:

a) Clean environment;
b) Access roads;
c) Equipment;
d) Regular drug supplies;
e) Adequate beds;
f) Functioning ambulance;
g) Adequate number of doctors;
h) Regular power supply.

3) Again, like the community gathering, service providers need to score each indicator and find the average to complete the self-evaluation score card.

4) Service providers should be asked to reflect on the scores and come up with their own suggestions for improving service delivery.

Stage Five: Interface between community and service providers
1) The interface meeting is between the community and service providers. This final stage of the CSC process is the key to ensuring that the feedback of the community is taken into account and that concrete measures are taken to remove the deficiencies in service delivery.

2) The implementing team will need to ensure that there is adequate participation from both sides. Local political leaders and senior government officials should also be involved in the interface meeting to act as mediators, and to give it greater legitimacy.

3) Once the community and service providers have gathered in a meeting the implementing team has to facilitate dialogue between the community and service providers and assist them to come up with a list of concrete changes that they can implement immediately. Local political leaders and senior government officials present can also endorse the reforms.

Stage Six: Follow-up and institutionalisation
At the end of the interface meeting, the next important stage is the follow-up and institutionalisation of the CRC process. From the supply side, the key is to get District Assemblies to create forums for community feedback through the Community Score Card (CSC) so that it can be fed into the planning and budgeting process. In the same vein, from the demand side, CSOs can train their staff on how to conduct a CSC so that they become the institutions responsible for undertaking the exercise on a sustained basis.

5.4.4 Differences between Citizen Report Card and Community Score Card
The differences between the Citizen Report Card and Community Score Card are presented in Table 5.4 below.

Table 5.8: Differences between Citizen Report Card and Community Score Card

Citizen Report Card	Community Score Card
Unit of analysis is the household or individual	Unit of analysis is the community
Data collected by means of a survey questionnaire	Data collected by means of a focus group discussion
Relies on formal stratified sampling to ensure that data are representative of the underlying population	Involves no explicit sampling. Instead the aim is to ensure maximum participation of the local community in the gathering
The output is the actual assessment of services in the form of the report card	Emphasis here is less on actual score card and more on achieving immediate response and joint decision making
The media play the major role in generating awareness and disseminating information	This relies more heavily on grassroots mobilisation to create awareness and invoke participation
Conducted at a more macro level (city, state or national)	Conducted at micro/local level (village clusters, set of facilities)
More useful in urban settings	More useful in rural settings
Time horizon for implementation is long (3-6 months)	Time horizon for implementation is shorter (3-4 weeks)
Intermediary plays a large role in conducting the survey and data analysis	Role of intermediary is mostly as a facilitator

Citizen Report Card	Community Score Card
Feedback to providers and the government is at a later stage after the media advocacy	Feedback to providers is almost immediate and changes are arrived at through dialogue during the interface meeting

Source: Singh and Shah, 2004

5.4.5 Participatory Public Expenditure Tracking Surveys

Participatory Public Expenditure Tracking Surveys (PETS) are quantitative exercises that trace the flow of resources from origin to destination and determine the location and scale of anomaly. These are distinct from but complementary to qualitative surveys of the perceptions of consumers regarding service delivery. They highlight not only the use and abuse of public money, but also give insights into the concepts of cost efficiency and accountability. In the absence of a strong institutional infrastructure to manage information flow, tracking surveys provide a realistic portrayal of the status of demand and supply of services, potentially justifying the creation of cost-effective mechanisms of public accountability through, for example, information dissemination on resource allocation and use.

Key Steps in implementing PETS

Nine major steps have been identified in the process of development and implementation of PETS:

1. **Preparation**

   The first step in conducting PETS is a consultation with key stakeholders. A meaningful consultation is important in the initial stages of the project in order to collect useful input from those most closely involved, clarify the expectations of all involved and motivate them to participate fully. Furthermore, consultation helps to foster and develop ownership of the process.

2. **Identify Research Questions and Hypotheses**

   The second major step is to identify research questions and hypotheses. Key service delivery issues are to be identified here. Problems are to be explored and tentative answers or hypotheses are to be developed. Using the education sector as an example, a research question could be as follows: why is school enrolment on the decline? Why isn't it improving, especially in poor communities, despite increased government funding? One possible answer, or hypothesis, to this question is that funds do not reach all the schools.

3. **Map Resource Flows**

   The third step is the mapping of resource flows, or funding sources. The objective is to identify the major sources of funding that flow through the system. In a particular sector, all sources of funds should be carefully considered – both on and off budget, and both internal and external. Do projects funds flow primarily from the central government? Or from decentralised administrative levels? And what percentage of funds comes from bilateral or multilateral donor agencies? And do other sources, such as parent-teacher associations or the private sector, contribute funds? The nature and characteristics of various flows of funds should be clearly identified in a resource map for maximum usefulness. For each of the resource flows identified, it is important to understand:
   - Where are 'the decision points' for allocation and deployment of the resources?
   - What are the allocation rules and administrative processes involved?
   - What accounting and recording procedures are used for each type of flow?

4. **Design Questionnaires**

   Questionnaires should be designed – one for sector ministries, one for District Assemblies, and one for the delivery units such as schools or clinics. The type of data to be collected, especially at the delivery unit level, should deal with a variety of information. This includes questions on facility characteristics, inputs, outputs, quality, financing and accountability mechanisms.

The objective of this overall process is to crosscheck the recorded data against the same information from another source. This is what will help measure the percentage of fund leakage. It is important to test questionnaires in the field before launching PETS in order to refine the survey instrument and ensure that the data are useful.

5. **Conduct Sampling**

The next step is to create a sample population on which to administer the survey. Sampling means that data will not be collected on all the country's schools or health clinics, but the sample should be large enough to be able to draw conclusions from the work. For this reason, a stratified random sample with representatives of all the facilities in the country should be selected, taking into account the different types of facilities.

6. **Conduct Fieldwork**

At this level, administer the questionnaire and begin the PETS. However, capacity in terms of staff, time and budget required should be reviewed. To ensure the quality of the survey work, the questionnaires should also be reviewed carefully after field-testing and modified if necessary. Individuals administering the survey and their supervisors should be trained well and a guide for interviewers should be developed.

7. **Enter and Clean Data**

Once data have been collected through administration of the questionnaire in the field, the next step in PETS involves entering and cleaning up the data. There are a few key recommendations for success in this stage:
- Involve a data management specialist from the very beginning to ensure consistency in coding;
- Pre-code all variables directly on the questionnaires – this reduces the time required for data cleaning after the survey;
- Plan return visits in case of errors and inconsistencies.

8. **Analyse Data**

The analysis of data should involve consultation with key stakeholders. The analysis of data should, ideally, provide answers to the research questions identified at the beginning of the PETS exercise. It should be done by:
- Locating and measuring leakage;
- Looking for variations between districts, delivery service units, etc.

9. **Dissemination of Results**

The final step in the PETS is the dissemination of results. To this end, an interim summary report should be produced and must include the main findings of the survey and major policy recommendations. Later on, a full report should be produced, including all survey findings, a detailed analysis of causes and effects, and widely dissemination of results in the electronic and print media in order to reach the citizenry.

Institutionalisation of PETS

PETS should not be seen as a 'one-shot exercise'. They should be institutionalised as a practice undertaken by the government and by CSOs, with each group using PETS to achieve different objectives. For the government, PETS can be used as a tool to monitor performance whereas for CSOs, PETS can be a tool to track flows and materials from the government. The institutionalisation process should comprise three major components:
- Institutional development, or creating institutions that will integrate PETS in the overall public administration process and public communication policy;
- Human resource development, through the training of staff in survey methods, financial audit, etc.
- An environment conducive for PETS, through reforms such as improved access to information, advocacy campaigns, community mobilisation, etc.

PART THREE

UNDERSTANDING M&E AS A SYSTEM

CHAPTER SIX

THE NATIONAL MONITORING AND EVALUATION SYSTEM

6.1 What is an M&E System?

An M&E system is the continuous monitoring and periodic assessment of the implementation of a policy through its programmes, projects and processes that transform inputs into outputs and outcomes. An M&E system means different things to different people but the common characteristics of any M&E system will include the following:

- It contains **parts or components** that are directly or indirectly related to each other;
- It has **interconnections** – the parts and processes are connected by developmental relationships;
- It has **performance** processes that transform inputs into outputs *(products, goods and services)* and outcomes *(immediate, medium- and long-term changes in attitudes, behaviour and livelihoods).*

6.1.1 Components and Interconnections in an M&E System

M&E processes begin only when a policy, plan, programme or project has been formulated. M&E mechanisms are then put in place to evaluate the policy or intervention before, during and after its implementation. To start with, an M&E plan or framework must be prepared so as to establish the structure of the system and provide a road map of what needs to be done. The plan should be prepared in a step-by-step and participatory process. An initial step is to clearly define the purpose and scope of the system. One way to distinguish M&E from academic studies and research is the active participation of stakeholders throughout the entire process. It is therefore important to identify, classify and analyse all stakeholders. It is also imperative to indicate how the stakeholders will be engaged in specific M&E activities. The relevant M&E capacities and conditions form the basis for the system to succeed; they must be assessed and any lapses addressed. Quantitative and qualitative indicators are valuable tools for measuring progress and should be constructed or selected, defined and prioritised. A results matrix, an M&E work plan and a budget are essential elements of the design phase of the system.

The how-to-do phase comprises a structured plan for systematic data collection and analysis to assess and demonstrate progress made in achieving expected results. Simple to read and objective reports are the key outputs of any M&E system. Report formats for various needs and stakeholders as well as reporting timelines must be set and adhered to. A dissemination and communication strategy for the M&E results is the last step to be prepared in the M&E plan. All the components mentioned above are the minimum requirements for any M&E system to function properly and effectively. These key components and how they interconnect like a jigsaw puzzle are illustrated in Figure 6.1.

Figure 6.1: Components and Interconnections of an M&E System
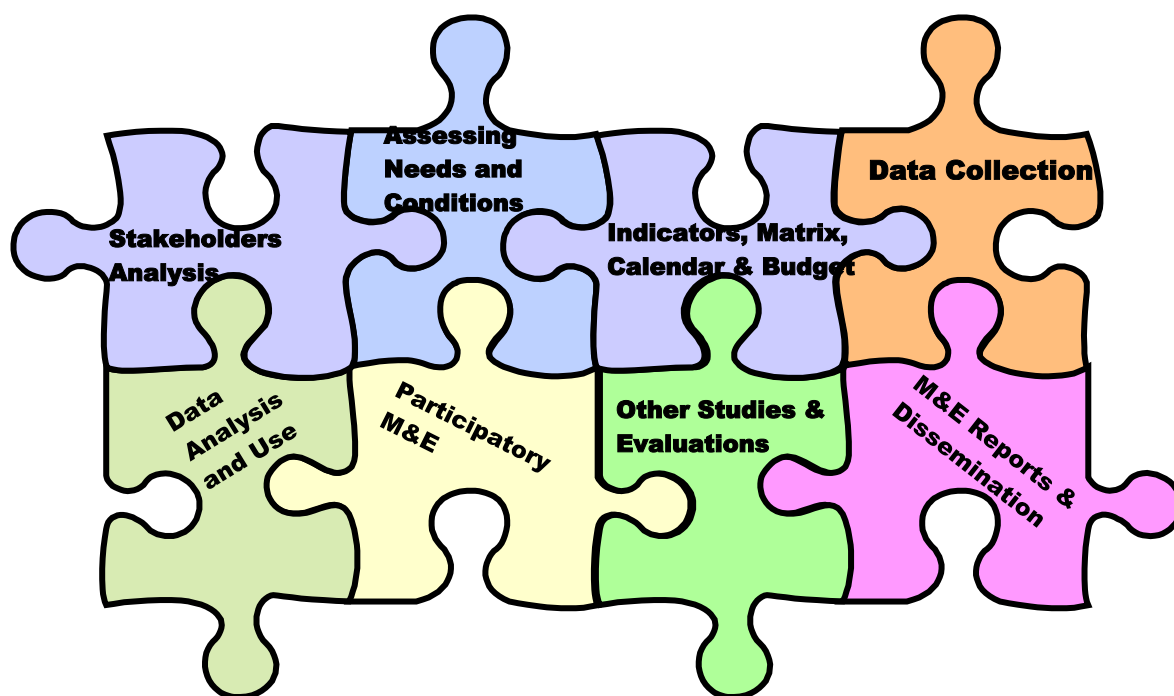
6.2   The National M&E System

M&E at the national level is made up of all the M&E systems in the country. The NDPC is the national agency responsible for coordinating all M&E activities in the country. The national M&E system illustrated in Figure 6.2 provides the mechanisms to monitor and evaluate the implementation of government policies and programmes at all levels of governance. In addition, the M&E system provides the basis for monitoring progress of implementation of internationally agreed development goals and other partnership agreements such as the Millennium Development Goals (MDGs), African Peer Review Mechanism (APRM) and Multi-Donor Budget Support (MDBS) triggers and targets. The output of the national M&E system (from both monitoring and evaluation) provides the most authoritative source of information on progress towards the achievement of the goals and objectives of NDPF and partnership agreements. The constitutional and legal mandates of the institutions at all levels of governance and their specific M&E responsibilities are discussed in Chapter 7.

Figure 6.2: Main Levels of the National M&E System
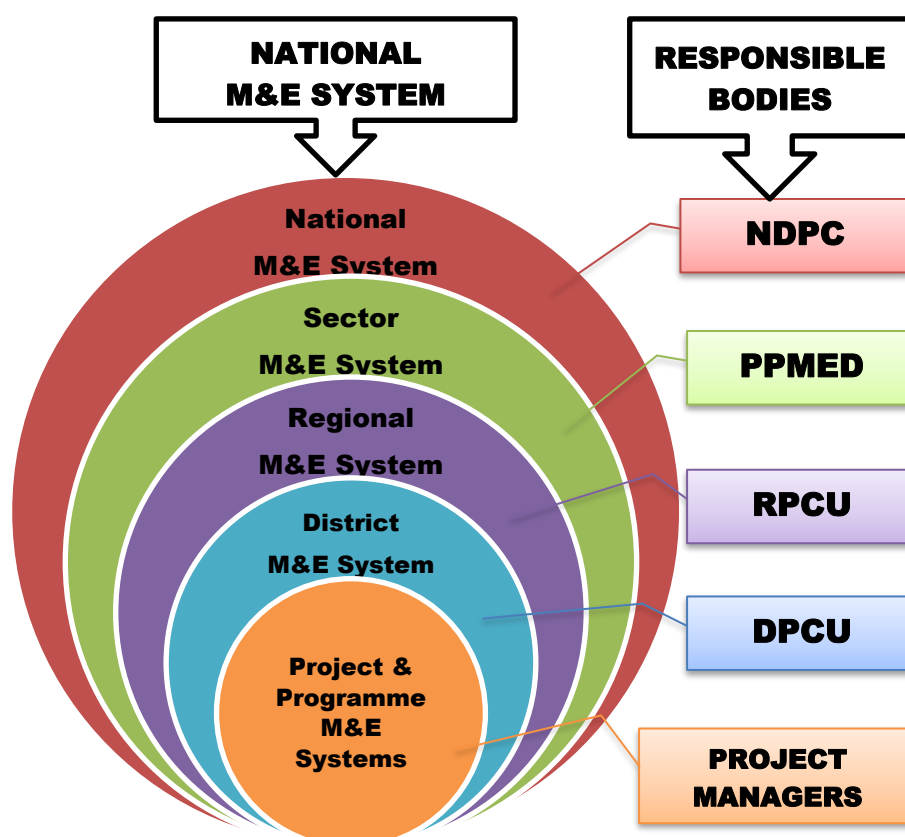
6.3 Purpose of the National M&E System

M&E is critical to sound governance and necessary for the achievement of development results. Government-wide M&E requires detailed knowledge both across and within sectors and interactions between planning, budgeting and implementation. The picture is complicated even further when the machinery of government is decentralised. It is precisely this complex intra-governmental structure with diffused powers and functions which demands a strong national M&E system to promote coordination and prevent fragmentation. Other key reasons for establishing an effective and efficient national M&E system include the following:

1. **Tracking development processes and results**
   The national M&E system provides the basis and data for the analysis of the relationships between inputs, outputs and their associated outcomes and impacts.
2. **Evidence-based policy making**
   The use of strong evidence can make a difference to policy making in at least five ways:
   a) **Achieve recognition of a policy issue:** M&E results can reveal aspects of social or economic life which had, until then, remained hidden from the general public and from policy makers. Once this information is revealed, groups such as civil servants, non-governmental organisations, development agencies and the media can lobby for the new policy issue to be recognised and addressed.
   b) **Inform the design and choice of policy:** Once a policy issue has been identified, the next step is to analyse it, so that the extent and nature of the problem can be understood. This understanding provides the basis for subsequent policy recommendations.
   c) **Forecast the future:** Evaluations that look into the future are required in order to gauge whether or not a policy measure taken to alleviate a problem in the short term will be successful in the long run. When a government is

committed to attaining targets in the future, forecasting models allow an assessment of whether these targets are likely to be met.

d) **Monitor policy implementation at sector and district levels:** Once policies are being executed, information is required by policy makers to monitor the expected results of the policies. Careful monitoring can reveal that key indicators are on-track or off-track, leading to a change of policy.

e) **Evaluate** National Development Policy Framework (**NDPF) policy impact:** Compared with monitoring**,** measuring the impact of a policy intervention is more demanding of methodology and of information. It is essential to incorporate an explicit mechanism for evaluating the policy impact of the NDPF.

3. **Linking plans and budgets at all levels**
An effective national M&E system is essential for good planning and budgeting systems and provides valuable feedback to those systems. The M&E processes relate directly to planning, budgeting, programme implementation, project management, financial management and reporting.

4. **Institutional and individual performance appraisals**
The national framework for rewards, sanctions and recognition should take M&E achievements into account. The recruitment and promotion of top public servants should therefore include criteria for M&E skills. Training in M&E should also form part of the institutional skills development strategy.

5. **Improve accountability, goods and service delivery**
The national M&E processes entail gathering and using information and knowledge in order to improve accountability and enhance service delivery. This cannot be achieved unless explicit and sustained efforts are made at all levels to find out what information is needed to improve government performance in terms of accountability and service delivery.

6.4 Results of the National M&E System

The results chain is a tool that provides development practitioners the opportunity to logically think through development interventions from the inputs to the impact levels. It forms the basis for the Logical Framework and the Theory of Change approaches to designing development programmes and projects. The practical application of this chain is that national development interventions are designed to bring about long-term change in the lives of all the people living in Ghana. To achieve national policy objectives, some financial, human and material resources are required (inputs). The activities are the actions taken or work performed by using these inputs. The activities are completely dependent on the inputs. These activities will then lead to the production of goods and services for consumption (outputs). In the short term, the outputs are expected to bring about changes in attitudes and behaviour in the population (outcomes) and changes in livelihoods and standards of living (impact) in the long term. Figure 6.2 illustrates the results chain of the national M&E system.

Figure 6.3: National M&E Results Chain

Results / Implementation		Description
Impact (Goals)		Long-term widespread improvement in society
Outcomes (Objectives)		Immediate to medium-term effects of the outputs
Outputs		Goods and services produced
Activities		Tasks undertaken to transform inputs into outputs
Inputs		Financial, human and material resources
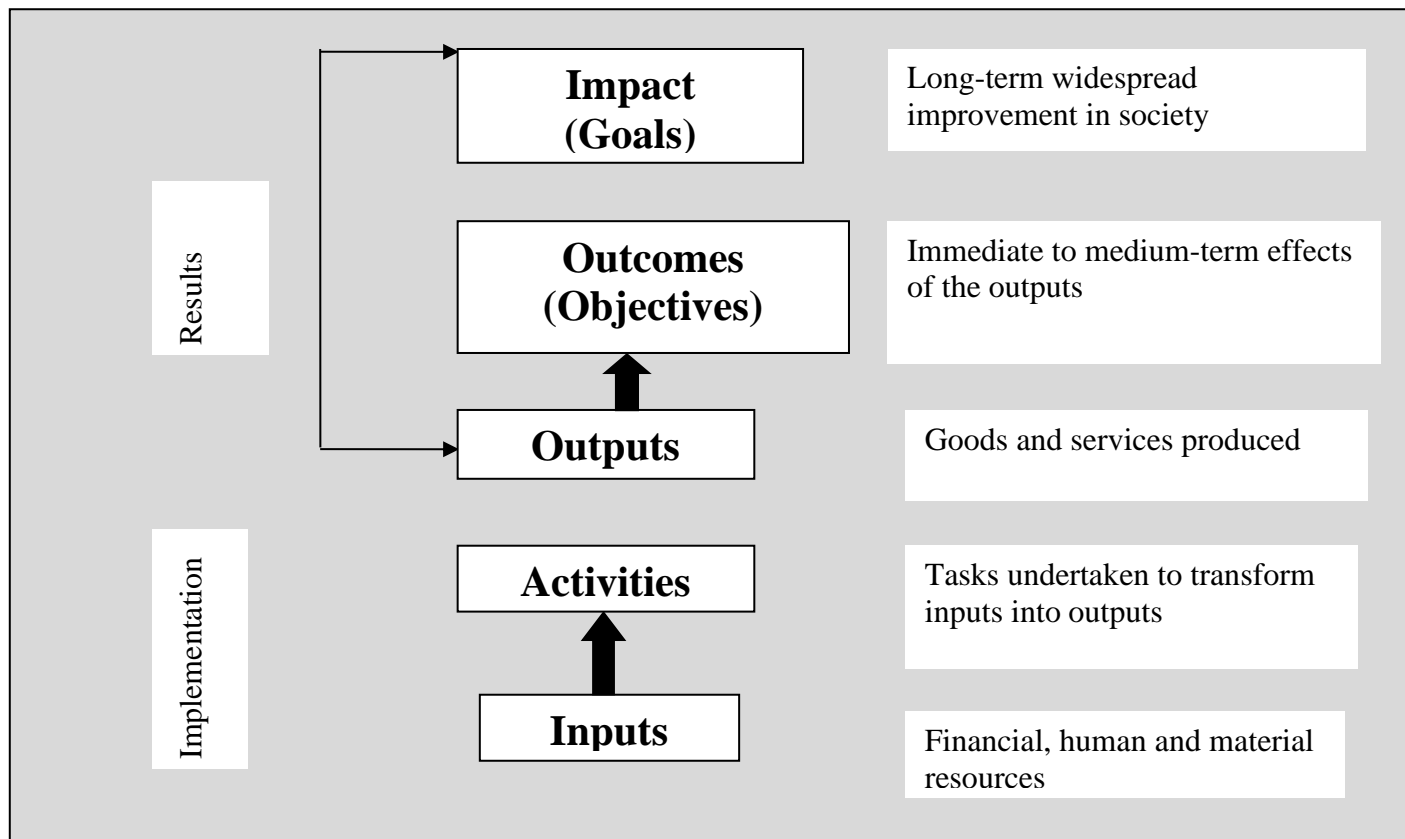
6.5   Characteristics of a Functional National M&E System

1) There is a legal framework backing the M&E system with institutional mandates.
2) There is a clear national M&E policy and purpose and clear directives.
3) There is a strong and committed political leadership and M&E champions supporting the system in all MDAs and MMDAs.
4) Adequate financial resources are made available for M&E activities and processes in all MDAs and MMDAs.
5) There is a capable institution at national level to coordinate and maintain the system.
6) There are units in all MDAs and MMDAs with specific M&E mandates, procedures and responsibilities.
7) There is adequate staffing and M&E concepts, tools, techniques and relevant skills are well known, understood and applied in all MDAs and MMDAs.
8) The system is based on M&E plans prepared through a participatory process at all levels.
9) Monitoring is done as a routine in all MDAs and MMDAs.
10) Evaluations are mandatory and are carried out in all MDAs and MMDAs.
11) The M&E information generated is used to improve management, and to influence policy formulation and decision making in all MDAs and MMDAs.
12) The M&E information is disseminated within and outside the MDAs and MMDAs (to media houses, CSOs, traditional authorities, academia and research institutions, etc.)
13) There are functional management and information systems in all MDAs and MMDAs.

6.6   Assumptions and Risks of the National M&E System

Assumptions and risks underlying the national M&E system answer two questions: What are the assumptions for effective functioning of the system? What risks can contribute to or derail the achievement of the objectives of the system?

6.6.1 Assumptions

The national M&E system assumes there is capacity within the government to generate and use information and data that will assist in improving public sector management and performance. Often, this assumption turns out to be false unless there are conscious efforts by government institutions to build this capacity and ensure that it is being used. The system further assumes that there will be greater demand for national M&E information if effective incentives (rewards or sanctions) are built into the system. However, this stands the risk of failure if there is no understanding of how M&E information can assist public sector managers and decision makers in moving to achieve national development goals.

6.6.2 Risks

Risks refer to the uncertainty of achieving expected results from the national M&E system. The risks that can adversely affect M&E systems at all levels of governance include the following:
1) Lack of human resources and high attrition rates.
2) Limited M&E competencies and capacities.
3) Lack of or non-functional M&E information systems.
4) Inadequate fieldwork.
5) Weak reporting and/or unreliable results.
6) Non-compliance with M&E requirements (M&E guidelines, formats, reporting timelines, etc.).

6.6.3 Managing National M&E Risks

Risk management is a systematic approach to respond proactively to change by mitigating threats and capitalizing on opportunities. The national M&E system therefore requires strategic leadership and a clear understanding of basic concepts and their potential uses in order to ensure efficiency and effectiveness. In addition, the national M&E system can only succeed if there is:
1) Commitment to providing the necessary financial, material and human resources for the M&E system at all levels of governance, thereby enabling it to develop and mature.
2) Commitment to supporting the values and ethics that underlie a successful M&E system (which include commitment to achieving development results, evidence-based policy formulation and decision making, objectivity, transparency and accountability, partnership and ownership of the development process by the stakeholders).
3) A strong civil society demanding and advocating evidence-based policy making with consideration for age, gender, disability, social status, ethnicity, other social factors and cultural values.
4) Willingness and ability to challenge any negative tendencies or culture within the government establishment.
5) Capacity within government institutions and civil society organisations to demand and use M&E information as part of the normal process of doing business.
6) A government that is clear about where and how M&E information can and will be used (e.g. in policy, planning, programme and project development, decision making, budgeting, etc.).
7) Adequate rewards and sanctions within the governance system to ensure that senior public servants produce credible and timely M&E information and ensure effective utilisation of the results.
8) Recognition within the government for formal and informal mechanisms and forums for reporting and sharing M&E information.
9) General recognition that access to M&E information increases transparency and accountability.
10) Commitment to make M&E information from the government available to the media, civil society, etc.

NATIONAL MONITORING AND EVALUATION INSTITUTIONS

7.1 National M&E Institutions, Roles and Responsibilities

The key institutions and the bodies which have a constitutional and/or legal mandate for M&E and perform other oversight responsibilities at the national level include: NDPC; Office of the President (OoP); Parliament; Ghana Audit Service; Public Services Commission (PSC); Internal Audit Agency (IAA); Office of the Head of Civil Service (OHCS); Ghana Statistical Service (GSS); Ministry of Finance (MoF); Policy, Planning, Monitoring and Evaluation Directorates (PPMEDs) of other ministries and the Cross-Sectoral Planning Groups (CSPGs). Figure 7.1 illustrates the national M&E institutional framework, the key actors, their main responsibilities and how the information generated flows up and feedback flows down at the various levels.

7.1.1 The National Development Planning Commission

NDPC is the institution established and mandated by Articles 86 and 87 of the 1992 Constitution to guide the formulation of development policies and plans and to undertake the monitoring and evaluation of the country's development efforts. NDPC advises the President and Parliament (on request) on the performance of public policy and programmes, their impact, and on the need for policy reforms. Whereas the National Development Planning Commission Act, 1994, (Act 479) established the Commission; the National Development Planning (System) Act, 1994, (Act 480) specifies the planning, coordination, monitoring and evaluation functions.

In fulfilment of its constitutional mandate, NDPC is in continuous consultation with the OoP and MDAs, development partners (DPs) as well as civil society organisations and other stakeholders regarding policy formulation, plan preparation, and monitoring and evaluation. NDPC also works through CSPGs.

Figure 7.1: National M&E Institutional and Reporting Framework
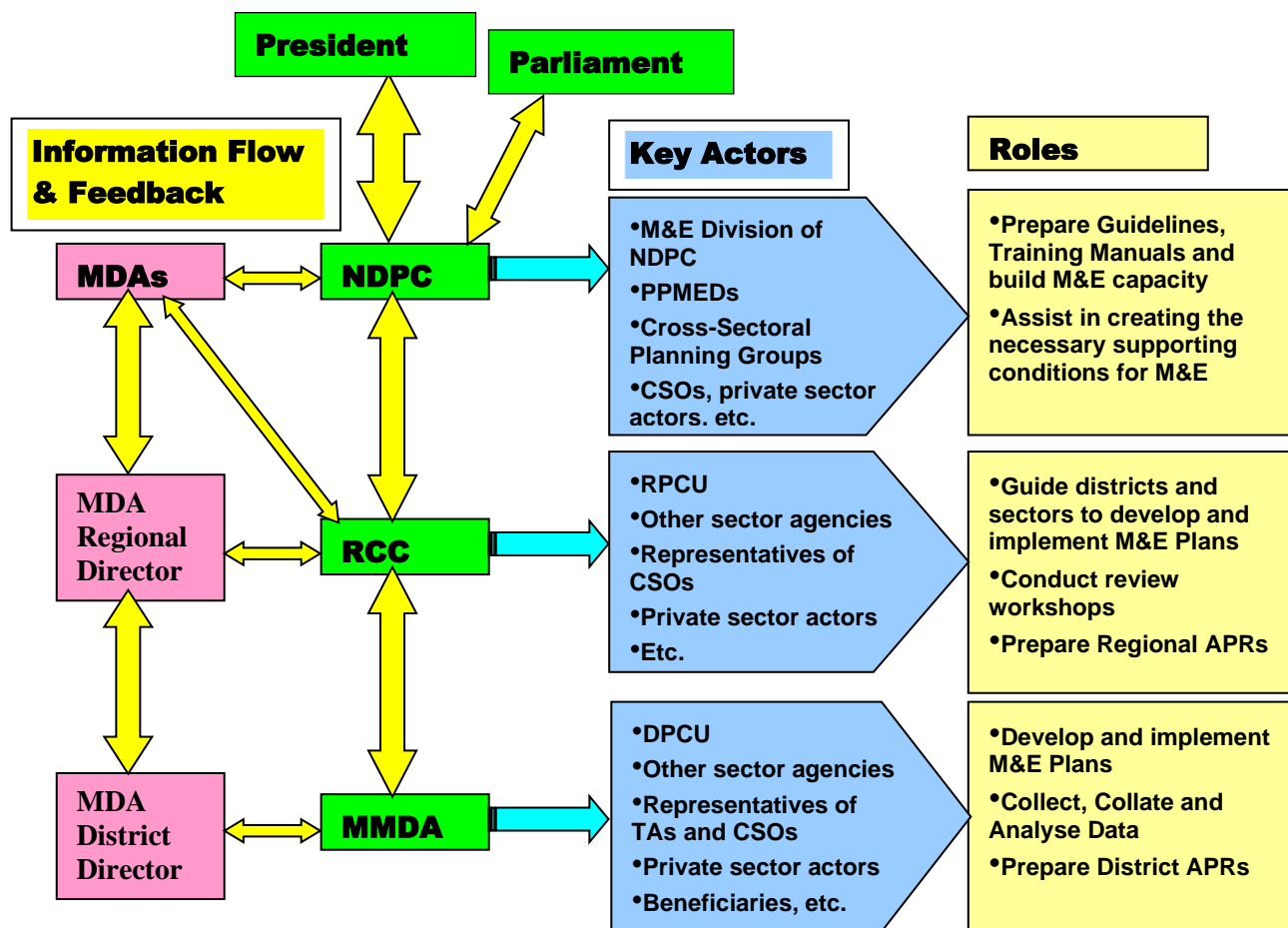
7.1.2 Office of the President

As a key recipient and user of M&E information, the OoP has a key role to play to ensure that M&E is adequately resourced and taken seriously by all MDAs and MMDAs.

7.1.3 Parliament

Parliament as one of the three arms of government plays an important role in monitoring government policies, programmes and projects. The Parliamentary Special Committee on Poverty Reduction has the oversight responsibility of making recommendations on national development to the full Parliament for approval. It further influences government policies on poverty reduction through the annual budget and regular interaction with MDAs and CSOs. Members of Parliament are key players in national development and use M&E results to influence government policies.

7.1.4 Ghana Audit Service

The Ghana Audit Service is the institution mandated by the 1992 Constitution (Articles 187, 188, 189) and the Audit Service Act 2000, (Act 584) to monitor the use and management of all public funds and report to Parliament. The Service is headed by the Auditor-General and audits the accounts of all public offices. The audits which the Audit Service must perform are:

1) Financial Audit or Regularity Audit.
2) Performance or Value for Money Audit.
3) Forensic Audit.
4) Environmental Audit.

5) IT or Computerised Systems Audit.
6) Payroll Audit.

7.1.5   Internal Audit Agency

The Internal Audit Agency (IAA) was established by the Internal Audit Agency Act, 2003 (Act 658) with a mandate to coordinate, facilitate and provide quality assurance for Internal Audit Units in MDAs and MMDAs. The IAA has oversight responsibility over internal audit practice in the public services with the aim of enhancing efficiency, accountability and transparency in the management of resources in the public sector.

7.1.6   Public Services Commission

Article 194 of the 1992 Constitution established the Public Services Commission (PSC) while Article 106 states that the PSC shall have such powers and exercise such supervisory, regulatory and consultative functions as Parliament shall, by law, prescribe, including as may be applicable, the supervision and regulation of entrance and promotion examinations, recruitment and appointment into or promotions within the public services, and the establishment of standards and guidelines on the terms and conditions of employment in the public services.

7.1.7   Office of the Head of Civil Service (OHCS)

The OHCS was created in 1980 as a centre for human resource management for the entire civil service. Section (6) of the PNDC Law 327, 1993 provides for the appointment of the Head of the Civil Service who is mandated to do the following:
1) Ensure efficiency of the Service.
2) Take charge of all civil servants.
3) Ensure effective implementation of government policies and plans.
4) Advise the government on employment and policy formulation within the Service.
5) Advise on conduct of management audits and reviews.
6) Determine and advise on manpower limits for the Service.

7.1.8   Ministry of Finance (MoF)

The Ministry of Finance exists to ensure macro-economic stability for the promotion of sustainable economic growth and development of Ghana and its people through the formulation and implementation of sound financial, fiscal and monetary policies, efficient mobilisation, allocation and management of financial resources, as well as establishing and disseminating performance-oriented guidelines and accurate, user- friendly, financial management information systems. MoF is responsible for:
- Mobilisation of external and internal resources.
- Allocation of resources to all sectors of the economy.
- Ensuring sustainability of public debt.
- Preparation and implementation of the annual budget and economic and financial statement of the government.
- Management of public expenditure.
- Development and implementation of financial sector policies.

7.1.9   Ghana Statistical Service (GSS)

The Statistical Service Law, 1985 (PNDC Law 135) established the Ghana Statistical Service, with responsibility for the collection, compilation, analysis, publication and dissemination of official statistics in Ghana for general and administrative purposes. GSS collects data through censuses and surveys and administrative records. GSS is the main source of data for some of the NDPF indicators. It also supports the M&E system by helping in the design of the methodologies, approaches and instruments employed in collecting data at the national, sectoral, regional and district levels.

7.1.10 Cross-Sectoral Planning Groups (CSPGs)

The National Development Planning Commission Act, 1994 (Act 479) Section 15 provides for the establishment of Cross-Sectoral Planning Groups by the Commission for the integration and coordination of planning and development activities. The CSPGs are composed of government and non-government actors: MDAs, academic and research institutions, civil society and non-governmental organisations (CSO/NGO), the private sector and selected individuals at national level. NDPC helps to organise the CSPGs to define national core indicators, review M&E reports, make suggestions on the conduct of evaluations (including participatory M&E) and perform other M&E functions.

7.2 Sector M&E Institutions, Roles and Responsibilities

Ministries, departments and agencies (MDAs), especially their Policy, Planning, Monitoring and Evaluation Divisions (PPMEDs) and the decentralised departments at the regional and district levels all have important roles and responsibilities in M&E. Section 12, sub-section 1(b) of the Civil Service Act, 1993 (PNDC Law 327), established the PPMED to coordinate and monitor programmes of the ministries and their M&E functions are prescribed by legal instruments and regulations. For example, Section 10 of the National Development Planning (Systems) Act, 1994, Act 480 requires the ministries to monitor the implementation of their Sector Medium-Term Development Plans (SMTDP) and submit reports at intervals in prescribed formats to NDPC.

The specific roles and responsibilities of the MDAs and their decentralised departments include the following:

Sector Ministers and Chief Directors

Ministers, Deputy Ministers and their Chief Directors are key stakeholders in the establishment of a functional M&E system at sector level. Their specific roles in M&E activities are to:
1) Ensure that MDAs prepare M&E Plans following the Sector M&E Guidelines issued by NDPC.
2) Ensure that all programmes and projects of MDAs are systematically monitored and evaluated in accordance with their approved M&E Plan.
3) Raise awareness of the need and make demands for measuring performance and development outcomes by all MDAs.
4) Use the M&E reports produced by the MDAs and NDPC to enhance evidence-based decision making at district and regional levels.
5) Increase the demand for and use of M&E results by MDAs through regular interactions to assess their response to the recommendations in the APRs.
6) Ensure that the recommendations in the APRs are used for the improvement of development plans and budgets of MDAs.
7) Facilitate the work of the PPMEDs by ensuring that:
   - M&E capacities of the PPMEDs are developed to the required standard.
   - PPMEDs are adequately resourced with vehicles, logistics and operational costs to enable them to collect, analyse data and generate reports in an accurate and timely manner.
8) Periodically visit key project or programme sites to undertake the different types of monitoring discussed in Table 3.1.

PPMEDs
1) Prepare M&E Plans for the SMTDPs.
2) Define and select sector-specific indicators in collaboration with NDPC as core national indicators.
3) Demand and collate M&E data from the regions and districts for production of Sector APRs.
4) Periodically visit key project sites and report on development progress at all levels.
5) Forward Sector APRs to NDPC and facilitate dissemination to all stakeholders.
6) Ensure that gender equality/equity indicators and other cross-cutting issues, such as HIV and AIDS, environment, vulnerability and exclusion are considered in M&E Plans.
7) Facilitate evaluation of their SMTDPs and make recommendations for the review of policies and strategies.

7.2.1 Decentralised Sector Departments at Regional Level
- Provide guidance to decentralised departments at district level on how to implement their sector M&E Plans;
- Collate and validate sector data from decentralised district departments through site inspections and regional workshops;
- Harmonise and forward the collated district M&E reports to the RPCUs and PPMEDs.

7.2.2 Decentralised Departments at District Level
- Collect data on sector-specific indicators and report on these to the DPCUs and heads of department at regional level;
- Support the DPCUs to conduct evaluations and Participatory M&E (PM&E) relating to the sector;
- Support GSS formal survey interventions relating to the sector.

7.3 Regional M&E Institutions, Roles and Responsibilities

7.3.1 Regional Ministers and Regional Coordinating Directors
Regional Ministers, Deputy Regional Ministers and their Coordinating Directors are key stakeholders in the establishment of a functional M&E system at regional and district levels. Their specific roles in M&E activities are to:

1) Ensure that MMDAs prepare M&E Plans following the District M&E Guidelines issued by NDPC.
2) Raise awareness of the need and make demands for measuring performance and development outcomes by all MMDAs.
3) Use the M&E reports produced by MMDAs and NDPC to enhance evidence-based decision making at district and regional levels.
4) Increase the demand and use of M&E results by MMDAs through regular interactions to assess their response to the recommendations in the APRs.
5) Ensure that the recommendations in the APRs are used for the improvement of development plans and budgets of MMDAs.
6) Facilitate the work of the RCCs by ensuring that:
   - M&E capacities of the RPCUs are developed to the required standard;
   - RPCUs are adequately resourced with vehicles, logistics and operational costs to enable them to collect, analyse data and generate reports in an accurate and timely manner.
7) Periodically visit key project or programme sites to undertake the different types of monitoring discussed in Table 3.1.

7.3.1 Monitoring and Evaluation Mandate and Functions of the RPCU
The Local Government Act 1993, (Act 462), Section 143 (2) established the Regional Planning Coordinating Unit to provide a secretariat for the Regional Coordinating Council (RCC) to perform its coordination, monitoring, evaluation and harmonisation functions. These functions are specified in Section 8 of the National Development Planning (Systems) Act 1994 (Act 480).

The composition of the RPCU derives its source from the Local Government Act 1993 (Act 462) Section 143 (3). The RPCU shall consist of 11 members (Box 7.1). To perform its M&E functions effectively, the RPCU should co-opt other sector agency heads, persons from private sector and civil society organisations whose input will be needed. The Regional Coordinating Director shall convene all meetings, issue circulars to the regional sector agencies. The Regional Economic Planning Officer shall manage

Box 7.1: Members of the Regional Planning Coordinating Unit

1	Regional Coordinating Director (Head)
2	Regional Economic Planning Officer (Secretary)
3	Regional Budget Officer
4	Regional Local Government Inspector
5	Regional Director of Health
6	Regional Director of Education
7	Regional Director of Agriculture
8	Chief Works Superintendent
9	Regional Town and Country Planning Officer
10	Regional Statistics Officer
11	Regional Coordinating Council Nominee

the RPCU secretariat, maintain the documentation centre and lead monitoring visits. These two officials will also serve as a link between the RPCU and the RCC. There should be gender balance in the membership of the group.

To fulfil its M&E functions, the roles and responsibilities of the RPCU include the following:
1) Provide guidance to the districts in the development and implementation of their M&E Plans.
2) Demand, collate and evaluate data from district level M&E for onward transmission to NDPC and other stakeholders.
3) Evaluate, recommend and support capacity building and other M&E needs for the MMDAs.
4) Review data and verify inconsistencies.
5) Support GSS formal survey interventions relating to NDPF.
6) Verify the indicators submitted from the districts through workshops.
7) Periodically visit key project sites and report on development progress in the districts.
8) Facilitate dissemination of NDPF and other M&E reports to all the districts and stakeholders.
9) Ensure that gender equality or equity indicators are clearly outlined in M&E Plans and the information analysed from a gender perspective.
10) Hold annual workshops to involve all DAs within the region for NDPF review with policy recommendations.
11) Review and collate the district Annual Progress Reports to produce the regional APR.
12) Facilitate evaluation of the DMTDPs and make recommendations for policy review.

7.4 District M&E Institutions, Roles and Responsibilities

7.4.1 MMDCEs, Presiding Members and District Coordinating Directors
MMDCEs, Presiding Members and their Coordinating Directors are key stakeholders in the establishment of a functional M&E system at district, programme and project levels. Their specific roles in M&E activities are to:
1) Ensure that MMDAs prepare M&E Plans following the District M&E Guidelines issued by NDPC.
2) Ensure that all programmes and projects of MMDAs are systematically monitored and evaluated in accordance with their approved M&E Plans.
3) Raise awareness of the need and make demands for measuring performance and development outcomes by all MMDAs and project managers
4) Use the M&E reports produced by MMDAs and NDPC to enhance evidence-based decision making at district level
5) Increase the demand and use of M&E results by MMDAs through regular interactions to assess their response to the recommendations in their APRs.
6) Ensure that the recommendations in the APRs are used for the improvement of development plans and budgets of MMDAs.
7) Facilitate the work of the DPCUs by ensuring that:
   • M&E capacities of the DPCUs are developed to the required standard;
   • DPCUs are adequately resourced with vehicles, logistics and operational costs to enable them to collect, analyse data and generate reports in an accurate and timely manner.
8) Periodically visit key project or programme sites to undertake the different types of monitoring discussed in Table 3.1.

7.4.2 Monitoring and Evaluation Mandate and Functions of the DPCU

Section 46, Sub-section 3 of the Local Government Act, 1993, (Act 462) established the District Planning Coordinating Unit (DPCU) to assist the District Assembly (DA) to execute designated planning functions. The National Development Planning (Systems) Act, 1994, (Act 480) defines the DPCU's planning, programming, monitoring, evaluation and coordinating functions.

In line with Section 46, Sub-section 4 of the Local Government Act, 1993, (Act 462), the DPCU shall be made up of a minimum of 11 officers (Box 7.2). To perform its M&E functions effectively, the DPCU should co-opt representatives from other sector agencies, persons from the private sector and civil society organisations whose input will be needed. The District Coordinating Director should lead the group and be responsible for convening meetings, issuing of circulars to the decentralised sector agencies and so on. The District Planning Officer shall act as the secretary and be responsible for documenting all M&E working sessions, ensuring participation of all stakeholders. There should be gender balance in the membership of the group.

Box 7.2: Members of the District (Metropolitan/Municipal) Planning Coordinating Unit

1	District Coordinating Director
2	District Planning Officer
3	District Budget Officer
4	District Finance Officer
5	District Director of Health Services
6	District Director of Education
7	District Director of Agriculture
8	District Director of Social Welfare or Community Development
9	District Physical Planning Director
10	District Director of Works or Engineering
11	Nominee of the District Assembly

To fulfil its M&E functions, the DPCU shall have the following roles and responsibilities:

1) Develop and implement the District M&E Plan.
2) Convene quarterly DMTDP performance review meetings with all stakeholders.
3) Undertake periodic project site inspections.
4) Liaise with RPCU to agree on goals and targets.
5) Develop DMTDP indicators for measuring change, especially on gender equality or equity and other cross-cutting themes in the National Development Policy Framework (NDPF) such as environment, vulnerability, exclusion and social protection.
6) Collect and collate feedback from sub-district levels for preparation of the District APR.
7) Facilitate the dissemination and communication of M&E reports, the NDPF and other documents from NDPC at district and sub-district levels.
8) Provide support to GSS to undertake district-level CWIQ and other national surveys and censuses.
9) Produce District Annual Progress Reports and make recommendations for policy review.
10) Conduct mid-term and terminal evaluations of the DMTDP as well as other evaluations.

7.5 M&E Roles of Traditional Authorities and CSOs

Traditional Authorities (TAs), i.e. Chiefs and Queen Mothers, the youth and civil society organisations (CSOs) – including NGOs, community-based organisations, voluntary, professional and faith-based organisations, universities, research institutions, think-tanks, the media – play important roles as producers and users of M&E data and information. The participation of TAs and CSOs in NDPF monitoring can add real value to the process itself and its policy outcomes. TAs and CSOs have contacts with the people at the grassroots and are therefore well positioned to express the views and experiences of people whose needs the NDPF aims to address. On the whole, TAs and CSOs can hold MDAs and DAs more accountable and responsible for the delivery of goods and services as well as exposing malpractices, corruption and choices which do not benefit those needs the NDPF is supposed to address.

TAs and CSOs, as partners in social and economic development, are a source of independent and useful information and perspectives on how the DAs and other key government officials are performing. Specifically, CSOs play important roles in the M&E framework as follows:

1) Provide an independent view on policy formulation and implementation of NDPF programmes and projects.

2) Serve on the Cross-Sectoral Planning Group (CSPG), especially during the preparation of the Annual Progress Report.
3) Collaborate with RPCUs and DPCUs to undertake policy, programme and project reviews and performance assessments.
4) Undertake social audits of budget releases, DACF, funds from development partners as well as internally generated funds.
5) Assist NDPC, sectors and districts to disseminate the national, sector and district APRs.

7.6   M&E Roles of Development Partners

Development partners (DPs) play a significant role in shaping and enhancing M&E at national, sector and district levels. Specifically, DPs should:

- Help strengthen the sector/district-level institutional framework for evidence-based policy formulation, planning, monitoring and evaluation;
- Provide support to enhance capacity building in M&E for the preparation and implementation of sector and district M&E Plans and APRs;
- Assist government agencies to develop efficient information and reporting systems and reduce support for separate, additional monitoring and reporting procedures.

7.7   Strengthening the Institutional Arrangements for M&E

Greater coordination is needed between the key government agencies responsible for M&E. This requires better information flow and incentives for monitoring and evaluation at all levels. There is a need to build M&E capacity in the key institutions mentioned in the above sections for proper functioning and sustainability of the national M&E system. The following measures will contribute greatly to an effective national M&E system:

1) Reinforce the institutional arrangements with adequate staff to support and sustain effective M&E at all levels.
2) Coordinate and strengthen the existing mechanisms for measuring the performance of public servants at all levels.
3) Develop an integrated M&E system for the assessment of capacities and management performance of MDAs and MMDAs.
4) Evolve an efficient system for generating reliable and timely data on public service delivery using the existing M&E structures and staff at all levels.
5) Manage the existing M&E institutional structure to provide an effective feedback mechanism that makes information available to the government, private sector and civil society at all times.

PART FOUR

STEPS IN DEVELOPING

M&E AS A SYSTEM

CHAPTER EIGHT (STEP ONE)

IDENTIFICATION AND ANALYSIS OF STAKEHOLDERS

8.1 Who is a Stakeholder?

A stakeholder refers to a person, group or institution that has interests or can be affected (positively or negatively) by a development policy or intervention (programme or project) and must therefore be taken into account before, during and after its implementation. The interests and needs of stakeholders vary and depend on how they benefit or are able to influence a policy or intervention in a positive or negative way. In order to manage and adequately address these variations, an initial activity in doing M&E is to identify, classify and analyse all individuals, groups or organisations that have a stake in a development policy or an intervention to be monitored and evaluated.

8.2 Purpose of Stakeholder Identification and Analysis

The main rationale for stakeholder identification and analysis is to ensure that development reflects the needs of all interest groups and not merely the needs of the implementing institutions. It enables decision makers to develop effective engagement strategies for all parties in M&E processes. This usually leads to sustained capacity building and dissemination of the M&E results. In addition, stakeholder identification and analysis:
1) Enhances the participation of all interested parties in the implementation of the development plan.
2) Ensures that potential risks, conflicts and constraints that could affect smooth implementation of the development plan are avoided.
3) Increases demand for and utilisation of M&E results.
4) Enhances partnerships and facilitates smoother implementation of the development plan.
5) Identifies vulnerable or marginalised groups that are normally left out in the planning processes.
6) Increases managerial and administrative support for a given development policy or programme.
7) Increases effective interaction among key stakeholders.
8) Determines the extent to which certain groups should participate in the entire M&E process (UNDP Handbook, 2009).

8.3 How to Identify and Classify Stakeholders

The process of identifying and classifying stakeholders includes the selection of all relevant parties and the determination of their needs and interests as well as their responsibilities. The stakeholders identified can be classified in two broad groups:
1. **Primary stakeholders** – Individuals and groups directly involved or affected by an intervention, i.e. the initiators, implementers, financiers, direct beneficiaries as well as those adversely affected by policies, programmes and projects. For example, for a rural road project, primary stakeholders include traders and farmers whose livelihoods will be affected (positively or negatively) by the new road construction.
2. **Secondary stakeholders**: Individuals and groups who are indirectly involved or affected by the intervention. A programme designed to reduce domestic violence, for instance, could have a positive effect on hospital emergency room personnel by reducing the number of cases they see. It might require more training or police to help them handle domestic violence calls in different ways. Both of these groups are secondary stakeholders.

Since stakeholder influence and power can determine the success or failure of development interventions, it is appropriate to use a wide scope for stakeholder identification during the planning phase. This will ensure that legitimate stakeholder interests and concerns are effectively addressed before implementation. Basic consultations, focus group discussions and stakeholder workshops are some common approaches used in conducting stakeholder identification and classification. The following steps may be considered:

1) Clarify the main purpose of the stakeholder analysis and agree on the criteria for identifying and classifying stakeholders.
2) In a very early stage of the process, stakeholder identification and classification may simply be done "in the office" by members of the DPCU or staff of the PPMEDs or even the project management team at project level. This involves brainstorming and listing all primary and secondary stakeholders. This can be done when the following questions are posed: which individuals, organisations or groups should be involved in the intervention for it to achieve its ultimate goal? Who will the project or programme management team work directly with? Who can help or hinder project implementation? Who is the project aiming to help? In identifying stakeholders, it is also important to think beyond the obvious. Beneficiaries, policy makers and other primary stakeholders are easy to identify, whereas some secondary stakeholders who may be indirectly affected are more difficult to identify.
3) Inform selected participants about the stakeholder identification and classification programme.
4) List all criteria to be used to prioritise all those involved.
5) Complete a stakeholder table (e.g. in working groups) during the identification phase of the planning process.
6) Define the influence and importance status of the selected stakeholders (e.g. importance/ influence matrix).
7) Classify all stakeholders into primary and secondary stakeholders.

An example of identified and classified stakeholders is provided in Table 8.1

Table 8.1: National M&E Plan Stakeholders Identified and Classified

Office of the President (OoP)	Primary (decision maker, user and collaborator)
Parliament	Primary (law maker and regulator, user and collaborator)
NDPC	Primary (initiator, regulator and user)
Council of State	Secondary (user and collaborator)
MoF	Primary (implementer, financier, user and collaborator)
GSS	Primary (implementer, producer of data, user and collaborator)
MLGRD	Primary (producer of data, user and collaborator)
Other MDAs	Primary/secondary (producers of data, users and collaborators)
MMDAs	Primary (producers of data, implementers, users and collaborators)
Development partners	Primary (financiers, users and collaborators)
RCC	Primary (users and collaborators)
CSOs	Secondary (users and collaborators)
Private sector organisations	Secondary (users and collaborators)
Academia and research institutions	Secondary (users and collaborators)
Individual resource persons	Secondary (users and collaborators)
Traditional authorities (Chiefs and Queen Mothers)	Secondary (users and collaborators)
Media	Secondary (users and collaborators)
Professional associations	Secondary (users and collaborators)

Adapted from NDPC, *M&E Plan (2010-2013)*

The implementation of a DMTDP, for example, can involve stakeholders such as the local communities, the district administration, District Assembly members, unit committee members, area councils, the Regional Coordinating Council, district health administration and service providers, the Ministry of Food and Agriculture, the National Health Insurance Authority, Members of Parliament, political parties, development partners, research institutions, the media and civil society groups. Based on how these groups are affected by or affect the implementation of DMTDP, they could either be classified as primary or secondary stakeholders.

On the other hand, implementation of a project M&E plan may include key stakeholders such as local communities in the catchment area, project management staff, donors, steering committees, traditional authorities, interested civil society groups, NGOs, DPCU, RPCU, area councils, unit committees, Members of Parliament, District Assembly members and contractors. However, the level of involvement of any of these possible stakeholders depends on the degree to which they affect or are affected by the project.

8.4: How to Analyse Stakeholders

The DPCUs and PPMEDs must analyse all stakeholders after they have been identified and classified. The following steps are recommended:

1) **Assess the magnitude and potential impact of stakeholder needs, interests and responsibilities on the successful implementation of the M&E plan**

   Questions useful for assessing the needs, interests and responsibilities of different stakeholders include:
   - What are the expectations of stakeholders with respect to M&E plan implementation?
   - What are the responsibilities of stakeholders in terms of ensuring smooth implementation of the M&E plan?
   - What conflict situations are likely to arise during project implementation?
   - What needs does the intervention hope to address?

2) **Determine stakeholder influence and importance**

   As discussed in Section 8.3, stakeholder influence or importance is crucial to the implementation of the M&E plan. **Influence** refers to the power that the stakeholders have over the intervention. This may either be formal (due to their control over decision-making process) or informal (because they can use their communal connections and linkages to hinder or facilitate the implementation of the project or programme).
   On the other hand, **importance** relates to the degree of active involvement of the stakeholder in the process of achieving project objectives. The district or sector agencies can determine the importance and influence of stakeholders by assessing their:
   - Power and status (political, social and economic);
   - Degree of organisation;
   - Control over strategic resources;
   - Personal connections.

3) **Outline involvement strategies**

   Develop involvement strategies for identified stakeholders. This can be done by asking the different people or groups how they think they can be optimally involved. However, it must be noted that participation does not mean involving everybody in all decisions at all times. It means carefully ensuring that different interests can be best represented in different phases and forums of the M&E process.
   The involvement strategies should be planned taking into account:
- The needs, interests, importance and influence of each stakeholder;
- Important stakeholders who lack influence;
- The unique functions and roles of all stakeholders.

Table 8.2 provides a sample of a typical M&E stakeholder analysis of the NDPF.

Table 8.2: Stakeholders in Implementation of National M&E Plan

Stakeholders	Needs/Interests/Responsibilities	Involvement
1. Office of the President (OoP)	- Demand and use M&E results - Ensure accountability and transparency - Ensure quality public goods and services delivery - Provide incentives for M&E (including staff) - Ensure efficient use of resources	- Creation of the necessary conditions for M&E - Participation in M&E workshops, seminars, meetings and conferences - Inspection of projects - Dissemination and communication of M&E results - Preparation of M&E reports
2. Parliament	- Deliberate and debate on M&E results - Use M&E results (e.g. APR) to play oversight role over the Executive - Ensure accountability and transparency - Ensure appropriate allocation and efficient use of resources for M&E	- Preparation of M&E reports - Participation in M&E workshops, seminars, meetings and conferences - Dissemination and communication of M&E results - M&E orientations, feedback and capacity building - Inspection of projects
3. NDPC	- Monitor, evaluate and coordinate development policies, plans and strategies - Provide evidence-based policy advice to the President, Parliament and other stakeholders - Support M&E capacity building and training at all levels - Demand and harmonise progress reports from all MDAs and MMDAs - Provide feedback on M&E results - Ensure incentives are provided for effective M&E at all levels - Ensure that a functional M&E system exists at all levels - Prepare M&E Guidelines for sectors and districts - Prepare National M&E Plan - Prepare M&E Manual for reference and training at all levels - Conduct PM&E - Conduct evaluations - Prepare sector M&E Plan - Monitor and evaluate the SMTDP - Apply M&E rewards and sanctions - Use M&E results for policy formulation and decision making - Provide feedback on M&E reports and backstopping to districts and sectors	- Inspection of projects - Data collection, validation and analysis - Revision and collation of M&E results from MDAs, MMDAs, CSOs, etc. - Dissemination and communication of M&E results - Organisation of M&E orientation and training workshops - Organisation of M&E workshops, seminars, meetings and conferences - Preparation and revision of M&E documents - Preparation of district and sector M&E Guidelines - Organisation of PM&E - Commissioning of and participation in evaluations and specific studies

Stakeholders	Needs/Interests/Responsibilities	Involvement
4. Council of State	• Ensure efficient use of resources • Use M&E results (e.g. APR) to advise the President	• Participation in M&E workshops, seminars and meetings • Dissemination and communication of M&E results • Inspection of projects
5. MoF	• Ensure appropriate allocation and release of funds for M&E • Ensure availability of accurate, reliable and timely financial data • Monitor and evaluate SMTDP • Produce M&E reports • Provide M&E incentives • Prepare sector M&E plans • Use M&E results for evidence-based financial policy formulation and decision making • Provide feedback on M&E results • Support capacity building & training in M&E	• M&E data collection and validation • Participation in preparation of M&E budget • Dissemination and communication of M&E results • Participation in M&E workshops, seminars and meetings • Revision of M&E documents • M&E orientation, feedback and capacity building • Inspection of projects
6. GSS	• Ensure the availability of accurate, reliable & timely data at all levels for effective decision-making • Provide feedback on M&E results • Support capacity building & training in M&E • Conduct surveys and census • Provide baseline data • Prepare sector M&E Plan • Monitor and Evaluate SMTDP • Produce M&E Reports • Use M&E results for evidence-based policy formulation and decision making	• Data collection, storage, retrieval and presentation using Ghana Info database • Participation in M&E workshops, seminars and meetings • Dissemination and communication of M&E results • Participation in PM&E • Participation in evaluations • Preparation and revision of M&E documents • M&E orientation, feedback and capacity building • Inspection of projects
7. MLGRD	• Prepare sector M&E plan • Monitor and evaluate SMTDP • Produce M&E reports • Support capacity building and training in M&E • Conduct PM&E • Conduct evaluations • Provide feedback on M&E results • Use M&E results for evidence-based policy formulation and decision making	• Participation in M&E workshops, seminars and meetings • Dissemination and communication of M&E results • Participation in PM&E • Participation in evaluations • M&E data collection and validation • Preparation and revision of M&E documents • M&E orientation, feedback and capacity building • Inspection of projects
8. Other MDAs	• Prepare sector M&E plan • Monitor and evaluate SMTDP • Produce M&E reports • Support capacity building and training in M&E	• Participation in M&E workshops, seminars and meetings • M&E data collection and validation • Dissemination and communication of M&E results

Stakeholders	Needs/Interests/Responsibilities	Involvement
	• Ensure the availability of accurate, reliable and timely M&E data • Use M&E results for evidence-based policy formulation and decision making • Provide M&E incentives • Provide feedback on M&E results	• Participation in PM&E • Participation in evaluations • Preparation and revision of M&E documents • M&E orientation, feedback and capacity building • Inspection of projects
9. Regional Coordinating Councils	• Ensure the availability of accurate, reliable and timely data from the districts for effective decision making • Harmonise and coordinate regional M&E progress reports • Provide feedback on M&E reports to districts • Ensure accountability and transparency • Disseminate M&E results • Support capacity building and training in M&E • Supervise district M&E activities • Receive district M&E reports • Use M&E results for evidence-based policy formulation and decision making • Create demand for M&E results	• Participation in M&E workshops, seminars and meetings • Harmonisation and coordination of M&E reports • Dissemination and communication of M&E results • Preparation and revision of M&E documents • M&E orientation, feedback and capacity building • Inspection of projects • Participation in evaluations • Participation in PM&E
10. Metropolitan Municipal and District Assemblies	• Prepare district M&E plan • Ensure the availability of accurate, reliable and timely data for evidence-based policy formulation and decision making • Monitor and evaluate DMTDPs • Produce M&E reports (quarterly and annually) • Ensure accountability and transparency • Provide feedback on M&E reports • Disseminate M&E results • Support M&E capacity building and training • Create demand for M&E results • Use M&E to enhance ownership and partnership in local development • Conduct PM&E • Conduct evaluations • Use M&E results for evidence-based policy formulation and decision making	• Data collection and validation • Participation in M&E workshops, seminars and meetings • Preparation and revision of M&E documents • M&E orientation, feedback and capacity building • Inspection of projects • Participation in evaluations • Participation in PM&E • Dissemination and communication of M&E results
11. Development Partners	• Provide funds, logistics and technical assistance for M&E • Demand M&E results	• Participation in M&E workshops, seminars and meetings • Data validation

Stakeholders	Needs/Interests/Responsibilities	Involvement
	• Ensure accountability and transparency • Ensure quality and efficient goods and services delivery • Support evaluation capacity building • Use M&E results for evidence-based policy dialogue and decision making • Create demand for M&E results	• Preparation and revision of M&E documents • Dissemination and communication of M&E results
12. Civil Society Organisations *(NGOs, CBOs, voluntary, faith-based organisations)*	• Ensure transparency and accountability • Ensure quality and efficient goods and services delivery • Demand and use M&E data or results for advocacy • Disseminate M&E results • Conduct PM&E	• Participation in M&E workshops, seminars and meetings • Dissemination and communication of M&E results • Preparation and revision of M&E documents • Data collection and validation
13. Private sector organisations	• Ensure transparency and accountability • Ensure quality and efficient goods and services delivery • Demand and use M&E data or results • Disseminate M&E results • Share development information	• Data collection and validation • Dissemination and communication of M&E results • Preparation and revision of M&E documents • Inspection of projects
14. Academia and research institutions	• Sharing development information • Conduct studies and evaluations • Provide technical assistance • Utilise M&E data or results	• Participation in M&E workshops, seminars and meetings • Dissemination and communication of M&E results • Data collection and validation • Preparation and revision of M&E documents • Participation in evaluations • Participation in PM&E
15. Individual resource persons	• Offer technical assistance	• Preparation and revision of M&E documents • Participation in evaluations • Participation in PM&E
16. Local communities and traditional authorities	• Demand and use M&E reports or results for advocacy • Share development information • Demand top quality, reliable and affordable services • Ensure transparency and accountability • Monitor projects and programmes	• Dissemination and communication of M&E results • Participation in M&E workshops, seminars and meetings • Inspection of projects • Participation in evaluations • Participation in PM&E
17. Media	• Demand and use M&E results • Demand top quality, reliable and affordable services	• Participation in M&E workshops, seminars and meetings • Dissemination and communication of M&E results

Stakeholders	Needs/Interests/Responsibilities	Involvement
	• Ensure transparency and accountability • Monitor and report on projects and programmes • Disseminate M&E results	• Inspection of projects
18. Professional associations	• Use M&E reports or results for advocacy • Sharing development information • Demand quality, reliable and affordable goods and services • Ensure transparency and accountability	• Participation in M&E workshops, seminars and meetings • Participation in evaluations • Participation in PM&E Dissemination and communication of M&E results • Data validation • Preparation and revision of M&E documents • Inspection of projects

Adapted from NDPC, *M&E Plan (2010-2013)*

CHAPTER NINE (STEP TWO)

ASSESSING CAPACITIES AND CONDITIONS FOR MONITORING AND EVALUATION

9.1 What are M&E Capacities and Conditions?

M&E capacity is the ability of individuals and organisations to perform their M&E functions efficiently and effectively in a sustainable manner.

M&E conditions refer to the material resources and incentives required to create an enabling environment for effective M&E. Creating the necessary conditions to support M&E is the process of identifying, evaluating and providing the required material resources and incentives for effective M&E to happen. The assessment of M&E conditions also means determining if there is a functional M&E information system.

The key to an effective M&E system is the existence of adequate human capacities and conditions to implement the M&E plan. Without creating the enabling environment, the M&E system will not achieve its intended results. This process should normally involve all stakeholders.

9.2 Steps for Addressing Human Resource Requirements for M&E

There are few M&E experts to run M&E systems at all levels of governance in Ghana. It is recommended that a long-term M&E capacity-building strategy be developed by all MDAs and MMDAs. Capacity building for M&E could either be external or on-the-job training (IFAD, 2000). Staff capacity development is crucial to the functioning of every M&E system. Below is a process guide that organisations could use to identify and assess their capacity requirements:

1) Brainstorm on the technical skills needed to undertake M&E.
2) Identify all individuals with direct or indirect responsibility for M&E.
3) Use an M&E human capacity worksheet to capture the technical skills needed by the identified individuals.
4) Make recommendations to management on capacity needs and M&E requirements.
5) Use a participatory process with all stakeholders in implementing the recommendations.

The outcome of the above process will assist MDAs and MMDAs to take one or a combination of the following steps to ensure that they have the right calibre of people to perform their M&E functions:

Steps 1 – Engage trained M&E staff
The engagement of already trained personnel to fill vacant positions is the ideal option but this is always difficult because:
- Few people have the requisite M&E skills;
- Engaging trained and skilled personnel requires that the necessary incentives are provided to attract them to the job and to keep them at post;
- It is also a time-consuming process to engage new staff in the public service.

Step 2 – External and on-the-job M&E training
Providing external and on-the-job training programmes is always necessary for sustained M&E capacity building to support the implementation of M&E activities. External training for M&E staff could lead to the award of a certificate, diploma, Bachelor's degree, Master's degree or a PhD. Generally, organisations and individuals could collaborate with capacity-building institutions such as the Ghana Institute for Management and Public Administration (GIMPA), the Institute of Local Government Studies (ILGS) and universities to address the M&E capacity challenges facing the

country. The International Program for Development Evaluation Training (IPDET) in Canada under the auspices of Carleton University and the World Bank is also recommended for all M&E practitioners. Part of the DACF allocation for capacity building and M&E budgetary allocation could be used to sponsor DPCU staff to attend M&E-related courses such as development planning, team and consensus building techniques, database management and other computer programs, report writing, and facilitation skills.

On-the-job training programmes could also take the form of workshops, seminars, conferences and short training courses. Whether it is an external training programme or on-the-job training, M&E staff must on a regular basis acquire new knowledge and skills on the subject in order to function effectively. Even the most trained M&E professionals will need to upgrade their skills and understanding of emerging issues in M&E in order to function effectively.

Step 3 – Engage external consultant for focused inputs
In the event there is low M&E capacity, organisations can engage external resource persons to undertake specific M&E tasks. However, it must be noted that the use of external resource persons or consultants does not help enhance institutional memory or build internal capacity. Above all, the engagement of external resource persons is a very expensive venture. At project level, the engagement of a consultant is recommended during the start-up of the project when staff may not yet have been engaged and relationships with implementing stakeholders are weak (IFAD, 2000)

9.3   Steps for Assessing and Acquiring M&E Material Resources

Material resources are very important for the successful functioning of any M&E system. The availability of office space for staff, documentation centres, computers and accessories and vehicles for M&E are some of the material resources needed for successful implementation of M&E by any organisation. Organisations could take the following steps to identify and assess their material resource requirements:

1) Brainstorm on the material resources needed.
2) Discuss how readily you can access each, whether directly or through partners.
3) Assess whether or not the required resources can be met with the existing budget allocations.
4) Identify and defer to the next budget those resources that cannot be obtained with the existing budget.

> **Box 9.1: Examples of Material Resources**
> - Documentation centre
> - Hardware (desktop computers, laptops, projectors, etc.)
> - Software (statistical packages, GIS, MIS, etc.)
> - Internet
> - Telephones
> - Vehicles

9.4   Steps to Assessing and Providing the Necessary Incentives
Providing M&E incentives means offering the right motivation to inspire staff to appreciate the value of M&E and give their best. It entails developing and implementing an incentive package and removing disincentives. A good incentive system should be equitable, applied in a timely manner, compatible with the goals and objectives of the organisation and recognised as part of the development intervention policy.

NDPC, in collaboration with MoF, MLGRD and the DACF Secretariat should work together with MMDAs and MDAs to develop appropriate incentive packages that will realistically address inadequate financial incentives and motivation for M&E staff at all levels. Other disincentives to be addressed include untimely release of funds for M&E work, difficulty in allocating a separate vehicle for M&E work and management apathy towards M&E. Generally, good incentive packages for M&E should be closely linked to district and sector management efforts to improve the implementation of projects and programmes. Management could take the following steps in creating the necessary incentive packages for M&E:

1) Ensure clarity of M&E responsibility in job descriptions and work plans for staff.
2) Provide appropriate remuneration and other incentives such as housing and vehicles

3) Make financial and other rewards easily available.
4) Ensure professional development for career advancement.
5) Institute reward and sanction mechanisms for compliance and non-compliance with M&E requirements.

9.5 Tools for Assessing M&E Capacities and Conditions

M&E capacities and conditions can be assessed using various methods and tools. Needs assessments and the management capacity index are two examples discussed below.

9.5.1 M&E needs assessment

M&E needs assessment can be conducted through field surveys or through desk review. A desk review of district and sector M&E plans conducted by NDPC in 2009 revealed a lack of or inadequate knowledge and skills in M&E, database management and general ICT skills. There was also limited knowledge and skills in facilitation, team- and consensus-building techniques, data collection and analysis, and not enough personnel to fill vacant M&E positions. With regard to material resources, the study highlighted the absence of documentation centres, digital cameras, scanners and photocopier machines, desktop computers and accessories, laptop computers, LCD, projectors, flipcharts and a shortage of vehicles to undertake M&E exercises. On financial resources, the study confirmed challenges such as the lack of or inadequate funds to carry out M&E activities, diversion of funds budgeted for M&E activities and late releases of funds for M&E activities (NDPC, 2009)

The desk review also acknowledged the following as issues relating to disincentives for M&E at the district and sector levels: low levels of appreciation for M&E by political leadership, low financial incentives, limited office space, low support and motivation for individuals and units responsible for M&E and management apathy towards M&E.

9.5.2 M&E management and capacity index

The management and capacity index is a perception index designed to present at a glance the status of management strengths and weaknesses in an organisation. The index is also an assessment tool that provides a framework for the organisation to evaluate its performance in relation to human resources, material resources and incentives. The index (Table 9.1) uses the following 11 indicators: skills and knowledge, staff complement, qualification of personnel, availability of funds, utilisation of funds, timely access to funds, leadership, management, motivation and incentives, workload, logistics, equipment and facilities.

Table 9.1: District Assembly DPCU Capacity and Management Index

Indicators	Score = 1	Score = 5	Score = 10
Skills and Knowledge	Most staff do not have the requisite skills and knowledge to complete basic work	Some staff have the requisite skills and knowledge in some areas but not all	All staff have the requisite skills and knowledge to complete even advanced tasks
Staff Complement	There are numerous vacant positions	Most key positions are filled but there are still gaps	All positions in the DPCU are filled
Qualification of Personnel	Most staff do not have the required education	Most staff have the required education but not all	All staff have the required education with some exceeding standard requirements
Availability of Funds	Funds available do not meet basic costs	Funds available to meet basic costs but will not allow DPCU to carry out activities in the M&E plan	Funds available meet basic costs as well as enable DPCU to carry out all activities in the M&E plan
Utilisation of Funds	Resources are spent at the discretion of management	Some resources are spent as approved by the DA, but management continues to	Resources are spent as budget in accordance with the DMTDP

Indicators	Score = 1	Score = 5	Score = 10
	and not in pre-approved areas	direct some funds inappropriately	
Timely Access to Funds	Funds released up to 12 months behind schedule	Funds released up to 6 months behind schedule	Fund released on schedule
Leadership	Inadequate leadership for addressing development needs due to low motivation	Leadership is able to complete short-term tasks, but is not dynamic or able to envision the medium- to long-term	Leadership is dynamic and motivates DA staff and members to work together for long-term development
Management	The full complement of management is not available, and what is present does not have the skills to direct DPCU activities	Management is present but not able to handle all management functions of planning, budgeting, financial reporting, M&E, etc.	Management is technically skilled in all components
Motivation and Incentives	Basic central government incentives exist but are not accessible	Some central government incentives are accessible	Central government incentives are easy to access and some development partner incentives exist
Workload	Workload is so high that staff have to work overtime to complete even basic administrative tasks	Workload forces staff to work overtime to complete administrative and programming functions	Staff are able to complete their jobs within regular working hours
Logistics	There are no vehicles, stationary, documentation centre, computers and accessories, photocopiers to serve DPCU	There are a few vehicles, computers and photocopiers but not adequate for effective M&E activities	Adequate number of logistics exist for M&E activities
Equipment and Facilities	Office space, furniture and technology are not adequate to serve all staff	Office space is adequate but furniture and technology are still lacking for some staff	Staff have access to appropriate office space, furniture and technology
Total Score	11	55	110

NB:
1. **The score** is a continuum from 1 to 10.
2. **The indicator total scores** above provide the worst, average and best case scenarios for three people.
3. **The total score** for the three people is calculated by adding the 3 scores (11+55+110 = 176)
4. **The average total score** is calculated by dividing the total score by 3 (176/3 =58.7)
5. **The Index** is calculated by dividing the average total score by the number of indicators (58.7/11=5.3)
6. **The interpretation for Index 5.3 means** this organisation has a mediocre capacity and management performance

Adapted from DISCAP M&E Manual, 2002

Guide to the Scoring Exercise

The Management Capacity Index is a group exercise. The assessment is done by translating individual perceptions on an issue or indicator into a numerical value ranging from 1 to 10. Actual scoring should be done as a continuum from 1 to 10 (e.g. 6.0, 1.2, 3.4, 8.8, 5.6, 7.0, etc.). This assessment must be done by a group of people who work with or know the organisation to be assessed very well, for example, staff and key stakeholders. The best approach is for a facilitator to take all participants through the indicators and the scoring process. When all participants have understood the process, the scoring must be done independently as a secret ballot. The results are then collated, analysed and interpreted by the group. Interpretation of the index sets a score range of 1 to 4 for low performance, 5 to 7 for average performance and 8 to 10 for high performance.

Guide to Calculating the Scores

Total individual scores – Each participant should sum up all the scores he/she gave for each indicator. The minimum total score for one individual will be 11 while the maximum score will be 110.

Average score for each indicator – Calculate the average score for each indicator by adding all the individual scores for each indicator and dividing the sum by the number of participants. Thus, if the 10 participants scored the **leadership** indicator as follows: $5.5 + 3.0 + 4.0 + 6.0 + 7.5 + 2.0 + 1.4 + 9.0 + 5.3 + 7.2 = 50.9/10 = $ **5.9.** The interpretation of this score is that the performance of leadership in this organisation is average. Leadership of this organisation may be able to complete short-term tasks, but is not dynamic or able to envision the medium to long term.

Average total scores for the indicators – Add up the individual total scores of the 11 indicators (as explained above), e.g. if the scores by the 10 participants for each indicator were as follows: $25.5 + 33.0 + 44.0 + 46.0 + 87.5 + 92.0 + 99.4 + 29.0 + 35.3 + 67.2 = $ **558.90**. Determine the average total score for the 11 indicators. i.e. $558.9/11 = $ **50.81**

The Index (Average indicator score) – Calculate the **index** by dividing the average individual total scores by the number of indicators i.e. $50.81/11 = $ **4.6.** The **index** of **4.6** means this organisation has mediocre management capacity and performance.

CHAPTER TEN (STEP THREE)

MONITORING INDICATORS

10.1 What is an Indicator?

The Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD) defines an indicator as a *"quantitative or qualitative factor or variable that 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"*.

In simple terms, an indicator is a quantitative or qualitative measure that provides information on performance, achievement and compliance. It forms the basis for the collection of data on the state of a situation or condition, progression of an activity, project or programme. Indicators are used at all levels of the M&E results chain to monitor progress with respect to inputs, outputs, outcomes and impacts.

An indicator, as the name suggests, merely indicates and may not convey the complex dimensions of a given situation or activity. The direction of change of an indicator is context-specific and higher values can be good or bad, depending on what is being measured. For example, in agricultural production, crop yields are expected to increase, whereas in health service delivery, the maternal mortality ratio is expected to decrease.

10.2 Importance of Indicators

Indicators help to answer four key questions:

1) **What is the current situation**? As part of the baseline assessment, indicators provide information on what the current problems are, their magnitude, incidence and prevalence.
2) **Where do we want to go**? The information provided by the baseline can help to determine priorities and hence appropriate actions to be pursued.
3) **What is the right path to take us where we want to go?** M&E indicators can signal whether or not the actions being undertaken are producing the desired outputs, outcomes and impact.
4) **Are we at the place we want to be?** Indicators will enable us to determine whether or not we have made significant progress towards our chosen goal.

10.3 Characteristics of Good Indicators

Generally, a good indicator should have the following characteristics*:*

1) Relevant to the intervention.
2) Relevant to the goal and objectives.
3) Easy and feasible to measure.
4) Specific unit(s) of measurement.
5) Easy to interpret.
6) Specific time frame over which it will be monitored.
7) Easy to show a trend over time.
8) Specified target group.

10.4 How to Construct Indicators

Indicator construction, selection, definition and prioritisation should be done by involving key stakeholders in a participatory process, with the following steps:

1) **To create ownership**, the first step is to assemble all the stakeholders to define the indicators needed for performance measurement and change.
2) **Identify all the issues** related to the intervention and define clear objectives for the process.
3) **Construct or select indicators or variables** that can measure the performance of the intervention relative to its goal and objectives. After selecting the indicators, ensure that their meaning follows national and international standards.
4) **Classify the indicators as** follows: input, process, output, outcome or impact. This is in line with the results chain discussed in Chapter 6.
5) **Establish the baseline data** for each indicator. Some outcome and impact baseline data may only be available through a baseline study.
6) **Determine a realistic target for each indicator for a specific time period** – weekly, monthly or annual targets.
7) **Construct proxy indicators if necessary. F**or example, it may be difficult to measure the outcomes of policy, governance etc. directly.
8) **Disaggregate indicators** where necessary, to facilitate the collection of specific data based on geographical location, age, gender, income levels, social groups, etc.
9) **Distinguish between quantitative and qualitative indicators**, depending on the nature of the intended results.
10) **Review the indicators periodically,** to refine or eliminate redundancies and address issues related to data collection. Reset baselines and targets if necessary.
11) **Determine the human and financial resources required** for measuring each indicator.
12) **Agree on the appropriate frequency** for collecting data on each indicator.
13) **Collect data on each indicator.** Determine the individuals, agencies or institutions responsible for measuring each indicator.
14) **Use of results. D**etermine how the information from the different indicators will be communicated and fed back into decision-making processes and planning.

10.5 Classification of Indicators

10.5.1 Classification of M&E Indicators Based on the Results Chain
These classifications are:

1) **Input Indicators**
   Input indicators are quantified and time-bound statements of resources to be provided. These are financial, human, and material resources used for the development intervention. Input indicators measure the committed resources or the 'means' by which programmes or projects are implemented. It is therefore necessary to consider whether or not the inputs have resulted in the desired outputs. Information on these indicators comes largely from accounting and management records. Examples of input indicators include:

   a) Teacher-to-pupil ratio.
   b) Extension worker to farmer ratio.
   c) Doctor-to-patient ratio.
   d) Number of textbooks provided.
   e) Quantum of funds provided.

2) **Output Indicators**
   Output indicators measure the goods produced and services delivered. Examples of output indicators include:
   a) Number of school buildings constructed
   b) Number of boreholes drilled
   c) Number of farmers trained on improved rice production methods
   d) Number of peer educators trained in HIV and AIDS prevention techniques.
   e) Number of teachers trained in textbook use.

f) Number of credit applications for women farmer groups processed.

g) Number of demonstrations managed per extension worker.

3) Outcome Indicators

Outcome indicators measure the immediate and intermediate changes in conditions or behaviour achieved at the "purpose or objective" level through the provision of outputs. They deal more with the direct effects and quality of project outputs on beneficiaries. Examples of outcome indicators include:

a) Change in access to portable water from a borehole.

b) Net enrolment ratio in primary education.

c) Change in sales of high-quality rice by small-scale farmers.

d) Percentage of women satisfied with the maternity health care they received.

e) Transition rates from primary to secondary education (disaggregated by sex).

f) Proportion of girls completing secondary education.

g) Percentage change in prevalence of communicable diseases (disaggregated by geographical location).

h) Percentage change in the incidence of HIV and AIDS (disaggregated by age group and geographical location).

4) Impact Indicators

Impact indicators refer to the changes in the lives of people, as perceived by them and their partners at the time of evaluation, as well as sustainability-enhancing changes in their environment to which an intervention has contributed. Impact indicators measure the positive and negative changes to the environment, welfare, and living conditions as a result of the outputs and outcomes of an intervention. Examples of impact indicators include:

a) Literacy rate (disaggregated by sex).

b) Change in poverty levels (disaggregated by geographical location).

c) Poverty gap ratio (disaggregated by location).

d) Infant mortality rate.

e) Change in AIDS-related deaths (disaggregated by age group and geographical location).

f) Change in national GDP growth rate.

10.5.2 Direct and Indirect Indicators

Indicators can be classified as direct or indirect (proxy). All the indicators discussed above are examples of direct indicators. Proxy or indirect indicators are used when it is difficult to measure an indicator directly. Proxy indicators should be used only when data for direct indicators are not available, when data collection will be too costly or if it is not feasible to collect data at regular intervals.

The following are examples of proxy indicators used to measure poverty and well-being:

1) Type, size or spending on funerals.

2) Availability of new clothes for celebrations.

3) Postponement of marriage due to lack of dowry.

4) Regular use of shoes.

5) Number of meals per day.

6) Possession of a television set in a rural area.

7) Use of corrugated roofing sheets (instead of mud or thatch) in a rural area.

10.5.3 Quantitative and Qualitative Indicators

Indicators can also be classified as quantitative or qualitative.

Quantitative Indicators

Quantitative indicators are measures using defined numerical values such as numbers, percentages, ratios and monetary values. In many cases, quantitative indicators are primarily used as measures of performance because the information is clear, easy to grasp and to disaggregate.

Examples:

1) Number of villagers reached by health workers.
2) Unemployment rate.
3) Average annual income of farmers.
4) Total disbursement of project funds.
5) Time saved by using the new bypass road.
6) Number of students per faculty member.

Quantitative indicators can be further classified as simple, complex, compound or index. Table 10.1 presents some examples.

Table 10.1: Sub-Classifications of Quantitative Indicators and their Measurement

	Types of Indicators	Example	Explanation
1	Simple Quantitative Indicators	• Kilometres of road built • Average yield from X crop in Y areas	These indicators require only one measurement unit
2	Complex Quantitative Indicators	• Number of households experiencing food shortage	Here there are a number of different bits of information involved: duration, size of household, location and type of food shortage. Without specifying which types of households are experiencing shortage and to what degree, the indicator will not be so useful.
3	Compound Indicators	• Number of effectively functioning water users' associations in the project area • Number of village development plans completed that meet funding criteria	These indicators have a standard in them that needs defining and assessing, "Effectively functioning" needs to be defined and means that the quality of each association needs to be assessed. The village plans also need to be assessed against funding criteria.
4.	Indices	• Index of irrigation system performance	Indices combine a number of different indicators to enable comparison. The human development index is an example.

Source: IFAD, *Guide for Project M&E,* 2002

Qualitative Indicators

Qualitative indicators are expressed as non-numerical information, usually a narrative description of facts, opinions, attitudes and behaviour. Qualitative indicators can describe the process and results of a development intervention, which are not always directly measurable. However, there are ways to quantify qualitative descriptions such as by using nominal and ordinal scales.

Examples:

1) Approval of a newly-developed health care system.
2) Description of changes in attitudes of beneficiaries.
3) Degree of satisfaction with the services using a five-point scale (e.g., very satisfied, satisfied, neutral, dissatisfied, very dissatisfied).
4) Ranking of most important changes occurring in a community.

10.5.4 Classification of Indicators Based on Sector

Sector Indicators

Indicators may also be classified based on sectors of the national economy. Table 10.2 presents examples based on four sectors.

Table 10. 2: Indicators Based on Sectors

Education	Health	Food and Agriculture	Economic
1) Literacy Rate 2) Enrolment Rate 3) Completion Rate 4) Repetition Rate 5) Teacher-Pupil Ratio 6) Textbook-Pupil Ratio 7) National Average Distance of School from Community 8) Male-Female Parity In Education	1) Mortality Rate 2) Crude Birth Rate 3) Fertility Rate 4) Population Growth Rate 5) Morbidity Rate 6) Number of Medical Facilities 7) Doctor-Patient Ratio 8) Life Expectancy 9) HIV And AIDS Prevalence Rate 10) Percentage of Population with Access to Potable Water	1) Area under Crop Cultivation 2) Productivity Rate for Crop Sub-Sector 3) Productivity Rate for Livestock Sub-Sector 4) Percentage of Land under Irrigation 5) Average Size of Household Land Under Cultivation 6) Extension Service Personnel to Farmer Ratio	1) GNP / GDP 2) Per Capita Income 3) Inflation Rate 4) Interest Rate 5) Exchange Rate 6) Consumer Price Index 7) Employment Rate 8) Unemployment Rate 9) Poverty Rate 10) Terms of Trade

10.5.5 Miscellaneous Classification of Indicators

Indicators can also be classified based on other criteria. Table 10.3 shows a classification of indicators under four different themes.

Table 10.3: Rural Development Project Indicators classified under four Themes

1. Food Security	2. Poverty	3. Empowerment of Grassroots Institutions	4. Empowerment of Women
Change in Food Production	Change in Household Real Income	Change in Farmers' Group Participation in Decision Making at Project/ Local Level	Change in Female Enrolment in Primary Education
Change in Cultivated Area	Change in Access to Off-Farm Income	Change in Autonomous Farmers' Group Formation in Project Area	Change in Number of Women's Groups Formed in Project Area
Change in Yields of Staple Food	Change in Access to Capital	Changes in Autonomous Farmers' Group Formation in Project Area	Change in Number of Loans Disbursed to Women's Groups
Change in Consumption of Staples	Change in Access to Labour	Change in Grassroots Ability to Self-Monitor and Evaluate Own Progress	Change in the Number of Women's Groups Accessing Second and Third Loan
Change in Prices of Food	Change in Access to Irrigation Facilities	Change in Capacity to Market Own Products	Change in Number of Women Members in Local Production/ Service Associations
Change in On-Farm Food Storage Capacity	Change in Availability of Basic Needs Services	Change in Terms and Conditions of Marketing Arrangements	Change in Women's Decision-Making Capacity at Household Level
Change in Chronic Malnutrition Among Children	Change in Access to Safe Water		Change in Women's Participation in Decision Making at Project/Local Level

Change in Rate of Stunting Children Under Five Years	Change in Access to Basic Education		
	Change in Access to Basic Health Services		

10.6 Criteria for Assessing Indicators

There are three types of criteria used for assessing indicators:

- **SMART**: Specific, Measurable, Attainable, Realistic, Timely
- **DOPA**: Direct, Objective, Practical, Adequate (Source: Japan, 2004)
- **CREAM**: Clear, Realistic, Economic, Adequate, Monitorable (Source: World Bank, 2004)

10.6.1 SMART Criterion

This uses the following questions to assess the indicator:

Simple/Specific
1) Is the indicator stated as simply as possible?
2) Does it describe exactly what is to be measured?
3) Is it clear on what is to be measured?
4) Has the appropriate level of disaggregation been specified?
5) Does it capture differences across areas and people?
6) Is the indicator specific enough to measure progress towards the desired result?

Measurable
1) Are changes objectively verifiable?
2) Will the indicator show desirable change?
3) Is the indicator a reliable and clear measure of results?
4) Is the indicator sensitive to changes in policies and programmes?
5) Do stakeholders agree on exactly what to measure?

Attributable/Attainable
1) Is the indicator obviously and directly related to the output or outcome to be measured?
2) Will external factors of the project affect the indicator also?
3) What changes are anticipated as a result of the development activity?
4) Are the expected results realistic?

Relevant
1) Does the indicator capture the essence of the desired results?
2) Is the indicator relevant to the intended outputs and outcome?
3) Is the indicator able to be measured in a consistent and transparent manner?
4) Is the indicator plausibly associated with the investment activity?

Timely
1) Can indicators be measured at the most appropriate time and on a regular basis?
2) Can the collected data be processed and reported to the appropriate stakeholders in a timely and efficient manner?
3) Is the indicator data available at reasonable cost and effort?
4) Are the data source and responsibilities for data collection known?
5) Does an indicator monitoring matrix exist?

10.6.2 DOPA Criterion

This assesses an indicator as follows:

1. **Direct/Valid.** Direct indicators explain the objective or component more clearly, and thus make it easier to measure the achievement level.
2. **Operational.** For instance, the indicator of "the number of mid-level technicians who have succeeded" cannot be measured unless the meaning of "succeeded" is clear enough (e.g., it can be defined as "those who were employed within one year after the professional training" or "those whose salary was raised").
3. **Practical.** The cost of measurement depends on measurement strategies and the credibility of secondary data. If highly reliable secondary data are available, then a simple practical indicator can be set at a minimal cost. The indicators that are measurable only after large-scale surveys may not be practical in terms of cost and time. Measurement methods are part of the management tools used for monitoring and evaluation. The accessibility and timing of obtaining data is another important criterion in selecting measurement methods.
4. **Adequate.** We should avoid too many indicators for only one purpose. It might mean that the objectives could be too complicated or their contents are not fully understood among those concerned. In that case, it would be necessary to review objectives and reset more concrete and specific ones.

10.6.3 CREAM Criterion

This uses the following questions to assess each indicator:

1) **Clear -** is the indicator precise and unambiguous?
2) **Relevant -** is the indicator appropriate to the subject at hand?
3) **Economic -** is the indicator measurable at a reasonable cost?
4) **Adequate -** is the indicator sufficient to assess performance?
5) **Monitorable -** is the indicator amenable to independent validation?

10.7 How to Set Baselines

10.7.1 What is a Baseline?

Baseline refers to the situation before or at the beginning of a development intervention. **Baseline data** are the data collected about the situation at the beginning of, or prior to the implementation of an intervention. Baseline data on indicators provide a reference against which future performance can be measured to show changes during implementation of the intervention. Without knowledge of the situation at the beginning, it would be difficult to monitor progress or to evaluate outcomes and impact.

10.7.2 How to Set Baselines before Implementation

In a situation where the baseline does not exist, baseline data on indicators can be collected from secondary data sources, rapid assessments, studies or surveys at the start of the intervention. Below is an outline of how and where to obtain baseline in varying situations. When collecting baseline data in all situations, it is important to focus on the indicators.

1) **Baseline data in general** – data on the general situation are often available in official statistics e.g. infant mortality rates, school enrolment by gender, unemployment rates and literacy rates.
2) **Geographical area** – if the indicators are disaggregated to particular geographic location, collecting data on that location might involve house-to-house surveys, visiting schools, hospitals, etc. in the area.
3) **Baseline data on impact** – if the indicators are to measure the impact of an intervention on people or families, this will demand specific data on population, income, number of people employed, etc. This data could be collected from interviews using a combination of different questionnaires.
4) **Baseline data on individuals – i**f working with individuals to collect data on their current situation relevant information will include age, gender, current income, employment status, current level of education, amount of money spent on leisure activities, and ambitions for each individual. This data could be collected from interviews using a combination of different questionnaires.

10.7.3 How to Set Baselines during Implementation

Anecdotal data – It is very difficult setting baselines when implementation of an intervention is in progress and the situation has changed. However, there are ways to work "backwards" to rectify the situation. One option is collect anecdotal data from those who were involved at the beginning and could remember what the situation was when the project started. Baseline data could be collected through discussions and looking at the written records of the intervention – minutes, progress reports, work plans, budgets, etc.

Control groups – Where baseline data were not collected at the start of the intervention, another option is to collect the data through the use of control groups. These are groups of people, businesses or households that did not benefit from an intervention. These groups must be in a situation very similar to those that benefited from the intervention. For example, a project targeting school children around the country to build their self-esteem and awareness as a way of combating the spread of HIV and AIDS and preventing teenage pregnancies failed to collect baseline data at the start of the project. It will be necessary to set up control groups of schools in areas with similar profiles. By collecting data on specific indicators from children in schools that benefited from the project and from children in other schools that were not covered by the project, one could determine whether or not the project made a difference. It will also be necessary to ascertain that no other variables affected the findings or comparisons. For example, if there was a similar project in a school, this school should not be part of the control group.

10.8 How to Set the Target of an Indicator

10.8.1 What is a Target?

There are two essential components in an indicator: (i) baseline and (ii) target. After establishing the baseline, the next step is to set the indicator target. A target is the quantifiable level of performance to be achieved by a given time. It is what the situation is expected to be at specified periods – weekly, monthly, quarterly, yearly, etc.

10.8.2 Classification of Targets

Targets may be either quantitative or qualitative, depending on the nature of their indicators. In most cases, targets are quantitative or numerical. Qualitative targets are usually descriptive.

There are three types of targets:
- **Continuous targets** – a level of service to be expected all the time, e.g. 100% of invoices to be paid within 30 days;
- **Time-bound targets** – constituting a one-off promise for a certain area, e.g. by 2013, we shall work with Company X to place 100 recycling plants in villages in South Tongu District;
- **Percentage achievement targets** – commitments to achieve a stated level of service against a standard, e.g. raise standards in English and Maths so that by 2013, 95 percent of 10-year-olds score 3 or better.

Examples of some Millennium Development Goals (MDGs) targets:
- Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day;
- Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling;
- Reduce by two thirds, between 1990 and 2015, the under-5 mortality rate.

10.8.3 Importance of Targets

Targets are important for the following reasons. They:
1) Serve as the mile posts for judging the progress being made.
2) Provide a schedule for reaching levels originally envisioned.
3) Inform stakeholders of tasks to be accomplished.
4) Motivate individuals involved in the implementation of an intervention to do their best in order to meet set targets.
5) Help to establish clear performance and management contracts.

10.8.4 Setting Targets

The starting point for effective target setting is a realistic awareness of where one is and where one wants to be in the future. A participatory process should be adopted to set targets as follows:

- Involve all stakeholders who have in-depth knowledge of the intervention and can make realistic projections;
- Take account of the factors that will influence the ability to achieve the stated objectives;
- The baseline and target should use the same unit of measurement over a period.

CHAPTER ELEVEN (STEP FOUR)

MONITORING MATRIX

11.1 What is a Monitoring Matrix?

A monitoring matrix is a table that links goals and objectives to indicators and targets. It also classifies the indicator types (input, output, outcome or impact) and shows the baseline data for each indicator, the data sources and frequency of monitoring the indicator. It further shows who is responsible for collecting the monitoring data for each indicator (individuals, institutions, departments and agencies etc.). Table 11.1 presents an example of a monitoring matrix.

Table 11.1: Example of a Monitoring Matrix

MTDP Goal: To increase food security and income generating activities in District X						
NDPF Policy Objective to Link: Ensure sustainable increase in agricultural productivity and output to support industry and provide stable incomes for farmers						
Objective 1: To increase and diversify agricultural production in a sustainable way						
Indicators	Indicator type	Baseline 20XX	Target 20XY	Data Sources	Monitoring Frequency	Responsibility
Yield of selected crops, livestock and fish	Output			MoFA	Semi-Annually	MoFA, DPCU
% of households able to meet minimum nutritional requirements throughout the year	Outcome			MoFA	Annually	MoFA, DPCU
Objective 2: etc.						

Adapted from NDPC, *National M&E Plan (2010-13)*

11.2 What are Goals and Objectives?

Goals are general directions or intentions that explain what is to be achieved. They represent broad, usually long-term, visions which are not specific enough to be measured. Example:
- Protect public health and safety;
- Eradicate extreme poverty and hunger.

Objectives are the short- to medium-term sub-goals needed to help achieve the long-term goals. They are more specific and may outline the "who, what, when, where and how" of reaching the goals. Example:
- Increase access to health care;
- Provide safe water for household use;
- Increase school enrolment in a community.

11.3 Purpose of a Monitoring Matrix

A monitoring matrix is a planning tool which encourages clear and strategic thinking when preparing an M&E plan. The matrix is a critical tool for monitoring progress towards the achievement of stated goals and objectives in a development plan, programme or project. Below are other benefits derived from a monitoring matrix. It:

1) Summarises the key monitoring results.
2) Provides an overview of the goals and objectives of the interventions.
3) Contains the monitoring indicators and their baseline data.
4) Indicates the appropriate frequency for measuring each indicator and how the indicator is moving towards or away from its target.
5) Classifies the indicators to show their level of measurement in the results chain.
6) Provides clear directions on who is responsible for collecting monitoring data and when it should be done.

11.4 Steps to Developing a Monitoring Matrix

In order to develop a monitoring matrix, one needs to be conversant with the background of the plan, programme or project. The following steps can be taken to develop the matrix:

1) Identify the goals and objectives in the policy, plan, programme or project document.
2) Determine the indicators to track the goals and objectives.
3) Define the type of indicator (input, output, outcome or impact).
4) Determine the baselines.
5) Set the indicator targets.
6) Identify where data is to be collected from.
7) Determine the frequency for collecting data on each indicator.
8) Decide on the actors responsible for data collection.
9) Develop the monitoring matrix.

CHAPTER TWELVE (STEP FIVE)

MONITORING AND EVALUATION WORK PLAN AND CALENDAR

12.1 What is the M&E Work Plan and Calendar?

12.1.1 M&E Work Plan

This is a costed action plan to guide the implementation of an M&E plan. It contains all the activities envisaged for the multi-year (usually four years) planned period of a policy or intervention. It assigns responsibilities, time frames and costs of all the activities identified. Table 12.1 presents an example of an M&E work plan.

Some of the core activities to be considered when preparing the M&E work plan are listed below. Details of these activities are provided in the chapters indicated:

1. **Monitoring (Chapter 3)** – to assess: situation and operations, performance and challenges, use of funds, compliance, beneficiaries, etc. through:
   - *Field visits*
   - *Inspections*
   - *Supervision*

2. **Data collection (Chapter 14)** – quantitative and qualitative from primary and secondary sources through:
   - Data-collection instruments
   - Conduct census, surveys, baseline studies, interviews, etc.

3. **Data Processing (Chapter 15)** – through:
   - *Data validation* – to verify the credibility of data collected
   - *Data analysis* – to derive useful information

4. **Evaluations (Chapter 4)** – *ex-ante*, mid-term, terminal, *ex-post*, etc. by internal or external evaluators to:
   - Assess operations and performance
   - Determine relevance, efficiency, effectiveness, impact and sustainability
   - Identify the intended and unintended consequences of policies, programmes and projects.

5. *Participatory M&E (Chapter 5)* – Using the following methods:
   - Focus group discussions (FGD)
   - Participatory Rural Appraisal PRA
   - Citizen Report Card (CRC)
   - Community Score Card (CSC)

6. **M&E meetings, workshops and seminars (Chapter 16)** – through:
   - *Briefing sessions* – to update key stakeholders on progress, performance, etc.;
   - *Quarterly progress review meetings* – to review progress (planned versus actuals);
   - *Semi-annual or annual progress meetings or workshops* – to review progress;
   - *Evaluation debriefing workshops* – to present and discuss draft evaluation reports and findings.

7. **Reporting on M&E results (Chapter 16) –** data and information from M&E processes expressed verbally, pictorial or written. They include:
   - Reports from monitoring exercises;
   - Reports from evaluations conducted;
   - Daily, monthly, quarterly or annual progress reports;
   - On-demand reports;
   - Exception reports;
   - Completion reports.

8. **Dissemination and communication of M&E results (Chapter 17)**
   - Distribution of M&E reports (e.g. quarterly and annual progress reports);
   - Communication activities as specified in the dissemination and communication strategy in Table 17.1.

Table 12.1: Example of a National Level M&E Work Plan

M&E ACTIVITIES	TIMELINE 2014-2017	ACTORS	BUDGET GH¢*
M&E Plan Preparation			
Review or selection of indicators	Beginning of plan period	NDPC, PPMED, etc.	600
Implementation Monitoring			
Field visits	Quarterly	NDPC, PPMED, etc.	10,000
Review meetings	Quarterly	NDPC, PPMED, etc.	2,000
Preparation of Monitoring Reports			
Preparation of Progress Reports (PR)	Quarterly	NDPC, PPMED, etc.	1,000
Data collection	Quarterly	NDPC, PPMED, etc.	15,000
Data collation	Quarterly	NDPC, PPMED, etc.	2,000
Data analysis	Quarterly	NDPC, PPMED, etc.	5,000
PR validation workshops	Quarterly	NDPC, PPMED, etc.	18,000
Internal review of draft PR	Quarterly	NDPC, PPMED, etc.	2,000
Peer review of Annual Progress Report (APR)	Every 2nd quarter	NDPC, PPMED, etc.	8,000
Print APR	Every 2nd quarter	NDPC, PPMED, etc.	6,000
Dissemination and Communication of M&E Results			
Organise PRs dissemination workshops	Quarterly	NDPC, PPMED, etc.	32,000
Distribution of PRs	Quarterly	NDPC, PPMED, etc.	2,000
Stakeholder engagement on PRs	Quarterly	CSOs, RCC, etc.	5,000
PM&E			
Prepare for PM&E with stakeholders	Every 2 years	TAs, CBOs, etc.	2,000
Train personnel to conduct field work	Every 2 years	TAs, CBOs, etc.	2,000
Conduct PM&E	Every 2 years	TAs, CBOs, etc.	20,000
Evaluation			
Selected evaluation activities	Every year	PPMED, RCC, etc.	30,000

*The estimated costs are not real
Source: NDPC, *NDPC M&E Plan (2010-2013)*

12.1.2 M&E Calendar
The M&E calendar is an annual implementation schedule with specific time periods and deadlines for all activities to be undertaken. It stipulates specific dates within a week, month or quarter for M&E activities. Table 12.2 is an example of an M&E calendar.

Table 12.2: Example of an M&E Calendar with Tentative Dates

M&E activities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
M&E indicator review								10th				
Field visits			20th			25th			X			Y
Organise review meetings	4th	20th	26th	16th	25th	29th	28th	20th	24th	22nd	21st	17th
M&E monthly reports	26th	27th	22nd	28th	24th	27th	26th	25th	22nd	29th	23rd	26th
M&E quarterly reports			22nd			27th			22nd			26th
Conduct M&E capacity building for core staff at DPCU & PPMED							3rd					
Prepare for APR production	17th											
Data collection		18th										
Data collation			20th									
Data analysis				10th								
Organise APR validation workshop				25th								
Internal review of draft APR					15th							
Peer review APR					20th							
Print APR						2nd						
Organise a dissemination workshop											12th	
Distribution of APR											5th	
Prepare for PM&E with stakeholders	9th											
Train personnel to conduct field work		5th										
Conduct PM&E			2nd									

12.2 Importance of an M&E Work Plan and Calendar

12.2.1 Importance of M&E Work Plan

The M&E work plan serves as a progress monitoring tool, resource mobilisation tool, capacity building tool, feedback tool and management tool for those responsible for implementing the M&E plan. It further helps to:
1) Clarify and facilitate execution of the M&E plan.
2) Provide a useful management tool for coordinating the operation of the M&E system.
3) Determine the participants in specific M&E activities.
4) Mobilise and rationalise resources for prioritised M&E needs. A clearly costed work plan facilitates the release of M&E resources.
5) Enable development partners to effectively tailor their M&E support to prioritised M&E needs and commit to supporting specific aspects of the M&E system.

12.2.2 Importance of M&E Calendar

The M&E calendar provides specific dates for all M&E activities within one calendar year and therefore serves the following useful purposes:

1) M&E staff can use the M&E calendar to follow up on stakeholders about specific activities, track progress and manage potential delays and bottlenecks.
2) Improves coordination and management of M&E activities.
3) Ensures that M&E information is available at the time required by those who need it.
4) Establishes critical deadlines for implementing M&E activities.

12.3 Steps in Preparing the M&E Work Plan and Calendar

The M&E work plan and calendar should be prepared through a participatory process with due consideration to age, gender, disability, social status, and other social factors. The following steps should be taken when developing an M&E work plan:
1) Identify programme or project goals and objectives.
2) Determine the activities to be undertaken within the M&E plan period.
3) Define the timelines – this should be carefully thought through in view of other activities that may or could occur simultaneously; the timelines should also be realistic and achievable.

4) Determine M&E methodology for monitoring the process and evaluating the effects.
5) Determine the actors responsible for each activity – who are the key groups and/or individuals that will be involved in the various stages of putting the Plan into action?
6) Determine the costs of each M&E activity.
7) Develop the M&E work plan matrix.
8) Prepare the annual M&E calendar with specific dates for all the activities.

CHAPTER THIRTEEN (STEP SIX)

MONITORING AND EVALUATION BUDGET

13.1 What is the M&E Budget?

The M&E budget refers to the cost estimates for creating the necessary conditions and implementing the activities required for a functional M&E system. Generally, budgeting involves a projection of costs of items, personnel and activities for the plan over a specific period. Through budgeting, planned activities are translated into actions to produce the desired outputs. Thus, the M&E work plan and the M&E budget are complementary and mutually reinforcing.

The M&E budget is a key requirement for effective M&E. International best practice suggests that 2-5 percent of the total budget of a proposed project or plan should be reserved for M&E activities. Inflated budgets are signals of waste while budgets that are too low cast doubts on effective implementation of the M&E plan. Most donor-funded projects in Ghana recognise the importance of M&E and therefore allocate sufficient funds for M&E. This cannot be said of government of Ghana budgetary allocations for M&E. With financial support from UNICEF, NDPC conducted a study entitled "*A Baseline Study on Resources Spent on M&E and Statistics*" (2011). The study confirmed that budget allocations to MDAs for M&E were not only inadequate but were often redirected to other activities in the event of resource constraints.

13.2 Importance of the M&E Budget

The M&E budget provides an estimate of how much money is needed to implement an M&E plan. It compels rigorous thinking through of the costs and implications of planned M&E activities. The M&E budget is the basis for financial accountability and transparency in conducting M&E. It also makes it possible to:
1) Plan M&E activities in a systematic and logical manner.
2) Determine direction and forecast M&E outcomes.
3) Establish priorities and allocate M&E resources.
4) Assign M&E responsibilities.
5) Improve efficiency in the implementation of the M&E plan.
6) Evaluate performance against the budget.
7) Control costs of M&E materials and expenditure.
8) Take remedial action when there is deviation from the M&E plan.

13.3 Steps in Preparing the M&E Budget

Every effort in the preparation of a monitoring and evaluation budget should be made participatory with due consideration to varying needs according to age, gender, disability and other social factors. Best practice has proven that it is important to identify the M&E requirements early in the project or programme design phase so that adequate funds are allocated and made available for M&E activities. The following are some steps to preparing the M&E budget:

Steps 1 - Identify and involve key stakeholders
It is important to involve key stakeholders and people with budgeting skills in this process. The M&E budget can be prepared using an ordinary spreadsheet program such as MS Excel. A person familiar with such programs can speed up the M&E budget preparation process.

Step 2 - Itemise M&E budget needs
Detailing budget items should be straightforward if the M&E plan has been prepared systematically. M&E tasks and associated costs should be listed in the M&E work plan. Where key activities have already been identified with cost estimates, these should be budgeted for in detail. A spreadsheet clearly itemizing M&E expenses will be of great help.

It is also advisable to add a narrative (comments and descriptions) to justify each line item in the spreadsheet to help guard against unexpected budget cuts. Examples of M&E budget items are provided in Table 13.1.

Table 13.1: Examples of M&E Budget Items

Budget item	Examples
Staff Time and Staff-Related Costs	Evaluation consultants, workshop facilitators and moderators, data entry clerks, survey designers (e.g. baseline), logical framework designers, database developers, ICT trainers
Transportation for Field Work	4-wheel-drive vehicles and motorbikes for field trips, fuel and vehicle maintenance, air travel (local and foreign)
M&E Plan Preparation	Literature review and drafting, experts/peer review workshops, etc.
Office Equipment and Logistics	ICT equipment (hardware and software) – personal computers, laptops, computer programme, printers, scanners, pen drives, external drives, projectors, photocopiers, monitors, televisions and other gadgets for videoconferencing
Office Supplies	Furniture, refrigerators, tools (stapler, perforators, etc.), stationery
Data Collection and Field Support	Supplies for fieldwork (bags, hats, pens, pencils, etc.), other items for field work (recorders, digital cameras, boots, raincoats, etc.), hiring of data collection assistants, training costs of field staff
Data Processing, Analysis and Interpretation	Data cleaning and coding costs, data entry costs, data validation costs, data analysis costs
M&E Report Writing	Secretarial services, photocopying, reviewing and editing costs, printing
M&E Results Dissemination and Communication	Document distribution, display boards and easels, telephone and fax, internet and e-mail, network maintenance, media, etc.
Skills Training (local and foreign)	Skills training in: ICT, facilitation and presentation, report writing, PM&E, evaluations etc.
Training Events	Workshop venue, participant travel, accommodation, workshop materials, *per diem*, etc.
Special M&E Events	Launching of M&E reports, hosting local and international conferences
Miscellaneous	Security items, insurance, etc.

Step 3 - Estimate costs of M&E items and activities

A wide range of the items (such as participants, equipment, logistics, etc.) listed in Step 2 should have costs attached to them. These are the costs to be estimated in order to develop the M&E budget. The format used to estimate the costs should include:

1) Budget item and identification number – could be objectives that can be measured, broad outputs or activities that need to be broken down.
2) Activities – specific actions to be taken.
3) Inputs – specific budget items classified into four groups:
   - Facilitation – consultants, workshop facilitators, moderators, etc.
   - Conference – venue, accommodation, meals, etc.
   - Travel – allowances, fuel and vehicle maintenance, etc.
   - Logistics – equipment, stationery, etc.
4) Quantities, or number of people involved.
5) Frequency of the event.

6) Cost per person involved in the activity.

The budget format should allow for the calculation of sub-totals and total costs for portions of the budget and the grand total. Table 13.2 shows an example of a budget spreadsheet with some M&E items.

Table 13.2: Example of an M&E Budget Format with Cost Estimates

Item	Activities	Inputs	Qty. or no. of people	Frequency	Unit cost GH¢	Amount GH¢
Annual Progress Report (APR)	Organise two workshops to prepare the APR	Facilitation	8	1	100	800
		Conference	8	1	50	400
		Travel	20	1	60	1,200
		Logistics	100	1	5	500
		Sub-total				**2,900**
		Conference	200	1	30	6,000
		Travel	200	1	100	2,000
		Logistics	200	1	10	2,000
		Sub-total				**10,000**
		Total				**12,900**
Build M&E Capacity	Organise M&E training workshops	Facilitation	8	12	100	9,600
		Conference	100	12	50	60,000
		Travel	500	1	50	25,000
		Logistics	500	1	10	5,000
		Total				**99,600**
Dissemination of APRs	Hold M&E dissemination workshops	Facilitation	8	1	100	800
		Conference	250	1	200	50,000
		Travel	250	1	50	12,500
		Logistics	250	1	10	2,500
		Total				**65,800**
GRAND TOTAL						**178,300**

Step 4 - Validate the M&E budget

The draft M&E budget should be validated with a wider group of stakeholders. The budget should be approved by the highest decision-making body of the organisation before implementation.

Step 5 - M&E budget review

The approved M&E budget will have to be reviewed periodically during implementation in line with prevailing economic conditions.

CHAPTER FOURTEEN (STEP SEVEN)

HOW TO COLLECT MONITORING AND EVALUATION DATA

14.1 What is Data Collection?

Data collection is the systematic process of obtaining useful information on policy, programme or project. The key issue is not how to collect data but rather how to obtain useful data. Before embarking on any data collection process, the following preparatory steps need to be considered:
1) Address any ethical concerns.
2) Prepare written guidelines for how data collection will be done.
3) Pre-test data collection instruments and procedures.
4) Train all staff or personnel who will collect the data.

14.2 Steps to Data Collection

The basic steps to collect data are as follows:

1) Identify the specific areas of concern for data collection or the problem you are trying to solve by collecting the data.
2) Brainstorm the type(s) of data to collect for your programme or project.
3) Involve key stakeholders who will be required to provide or otherwise assist in the effort, e.g., programme managers, DPCU, RPCU, PPMED staff, CSOs, etc.
4) Develop data collection instruments, definitions and procedures to ensure that data collected covered all relevant areas. Example, indicator instruments and/or interview questionnaire.
5) Specify the composition of field staff (e.g., identify team members, team supervisors and team leaders). Brief and train the field staff on the use of the data collection templates or instruments and reporting procedures.
6) Pre-test the data collection instruments to avoid some of the data collection problems identified in Box 14.1
7) Develop a work plan; specify roles and responsibilities; detail specific tasks to be undertaken as well as time lines involved.
8) Specify logistics support required such as transportation, administrative support, translation, data processing, office and other equipment.
9) Specify the detailed budget including cost of consultants, travel, logistics and support staff.
10) Hold validation meetings on the data collected from the field to check the accuracy and reliability with key stakeholders before data analysis.
11) Hold regular meetings to identify data gaps and challenges in collecting data.

> **Box 14.1: Data Collection Challenges**
> 1. Language barriers.
> 2. Limited time.
> 3. Costs.
> 4. Poorly trained staff.
> 5. Invasion of privacy.
> 6. Suspicion shown by respondents
> 7. Biases.
> 8. Community expectations.
> 9. Cultural values and norms.
> 10 Poor guidance

14.3 Data Collection Methods

Data collection methods refer to the approaches, principles, procedures, protocols and strategies employed to obtain data relating to a particular problem or situation. Data collection is an integral part of M&E. There various methods used in the data collection process can be classified as qualitative or quantitative. The data to be collected under each method can be primary and/or secondary.

In broad terms, the decision on which method to use depends upon:

1) What you want to know (nature of issues involved).
2) Where the data reside.
3) Resources available for data collection.
4) Time available for the data collection.
5) Amount of existing data on the issue(s).

14.3.1 Quantitative Methods for Data Collection

Quantitative methods are techniques employed to obtain data in numerical values, e.g. the number of tractors distributed to farmers. The methods seek to exert maximum control over the questions and potential answers. Typical questions relate to who, how much and how many? The questions are generally not open-ended. Examples of quantitative methods include population census and surveys.

Quantitative methods are used:

1) When the emphasis is on precision and accuracy.
2) Where a large sample or population is involved.
3) When there is certainty about what is to be measured.
4) To test whether there is a statistical relationship between variables.
5) To produce evidence to prove that a particular problem exists or to justify a particular strategy.
6) To identify the characteristics of a population, for example, during a baseline survey.
7) When there is a need to show results logically.

Quantitative methods are focused, specific in terms of measurement and ultimately reduce the time needed for data analysis. The results derived from quantitative methods can be generalised to the wider population if proper sampling techniques are carefully applied.

Quantitative methods tend to be stronger in terms of reliability but weaker in terms of validity. Reliability refers to the consistency of measurement over time while validity seeks to answer the question whether what is measured is what is intended to be measured. For example, if the intended purpose is to measure behaviour, is it behaviour that is measured or attitudes?

It must be noted, however, that quantitative methods limit the scope of data and thereby run the risk of leaving out essential data. In quantitative methods, the questions are generally narrowly focused and precisely worded, with a fixed set of responses so that everyone is asked the same questions the same way and has to choose from exactly the same set of responses.

Types of quantitative methods
When conducting M&E, many quantitative methods may be used such as surveys and questionnaires.

Surveys

Survey is a systematic collection of data or information from a defined population usually by means of interviews, or questionnaires administered to a sample of units or to the whole target population.

The purpose of survey is to obtain data from a large number of people in a structured way according to specific questions, often in ways that allow for statistical analysis. Surveys form the basis of many M&E studies as they allow for focused data collection from a sample population on specific performance questions or indicators.

Surveys are good for asking people about their perceptions, opinions, and ideas. They are less reliable for finding out how people actually behave. The main steps to conducting a survey are outlined in Box 14.2.

> **Box 14.2: Steps to conducting a Survey**
> 1. Agree on the purpose and information needs of the questions.
> 2. Decide whether or not the information needs require a questionnaire.
> 3. Ensure that the questions are focused and well formulated or the survey will not be useful.
> 4. Agree on who should be questioned and how many people should be included in the sample. Also decide on the most appropriate manner of questioning.
> 5. Pre-test the interview questions to ensure that they are appropriate, accurate enough and give you the type of information you need.
> 6. Collect and analyse the information.

In-person (face-to-face) **interviews** are useful when you want an in-depth understanding of experiences or how a programme or project works. They are also useful when other approaches are unlikely to work. However, it is a dynamic process of gathering data involving personal interaction between two or more individuals which can result in change of behaviour, thereby introducing bias into the data obtained. Effective in-person interviews require the use of a guide or protocol. In-person interviews can be done individually or in groups. In groups, you will ask fewer questions than in an individual interview since everyone has to answer and there are limits to how long people are willing to sit. In-person interviews can be longer and more in-depth than questionnaires or telephone surveys.

Self-administered surveys work when the population can read the language of the survey. They are useful when the anonymity of the respondent is required. They also allow for questionnaires being filled at the convenience of the respondent and the absence of an evaluator eliminates the issue of interviewer error or bias. Self- administered questionnaires should be short and take not more than 30 minutes to complete (even shorter is better). You are more likely to get honest responses to sensitive questions by using self-administered questionnaires.

Telephone surveys are appropriate when most people have telephones. It gives a certain amount of flexibility to the evaluator. For example, evaluators can ask complex questions over the telephone and they can explore, skip irrelevant questions as well as change the direction of the questions based on the flow of the conversation. Telephone surveys need to be short and well-focused; typically, they should not last longer than 15 minutes.

Mailed questionnaires are appropriate when the survey covers a wide geographical area. They allow the respondent enough time to answer the questionnaire. It is critical to note that mailed questionnaires are known for the low response rate, making it difficult to establish a sample representation. Eliciting a good response rate from mailed-questionnaires may require enclosing a self-addressed stamped envelope and sending a series of reminders.

Each of these approaches discussed above can either be structured or unstructured.

Structured surveys are:
- Easier to complete (checking a box takes less time than writing a narrative response);
- Easier to analyse;
- More efficient when working with a large number of people.

Unstructured surveys are:
- A rich source of data;
- Labour intensive;
- Subject to bias through interpretation;
- Burdensome for people to complete as a self-administered questionnaire.

Steps for designing and using an effective survey questionnaire
1) **Develop the purpose**
   - Determine the questions to be answered;
   - Specify the information needed for each question;
   - Draft the specific sub-question(s) under each question.

2) **Group the questions into the appropriate forms**
   - Fill in the blank;
   - Multiple choice;
   - Comment on;
   - List;
   - Likert scale;
   - Ranking.

3) **Sequence the questions**
   - Group similar themes together;
   - Organise into titled sections;
   - Include introductory explanation for each section where necessary.

4) **Pilot the questionnaire**
   - Pre-test questionnaire;
   - Clarify wording;
   - Identify ambiguity;
   - Revise;
   - Re-test if necessary.

5) **Develop the implementation strategy**
   - Select the sample;
   - Develop a cover letter;
   - Prepare distribution package and send;
   - Monitor responses and follow up.

Questionnaire

A questionnaire is a series of questions asked of individuals to obtain statistically useful information on a given topic.

When properly constructed and responsibly administered, questionnaires become a vital instrument with which statements can be made about specific people or groups or entire populations. Care must be taken in the design of the questionnaires to ensure clarity. Questions may be designed to measure dichotomous responses (for example, yes/no, or true/false questions), or responses on an interval level such as the Likert scale (bipolar 1-5 ratings) or by semantic differential scaling (bipolar adjective pairs, for example, a range of choices including "very interesting, somewhat interesting," etc.). Open-ended questions are also used in questionnaires, though these require more time to read and can be more difficult to analyse statistically. Open-ended questionnaires may also require a higher literacy level than multiple choice answers

> **Box 14.3: Some Tips for designing a High-Response Questionnaire**
> - Questions should be concise and to the point
> - Avoid making assumptions
> - Question structure (arrange general questions ahead of specific questions)
> - Be explicit about the period of time being referenced by the question

In designing a questionnaire, the evaluator can choose to make it structured non-disguised, structured disguised, non-structured non-disguised, or non-structured disguised.

Structured non-disguised questionnaire:
- Questions are listed in a predetermined order;
- Respondents are told the reason for collecting the information.

Structured disguised questionnaire:
- Questions are listed in a prearranged order;
- Respondents are not told the reason for collecting the information.

Non-structured non-disguised questionnaire
- Questions are not structured;
- Researcher is free to ask questions in any sequence he/she wants;
- Respondents are told the reason for collecting the information.

Non-structured disguised questionnaire
- Questions are not structured;
- Researcher is free to ask questions in any sequence he/she wants;
- Respondents are not told the reason for collecting the information.

14.3.2 Qualitative Methods for Data Collection

Qualitative methods are techniques used to obtain data in descriptive form, reflecting people's judgements, opinions, perceptions and attitudes relative to a given situation or subject. Example of qualitative methods often used for monitoring and evaluation are presented in Box 14.4.

> **Box 14.4: Examples of Qualitative Data Collection Methods**
> - Observation
> - Focus Group Discussions
> - In-depth Interviews
> - Key Informant Interviews

Qualitative methods are used when:

1) Information is needed on what people think about a particular situation or why they behave in particular way.
2) In-depth information on a given topic is required.
3) The purpose is to seek broad understanding of themes and issues.
4) There is no need for quantification of data.

5) Resources and time are limited.

Types of qualitative methods
When conducting evaluation, qualitative methods used include observation, focus group discussions and case studies.

Observation
The purpose of observation is to obtain useful and timely information by observing what people do, to help make decisions on improving project or programme performance or for generating insights and findings that can serve as hypotheses for more focused studies. In the context of M&E, observation is critical to complement collected data and provides a better understanding of the environment in which the information is collected and also helps explain results. Observation enables us to see what is happening in its minute form. A lot can be seen by just looking around. Direct observation is useful for validation in monitoring as it can be used to cross-check responses elicited by other methods. Observation can take three forms, namely:

> **Box 14.5: Steps to conducting Observations**
> - Agree on a clear conceptual framework, as well as guidelines for what needs to be observed and the information required;
> - Choose and train appropriate individuals or groups of observers in observational skills;
> - Collect and record data as agreed.

1. **Unobtrusive observer**
   Subjects are unaware that they are been observed. For example, no one will know you are watching them.

2. **Participant (active) observer**
   The one collecting the M&E data actually participates in the activity socially, personally, and spatially. This method is good for studying groups, organisations and social processes. For example, you may participate in a training workshop for farmers as if you were just a participant, but you are in fact evaluating course dynamics.

3. **Obtrusive (passive) observer**
   Subjects are aware that they are being observed. For example, if you come into a classroom with a clipboard and are introduced as an observer, then everyone knows why you are there.

A case study of the use of direct observation in monitoring is presented in Box 14.6.

> **Box 14.6: Example of using Direct Observation in monitoring Training Sessions on Hygiene in a Water and Sanitation Project**
> Direct observation was used to evaluate a drinking water project. Training sessions on hygiene undertaken by project staff and attended by women and children in the villages were observed. This study revealed that project staff were using academic terms and language in the hygiene training that made the sessions useless because the villagers did not understand them. With this information, the training sessions were modified to become more locally appropriate.

Within any of these options, the observations can be structured or semi-structured. In structured observations, a specific checklist to count things precisely according to a specific schedule or a stopwatch to time activities is needed. In semi-structured observation, notes are taken of whatever strikes the data collector as interesting, typical, unusual and/or important. With time, one may then begin to look for specific things.

The observation method has the advantage of collecting data on actual behaviour rather than self-reported behaviour or perceptions in real time. However, the disadvantages are that observation can generate observer bias and jeopardise

reliability as two observers may see things very differently. Observation poses challenges to interpretation and coding of data as well as sampling problems. It is also labour-intensive and costly.

Focus group discussions

A focus group is a type of qualitative data-gathering method in which small groups of people are brought together to informally discuss specific topics under the guidance of a moderator. The purpose of focus group discussion is to collect general information, clarify details or gather opinions on an issue from a small group of selected people who represent different viewpoints. For M&E, focus groups are good for assessing opinions of change, assessing the quality of project services or service providers and identifying areas of improvement. The group process tends to elicit more information than individual interviews because people express different views and you are able to explore the reasons and feelings behind those differences. The conversation is often not linear; participants may bring up information or perspectives at any time. Sometimes they will answer a question on your script before it is even asked.

> **Box 14.7: Steps to consider when conducting Focus Group Discussions**
> 1. Determine the participants (number and target group).
> 2. Present the group with a broad question.
> 3. Discuss this question for the time period agreed upon beforehand (one or two hours).
> 4. Take detailed notes of the discussion.
> 5. Keep conducting different focus group sessions until the data become repetitious (to ensure reliability of data).

However, facilitation of a focus group requires considerable skill, both in moderating the group and in adequately recording the responses. Group dynamics, due to individuals being too shy, domineering or disruptive, etc. can hamper the discussion.

This method can be used to obtain a consensus view. However, a small group of people cannot represent all views held by, for example, an organisation or community. On the other hand, if the group is not homogeneous enough, there can be strong disagreements. Therefore, careful thought should be given to the composition of the group.

Focus groups are normally made up of anywhere between 6 and 12 people with common characteristics. These must be in relation to what is being studied and can consist of demographic characteristics as well as a certain knowledge base or familiarity with a given topic.

Typical elements of focus group discussion

A summary of the typical elements of a focus group discussion includes:

1) Small groups (6-12 people).
2) Groups can be diverse but people of different status should not mix. For example, students and teachers, or employees and their bosses.
3) Comfortable, safe, familiar surroundings, sitting around a table or in a circle.
4) Skilled moderator (or facilitator) and note taker.
5) Provision of food or refreshment is essential, especially when participants have travelled long distances to participate.
6) Monetary incentives are often helpful to get people to show up.
7) Consider whether transportation and/or childcare will be needed; if so, make arrangements for them to be provided.
8) Clear explanations of the purpose, why their views are important, how they were selected, what a focus group is, and the rules of the process.
9) Key rule: "what is said in this room stays here."
10) Moderator guides the process, keeps the group focused, and makes sure everyone has the opportunity to voice his/her views.
11) Ask a few critical questions: all are open-ended, moving from easy, conversational questions to the more serious questions and ending with a wrap-up question.

12) Tape record each session and ideally have a verbatim transcript. Even if you do not completely transcribe the tape, it will help to listen to it again as you write up your notes. If taping is not possible, consider having a second note-taker present.
13) Write up your notes immediately after the session. Keep your impressions and reactions in a separate set of notes. The moderator and note taker should review the notes together.

How many focus group sessions?

There is no fixed rule about how many focus groups to organise. The general rule is to hold focus group meetings until you begin to hear the same themes. This usually happens between 3 and 6 focus group sessions. However, you may have other reasons for holding more. You may need to include a number of specific groups in your community or cover selected geographical areas.

The main advantages of focus groups include the following:

1) Relatively quick and easy.
2) May take less staff time than in-depth in-person interviews.
3) Provide the flexibility to make changes in process and questions.
4) Ability to explore different perspectives.

The disadvantages include the following:

1) Analysis is time consuming.
2) Participants might be different from rest of population.
3) Risk of bias in interpreting the data.
4) Risk of the group being influenced by the moderator or dominant members.

Case studies

Case studies document the life story or sequence of events over time related to a person, location, household or organisation in order to obtain insight into a project's impact. From the M&E perspective, case studies add life to what might otherwise be data without a human face and they allow for an in-depth understanding of the context and human factors behind general or summarised data that may be collected through other means.

Case studies can provide important background and human context for data that are generated by other methods. A cross-case study analysis can be highly valuable, particularly if it relates to broader policy questions of major interest. A case study is particularly useful in complex situations where many variables interrelate and where outcomes and impact are liable to vary across different populations.

However, case studies are generally not considered representative. For this reason, it is good to use case studies in combination with methods involving larger samples, such as surveys or questionnaires.

> **Box 14.8: Steps to consider when using Case Studies**
> 1. Define the purpose and precise information needs of the case study.
> 2. Decide how you are going to select the individuals, households or organisations for the case studies.
> 3. Decide how you will obtain the information.
> 4. Develop the question checklist that will guide information collection.
> 5. Repeat the discussions with enough frequency to allow an up-to-date picture of changing conditions.

A variation on this method is to use the traditional form of story-telling as an entertaining way to gain some understanding of how people deal with issues or crises. It is often an important part of village life in communicating ideas and community values.

Box 14.9 presents a short case study used to profile primary stakeholders.

Box 14.9: Short Case Study used to profile Primary Stakeholders in the Ghanaman Rural Enterprises Project Interim Evaluation (2000)

Profile of Hilda Atiah: A client who has added another enterprise to an existing one.

Hilda was born in 1966 in the Volta Region of Ghana. She was the seventh out of eight children. Her father was in the Ghana Police Service, which meant they were transferred several times, allowing Hilda to pick up several Ghanaian languages.

When she married, her husband encouraged her to take a vocational course, and she decided to study dressmaking. After a three-year course, she set up a workshop, her elder sister giving her the initial capital for the enterprise. She has already trained five apprentices.

Between April and August, however, dressmaking is not a profitable business and Hilda found it difficult to manage the house financially. She decided to participate in the Rural Enterprises Project's one-week course in making soap and pomade. With the financial assistance of her husband, together with her own savings, she started a soap-making business.

Hilda makes a profit of ¢200,000 (or US$1 = ¢7,100 at September 2001 rates) per week and from the profit, she has been able to construct a big shed where she makes the soap. Her husband, a trader in food and household goods, has decided to stop his trading activity and concentrate on soap production. Hilda believes that the project should organise an advanced course for them to improve their skills instead of solely training new members who will saturate the market.

The emphasis is on an entire organisation with great attention paid to detail in order to understand and document the relationships between circumstances, events, individuals, processes and decisions made. It is used when it is desirable to learn from the experience of others.

In order to obtain the information required, it is usually necessary to conduct an in-depth interview with key individuals in the organisation as well as consulting internal documents and records or searching press reports. Observation of actual meetings, sales calls or trips, negotiations, etc. can also prove insightful, since "actions speak louder than words", even when it comes to understanding how decisions are made in an organisation or why some organisations are more successful than others.

However, caution must be exercised in transferring lessons to other situations: there is no "formula" that can be applied, but rather a context that must be understood and interaction among individuals that must be appreciated. Individual personalities, their vision and drive contribute as much if not more to the success of an organisation than processes.

Documentary review method for collecting M&E data

From the M&E perspective, this method can provide baseline information on a project area or a particular indicator. It also can provide a good background to current activities to help explain whether changes are occurring and why or why not.

However, it must be noted that one would be limited by what documentation is available and accessible, how it has been presented and by whom (possibilities of bias, etc.), how it has been stored and all the issues of quality coming from these restrictions.

It is important to keep good records of where you got the data and how it was collected. In order to enhance the quality of the data from secondary sources, find out the following:
1) How the study or research was carried out
2) How each variable or indicator was measured
3) How the data were coded
4) How accurately data were verified.

> **Box 14.10: Steps to consider in conducting Documentation Review**
> 1. Make sure you are clear about the questions you wish to answer and what (type of) information you need for this.
> 2. List all possible sources of existing information (project documentation, government records, etc.).
> 3. Prioritise those that are most likely to provide useful information in a cost- and time-efficient manner.
> 4. Collect documentation and check its reliability.
> 5. Identify information gaps or where contradictory evidence needs to be clarified.

Collecting data from paper files, records or documents

Sometimes the data are available but not in a form that is easy to analyse. You may have to collect information from files or documents. In this situation, a data collection instrument that specifies exactly what data you want to collect and how you want to code it must be developed. As a rule of thumb, develop an instrument that is easy, simple and clear. Set up your standard procedures and train everyone who will be collecting data in order to ensure that everyone codes the data in exactly the same way. When working with official documents that describe current activities or practices, try to verify that the documents accurately reflect what is actually practised.

Collecting computer data

In the case of collecting data from a computer, the following steps may be pursued:
- Obtain the database structure, data dictionary, coding schemes.
- Find out what is needed to transfer the data to your computer.
- Verify the accuracy of the data in the computer.

Various search engines on the internet have facilitated easy searches for data or information on almost every conceivable issue.

The main advantage of using existing data is that it is often cheaper and faster than collecting original data. However, the main disadvantage is that it is not possible to verify possible coding errors or problems and the data may not be exactly what are needed for evaluation purposes.

14.2.4 Comparison between qualitative and quantitative methods

Table 14.1 shows a comparison between qualitative and quantitative methods of data collection for monitoring and evaluation.

Table 14.1: Comparison between Qualitative and Quantitative Methods

Features	Qualitative	Quantitative
Duration	Short	Long
Cost	Low-to-medium	Medium-to-high
Participation	Medium-to-high	Low-to-medium
Methods	Basket of tools	Standardised methods
Major Research Tool	Semi-structured interviews	Formal questionnaire
Sampling	Small-to-medium purpose	Largely random
Statistical Analysis	Little or none	Major part
Analysis	In-the-field and on-the-spot	Back in office

Question format	Open-ended	Closed-ended

14.4 Sources of Data

M&E data may come from two main sources, namely, primary and secondary sources.

Primary data is data collected through surveys, meetings, focus group discussions, and interviews that involve direct contact with respondents (target group or population). Data can also come from administration, finance and programme operations. Primary data can take the form of input, output or outcome data. Primary data, though expensive to collect, may be necessary where appropriate indicators and baselines are not available for effective monitoring and evaluation activities.

Secondary data are data collected in the past for some purposes related to the current area of monitoring and evaluation. Secondary data can be found in, for example, NGOs, MDAs and their decentralised agencies, and in Ghana Statistical Service surveys (CWIQ, GLSS, GDHS) and national census reports. Secondary data represent tremendous cost and time savings to organisations and hence the need to first investigate what data exist when planning for future data collection exercises so as to determine how relevant they are for M&E operations.

It is important to note that all secondary data were or are primary data for another study. The most common practice is to use a combination of primary and secondary data to complement each other. For example, it would require the use of records of attendance and enrolment to meet the M&E data needs for assessing outcomes of the School Feeding Programme.

The main concerns with secondary data are the extent of reliability and validity. In order to ensure that secondary data meet minimum standards of reliability and validity, the following steps must be taken:

1. **Identify and assess the relevance of the secondary data**
   - Compare existing data with target
   - Review data from government and partner organisations collected within the same geographical areas.
2. **Assess the appropriateness of relevant secondary data**
   - Do the secondary data cover the same geographical area and unit of study?
   - How long ago were the secondary data collected and are they still likely to be suitable?
3. **Check the reliability of the data and data source**
   1) How reputable is the organisation that collected the secondary data?
   2) What methods were used to collect the data?
   3) Is there a description of quality assurance methods used?
   4) How large was the sample?
   5) Are the questionnaires available for review?
   6) Are the raw data available for review?
4. **Check the reliability of secondary data for follow-up study and monitoring**
   - Is there going to be a follow-up study at a later time by the same people who collected the secondary data?
   - Are the methods used sufficiently described to facilitate replication?

14.5 Who is Responsible for Data Collection?

For monitoring purposes, great care is needed in identifying roles and responsibilities, for example: who collects, who reports and who uses data or information? Too often, people are required to collect or report information when they have little interest in it being accurate.

The motivation of people for collecting, reporting and acting on data or information is important. Generally, the people who complain about an issue or problem are the best ones to monitor it. The point is that it must be attractive for people to monitor a particular issue. The person collecting data or information or checking or reporting must see the benefits of doing it accurately. Even with highly motivated people, it is important not to ask someone to collect too much information over too long a period of time. The level of accuracy goes down if too much information is expected at a stretch.

Extra checks (also called triangulation) are very important in ensuring the validity and reliability of information. Ways of doing extra checks on the monitoring information include:

1) Have a second person or group collect the same (or almost the same) information.
2) Make the information as public and open as possible.
3) Combine standard monitoring with frequent spot checks.
4) Organise alternative ways of transmitting the information.

14.6 Appropriate Sampling Techniques for M&E

What is sampling?
Sampling is a method of selecting some part of a group to represent the total group. The total group is the population while the part is the sample. The alternative to sampling is complete enumeration, i.e., studying the entire population. Two things are absolutely necessary to ensure a high level of confidence that the sample represents the population:

- An unbiased sample; and
- A sufficiently large sample.

Bias is a statistical term which means "error". An unbiased sample therefore implies it is "without error", which in reality is impossible to achieve.

A representative sample of subjects is usually drawn from a population and studied to make inferences about the population. To be representative means to provide close approximation of certain characteristics of the target population, i.e., ensuring that every sector of the population has an equal chance of being represented. Socio-demographic variables such as sex, religion, education, age, marital status, income, etc. are usually considered in drawing a representative sample of people.

Reasons for sampling
1) Impractical to cover entire population.
2) Sampling reduces the length of time needed to collect data or information about social, political or economic phenomena.
3) It helps cut the cost of data collection.
4) Quicker to obtain information.
5) Produces more detailed and accurate information.

Concepts in sampling
1) **Population (general universe)** is an aggregate of all cases that conform to a set of specifications. Population can be finite (countable units) and infinite (endless sampling units).
2) **Sampling frame (working universe)** is the concrete list of sampling units from which a sample is obtained. Three problems in sampling frames include incomplete frames (i.e., included units in population missing from list), cluster elements (i.e., consisting of city blocks rather than individuals) and blank foreign elements (i.e., sampling units of sampling frame not included in the original population).
3) **Sampling unit** is either an individual or event that is a constituent part of the population.
4) **Sampling error** is the extent to which a given sample estimate deviates from the population value that it estimates.

   Generally, at each time one chooses a sample, one of three mutually exclusive things can occur:
   - the sample mean is larger than the population mean;
   - the sample mean is smaller than the population mean;
   - the sample mean is equal to the population mean.

Guidelines for selecting a sample
1) Define the population.
2) Define the sampling frame, making sure there are no duplications and omissions.
3) Decide on the sampling design.
4) Determine sample size.
5) Determine the sampling technique to use for selecting the individual elements of the population.

Sampling design
Sampling design is a plan that indicates how cases are to be selected for data collection. There are two main types of sampling designs, namely, **probability sampling and non-probability sampling.** Probability sampling is a process that ensures that all cases in the population have a known probability of being included in the sample. It is more scientific and more acceptable but can be expensive. A very important principle of sampling theory is that the larger the sample, the closer its mean is likely to be to the population mean.

Probability sampling methods
The main probabilistic sampling techniques that can be used to obtain representative members of a target population are presented below.

1. **Simple Random Sampling**
   This is a sampling method that ensures that every member, element, or unit of the population has an equal and independent chance of being selected or included in the sampling. Two requirements are necessary for the success of this method:

   - A complete list of the population;
   - The random selection of cases to be included in the sample by lottery method or use of a random table.

2. Systematic Random Sampling

This method consists of selecting every k^{th} case from a complete sampling list. Two requirements must be provided:

- A sampling interval, which is the ratio of the number of cases in the population to the desired sample size
- A random start, which refers to the process of using a table of random numbers or other device to select at random the initial case between 1 and K.

For example, to obtain a sample of 100 students from a list of 2,500 in a campus directory, the sampling interval is determined by dividing 2,500 by 100 which is equal to 25. Then the random start is determined by considering any number between 1 and 25 and then starting with that number, every twenty-fifth student thereafter.

The advantage with this system is that it has built in type of stratified system. The major disadvantage is that the available population may have a periodic cyclical pattern that corresponds to the sampling interval, which produces systematic sample biases.

3. Stratified Random Sampling

This is a method whereby the population is subdivided into two or more mutually exclusive segments, called strata, based on categories of one or a combination of relevant variables, e.g. male, female, lower and upper classes. Simple random samples are then drawn from each stratum and these sub-samples are put together to form the complete, stratified sample which could be proportionate or disproportionate.

Two main advantages associated with stratified sampling technique are:

- Increases in sampling precision (efficiency) by ensuring representation of essential segments or categories of the population;
- Guarantees that categories with small proportions of cases in the population are adequately represented in the sample, usually achieved through the use of disproportionate stratified random sampling.

4. Cluster Sampling

This is a method by which the population is broken down into cases, called clusters, and a sample of clusters is selected at random. Clusters generally consist of natural groupings, such as college dormitories or geographic units such as counties, census tracts and blocks. Unlike stratified sampling which draws cases from each stratum, clustered sampling draws cases only from those clusters selected for the sample.

Cluster sampling is called a single-stage cluster design where all the cases in each sampled cluster are included in the sample, i.e., sampling occurs once at the cluster level. The advantage of cluster sampling is that it reduces costs of data collection. It is, however, less precise.

5. Multi-Stage Sampling

This involves sampling at two or more stages, e.g., random sampling of regions, then randomly selecting schools within the regions and randomly selecting students within the schools.

Non-Probability Sampling Methods

Non-probability sampling refers to processes of case selection other than random. The two basic weaknesses of this sampling technique are:

- No control for investigator bias in the selection of the units;
- Their pattern of variability cannot be predicted from probability theory which enables the investigator to calculate the sampling error or estimate sample precision as is the case in the probability sampling method.

> **Box 14.12: Non-Probability Sampling Techniques**
> 1. Convenience
> 2. Purposeful / Judgmental Sampling
> 3. Quota Sampling
> 4. Snowball Sampling

1. **Convenience Sampling**
   Convenience or accidental sample is one in which the units of the sample are selected based on their proximity, for example, data collected in a classroom using students. This technique is less costly but cannot be generalised to the population at large.

2. **Purposeful or Judgemental Sampling**
   This is one that is drawn based on available information of the units that are judged to be representative of the total population. The aim is to obtain information about members of the population exhibiting such characteristics. This method is useful for describing a phenomenon rather than for making statistically based inferences about its incidence in the population. For example, one might want to speak only with older people to obtain a historical perspective on agricultural practices in an area, hence a purposive sample would aim to create a list of older people on whom to focus the questions (Box 14.13).

   Box 14.13: Using Key Informants in Purposive Sampling
   Working with key informants helps when you are seeking in-depth information about a specialised topic (having specific skills, knowledge or roles of interest) in the project area. This can be used to carry out case studies or focus groups.
   i. Make a list of potential key informants who can answer the specific M&E question you have in mind. These include:
   - Trained experts active in the project area (e.g., doctors, economists, credit experts and agricultural scientists);
   - Government officials, such as extension staff or health workers;
   - Local leaders, such as tribal chiefs;
   - Knowledgeable persons, such as shopkeepers and market traders.
   ii. Then select the informants most relevant to the question at hand. Add more informants as required during the interviews.

   Purposeful samples may be based on critical, typical, extreme and similar cases:
   1) **Typical case samples:** Select units that are about average or within the mid-range in respect to the characteristics of most interest to the researcher.
   2) **Critical case samples:** Select units that highlight a situation of particular interest to the researcher.
   3) **Extreme case samples:** Select units that are very high and those that are very low with respect to one or more characteristics of interest to the evaluator.
   4) **Similar case samples:** Select units that are very similar to some specified unit; this is primarily used in prospective research aimed at determining what effects a proposed policy or project will have in a given country, region or circumstance.

3. **Quota Sampling**
   This is one where the sampling units of the strata constituting the samples are drawn based on their numerical representation of the total population, for example, samples of males and females selected on the basis of the ratios relative to the national population.
   Quota sampling is useful for making comparisons and for isolating one particular aspect to be monitored or evaluated. It involves the selection of a fixed and predetermined number of units that possess a particular characteristic, which are then compared to an equal number of units that are similar but lack that particular characteristic of interest.

4. **Snowball Sampling**

This is drawn based on an initial identification of a small number of sampling units which are subsequently used as informants for identification and inclusion of additional sampling units of similar characteristics. This technique is appropriate where knowledge of the whereabouts of the target group is very limited. For example, one may want to study perceptions of people living with HIV and AIDS, child abusers, corrupt officials etc. People who fall in these categories may not be easily located or identified except through informal contacts. The first few to be identified constitute the sources for identifying more in a similar situation.

14.7 M&E Information System (GHANAINFO)

Database systems play important roles in information storing and sharing. They are an essential system for storing, analysing and presenting data captured. The GhanaInfo database system initiated by GSS and NDPC captures data on human development indicators. The system organises data by indicators, time periods, geographic areas and sources with extensive metadata based on international standards. These data could be used by RPCU, DPCU and PPMED to analyse and make presentations on the issues pertaining to them. The system also dynamically generates tables, graphs and maps from data views, allowing the user to instantly preview them, which could also be useful to RPCU, DPCU and PPMED.

CHAPTER FIFTEEN (STEP EIGHT)

PROCESSING AND ANALYSING
MONITORING AND EVALUATION DATA

15.1 What is Data Processing?

Data processing involves the preparation of data for analysis. The main activities include editing, coding, preparation of data file, data entry and data cleaning.

1. **Editing**

    Editing is the process of examining the completed questionnaires and data collection sheets to correct errors or mistakes. There are two main types of errors that can occur during data collection, namely errors of commission or of omission. Editing can take place in either the field while the data collection is still going on or back in the office of the evaluator or the person collecting data. While the former is referred to as field editing, the latter is central editing.

2. **Coding**
    Coding involves the assignment of symbols for each category of variables in the study. For example, in a survey, 'yes' may be coded '1' and 'no' coded '2'. Coding can be done before or after the design and implementation of a survey questionnaire. This gives rise to two types of coding.

    *   Pre-coding: refers to those situations where the evaluator decides before starting the data collection what symbols to assign for any particular variable;
    *   Post-coding: refers to coding of data after they have been collected.

    It is important to note that coded data may sometimes be recoded. Recoding involves re-assigning symbols to values that already exist. The purpose may be to collapse and reduce the number of categories for given variables. For example, age categories of respondents can be recorded into two categories "old" and "young" or educational status of respondents into "without education" and "with some education".

    Traditionally, a codebook is prepared for the data collected. The codebook serves two vital functions: it specifies the meaning of each numeric code and indicates the column in which each variable is located. With the development of sophisticated statistical software, code books are hardly prepared any more.

3. **Preparing the Data File for Data Entry**

    A data file has to be prepared for processing data. The type of data file to be prepared will depend on the statistical software to be used. There are several computer applications that can be used to process and analyse data. These include SPSS, STATA, ACCESS, EXCEL, EPI-INFO and MITAB. These applications vary in terms of ability to perform complex statistical functions and of versatility. For a relatively small project, Excel is essentially a spreadsheet software but can be used to produce a database. It is important to have a working knowledge of one or more of the above-mentioned software applications.

    In any event, statisticians and computer experts can provide assistance at different stages of the evaluation. For the purpose of the discussion below, SPSS is used for illustration.

    To prepare data for analysis, the following activities have to be undertaken:

    1) Edit the M&E data instruments.
    2) Assign identity numbers to cases.

3) Prepare variable lists and names.
4) Assign codes to response categories.
5) Assign variable names and value labels to variables.
6) Determine the column width for the variable.
7) Determine the type of variables (numeric versus alphanumeric).
8) Assign missing values.
9) Name the data file.

4. Data Entry

Data entry refers to the process of creating a data file and keying in the data (which include the case identity number, usually in the first column and the variable names and values across the rows). The variable and value labels, column width and type of variable are also entered in the data entry window.

5. Data Cleaning

Data cleaning involves running preliminary frequencies of all the variables to make sure those variable names and response categories/values are correct and valid. This is very important because incorrect or invalid values will introduce some margin of error into analysed data and thus making it less credible.

The need for data cleaning can be explained in terms of the likelihood of the introduction of errors into data entry process through fatigue or random error. Data entry is quite a tedious exercise and needs to be done with extreme care. Only clean data is good for analysis.

15.2 Data Analysis

Data analysis is the process of transforming data into useful information through the application of statistical methods or techniques. Depending on the purpose of the analysis, the information generated could be depicting categories of phenomena, patterns, trends, relationships, etc.

Interpretation provides meaning to the information generated as well as its substance. The results (i.e., information) of the data analysis provide the basis for conclusions to guide management decision making.

Data analysis takes time and requires good data management techniques, creativity, intellectual rigour, hard and thoughtful work. Data analysis will be easier if the data collection instruments are well designed.

15.2.1 Steps in Analysing M&E Data

1) Review the development intervention goal and objectives.
2) Check for data completeness and accuracy for each development intervention objective.
3) Consider which of the data are quantitative and qualitative.
4) Determine the type of analysis to be conducted.

15.3 Who is Responsible for Data Analysis?

Where M&E information needs to be organised and analysed, a first option is to have the same people collect and analyse the data. These could be M&E unit staff. The activity helps build capacity and a sense of ownership. People will often be more interested in taking action on the information if they have analysed it themselves. If this is not possible, then the results of the analysis should be quickly fed back to them. Quick feedback tends to stimulate considerable interest and helps check the accuracy of the information.

When data is collected and analysed by field workers, it is essential that they are well trained. Even with good training, interesting observations can get lost at this level. For example, field workers may feel that certain questions are not being answered accurately. They may find unexpected and interesting answers that cannot be entered into the forms. Therefore, it is useful to provide many opportunities for feedback from field workers and to encourage more senior personnel to take part in the data collection.

Useful information can also get lost when the person who analyses the information is not involved in collecting the data. For example, in M&E information systems, data supervisors sometimes find that the information does not seem valid. This problem can be avoided, in part, if they are directly involved in the collection activities.

15.4 Types of Quantitative Data Analysis

The type of analysis to conduct depends on the purpose of the monitoring and evaluation. Three broad types of analysis can be distinguished based on the purpose.

15.4.1 Descriptive Analysis

This is used when the purpose is to provide a profile of the phenomena being monitored or evaluated. Basic descriptive statistics such as the mean, mode, median, standard deviation and range are generated on the key variables or indicators being monitored or evaluated. The more interesting measure is the standard deviation which, in conjunction with the mean, provides most of the information needed to describe the distribution of all cases on a given variable.

15.4.2 Comparative Analysis

This is used when the purpose is to compare programme impact and outcome among identified groups, geographical regions or any other criteria set. Common statistical techniques used for comparisons include analysis of variances and student t-test. This level of analysis may require an appreciable knowledge in statistics to understand and interpret the results of the analysis well.

15.4.3 Associational Analysis

This involves the statistical estimation of the relationships between two or more variables. For quantitative data, most of the common associational analyses are correlation and regression analysis. These analyses are used to establish associations and cause-effects among key monitoring and evaluation indicators. For example, one may be interested in finding out if the level of education affects target group access to programme services or satisfaction with programme services.

15.5 Basic Analysis of Quantitative Data

This generally involves the disaggregation of data into categories to provide evidence about project achievements and to identify areas in which a programme is succeeding and/or needs improvement.
For example data can be broken down by gender, social and economic situation, education, area of residence (urban or rural), marital status or age, as relevant to evaluation and project objectives and indicators.

Basic descriptive analysis provides the following:

1. **Frequency Count.**
   A frequency count provides an enumeration of activities, things, or people that have certain pre-specified characteristics. Frequency counts can often be categorised (e.g., 0, 1-5, 6-10, more than 10) in data analysis.
   In some cases, counting provides sufficient information. For example,

   - 35 out of 100 fertiliser depots did not have fertiliser for three days. The possible response or action is to check further to see if there is a breakdown in the production, delivery or other reason.
   - Four spillways for the new dam have been constructed using insufficient cement in the mortar for the slabs to hold. One possible action is to fix these spillways and check others. It is also useful to find out who is responsible for the construction.

2. Percentage

A percentage indicates the proportion of activities, things or people that have certain characteristics within the total population of the study or sample. Percentage is probably the most commonly used statistic to show current status as well as growth over time.

Data are often reported in percentages. Percentages can be useful but they can also be misleading. Here are some typical examples:

- A report stated that only 47 percent of the people in Community A and 53 percent of the people in Community B could use the new technology correctly. However, given the margin of error that existed in this study, the difference may not be significant. Determining the level of significance (that is, the margin of possible error) usually requires the help of a statistician. If such a professional is not available, then it is usually more valid to pay attention to field data in which there are large differences, for example, 15 percent or 20 percent or more, not small differences as in this example.

- A report stated that 92 percent of people use latrines. However, the sample size was only 45 households out of 100,000 households in the project area and most of these houses were along the road where people tend to be somewhat richer. Therefore, we cannot conclude that there is a high proportion of latrines. The sample size is too small and there is a 'road effect'.

- It was stated that 8.3 percent of the children reportedly had diarrhoea over the past week. This means about l out of 12 children. It is more meaningful to use the numbers rather than the percentage. This is particularly true since many field workers, staff and community members are not thoroughly familiar with percentages. Rather than say that an indicator of success is that 75 percent of households have and use latrines, it is more meaningful to say 3 out of 4 households.

3. Mean

The mean is the most commonly used statistic to represent the average in research and M&E. It is derived by dividing the sum by the total number of units included in the summation. The mean has mathematical properties that make it appropriate to use with many statistical procedures.

However, one must be careful in using the mean. The mean (average) can disguise information. To illustrate, suppose that a water user group paid an instalment of GH¢130 for water installation. The group had 13 households and each household made the following contributions: GH¢1, GH¢1, GH¢1, GH¢1, GH¢1, GH¢2, GH¢2, GH¢5, GH¢6, GH¢8, GH¢8, GH¢47 and GH¢47 respectively.

In this case, the average (mean) amount of money paid by each household in the group is GH¢10 (that is GH¢130 divided by 13). In fact, no household paid GH¢10. In this case, the mean disguised the fact that there are two extremely high payments – two households paid most of the money while the rest paid much less.

The mean is strongly influenced by extreme values that can distort information. By removing just one household that paid GH¢47 from the group, the mean will become GH¢7, which is a large reduction. The example shows a typical situation where the amount paid is pushed up by a few rich families. The families that paid GH¢47 might feel that they 'own' the water points and may be reluctant to let other families collect water.

Another kind of average is the centre or middle of the numbers when they are lined up according to size. This is the median. The median of the contribution from the group is GH¢2. This is the better 'average' as it tells us that half of the households paid GH¢2 or less. This seems a useful definition of the centre of the distribution. The median is not so easily influenced by extreme values.

Tables, percentages and averages often give a clear picture of the sample data, particularly for non-specialists, and many users will only be interested in this level of analysis. In addition, measures of spread, including percentiles,

standard deviations and range may add valuable information on how a variable is distributed throughout a sample population.

15.6 Analysis of Qualitative Data

Qualitative information relates to perceptions, judgements, attitudes and practices – for example, the quality of services, the real benefits or who makes decisions and how. The analysis of qualitative data helps broaden the view of the phenomena of interest in the result, and can also increase depth and detail where needed. Indeed, qualitative information can illuminate complex issues such as gender, ownership and demand, and can also explain the reasons behind quantitative data.

Qualitative data analysis includes detailed descriptions, direct quotations in response to open-ended questions, analysis of case studies, the transcript of opinion of groups and observations of different types. Qualitative analysis is best done in conjunction with the statistical analysis of related quantitative data.

Analysis of qualitative data may produce descriptions (patterns, themes, tendencies, trends, etc.), and interpretations and explanations of these patterns. The data analysis should include efforts to assess the reliability and validity of findings.

In analysing qualitative data, the evaluator must take note of the environment, record all the events and take pictures and notes of all related activities. This approach helps during transcriptions and report writing. The evaluator must also report in a narrative manner with contextual description and direct quotations from respondents.

Another method for analysing qualitative data is through cognitive mapping. The evaluator may adopt mental imaging or representation of the space or layout of the setting. The evaluator can use a series of psychological transformations by which individuals acquire certain attitudes and habits. The evaluator should then code, store, recall and decode information about the relative location and attributes of the phenomena in the everyday spatial environment.

15.7 How to analyse Qualitative Data

Step 1: Determine the process
The following approaches may be used for qualitative data analysis: exploration, discovery and construction. With the exploration analysis, the evaluator may evaluate data through a 'wide-angle lens' to examine the breadth and depth of the phenomena. With the discovery approach, the evaluator may adopt the natural setting or the natural environment. Finally, with construction, the evaluator may use the multiple realities approach. The multiple realities approach can be subjective or socially constructed.

In all three approaches, the evaluator may analyse words, images, objects, sounds and scents. The analysis may be done through in-depth interviews, observation, reviewing notes, documents, diaries, oral history, discussion, biographies, accompanied walk, stories, archival records, etc.

> **Box 15.2: Notes on how to analyse Qualitative Data**
> - Carefully review all the data;
> - Organise comments into similar categories, e.g., concerns, suggestions, strengths, weaknesses, similar experiences, programme inputs, lessons learned, recommendations, outputs, outcome indicators, etc.;
> - Identify patterns or associations and causal relationships in the themes, e.g., all people who attended programmes in the evening had similar concerns; most people came from the same geographic area; most people were in the same salary range; along with processes or events, respondents' experiences during the programme;
> - Combine the results of the quantitative and qualitative data.

Step 2: Determine the Method
The evaluator may select one or more of the following methods to collect data for qualitative analysis: interviews, forums, durbars, focus group discussions, oral

histories, accompanied walks and archival searches. Other methods include biographical review, storytelling, document review and observation.

Step 3: Determine the Instruments and Equipment
The evaluator may use an interview or a discussion guide for qualitative data collection. The instrument could have an introduction – name of interviewer, purpose, procedures, time and location of the target participant(s). The equipment the evaluator may use includes the observation checklist, recorders, cameras and a notepad.

Step 4: Determine the Qualitative Report Writing Structure
The following qualitative report writing approaches may be used by the evaluator. These include: interpretive science, discourse analysis, critical discourse analysis, the constant comparative method and cognitive mapping. Other writing styles include analytic induction, cross-site analysis, causal pathways and narrative structure.

Before writing qualitative reports, there must be transcription of interviews, discussions, oral histories, music, etc. Data collection and analysis must be integrative and concurrent. Evaluators must keep memos for administrative data; they must reduce data and also code, transform, highlight, summarise and categorise the data.

All qualitative data must be organised into identifiable themes, points and inductively categorised showing relationships, using diagrams and standardised presentation styles such as text, matrices, charts, tables and maps.

15.8 Validation of the Analysed Data

It is useful to check and validate M&E results through debriefings and feedback workshops. This can be done by asking some of the stakeholder groups (users and community members) to review critically the outcomes of the analysis. It may also be useful to extend the review process to some experts in that subject area.

Questions to pose include:
- Do these findings reflect one's own experience?
- Do the conclusions from the analysis make sense?
- Do you have suggestions about how to improve the situation or act on the conclusions?

The feedback from these groups can be used to refine the analysis. It can also build confidence in the monitoring activities. Lastly, it can motivate the stakeholder groups to take action on the basis of the M&E information.

15.9 Visualizing the Findings and Conclusions

Graphs, bar charts, pie charts, etc. are helpful in reporting data. However, since graphs can easily be made on computers, there is a tendency to misuse them by putting in too little or too much data that may not be very meaningful. The point is to show information that is important and useful.

15.10 Interpreting the Findings

Interpreting the findings of the analysis so as to draw conclusions involves attaching meaning to the analysis, explaining the patterns and trends observed and looking for relationships and linkages between the various factors and impacts. (See Box 15.3).

Box 15.3: Interpreting Findings
- What do the data say or mean?
- Is the finding of any substance to talk about?
- Are there any relationships?
- How reliable and/or valid are the findings?
- What are the lessons learned?

CHAPTER SIXTEEN (STEP NINE)

PREPARATION OF M&E REPORTS

16.1 What is an M&E Report?

An M&E report is a compilation of data and information from M&E processes. The next stage after data collection, collation and analysis is reporting in various forms – oral, written, pictorial, audio-visual, etc. Reporting involves the transformation from data to information with explanations, lessons and recommendations. Identifying the specific stakeholders and their information needs is critical when reporting. This informs the appropriate content, format and timing for the report. M&E staff need to ensure that they collect and present M&E information in concise and complete reports that enable stakeholders to make timely and relevant decisions.

16.2 Purpose of M&E Reports

The primary purpose of reporting is to ensure that all stakeholders are formally informed of the implementation status of an intervention in order to take the necessary decisions or actions. M&E reports should provide the status of delivery of activities, outputs, outcomes and impacts as well as information on any actual or potential challenges from approved work plans and budgets. M&E reports:

- Enable the assessment of progress and achievements in implementing the NDPF;
- Inform and help stakeholders focus on M&E results;
- Enable the improvement of subsequent work plans;
- Form the basis for evidence-based decision making;
- Communicate effectively or efficiently how goals and objectives are being met.

16.3 Types of M&E Reports

It is important to understand the types and content of M&E reports in order to put them to the right use. M&E reports can come from monitoring, evaluation or PM&E.

Monitoring reports are normally progress reports. They focus on specific targets and provide feedback on progress, emphasising the corrective actions to operations, delivery relative to plan as well as the challenges. Table 16.1 presents examples of the various monitoring reports that can be generated.

Table 16.1: Examples of Monitoring Reports

Field Report	A report emanating from inspection or supervision visits
Progress Report	A periodic report comparing planned targets with actuals
Exception Report	Reports on critical incidence or high deviations
On-Demand Report	A special report on request
Output Report	A report to ascertain the delivery of specified goods and services

Evaluation reports use information to make judgements on the worth of an intervention and indicate the relevance, effectiveness, efficiency, impact and sustainability of an intervention. Evaluation reports include inception reports, mid-term reports and completion reports. Participatory M&E reports on the other hand are a combination of the results from both participatory monitoring and participatory evaluation.

M&E reports can also be classified as internal or external reports. An internal report is produced to facilitate effective and efficient implementation of an intervention. It plays a crucial role in lessons learned to facilitate decision making,

and eventually what can be extracted and reported externally. Examples of internal reports include back to office reports, field trip reports, workshop reports, and minutes of meetings.

An external report is produced mainly to inform stakeholders outside the intervention organisation. Examples of external reports include monthly and quarterly progress reports, mid-term reports and completion reports. Table 16.2 outlines key characteristics of internal and external reports.

Table 16.2: Distinction between Internal and External Reports

Internal reports	External reports
Primary audience is the implementing organisation	Primary audience are the stakeholders outside the implementing organisation
Primary purpose is to inform management and decision makers (monitoring report)	Primary purpose is typically to highlight success and challenges and how they are being addressed for accountability, credibility, to solicit funds, etc.
Regularly written in accordance with pre-determined monitoring frequencies	Written less often and based on periodic assessments (evaluations)
Content is comprehensive, providing information that can be extracted for various external reports	Content is concise, typically abstracted from internal reports and focused on specific requirements and target audience
Format is typically predetermined to meet what will best serve the intervention institution and its needs	Format is often determined by external requirements or preferences of intended audience (e.g. donors, beneficiaries, government)

16.4 Flow of M&E Reports

Effective and reliable monitoring and evaluation depend on a regular and reliable flow of information vertically and horizontally. Information flow is critical for using M&E information to inform decision making at all levels. All MDAs and MMDAs are responsible for a significant amount of M&E data and reporting on indicators outlined in their Medium-Term Development Plans to assess the progress of implementation of the NDPF. NDPC has a key role in assessing the accuracy and reliability of these reports.

16.5 How to Write a Monitoring Report

Below are some considerations and steps to take when writing a monitoring report:

1) Identify the main readers or audience of the report.
2) Understand the target population and its information needs.
3) Determine the extent to which the findings reflect the aspirations of target population
4) Understand the goal, objectives and indicators that were monitored.
5) Understand the extent to which the findings can be generalised.
6) Write the report in simple language with graphics and pictures.
7) Begin the report with the positive results.
8) Concentrate on the results with recommendations or potential actions.
9) Emphasise the recommendations that are relevant to specific readers.
10) Emphasise specific actions to be taken.
11) If provided, follow the report format and meet all its requirements.

16.5.1 Example of a Progress Report Format

Box 16.1 presents a format that should be used by MDAs and MMDAs to write quarterly and annual progress reports. The APR is an example of a monitoring report. It serves as the basis for performance assessment of the S/DMTDP. The report should provide an accurate update on programme and project results and identify major constraints. As a self-assessment report, it can be used to spur dialogue with DPs and other stakeholders. The APR should contain elements of progress as outlined in the format, with recommendations to address any challenges.

16.5.2 How to write an M&E Field Trip Report

This section describes the main content and layout for an M&E field trip report. Each field visit should result in a short report that should include the following information:

1) Objectives of the field trip.
2) People and groups met and sites visited.
3) Methods used to collect and analyse the data.
4) Findings.
5) Comparison of findings with those of earlier visits – to show trends and consistency.
6) Conclusions.
7) Recommendations for action.

Box 16.1: Quarterly and Annual Progress Reports Format

Title Page
☑ Name of the MDA/MMDA
☑ Time period for the M&E report

Introduction
☑ Summary of achievements and challenges with the implementation of the S/DMTDP
☑ Purpose of the M&E for the stated period
☑ Processes involved and difficulties encountered

M&E Activities Report
☑ Programme/project status for the quarter or year
☑ Update on funding sources and disbursements
☑ Update on indicators & targets
☑ Update on critical development and poverty issues
☑ Evaluations conducted; their findings and recommendations
☑ Participatory M&E undertaken and their results

The Way Forward
☑ Key issues addressed and those yet to be addressed
☑ Recommendations

16.6 How to Write an Evaluation Report

It is useful to start the preparation of the report before data collection. For example, materials for the background section, information about the intervention and some aspects of the methodology, evaluation questions, etc. can be found in the evaluation TOR or proposal. The evaluation findings, conclusions, and recommendations generally need to wait till the end of the evaluation.

Evaluations generate huge amounts of information. Therefore, it is useful to organise evaluation data and field notes as soon as they are collected and to document fieldwork experiences and observations as soon as possible. Thus, preparing sections of the findings during data collection allows one to generate preliminary conclusions or identify potential trends that need to be assessed by additional data-collection activities. Other information and considerations include the following:

1. **Organise the various elements of the report**

   One of the most challenging tasks that evaluators face is how to organise the huge amount of data gathered into a useful, concise and interesting report. It is useful to remember that only a small and concise amount of tabulations prepared during the analysis phase should be in the report. A report outline will help in classifying information. Always be guided by the key evaluation questions, the indicators being assessed and the type of information that the target audience needs.

2. **Make clear, concise and direct recommendations**

   Examples of ways to make recommendations:

   1) Ways to improve the current management regime include the following:
   2) Actions needed to increase effectiveness include the following:
   3) Actions needed to improve monitoring processes include the following:

4) Areas for further assessments include the following:

3. Write to suit specific readers

The level and content of evaluation reports depend on who the report is written for – donors, policy makers, staff, beneficiaries, the general public, etc. The write-up in the report must therefore be clear and adjusted to suit the target group.

4. Make the report easy to read and absorb

The presentation must be made in simple language that can be understood by non-professionals. The following is a list of suggestions that might help in making the report easier to read:
1) The first sentence of each paragraph should be used to make the main point
2) The structure of the report should be simple. The text should be broken down in relatively small thematic or sequential parts, with simple and clear subtitles identifying the topics discussed.
3) Display your data in graphs, diagrams, illustrations and tables that summarise numbers. This should reduce the amount of text needed to describe the results and make it more interesting to read.
4) Briefly explain the graphs or illustrations focusing on the important points that relate to the issues presented
5) Use of qualitative information effectively makes the report more interesting. In addition, direct quotes, short examples and comments heard during fieldwork personalise the findings.
6) Use simple language that the readers will understand. Avoid the use of long and complicated sentences, unclear jargon and/or difficult words. Important technical terms should be defined in the text or in the glossary.
7) Different ideas should be presented in separate sentences.
8) The meaning of abbreviations and colloquial words should be explained.
9) Simple link words should be used to split sentences and indicate the direction in which the argument is moving.
10) Every table must have a title, table number and a reference to the source of information.
11) Use evaluation report formats provided by the client institution or funder.

16.6.1 Evaluation format

A general format for an evaluation report is presented in Table 16.3. This can be adapted to suit any evaluation were formats are not provided.

Table 16.3: General Evaluation Report Format

Evaluation Report Format
1. Title page
2. Table of contents
3. Acknowledgments (optional)
4. Executive summary
• Summarise the intervention being evaluated, the purpose of the evaluation, the methods used, the major findings and the recommendations in a prioritised order
• Two to three pages (usually) that could be read independently without reference to the rest of the report
5. Introduction
• Identify programme or project description and background
• Describe the programme or project being evaluated (the setting and problem addressed, objectives and strategies, funding)
• Summarise the evaluation context (purposes, sponsors, composition of the of the team, duration
6. Evaluation objectives, design and scope
• List the evaluation objectives including the questions the evaluation was designed to answer and the scope
7. Methodology
• Describe fully the evaluation methods and instruments (e.g., what data were collected, specific methods used to gather and analyse the data, rationale for visiting selected sites, etc.)

•   Limitations of the evaluation
8. Findings
•   State findings clearly with data presented graphically in tables and figures. Include effects of the findings on progress of programme/project
•   Explain the comparisons made to judge whether adequate progress was made
•   Identify reasons for accomplishments and failures, especially continuing constraints
9. Recommendations
•   List the recommendations for different kinds of users in priority order. Include costs of implementing them, when possible
•   Separate recommendations into short term and long term
•   Link recommendations explicitly with the findings, discussing their implications for decision makers
•   Include a proposed timetable for implementing/reviewing recommendations
10. Lessons learned
•   Identify lessons learned from this evaluation for those planning, implementing or evaluating similar activities
11. Appendices
•   Terms of reference
•   Instruments used to collect data/information (copies of questionnaires, surveys, etc.)
•   List of persons interviewed and sites visited
•   Data collection instruments
•   Case studies
•   Abbreviations
•   Any related literature
•   Other data/ tables not included in the findings chapter

16.7 Criteria for Assessing the Quality of M&E Reports

A well-presented M&E report is critical for effective decision making. An M&E report can only increase the knowledge on an intervention and reduce uncertainty if it is of quality. The word 'quality' refers to the characteristics that an M&E report should contain in order for it to be useful for effective decision making. Below are some criteria for assessing M&E reports:

1) **Relevant and useful -** should serve a specific purpose.
2) **Concise –** information overload is costly and can be a burden on information flow.
3) **Timely –** should be timely for its intended use. Information is of little value if it is too late or infrequent for its intended purpose.
4) **Complete –** It is especially important that a report meets all the requirements of a specific format.
5) **Reliable –** should provide an accurate representation of the facts.
6) **Easy to read –** should be written in simple language and some information conveyed using graphs, charts and other diagrams to make it easy to absorb.
7) **Consistent –** should adopt units and formats that allow comparison over time, enabling progress to be tracked against indicators and targets.
8) **Cost-effective –** should warrant the time and resources devoted to it, balanced against its relevance and use.

CHAPTER SEVENTEEN (STEP TEN)

DISSEMINATION AND COMMUNICATION OF M&E RESULTS

17.1 What is Dissemination and Communication?

Dissemination is spreading information, knowledge, etc. so that it reaches many people. Dissemination of M&E results means that stakeholders get the right information in a timely manner and in the right format.

Communication is the exchange of information using different means and media (speaking, writing, etc.). Good communication is characterised by clear purpose, clear content, reliable sources, effective transmission channels and efficient delivery to M&E stakeholders.

17.2 Purpose of Dissemination and Communication

The main purpose of disseminating and communicating M&E results is to:
1) Ensure accountability.
2) Motivate stakeholders to action.
3) Improve development interventions.
4) Advocate additional resources.
5) Promote understanding.
6) Explore and investigate what happened and why.
7) Promote organisational learning.

> **Box 17.1: Dissemination and Communication Checklist**
> 1. What is the best time to disseminate and communicate M&E results?
> 2. What is the message?
> 3. Who is the audience?
> 4. What is the best way to communicate?
>
> *Source: M&E Handbook for Business Environment Reform, 2008*

Successful dissemination and communication of M&E results is dependent on stakeholder involvement, adequate budgetary resources and an effective dissemination and communication strategy. Furthermore, a good dissemination and communication strategy will ensure that stakeholders receive M&E results that are relevant to their specific needs and provide the necessary feedback.

17.3 Dissemination Strategy

Disseminating M&E results to all stakeholders is often complex because of the different audiences and their information needs. The most commonly used formats are written reports, oral presentations, press releases, fact sheets and slide or computer presentations. These formats differ in length, detail and the amount of technical information. Below are some common elements to consider when disseminating M&E results:

- Logical organisation.
- Direct and concise language.
- Use of appropriate illustrations and examples.

Written reports combined with visual aids are effective means of disseminating results. Written reports can be used to provide updates on development progress, findings and recommendations, and maintain an internal record of M&E findings for staff. Oral presentations on the other hand provide a direct and concise overview of findings and allow for discussions. Fact sheets are especially effective for advocacy, conveying messages to policy makers and others who do not have the time to read longer reports.

There are various ways of disseminating M&E results to stakeholders and implementing agencies. Common methods include:

- Newsletters;
- Press releases;
- Flyers/brochures;
- Websites;
- E-mails;
- Social media.

Table 17.1: Example of a Dissemination Strategy

Target Audiences	Key Messages	Dissemination Strategies/Tools
Parliament, Office of the President, Ministers, Council of State	Easily digestible facts and figures about what has been achieved, proving change and relating it to the intervention	- Presentations - Websites and electronic reports - Media reports (newspaper, radio, TV) - Policy framework - Development plans - Formal reports - Factsheets - Town Hall meetings
MDAs, RCCs, RPCUs, MMDAs	- Key milestones achieved - Challenges - Advocate policy change, solicit resources to complete other programmes or projects - Coordination among institutions	- Presentations to staff - Feedback at staff appraisals - Organisation/institutional website - Media reports(newspaper, radio TV) - Formal reports - Policy framework - Development plans
Local communities, TAs, CSOs, Media, Development Partners, NGOs	- Increase public awareness - Key milestones achieved	- Briefing notes - Presentations to associations - Official visits - Simplified versions of development plans and formal reports - Newspapers, radio, TV - Newsletters – hard copy & electronic - Websites & electronic reports
Research and Academic Institutions, professional associations	Provide lessons	- Formal reports - Web sites & electronic reports - Policy framework - Development plan
Private sector organisations, consultants	Successful reforms	- Written reports - Executive summary briefing notes - Presentations – conferences /business - Seminars - Official visits - Simplified versions of development plans and formal reports - Media reports - Research journal papers - Case studies - Newsletters- hard copy & electronic

Adapted from NDPC, *National M&E Plan (2010-2013)*

17.4 Communication of M&E Results

Communication is an essential tool for creating and sustaining the demand for M&E results and moving relevant stakeholders to action. Communication of M&E results to stakeholders is often complex because different audiences will have different information needs. Thus, before beginning to plan how to communicate results, the following steps must be considered:

1) Identify target audiences and their information needs.
2) Collect stakeholder contact information.
3) Determine types of products that meet the audience's information needs.
4) Identify language requirements per product and audience.
5) Determine efficient forms and methods.
6) Monitor feedback and measure results of communication efforts.

All stakeholders should have the opportunity to know the progress of implementation and to respond to initial findings on outcomes, challenges and solutions. Before communicating findings, discuss draft findings with implementing partners and primary stakeholders in order to get feedback on accuracy, reach joint conclusions and agree on next steps. Once findings are agreed, communicate findings to government institutions and (if possible) donors and other primary institutions.

Media for communicating findings

Four types of media are commonly used to communicate M&E findings:

1. **Written reports** – progress report, evaluation report, PM&E report, briefs and newsletters can be produced to communicate M&E results.

2. **Oral reports** – findings can be communicated more effectively verbally than by other means. Speaking directly to a target audience provides a quicker and more flexible way to convey the message. When conducted well, face-to-face contact can lead to greater understanding and more frank discussions on the findings.

3. **Visual displays** – visual displays, such as graphs or charts showing trends or maps, help illustrate and supplement data in reports or oral presentations. Photographs or video images can also be used.

4. **Electronic communication** – access to and use of e-mail and the internet, allows rapid communication of findings to stakeholders. Information can be communicated by e-mail or by building specific websites containing links to all M&E information.

A communication strategy is essential when planning to do M&E. The strategy should identify who needs to receive the M&E results, in what format and when. Table 17.2 indicates communication tools and channels to meet the needs of specific stakeholders at different times.

Table 17.2: Communication Channels

Informal	Formal
Phone calls	Briefs
Quick faxes	Presentations
Internal correspondence	Workshop, Seminar
Gong-gong beater	Press conference
Print and electronic media	Articles in journals
	Website

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ADDITIONAL USEFUL INTERNET RESOURCES (Adapted from UNEG Report 2013)

Norms and Standards for Evaluation (Chapter Four)
- Norms for evaluation in the UN system, UNEG, 2005 (updated 2011) http://www.uneval.org/papersandpubs/documentdetail.jsp?doc_id=21
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- Competencies for evaluators; professional designation, Canadian Evaluation Society. Available at: http://www.evaluationcanada.ca/. [Accessed 29 March 2013].

International Training Programmes
1. **International Program for Development Evaluation Training (IPDET)**
   IPDET, co-sponsored by the World Bank and Carleton University, offers training annually in June in Ottawa, Canada. Options include a two-week core course, learning the fundamentals of development evaluation, followed by two weeks of optional workshops covering some 25 subject areas. (www.ipdet.org)

2. *Regional Centers for Learning on Evaluation and Results (CLEAR)*
   The centres are intended to provide demand-driven and regionally-based services for the benefit of government agencies, civil society organisations, development institutions and donors, among other clients. Services include: (i) training; (ii) advisory services and (iii) evaluation capacity building.
   - There are five CLEAR centres – see www.theclearinitiative.org.
   - Francophone Africa – Centre Africain d'Etudes Supérieures en Gestion (CESAG) in Senegal – www.cesag.sn.
   - South Asia – Abdul Latif Jameel Poverty Action Lab (J-PAL) at the Institute for Financial Management and Research in India – www.ifmr.ac.in.

Professional Associations – Evaluation Networks
- International Development Evaluation Association (IDEAS) www.ideas-global.org
- International Organisation for Cooperation in Evaluation www.ioce.net
- African Evaluation Association (AfrEA) http://www.afrea.org
- American Evaluation Association (AEA) www.eval.org
- Australasian Evaluation Society (AES) www.aes.asn.au
- Brazilian Monitoring & Evaluation Network http://redebrasileirademea.ning.com/
- Canadian Evaluation Society (CES) www.evaluationcanada.ca
- Danish Evaluation Society www.danskevalueringsselskab.dk
- Dutch Evaluation Society www.videnet.nl
- European Evaluation Society (EES) www.europeanevaluation.org
- Finnish Evaluation Society www.sayfes.fi/in+english/
- French Evaluation Society www.sfe-asso.fr/
- German Society for Evaluation Standards www.degeval.de
- Ghana Monitoring and Evaluation Forum http://www.ghmeforum.org/
- International Program Evaluation Network Russia and newly independent states)
- www.eval-net.org
- Israeli Association for Programme Evaluation www.iape.org.il
- Italian Evaluation Association www.valutazioneitaliana.it
- Japan Evaluation Society http://evaluationjp.org/english/index.html
- Malaysian Evaluation Society www.mes.org.my
- Polish Evaluation Society www.pte.org.pl
- Red de Seguimiento, Evaluación y Sistematización de América Latina y el Caribe http://noticiasrelac.ning.com/

- South African Monitoring and Evaluation Association www.samea.org.za

On-line Evaluation Resource Libraries
- My M&E- www.mymande.org
- Online Evaluation Resource Library (OERL) – www.oerl.sri.com
- WBI Capacity Development and Results – www.worldbank.org/capacitydevelopment

ANNEXES
ANNEX A: Glossary of M&E Concepts and Terms

Term	Definition
A	
Accountability	Obligation of government, public services or funding agencies to demonstrate to citizens that contracted work has been conducted in compliance with agreed rules and standards; also the obligation to report fairly and accurately on performance results vis-à-vis mandated roles and/or plans. This may require a careful, even legally defensible, demonstration that the work is consistent with the contract terms. Projects commonly focus on upward accountability to the funding agency, while downward accountability involves making accounts and plans transparent to the primary stakeholders. Ensuring accountability is one of the functions of monitoring and evaluation (learning and management are the other two).
Activity	Actions taken or work performed in a project to produce specific outputs by using inputs, such as funds, technical assistance and other types of resources.
B	
Baseline information	Information (usually consisting of facts and figures collected at the initial stages of a project) that provides a basis for measuring progress in achieving project objectives and outputs.
Benchmark	Reference point or standard against which performance or achievements can be compared. A benchmark might refer to what has been achieved in the past, by comparable organisations, or what could reasonably have been achieved in the circumstances.
Beneficiary Assessments	These focus on understanding the opinions of service users on the quality, relevance and benefits of policies, programmes and projects during and after their implementation.
E	
Effectiveness	A measure of the extent to which a project attains its objectives at the goal or purpose level; i.e. the extent to which a development intervention has attained, or is expected to attain, its relevant objectives efficiently and in a sustainable way.
Efficiency	A measure of how economically inputs (funds, expertise, time, etc.) are converted into outputs.
Evaluation	A systematic (and as objective as possible) examination of a planned, on-going or completed project. It aims to answer specific management questions and to judge the overall value of an endeavour and provide lessons learned to improve future actions, planning and decision making. Evaluations commonly seek to determine the efficiency, effectiveness, impact, sustainability and relevance of the project or organisation's objectives. An evaluation should provide information that is credible and useful, offering concrete lessons learned to help partners and funding agencies make decisions.
G	
Goal	The higher-order programme or sector objective to which a development intervention, such as a project, is intended to contribute. Thus, it is a statement of intent.
I	
Impact	The changes in the lives of people as perceived by them and their partners at the time of evaluation, plus sustainable changes in their environment to which the project has contributed. Changes can be positive or negative, intended or unintended.
Impact Assessment	Impact assessment is a generic term that includes Social, Economic and Environmental Impact Assessment (EIA) as well as Strategic Environmental Assessment (SEA). It is a comprehensive process and assessment tool used to ensure that programmes, projects and policies are economically viable, socially equitable and environmentally sustainable. Impact assessment should take into account policy impact in relation to gender equality and women's empowerment.

Indicator	A quantitative or qualitative factor or variable that provides a simple and reliable basis for assessing achievement, change or performance. A unit of information measured over time that can help show changes in a specific condition. A given goal or objective can have multiple indicators.
Information management system	A system of inputting, collating and organising data using a computer software to provide selective data and reports to assist in monitoring and controlling project organisation, resources, activities and results.
Input	The financial, human and material resources necessary to produce the intended outputs of a project.
M	
Mid-term evaluation	An external evaluation performed towards the middle of the period of implementation of the project. Its principal goal is to draw conclusions for reorienting the project strategy.
Monitoring	The regular collection and analysis of information to assist timely decision making, ensure accountability and provide the basis for evaluation and learning. It is a continuing function that uses methodical collection of data to provide management and the main stakeholders of a project or programme with early indications of progress and achievement of objectives, or shortcomings.
M&E matrix	A table describing the performance questions, information gathering requirements (including indicators), reflection and review events with stakeholders, and resources and activities required to implement a functional M&E system. This matrix lists how data will be collected, when, by whom and where.
O	
Objective	A specific statement detailing the desired accomplishments or outcomes of a project or programme at different levels (short to long term). A good objective meets the criteria of being impact oriented, measurable, time limited, specific and practical.
Outcome	The results achieved at the level of "purpose" in the objective hierarchy.
Outputs	The tangible (easily measurable, practical), immediate and intended results to be produced through sound management of the agreed inputs. Examples of outputs include goods, services or infrastructure produced by a project and meant to help realise its purpose.
P	
Participation	One or more processes in which an individual (or group) takes part in specific decision making and action, and over which s/he may exercise specific controls. It is often used to refer specifically to processes in which primary stakeholders take an active part in planning and decision making, implementation, learning and evaluation. This often has the intention of sharing control over the resources generated and responsibility for their future use.
Participatory monitoring and evaluation	A broad term for the involvement of primary and other stakeholders in monitoring and evaluation.
S	
Strategic evaluation	An evaluation of a particular issue aiming to advance a deeper understanding of the issue and reduce the range of uncertainties associated with the different options for addressing it. Strategic evaluation is done when the urgency of an issue poses high risks to stakeholders or has generated conflicting views. A study of this nature will help the parties concerned to reach an acceptable working agreement.
T	
Target	A specified objective that indicates the number, timing and location of that which is to be realised.
Thematic evaluation	This is used to assess the effectiveness of thematic policies, programmes and projects from the experiences gained during implementation of sector strategies.
V	
Validity	The extent to which something is reliable and actually measures up to or makes a correct claim. This includes data collection strategies and instruments.
Validation	The process of cross-checking to ensure that the data obtained from one monitoring method are confirmed by the data obtained from a different method.

ANNEX B: Example of Core District Indicators

	Indicator (Categorised by GPRS II Thematic Areas)	National Baseline (2005)	National Target (2009)
	PRIVATE SECTOR COMPETITIVENESS		
1.	Percentage (%) increase in yield of selected crops, livestock and fish	Maize = 0.35 Rice (milled) = 0.06 Cassava = 0.52 Yam =0.45 Pineapple = 0.10 Pawpaw = 0.07 Mango = 0.07 Banana = 0.05	0.52 1.56 0.76 0.65 0.14 0.09 0.10 0.09
2.	Proportion/length of roads maintained/rehabilitated - Trunk roads (km) - Urban roads (km) - Feeder roads (km)	 12,127 2,972 17,117	 13,260 5,173 26,913
3.	% change in number of households with access to electricity	1,313,825	Increase by 12%
4.	Hectares of degraded forest, mining, dry and wet lands rehabilitated/restored: a. Forest b. Mining c. Dry and wetland	10,000 ha (Govt/private) - Small scale: 205 ha - Large scale: N.A.	20,000 ha
5.	% increase in tourist arrivals	10%	14%
6.	Teledensity/penetration rate:	15% Fixed Line 1.7% Mobile 13.3%	30%
	HUMAN RESOURCE DEVELOPMENT		
7.	HIV/AIDS prevalence rate (% of adult population, 15-49 yrs. HIV positive)	3.4%	
8.	Maternal mortality ratio (number of deaths due to pregnancy and childbirth per 100,000 live births)	214	N/A
9.	Under-five mortality rate (number of deaths occurring between birth and exact age 5 per 1,000 live births)	111	N/A
10.	Malaria case fatality in children under 5 years per 10,000 population	2.8%	N/A
11.	Percent of population with sustainable access to safe water sources[1]	57%	60%
12.	**a.** Gross enrolment rate (the number of pupils/students at a given level of schooling – regardless of age – as proportion of the number children in the relevant age group) - Primary - JHS - SHS **b.** Net admission rate in primary schools (indicates Primary One enrolment of pupils aged 6 years)	 87.50% 72.80% 25.58% 26.20%	 99.00% 86.60% 30.90%
13.	Gender parity index (ratio between girls' and boys' enrolment rates; the balance of parity is 1.00)	KG 0.98, Primary 0.93, JSS 0.88, SSS	KG 1.00, Primary 1.00, JSS 1.00, SSS

[1] The Community Water and Sanitation Agency (CWSA) defines access to safe water to include the following elements:

1. Each person in a community has access to no less than 20 litres of water per day.
2. Walking distance to a water facility does not exceed 500 meters from the furthest house in the community.
3. Each sprout of borehole or pipe system must serve no more than 300 persons and 150 for a hand-dug well.
4. The water system is owned and managed by the community.
5. The water facility must provide potable water all year round.

	Indicator (Categorised by GPRS II Thematic Areas)	National Baseline (2005)	National Target (2009)
14.	Proportion of unemployed youth benefiting from skills/apprenticeship and entrepreneurial training	43.50%, TVET 85.90%	46.0% TVET 31.4%
	GOOD GOVERNANCE AND CIVIC RESPONSIBILITY		
15.	Total amount of internally generated revenue		
16.	Amount of Development Partner and NGO funds contribution to DMTDP implementation		
17.	% of DA expenditure within the DMTDP budget (How much of DA's expenditure was not in the annual budget?)		
18.	Number of reported cases of abuse (children, women and men)		
19.	Police-citizen ratio	1:925	1:500 (UN ratio)

ANNEX C: Proposed Programme for Preparing a Sector M&E Plan

	PLAN PREPARATION ACTIVITIES	PARTICIPANTS	KEY OUTPUTS
1.	1st meeting to map the way forward, draw up a budget and do stakeholder analysis	PPMED, Chief Director, Sector Minister, other heads of department	• **Budget for M&E plan preparation** • **Stakeholders identified and analysed**
2.	2nd meeting to assess the M&E needs and conditions in the sector	PPMED, other heads of department and representatives of key stakeholder groups	• **M&E challenges and solutions identified and discussed**
3.	Two-day workshop to select sector-specific indicators, establish baselines and targets and produce the M&E matrix	PPMED, other heads of department and representatives from stakeholder groups. It is very important to have a facilitator who is up to the task	• **Complete list of sector indicators (both core and sector-specific indicators)** • **Sector M&E matrix**
4.	Two-day workshop to develop the M&E calendar and the budget	PPMED, other heads of departments and representatives from stakeholder groups. It is very important to have a facilitator who is up to the task	• **M&E calendar (work plan)** • **M&E budget for the SMTDP**
5.	Two-day workshop to work on steps 7 to 10, evaluations and participatory M&E, i.e., how to collect, collate, validate and analyse data. How to use M&E results, and disseminate the reports, etc.	PPMED, other heads of department and representatives of stakeholder groups It is very important to have a facilitator who is up to the task	• **Write-up on steps 7,8,9 and 10** • **Write-up on evaluations and the PM&E to be carried out** • **Dissemination strategy**
6.	Collation of all reports from meetings and workshops into the draft M&E plan	Director of PPMED	• **1st Draft M&E Plan**
7.	Meeting to review 1st draft M&E Plan	PPMED, Chief Director, Sector Minister, other heads of department	• **2nd Draft M&E Plan**
8.	Meeting with a wide range of stakeholders to present the 2nd draft M&E Plan	Secretary and representatives of all stakeholder groups	• **3rd Draft M&E Plan**
9.	Public hearing on 3rd draft M&E Plan	PPMED, other heads of department and general public	• **4th Draft M&E Plan**
10	4th draft M&E Plan submitted to NDPC	Director of PPMED	• **Feedback from NDPC**
11	Comments discussed and changes made to the draft	PPMED, other heads of department and general public	• **Final M&E Draft Plan**
12	Draft submitted to Sector Minister for approval (together with the SMTDP) for submission to NDPC	Chief Director and Sector Minister	• **APPROVED SMTDP AND M&E PLAN**
13	M&E plan implementation	PPMED, other heads of department and stakeholders	• **Quarterly and Annual Progress Reports**

ANNEX D: Sample Terms of Reference for an Evaluation

Terms of Reference for the Outcome Evaluation
of the UNICEF Country Programme (1999-2009)

Introduction

UNICEF will undertake an evaluation to assess the outcomes of the 1999-2004 (Master Plan of Operation) and 2005-2009 Country Programme Action Plan (CPAP). The outcome evaluation will build upon evidence from the reviews and project evaluations conducted from 2000 to 2009.

The outcome evaluation seeks to assess UNICEF's contributions to Philippines Medium-term Development Goals. It will examine the gaps in the implementation of the fifth and sixth CPAP. The results will further inform the next round of CCA-UNDAF 2012-2016 and the formulation of the UNICEF Country Programme Document (CPD).

Background:

The country programme has been implementing a format of the Child-Friendly Movement (integrated/multi-sectoral approach) in 19 provinces and 5 cities, along with more general support to national programmes since 1999, CPC 5. The programme comes to an end at December 2009, and so this would now be an important opportunity to evaluate what results have been achieved over a ten-year period of similar programme format. Although, there has been an evaluation of CPC 5 (1999-2003), it has been of limited scope. This is why it is now being proposed to evaluate CPC 5 and 6.

At mid-term CPC 6 in 2007, an attempt was made to evaluate the Child-Friendly Movement as a programme delivery vehicle, as well as assessing processes and results on capacity building and completing individual programme-specific studies which would feed into technical evaluations at mid-term. The studies and evaluations reached the expected standards. However, the Child-Friendly Movement report explicitly mentions that more time would have been required for a thorough analysis on the results actually achieved.

By 2009, a decision was also reached to extend CPC 6 by two years (2010-2011) to synchronise the timeframe of UN Country Programme with that of Philippine medium-term planning.

Based on the above, it is proposed to conduct an outcome evaluation to arrive at a comprehensive report covering results achieved in both CPC 5 and 6 with the Child-Friendly Movement.

Country Programme Action Plan (2005-2009)[i]

In 2005, the Government of the Philippines (GoP) and the United Nations Children's Fund (UNICEF) signed a cooperation agreement called the Sixth Country Programme for Children (CPC 6). CPC 6 runs from 2005 to 2009. This integrated multi-sectoral programme provides interventions in 24 focus local government units (LGU) and supports the child rights-based policy advocacy and social services delivery systems of the national government. It has six components, namely Health and Nutrition, Education, Child Protection, HIV and AIDS, Communication, Social Policy and Local Development.

The aim of CPC 6 is to reduce the gap between the focus areas and the rest of the country in the performance on key child rights indicators. CPC 6 uses the Child-Friendly Movement (CFM) as a conceptual framework in promoting the rights of children and women and pursuing disparity reduction in the most disadvantaged communities. Specific strategic results, outcomes and outputs were identified at the start of the CPC 6 in the Country Programme Action Plan (CPAP). CPC 6 was designed to promote the Child-Friendly Movement (CFM). The CFM is intended to be a social movement for the realisation and protection of the rights of children. It puts children at the centre of any development undertaking. CPC 6, therefore, contributes to the progress of the Child-Friendly Movement in the Philippines.

There are six programme components of the sixth country programme action plan to address children rights and well-being with the following goals[ii]:

1. By the end of 2009, 40 percent of residents in the focus areas have a basic understanding of the Convention on the Rights of the Child (CRC), and all policy and decision makers in the focus areas commit to create a safe, healthy, and protective environment for and with all children, especially those in the poorest communities.
2. By 2009, infant and under-five mortality rates in the focus areas are reduced by 30 percent; child and maternal under-nutrition by 20 percent from 2005 levels. The Health and Nutrition programme aims to achieve full immunisation coverage of over 90 percent and universal salt iodisation coverage by 2006, reduce rates of low birth weight, stunting, and maternal anaemia by 20 percent, and increase the exclusive breastfeeding rate up to six months and the proportion of births attended by skilled health personnel by 30 percent. The programme set that by 2007, disparities in the health and nutrition situation of children and women between the focus areas and the rest of the country would be reduced by 20 percent.
3. By 2009, in the focus areas, 70 percent of children (3-5 years old) have access to quality early childhood care and development (ECCD) services, 92 percent of children (6-11 years old) attend primary school, at least 77 percent of schoolchildren complete Grade 6 and at least 80 percent attain a 65 percent mastery level of learning competencies. By 2009, the child-friendly school system (CFSS) will benefit 225 high schools.
4. By 2009, 80 percent of the most at-risk children and youth in the focus areas are empowered to protect themselves from HIV and other risk factors for HIV infection.
5. By 2009, the number of identified children in need of special protection in the most disadvantaged communities in the CPC 6 focus areas who are provided a protective environment through centre-based and community-based preventive actions and early interventions, rescue, healing, and recovery services and legal protection is significantly increased. This goal is embodied in the following outcomes:
   a. The rights of children and women are respected and better protected through a functional child-sensitive and gender-sensitive legal protection and justice system in all CPC6 areas;
   b. The risk of child abuse, exploitation, and trafficking in CPC 6 areas is reduced due to preventive and protective services provided to children, families, and communities;
   c. Children in CPC 6 areas enjoy a more protective environment supported by functional local structures in at least 50 per cent of Barangays as well as 95 NGOs, Faith-Based Organisations (FBOs), and People's Organisations (POs);
   d. The risk of child abuse, exploitation, and trafficking in CPC6 areas is reduced due to preventive and protective services provided to children, families, and communities;
   e. The number of girls and boys affected by armed conflict in CPC6 areas who receive special protection and are provided with basic and emergency social services will double to an estimated 80 per cent and the number of child soldiers who are demobilised nationwide increase by at least 300.
6. By 2009, all CPC focus areas and at least 70 per cent of non-focus areas have manifested increased investments in children's programs; improved capacity for, and actual enactment of, child-friendly laws, policies, and programs; and commitment to monitor and actually prepare annual reports on the situation of children.

However, all of these goals were reviewed during the mid-term review exercise conducted in 2007, and some of these goals were revised (which will be provided to the consultant during literature review stage of the evaluation) and the following recommendations were provided:

a) Re-brand the Child-Friendly Movement as child rights movement by creating CFM brand and CFM child rights watch system;
b) Mainstream human rights-based approach to programming and results based management;
c) Strengthen the disparity reduction strategy ;
d) Develop a health and nutrition policy framework;
e) Prepare a more strategic agenda for education;
f) Launch a systems-based approach on child protection; and
g) Create a social policy programme.

Overall objective:

The overall objective of the evaluation is to assess the results obtained in the frame of the CPAP 1999 – 2003 and 2005-2009 and to capture lessons learned to inform the new country programme (2012-2016). The evaluation will aim at distilling lessons learned for future programme design in the context of achieving MDGs in Philippines.

Specific objectives:
The objectives of this outcome evaluation are to:
1. Assess the relevance, effectiveness, efficiency, and sustainability of the programme and of the results achieved.
2. Assess the progress that has been made towards the attainment of the results at the outcome level against benchmarks, as outlined in the CPAP.
3. Assess key UNICEF contributions to the attainment of the results at the outcome level and identify key challenges and lessons learned.
4. Assess the extent to which results are sustainable at the relevant levels (provincial, barangay and communities,) and their replicability within the national extent and especially in support of the decentralisation strategies;
5. Assess UNICEF partnership strategy with bilateral donors, international aid agencies and private sector in relation to the outcomes.

Key questions to guide the evaluation process

Relevance:
- To what extent was the country programme design (1999-2004 and 2005-2009) relevant given the country context, priorities and needs, and UNICEF's niche?
- To what extent are the outcomes selected for CPC 6 relevant given the country context, priorities and needs, and UNICEF's niche?
- What conclusions and recommendations should be drawn in terms of the relevance of the country programme design for the preparation of the next country programme?

Effectiveness:
- Have the results stated at the outcome level in the CPAP been achieved or has progress been made towards their achievement?
- What factors (political, sociological, economic, etc.) have affected the outcomes, either positively or negatively?
- How have these factors limited or facilitated progress towards the outcomes?
- What were the key outputs produced by UNICEF that contributed to the outcomes?
- Were the outputs produced by UNICEF relevant to the outcomes?
- What were the quantity, quality and timeliness of outputs? What factors impeded or facilitated the production of such outputs?
- What results were achieved related to policy advice, dialogue and advocacy and laws in relation to the well-being of children and women through UNICEF assistance?
- To what extent did the evaluations and studies support the decision-making process of the projects and programmes and the country programme, specifically the MTR and the Programme Performance Assessment?
- To what extent were UNICEF-assisted capacity-building initiatives in the focus areas effective in building the knowledge and skills of the participants?
- To what extent were supplies provided during the country programme (2005-2009) under different programs relevant to the beneficiaries' need?
- To what extent were supplies used/utilised by the beneficiaries?
- To what extent did UNICEF respond effectively to emergencies during the last two years (measured against the benchmarks set in the Core Commitment for Children (CCC) and the Global Cluster Initiative)?
- What conclusions and recommendations should be drawn in terms of the effectiveness of the country programme design for the preparation of the next country programme?

Efficiency:
- What were the benefits obtained in comparison to the costs?

- Could alternative strategies be implemented to reduce costs in relation to the outcomes?
- What was the cost of producing the outcomes and how did they compare to UNICEF benchmarks in the region? (This exercise will be done for some outcomes specifically related to health and education).
- What conclusions and recommendations should be drawn in terms of the efficiency of the country programme design for the preparation of the next country programme?

Sustainability:
- To what extent are outcomes sustainable at the relevant levels (communities, mid- or high-level institutions)?
- To what extent have outcomes and outputs been replicated (which were aimed for replication) within the national context and especially in support of the decentralisation strategies? If so, by whom? If not, what are the realistic prospects of doing so?
- To what extent was a specific exit strategy prepared and agreed upon by key partners to ensure post-country programme sustainability specifically in the areas where UNICEF will not work?
- What was the partnership strategy adopted by UNICEF in pursuing the outcomes and was it effective and sustainable?
- What conclusions and recommendations should be drawn in terms of the sustainability of the country programme design for the preparation of the next country programme

Methodology:

The evaluation will take into account evaluation norms and standards commonly used by the OECD and DAC criteria to ensure utility. Programme sections will report the results against the established results framework for CPC 5 and 6. The researchers will evaluate the development of the results and correlate with baseline data established.

1. A desk review will be conducted of all available studies and reports from the MTR exercise and from the programme-specific studies/evaluations. In addition, a complete set of donor reports will be included for the desk review.
2. Programme Performance Assessment recommendations will be reviewed.
3. From the desk review, the researchers will determine what field work and process will be needed to be able to evaluate the sectoral reports against results, to address any gaps seen from the desk review and to complete the study of the Child-Friendly Movement.
4. The final report will be presented to UNICEF and to the national steering committee established to oversee the evaluation.

Timeline for evaluation

Activity	Timeframe	Responsible party
Desk review of existing and relevant documents	October – last two weeks November – first week	Evaluation team
Development of an inception report, including the outcome evaluation design, detailed methodology, study questions, scope and work plan	November – second week	Evaluation team
Debriefing with UNICEF CMT and steering committee on inception report	November – second week	Evaluation team and UNICEF CMT
Fieldwork as per the methodology	November – last two weeks December – first two weeks January – two weeks Total – six weeks	Evaluation team
Drafting of outcome evaluation report	January – fourth week February – first week	Evaluation team
Debriefing with UNICEF CMT on initial results	February – second week	Evaluation team and UNICEF CMT
Finalisation of outcome evaluation report (incorporation of comments)	February – last week March – first two weeks	Evaluation team
Submission of the final outcome evaluation report	March 15, 2010	Evaluation team

Team Composition

The evaluation will be carried out by a team of consultants with experience in carrying out outcome-based evaluations at the country level with a multidisciplinary background. UNICEF will provide the local consultant for the team in consultation with the National Economic Development Authority (NEDA) Philippines.

The team leader will have the following responsibilities:
- Ensure the technical quality of the evaluation;
- Play a lead role in the development of the inception report including, among other things: manuals, questionnaires, guidelines for focus group discussions and in-depth interviews;
- Conduct appropriate preparations for all aspects of field work, including recruitment, supervision and distribution of materials, so that field work and other survey activities are undertaken in accordance with the work plan and budgetary allocations;
- Analyse and write the quantitative and qualitative data reports, and prepare a presentation / dissemination of the draft report to the steering committee;
- Disseminate results to the stakeholders;
- Draft the management response to the evaluation recommendations.

General

Other team members will be required:

i. To examine the impact of the implementation of the 5th and 6th Country Programme based on established outcomes /indicators using the results framework of the country programme as the reference point;

ii. To critically examine the implementation of the 5th and 6th programme cycle of UNICEF support to the Government of Philippines, and based on the findings, to distil lessons learned and make recommendations on the development of the 7th UNICEF Country Programme Document/Country Programme Action Plan (CPAP);

iii. To discuss the findings and recommendations and the management response with the UNICEF country management team and the steering committee.

Management of the Evaluation

The evaluation will be managed by UNICEF. The lead consultant will however be expected to work in close collaboration with all the implementing partners of the 5th and 6th Country Programme.

A steering committee consisting of UNICEF and relevant stakeholders will be assembled to oversee the evaluation process. One of the major tasks of the committee will be to review the study instruments designed by the consultant, and to provide quality assurance to the entire process. Specific tasks will include:
- Reviewing and approving the inception report of the consultants;
- Agreeing on the proposed study methodology and assessment tools;
- Receiving and monitoring progress of the evaluation;
- Approving the final evaluation report; and
- Discussing and providing follow up to the management response.

Duration of the Assignment

The consultancy will be approximately 95 working days, from the date of signing the contract which is anticipated to be September 15 2009.

Deliverables / Expected Outputs

Deliverables	Due dates
Inception report including the outcome evaluation design, detailed methodology, study questions, scope and work plan	26th October, 2009
Presentation to CMT and Steering Committee	30th October, 2009

Finalisation of the outcome evaluation design, methodology and work plan (incorporation of comments)	3rd November, 2009
First field progress report (format will be provided)	20th November, 2009
Second field progress report (format will be provided)	15th December, 2009
First draft evaluation report (format will be provided)	25th January, 2009
Debriefing on the results	29th January, 2009
Second draft evaluation report	15th February, 2010
Final evaluation report (format will be provided)	27th February, 2010

Budget

The consultant will submit a technical and financial proposal detailing the methodology and cost of the consultancy.

Selected documents to be studied by the Evaluation Team

The evaluation team should study and make reference to the following documents during the conduct of the outcome evaluation:

1. United Nations Common Country Assessment (CCA) for the Philippines.
2. United Nations Development Assistance Framework (UNDAF) for the Philippines
3. (2005-2009).
4. UNICEF and GOP Country Programme for Children 5 Master Plan of Operation (1999-2003).
5. UNICEF and GOP Country Programme Action Plan (2005-2009).
6. UNICEF Results Framework (2005 -2009).
7. Sixth Country Programme for Children (2005-2009) *Mid-Term Review*, Philippines, October 2007.
8. UNICEF Philippines Donor Reporting documents (1999-2009).
9. UNICEF project documents, project monitoring reports, project evaluation reports, and terminal reports.
10. UNDP National Human Development Reports for the Philippines.
11. Philippine MDG Progress Reports (2003, 2005, mid-term, sub-national).
12. Medium-Term Philippine Development Plan (2004-2010) and other key national policies, strategies, and plans related to the outcome and other documents and materials related to the outcome (e.g. government and donors)

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i Adapted from the Country Program Action Plan between the Government of the Republic of the Philippines and the United Nations Children's Fund

ii Sixth Country Programme for Children (2005-2009) MID-TERM REVIEW, Philippines, October 2007