

Project Monitoring PMG333

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Lecture 02: Part(2)
Norms, standards
and management
for monitoring and
evaluation



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General Introduction

**«My favorite project? It's
the next one».
Frank Lloyd Wright**

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3. 2.The components of a project monitoring and evaluation system

A sound project M&E system requires six main components which together help to ensure that M&E is relevant to the project, within the capacity of the project management organisation, and is used to good effect. Each is considered briefly below.

Session 1: General introduction

(1) Clear statements of measurable objectives for the project and its components

- Projects are designed **to contribute to long-term sectoral development goals**, but at the level of project purpose their outcomes should be quite **specific and complete**.
- **Objectives** at the level of project purpose should be specific to the project interventions, **realistic in the timeframe for their implementation** and **measurable for evaluation**.

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(2) A structured set of indicators covering: inputs, process, outputs, outcomes, impact, and exogenous factors.

Indicators provide the **qualitative and quantitative** detail necessary **to monitor and evaluate progress and achievements at all levels of the project hierarchy.**

The ability to define **an indicator**, and agree with partners and stakeholders a target and the timing for its achievement, is a demonstration **that project objectives are clearly stated, and are understood and supported.**

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A logical structure for project monitoring and evaluation indicators

Logic	Indicators	Nature of the indicators	
Goal	Impact	Long-term statistical evidence	Exogenous indicators
Purpose	Outcomes	Social and economic surveys of project effects and outcomes	
Outputs	Output	Management observation, records, and internal reporting.	
Activities	Process	Task management of processes.	
Inputs	Input	Financial accounts Management records of inventories and usage.	

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2.1- Input indicators

- *are quantified and time-bound statements of the resources financed by the project, and are usually monitored by routine accounting and management records. They are mainly used by managers closest to implementation, and are consulted frequently (daily or weekly).*

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2.2- Process indicators

- *Monitor the activities completed during implementation, and are often specified as milestones or completion of sub-contracted tasks, as set out in time- scaled work schedules. One of the best process indicators is often to closely monitor the project's procurement processes.*

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2.3- Output indicators

- *Monitor the production of goods and delivery of services by the project. They are often evaluated and reported with the use of performance measures based on cost or operational ratios.*
- *The indicators for inputs, activities and outputs, and the systems used for data collection, recording and reporting are sometimes collectively referred to as the project physical and financial monitoring system, or management information system (MIS).*

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2.4- Outcome indicators

- *Are specific to a project's purpose and the logical chain of cause and effect that underlies its design. Often achievement of outcomes will depend at least in part on the actions of beneficiaries in responding to project outputs, and indicators will depend on data collected from beneficiaries, eg change in crop yields or cropping pattern, and investment by farmers in land management improvements.*

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2.5- Impact indicators

- *refer to medium or long-term developmental change to which the project is expected to contribute. Dealing with the effects of project outcomes on beneficiaries, measures of change often involve statistics concerning economic or social welfare, collected either from existing regional or sectoral statistics or through relatively demanding surveys of beneficiaries.*

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2.6- Exogenous indicators

- *Are those that cover factors outside the control of the project but which might affect its outcome, including risks (parameters identified during project design that might compromise project benefits) and the performance of the sector in which the project operates. Use of logical framework analysis for project design will guide the identification of exogenous indicators to match the key assumptions made about necessary external conditions at each level of the logical hierarchy*

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(3)Data collection mechanisms capable of recording progress over time, including baselines and a means to compare progress and achievements against targets.

Within project M&E systems there will be a need **to collect information of the baseline situation and for measurement of change** over time for the indicators selected. It is vital to think about **the sources of data, the reliability of that information and the costs and responsibilities.**

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Potential problems with secondary data can arise in a number of ways.

- ☐ Incomplete coverage of the specific project area,
- ☐ Inability to disaggregate the data to match the boundaries of the project area or sub-areas,
- Inability to disaggregate the data to match the project affected population or sub- groups,
- Inconsistencies in data collection in surveys implemented in different areas,
- ☐ Inaccuracies arising from inappropriate choice of measurement and collection methods or inadequate training and supervision of data collection staff

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- Data collection will incur costs of staff time and other resources, whilst excessive collection of unnecessary data will slow down processes of analysis and reporting, and may lead to a failure to communicate clear messages.
- Thus it is *important* to collect only the data that will be used effectively to improve management and decision-making.

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It is important to think about the following aspects when planning data collection:

- ☐ **What** – the data to be collected, in what form, with what degree of aggregation or consolidation, and for what purpose.
- ☐ **When** – the frequency of data collection and reporting.
- ☐ **Who** – the responsible persons, their responsibilities and capacities.
- ☐ **How** - methods and procedures for data collection, checking, validation and storage, and for analysis and reporting.
- ☐ **Where** – locations for data collection and processing, and the destinations for reported information.

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✓ Bio-physical measurements

- Measurements of **physical change over time.**
- Selected methods need to be adapted to local conditions, skills and resources, and it may be necessary to seek a **compromise** between **local capacities and technological appropriateness** and the achievable level of scientific

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✓ Sampling methods

The following will be needed to achieve a representative sample and valid and reliable results for the project area, system or target population.

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- **Clarification** and accurate listing of the sampling frame: a listing of the sampling units that make up the population to be studied.

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✓ Formal surveys

- A typical formal survey involves taking a range of measurements or observations from a relatively large sample.
- Surveys are commonly used at **the start and end of a project**, to gather **baseline information and compare outcomes to targets**. A survey can also be carried out as part of a mid-term review, to monitor progress and adapt project implementation as needed.

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✓ Semi-structured interviews

- This data collection technique **is commonly used in informal surveys** and typically involves a relatively small and non-random sample.
- It is used to gain information from an individual or a small group, using a series of broad questions to guide the conversations, but allowing for new questions to arise as a result of the discussion

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✓ Key informant interviews

- ✓ Key informants can be **an important source of information for project M&E.**
- ✓ Questioning is generally semi-structured and open-ended but can make use of structured close-ended questionnaires.
- ✓ Key informants will be **a small and purposively selected sample**, chosen because of their particular knowledge and position.
- ✓ The selection of informants **should adequately represent possibly diverse viewpoints and concerns**, and should be sensitive to gender or other sources of bias
- ✓ Community meetings take the form **of public meetings with a larger group**. When used for the purpose of gathering project M&E information, they should be **based on an interview guide or checklist and facilitated by an interdisciplinary team** rather than a single interviewer.

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✓ Focus group interviews

- ✓ Discussion with **selected groups** that are familiar with pertinent issues is another technique that can be used to explore issues and processes, and to clarify details and gather opinions, before designing a formal and structured survey.
- ✓ Focus groups **are particularly useful for assessing opinions of change** and the causes of change, and the quality of project services, and for identifying areas that need improvement.

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✓ Rapid Appraisal (RA)

- RRA can be described as **a systematic but semi-structured research activity carried out by a multidisciplinary team over a relatively short period of time.**
- It can involve a range of informal data collection techniques such as semi-structured interviews, transect walks, mapping, and wealth and matrix ranking.
- It can be used as part of the project M&E system, either at appraisal **to gather baseline information and help improve project design.**

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✓ Participatory Appraisal (PA)

- PA uses a similar array of data collection methods to RRA but places greater emphasis on the participation of local people in identifying the issues to be investigated and in the collection and analysis of data.
- Such approaches should be integral to participatory approaches to project management and implementation.

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✓ Direct observation

- This method involves structured observation of an activity, behaviour, relationship, phenomenon, network, or process in the field.
- It can be used to understand the context in which M&E data are collected, and help explain M&E results.
- Phenomena and processes can be studied in their natural setting and a holistic understanding gained.

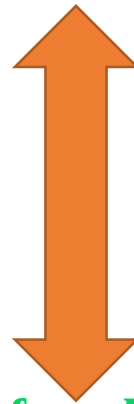
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✓ **Written documents analysis and review of programme records**

- This method involves reviewing project documents and records such as administrative databases, training materials, correspondence and routine progress reports.
- It can be very useful *in identifying issues to investigate further and provide evidence of action, change, and impact, to support respondents' perceptions.*

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(4)Where applicable, building on data collection with an evaluation framework and methodology capable of establishing causation (attribution).



- As a continuously available mode of analysis for project managers ongoing evaluation can be used to address the following key questions:

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- ☐ ☐ Is the response of the targeted populations as anticipated and satisfactory?
- ☐ ☐ What are the effects of the project on agricultural and other rural products?
- ☐ ☐ Are there any unanticipated effects, positive or negative, for the project or in relation to its wider environment?
- ☐ ☐ Can the causes of all observed changes be discerned and established with evidence?
- ☐ ☐ Does the logic of the intervention model of the project remain valid (ie is it the right design)?
- ☐ Are any ad hoc special or diagnostic studies needed to help answer any of these questions?

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✓ Experimental designs (randomisation)

- These are considered **the most robust of the evaluation methodologies** and require a randomised selection of the target population as part of the project design.
- A random selection into treatment and control groups is made within a defined area and population.
- There is no difference between the two groups besides the fact that the treatment group have access to or are influenced by the project or programme

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✓ Non-experimental or quasi-experimental designs

- These techniques generate comparison groups that resemble the treatment group, at least in observed characteristics, through use of **econometric methods**.
- Their main benefits are that they can draw on existing data sources and can be performed after a project has been implemented.
- Their principal disadvantages are that the reliability of the results is often reduced as the methodology is less robust statistically and the methods required can be statistically complex.

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✓ Qualitative methods

- These techniques often provide **critical insights** into beneficiaries' perspectives, the value of programs to beneficiaries, the processes that may have affected outcomes and a deeper interpretation of results observed using quantitative analysis.
- Because **measuring the counterfactual** is at the core of impact analysis techniques, qualitative designs have generally been used in conjunction with other evaluation techniques.

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✓ Integrating quantitative and qualitative methods

- Integrating **quantitative and qualitative evaluations** can often be the **best approach** to meet a project's information needs.
- In combining the two approaches, qualitative methods can be used **to inform the key impact evaluation questions**, improve the questionnaire or the stratification of the quantitative sample, and analyse the social, economic, and political context within which a project takes place,
- Quantitative methods **can be used to inform qualitative data collection strategies**, to inform on the extent to which the results observed in the qualitative work can be generalised to a larger population.

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(5) Clear mechanisms for reporting and use of M&E results in decision- making.

- **A good flow of information** is also closely linked to the development of accountability within the project, sector, government, and donor.
- The highest payoffs to evaluation arise at the policy and programme level, but project-level evaluation offers an easier and less sensitive starting point in many instances.
- Information from monitoring and evaluation can be used to demonstrate accountability and to promote knowledge transfers and adaptive learning in government agencies and other organisations.

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(6) Sustainable organisational arrangements for data collection, management, analysis and reporting.

- In terms of organisational arrangements there **is no single correct way to build a project M&E system.**
- Projects ***vary in their characteristics and requirements***, and countries and organisations are at different stages of development with respect to good public management practices in general, and M&E in particular. It is also important **to recognise that M&E systems are continuous works in progress** that must **be flexible and adaptable to changing needs and circumstances.**

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- **Logical framework analysis** indicates that project management will need to develop systems to provide information at all levels, from basic operational inventories and accounting through to generation of statistics about outcomes and impact.
- Building on the concept of a structured set of indicators, the table below shows **the typical nature and location of responsibility for M&E components at each level.**

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Organisation of project monitoring and evaluation

Objectives	Indicators	M&E components	Responsibility for M&E
Goal	Impact	Long term statistical evidence of project impact Exogenous indicators for risk factors and unanticipated wider environmental and social impacts	National or sectoral agencies and/or independent specialists
Purpose	Outcomes	Socioeconomic surveys M&E of leading indicators Diagnostic studies	Project management and/or independent specialists
Outputs	Output	MIS for physical and financial monitoring M&E components	Project staff
Activities	Process		
Inputs	Input		

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3.3- Participatory project monitoring and evaluation

- It has been recognised that there is **an increased need to engage in direct dialogue with stakeholders** involved in development projects..
- One critical dimension of this engagement is to involve stakeholders in the monitoring and evaluation of project activities, outputs and outcomes.
 - **Participatory monitoring and evaluation** is a process of collaborative problem-solving through the generation and use of knowledge, and through corrective action based on shared decision-making involving all stakeholders. Its key principles are:
 - local people are active participants – not just sources of information

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3.4-Learning and M&E systems

- Learning and ‘**lesson learning**’ have become common parlance in development. So why is this and what exactly do we mean by ‘**learning**’?
- Models of experiential learning typically comprise four dimensions of learning: having an experience; reflecting on that experience; conceptualising from the experience; and then testing out new ideas/concepts which lead to a new experience

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CARE and reflective practice

- Having asked a question that begs an answer, and designed a plan for collecting that information, staff need to reflect on their experiences and ask such questions as:

What were the anticipated effects?

Were there some unanticipated effects?

What have we learned from this?

What might we have to relearn or unlearn in our work?

What are our next steps?

Summary Session 1/2

Understanding and designing project monitoring and evaluation systems can be informed by the concepts and method of logical framework analysis. This provides the means to structure indicators and the organisation of all monitoring and evaluation activities. The steps involved in planning and implementation of a project M&E system are relatively straightforward, but the challenges arise in determination of the right balance of approaches and methods to be used.

- The approaches for data collection, evaluation and reporting that are selected must be well tailored to a project's characteristics and to local conditions and capacities. It is important to understand monitoring and evaluation as an essential part of good management, and one that requires acceptance of the notion of learning and of the creation of a learning environment.

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Thank You

