

# PROJECT M&E SYSTEMS



A project monitoring and evaluation (M&E) system covers all the work carried out during or after a project to define, select, collect, analyse and use information. It is where everything comes together, from the initial selection of objectives and indicators through to the final evaluation of a project. M&E systems in straightforward, timebound projects typically contain a number of common elements.

CSOs implement many different types of development interventions. These range from straightforward, timebound projects, based in a single location, through to international programmes of work, based in multiple countries and sectors. Most development interventions are expected to operate monitoring and evaluation (M&E) systems.

Different types of development intervention require different kinds of M&E system. This paper is primarily concerned with M&E systems for timebound projects and simple programmes. For the sake of convenience, these are called project M&E systems within this paper. M&E systems for more complex interventions are covered in a separate paper in this section of the M&E Universe.

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A project M&E system usually covers at least some of the elements described below. Some of these elements (e.g. indicators, baselines) are always considered part of an M&E system. Other elements, such as planning or learning processes, may be considered as part of a wider PME (planning monitoring and evaluation) or MEL (monitoring, evaluation and learning) system.

## Elements of an M&E system



A project M&E system requires a **context**. This means defining key features of the system such as its scope and purpose, or key principles which will govern its operation.

### **Purpose**

A project M&E system should be designed to serve a specific purpose or set of purposes. This almost always includes providing information for basic project management. Other major purposes may include learning and/or demonstrating accountability to different stakeholders. Project M&E systems may also be designed to provide evidence for advocacy or policy influencing work; enable supervision and control of staff or resources; support resource allocation; enhance communication between different stakeholders; support marketing or fundraising; or enhance the empowerment of different stakeholders.

### **Principles**

Many project M&E systems are based around a set of principles which govern how the systems should be designed and implemented. Principles typically include guidelines on issues such as ethics, transparency, gender awareness, the incorporation of rights-based approaches, or any other core principle considered important by the organisation implementing the project.

### **Participation**

The participation of different stakeholder groups may be covered under 'principles'. But even if a project M&E system is not based around a set of principles it is almost always important to clarify at the start who should be involved in planning, monitoring and evaluation, and how they should be involved. This means assessing what type of participation is desirable, and what is feasible. Sometimes, different stakeholder groups are involved in an M&E system because it results in better information being generated and analysed. Sometimes it is because it would be useful for them, or because it is accepted that they have the right to be involved.



A key question for any project M&E system is ‘*what do we need to know in order to monitor and evaluate the project?*’ **Information selection** is normally considered during the design and planning stages of a project. It covers a range of processes from developing plans, through to setting objectives, indicators and questions. Note that although information is often selected at the start, it is also considered good practice to refine, adjust and adapt plans, objectives, indicators and questions as needed over the course of a project.

***Theory of Change***

Some projects begin with the development of a theory of change. A theory of change sets out a pathway of desired changes in relation to a target group or issue, which may later be used as a basis for M&E. Common elements of a theory of change include a description of how change happens in a particular context, clarification of a project’s role in contributing to change, and the definition of critical, underlying assumptions.

***Project plan***

Most projects develop a formal plan at the start. A plan is usually a written document that describes the problems, challenges or opportunities a project will attempt to address, potential solutions, and activities designed to contribute to any desired changes. In many cases a project plan also contains information on how M&E will be conducted throughout the project. The way in which a plan is developed, and the content of the plan, often has implications for how monitoring and evaluation is carried out later on.

***Objectives***

Most projects develop a set of objectives. These can be set at different levels, covering the activities to be carried out, the products or services intended to be delivered, the initial hoped-for changes that will be directly influenced by the project, and the longer-term changes to which the project seeks to contribute.

***Indicators***

Most projects also develop indicators at the start. Indicators are the evidence which will help establish whether a project has done what it planned to, and whether (or how far) the desired changes have taken place. Indicators are normally reported in terms of numbers (statistics, graphs, tables, etc.) or words (narratives, stories, explanations).

***Questions***

Sometimes, monitoring, evaluation or learning questions are defined as an alternative or supplement to indicators. These are questions that a project hopes to answer through its M&E system. Questions may relate to the changes brought about by the project, the processes used to bring about those changes, or any other relevant issue.

***Activity plan***

Many projects develop activity plans with associated budgets. These detail the precise activities that are intended to be carried out over the course of the project.

***Risks and assumptions***

Some projects develop a set of risks or assumptions, often contained within a risk register or log. These cover a set of concerns that might throw a project off course, and therefore need to be monitored over its lifetime.

***Results framework***

Many projects develop results frameworks that capture all the required information needed to monitor and evaluate a project – objectives, indicators, questions, activities, risks and assumptions – in one place. Results frameworks may also contain milestones and targets. The most commonly used results framework at project level is the logical framework. However, other types of results framework may also be used.



**Collection of information** normally happens throughout a project. This is partly to ensure that the project remains on track, and partly to assess progress towards stated objectives, as well as identify unexpected changes. Some collection methods may be defined at the start of a project, but others may evolve as the project continues. Information is often collected on pre-defined objectives, indicators and questions, but may also cover unexpected and/or negative change.

***Tools and methodologies for collecting data***

Many different kinds of tools and methodologies can be used to collect information. These range from simple tools such as interviews, observation and photography through to more complex methodologies of data collection and analysis such as the Most Significant Change (MSC) technique or Participatory

Learning and Action (PLA) methods. Projects often employ a combination of different tools and methodologies.

**Templates and forms**

Most projects develop simple templates or forms, used to record formal and informal information on an ongoing basis. Templates can be used to record facts based on defined, quantitative indicators. These are often used to generate statistical data. But templates can also be a good way of recording qualitative information such as perceptions, opinions and observations over the course of a project.

**Baselines**

Many projects develop a baseline. Baselines are carried out at (or near) the start of a project, and are designed to establish a starting point so change can be assessed at a later stage. Project baselines can range from simple exercises based primarily on existing knowledge through to large and expensive surveys. They often involve the collection of information on a project's defined objectives and/or indicators.

**Control or comparison groups**

Some projects also establish control or comparison groups so that changes in their circumstances can be compared with those in targeted populations. Control or comparison groups include people that are similar to targeted beneficiaries, but who do not receive the same project services. Control or comparison groups are often used alongside baselines, and are a necessary part of some complex methods of data collection and analysis, such as quasi-experimental methods.

**Sampling methodologies**

Smaller projects often capture information on all targeted beneficiaries. However, larger projects may use quantitative sampling methods to infer change over wider populations. This means using an approved sampling methodology to generate assumptions about widespread change, based on measured change amongst a smaller number of beneficiaries. Qualitative sampling methodologies may also be used in some projects.



Most project M&E systems contain processes designed to **analyse information**, in order to make sense of information collected throughout a project, or afterwards. Much of this analysis may be straightforward, designed primarily to highlight deviation from plans or budgets.

**Quantitative and qualitative forms of analysis**

Sometimes, more structured methods of quantitative or qualitative data analysis might be used to assess change within targeted populations, or generate useful lessons. This often needs to be established at the start of a project, as baseline information may be required. Some methods of data collection (such as interviews or focus group discussions) can be analysed in many different ways. More complex methodologies, such as Randomised Control Trials (RCTs) or Qualitative Comparative Analysis (QCA) require specific analysis methods to be used.

**Learning mechanisms**

Project M&E systems often include learning mechanisms. These are developed so that project staff and/or beneficiaries can generate, share and apply lessons from within the project. Learning mechanisms can range from simple team meetings to more structured review and sensemaking sessions, where different stakeholders come together to make sense of existing information and agree appropriate action.



Every project M&E system should consider at the start how it intends to **use information**. Common usages include taking stock of progress, adjusting activities, changing plans, informing future project design, sharing learning more widely, or reporting to different stakeholders.

**Reporting**

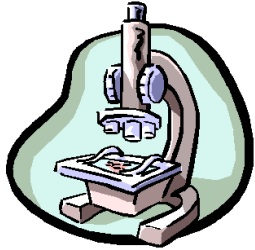
Most projects generate reports to different stakeholders at different times. Some reports are designed for internal actors, and some for external stakeholders. Reports can range from simple activity and budget reports through to reports on project changes and lessons learned. Many projects contain a reporting schedule, designed to cover the different reports needed throughout the course of the project.

**Methods of communication**

A key issue for most M&E systems is how, and to whom, the project will communicate information. Information may be communicated to different stakeholders in a variety of different ways, depending on the audience and purpose. Communication methods include written reports, audio-visual materials, face-to-face contact, use of the creative arts and social media.

**Decision-making mechanisms**

Some project M&E systems include formal mechanisms through which M&E findings can be used to influence decision-making. This can include regular meetings, as well as the submission of formal reports with recommendations.



Some projects are required to have a formal **evaluation** at the end, or partway through, especially if they are funded through external donors. Other projects choose to conduct an evaluation, using their own M&E resources. Many projects are never evaluated.

**Evaluation**

A formal evaluation may be conducted by internal project staff, but is usually facilitated by external people who can give an unbiased opinion of what has changed because of a project or programme, and what work has gone well or badly. Evaluations are often most effective when planned right from the start of a project or programme. There are many different types of evaluation, designed to achieve different purposes.

**Reviews**

Many projects rely instead on formal reviews, which can be facilitated internally or externally, and may include project team members, targeted populations and/or wider stakeholders.

**Impact assessment**

Some projects carry out impact assessments, designed to assess the long-term, sustainable changes brought about by the project. This may or may not form part of an evaluation or formal review. Impact assessments can be conducted during or at the end of a project, or some time after it finishes.

**Research**

Some project M&E systems have formal links between M&E and research. This means that findings generated through the M&E system can be examined in further depth using different forms of formal or informal research,

Finally, project M&E systems need to develop a **supporting environment**. This means identifying what is needed to ensure the M&E system actually works, and taking active steps to ensure that relevant systems and processes are put in place.



**IT and databases**

Some projects only store information via manual filing systems. Other projects use sophisticated databases or IT systems to support data storage and processing. In most organisations, IT systems are used by M&E staff, but are not under their direct control.

**Data management**

Data management covers the systematic storage, management and sharing of raw data – the facts and opinions generated and recorded through an M&E system. It may involve the use of databases.

**Knowledge Management (KM) systems**

Knowledge management goes further than data management, and is intended to enable organisations to acquire or create useful knowledge, and then make it available to those who can use it at an appropriate time and place. Knowledge management is often an important ingredient of learning within a project.

**M&E budget**

There is often a set budget for M&E within a project. Sometimes this covers the work of dedicated M&E staff. At other times it may cover the work of project staff with designated M&E tasks. An M&E budget might also cover particular M&E activities, such as a baseline or final evaluation.

**Job specifications**

Some projects have dedicated M&E personnel, whilst staff in other projects are expected to carry out M&E in addition to their normal tasks. In either event, job specifications may be developed specifically to cover M&E work within a project.

### **Training and support**

In many project M&E systems it is important to assess the M&E capacities of key stakeholders, and to assess whether this needs to change. If so, staff may be supported through capacity development. Different forms of support include training, mentoring, peer support and the development of M&E guidelines.

## **Project M&E system design**

There is no one, single way of developing a project M&E system. Needs vary enormously across different organisations and projects. Some community-based organisations (CBOs), operating close to the field, may require as little as an activity plan and associated budget, with a regular meeting or report to let interested stakeholders know whether or not planned activities have been carried out. At the other end of the scale, some project M&E systems may include all of the different elements described above, to one degree or another.

The elements contained in the previous section can act as a checklist for project M&E system designers. They do not all need to be included in every project M&E system. But at the start of a project, M&E system designers should at least consider whether or not each element is needed. The papers described in the section on further reading and resources below should help practitioners and designers assess when and where the different elements may be required. And in many cases CSOs can base their project M&E systems wholly or partly on systems run by similar organisations working in similar circumstances.

Some elements of a project M&E system can and should be developed at the start of the project. The M&E Universe paper '*Developing an M&E approach*' provides some suggestions on what needs to be covered during the planning stage. In most cases it is also possible to introduce new objectives, indicators, questions, tools, methodologies, templates, learning mechanisms, or any other kind of process once a project is underway. However, some of the more complex M&E methodologies – such as Randomised

Control Trials (RCTs) or quasi-experimental trials – can only be used if they have been factored in at the start of the project. This is because a project needs to have developed an appropriate baseline and/or defined some comparison or control groups for them to work properly.

## **Complex M&E systems**

The guidelines in this paper can be applied to any simple, timebound project, carried out in a defined location. However, many development interventions are not as straightforward as this. For example:

- projects or programmes may be run by networks, coalitions or consortiums;
- programmes may incorporate multiple projects run by different implementing partners;
- programmes of work may be spread across multiple countries or sectors;
- some INGOs or large Southern NGOs have M&E systems that operate at organisational level, and cover work that is not timebound; and
- projects or programmes may operate in complex or uncertain environments, such as in the aftermath of a humanitarian emergency.

In these cases, more complex M&E systems may be needed. Whilst these often cover the same elements as described within this paper, they need to be applied in different ways. Complex M&E systems are less likely to rely on tried and trusted procedures, and more likely to be tailored to the particular needs of a project, programme or organisation. They are dealt with in a separate paper.

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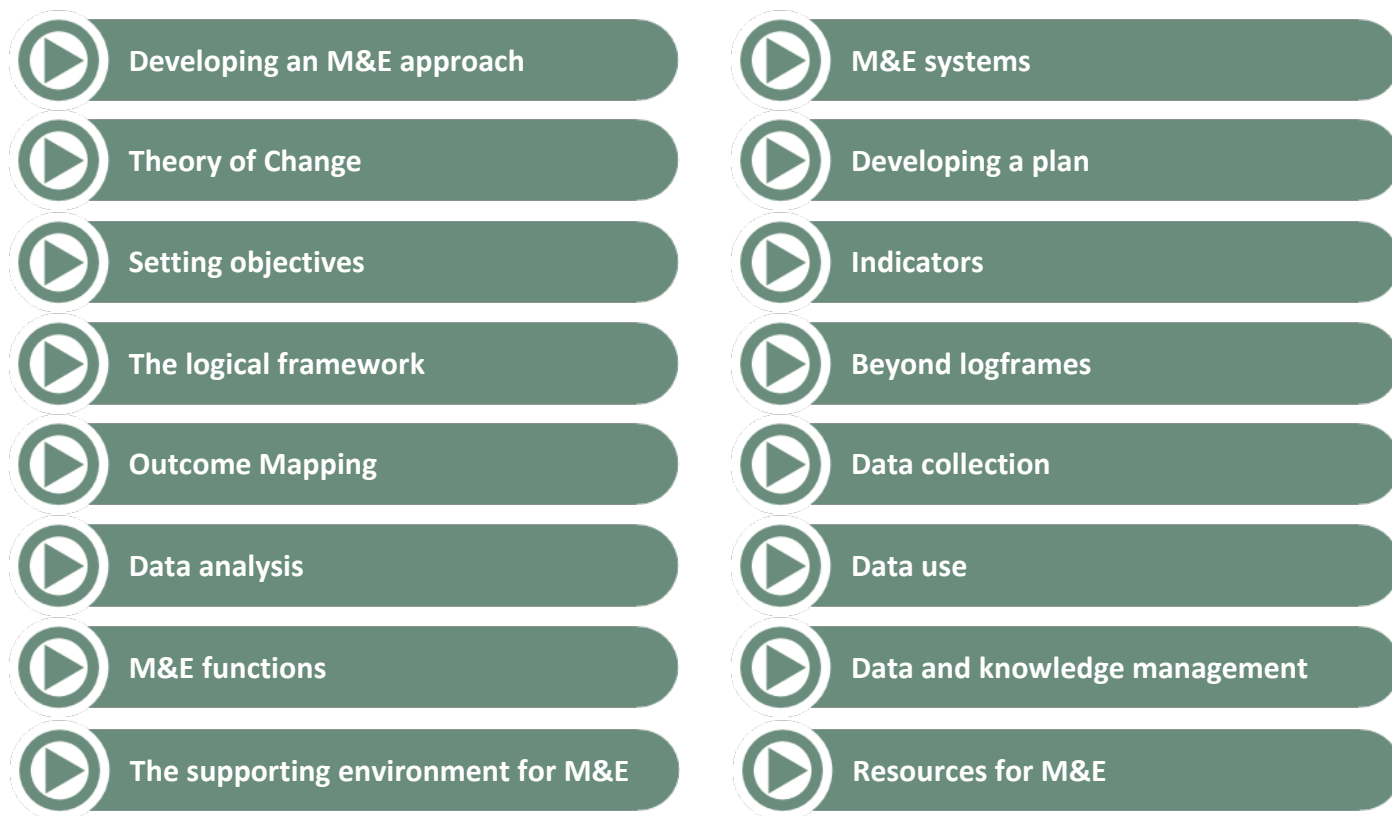
## **Further reading and resources**

An excellent practical guide to project / programme M&E systems can be found in the International Federation of Red Cross and Red Crescent Societies guide called '*Project/programme monitoring and evaluation (M&E) guide*'. This can be found freely on the internet in many places, including from the [www.ifrc.org](https://www.ifrc.org) site at <https://www.ifrc.org/Global/Publications/monitoring/IFRC-ME-Guide-8-2011.pdf>. The entire guide is devoted to project and programme M&E processes, and it is packed full of hints and tips for project / programme staff. Whilst the guide is intended for IFRC staff, much of what it contains is easily transferable to other CSOs.

Information on most of the elements described in this paper can be found by clicking on the links below. The following papers are covered:

- Comments on the **purpose** and **scope** of an M&E system can be found in the general paper on '*M&E systems*'.
- Different papers in the '*Planning and M&E*' section of the M&E Universe deal with **Theory of Change, developing a plan, setting objectives** and **indicators**.
- **Results frameworks** are also covered in the same '*Planning and M&E*' section in papers dealing with **the logical framework, beyond logframes** and **Outcome Mapping**.
- Elements included under the **collection of information** can be found by starting from the central paper in the '*Data collection*' section of the M&E Universe and following the links to other papers.
- Elements included under the **analysis of information** can be found by starting from the central paper in the '*Data analysis*' section of the M&E Universe and following the links to other papers.

- Elements included under the **use of information** can be found by starting from the central paper in the 'Data use' section of the M&E Universe and following the links to other papers.
- Papers on **evaluation, impact assessment, reviews** and **research** can be found by accessing the central paper in the 'M&E functions' section of the M&E Universe and following the links to other papers.
- Three papers in this section of the M&E Universe deal with **data and knowledge management, the supporting environment for M&E** and **resources for M&E**, and can be accessed by clicking on the relevant links.



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INTRAC is a specialist capacity building institution for organisations involved in international relief and development. Since 1992, INTRAC has contributed significantly to the body of knowledge on monitoring and evaluation. Our approach to M&E is practical and founded on core principles. We encourage appropriate M&E, based on understanding what works in different contexts, and we work with people to develop their own M&E approaches and tools, based on their needs.

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