

# OVERVIEW OF COMPLEX M&E SYSTEMS



Complex monitoring and evaluation (M&E) systems are designed to support the work of entire organisations, or large programmes of work involving multiple implementing partners. There are many differences between complex and project M&E systems. M&E processes that work well within small, time-bound projects often do not work, or work differently, across larger programmes of work.

CSOs implement a range of types of initiative from straightforward, time-bound projects at one end of the scale to large, multi-sector, multi-country, programmes of work at the other. In the middle of this spectrum lie projects or programmes which are carried out in difficult or uncertain settings, or are executed over multiple phases; programmes which are implemented through many partners and/or are run by consortiums, coalitions or networks; and entire programmes of CSOs which work in a single sector or location. And there are many other possible combinations.

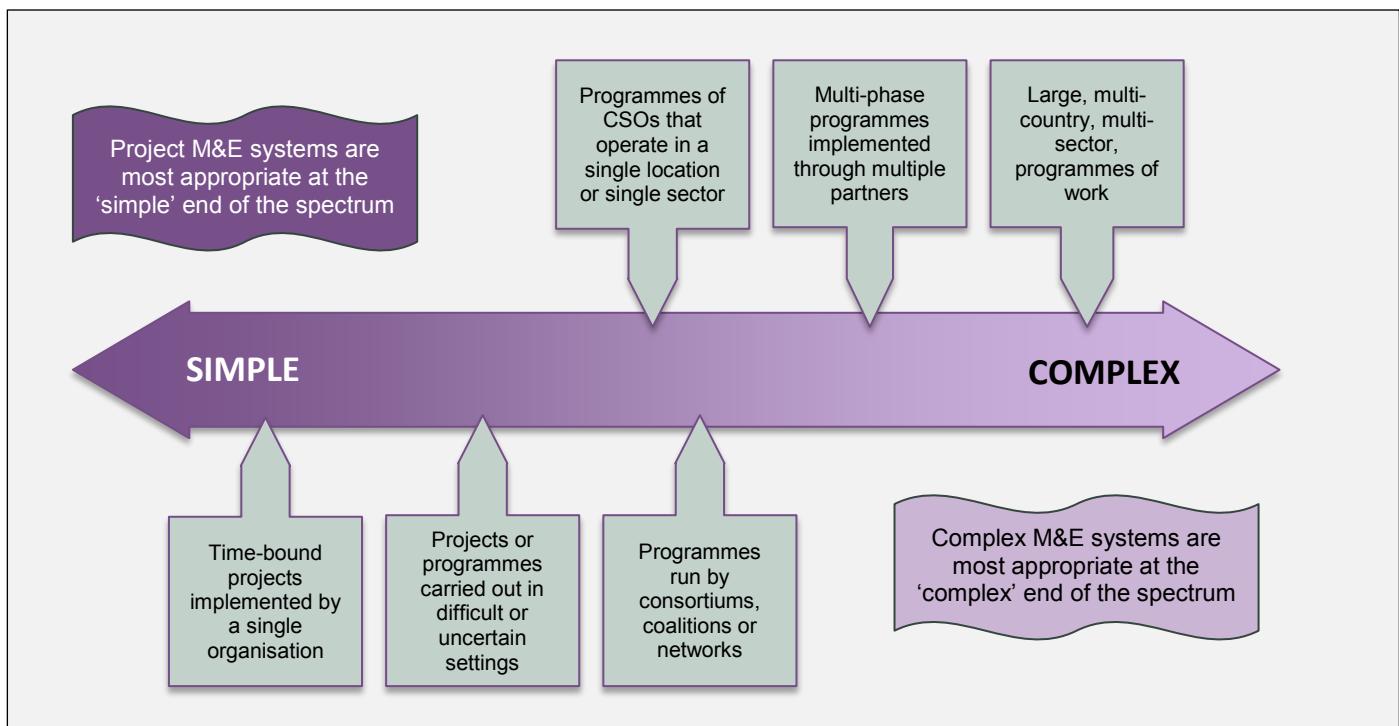
All these different initiatives are expected to have functioning monitoring and evaluation (M&E) systems. However, the nature of those systems differs according to the complexity of the initiative. As shown in the diagram below, complex M&E systems can be used throughout the spectrum of complexity, but are most appropriate at the complex end. Project M&E systems, on the other hand, are more applicable in straightforward, time-bound projects, and are most appropriate at the simple end of the spectrum. A separate paper in this section of the M&E Universe covers project M&E systems.

Complex M&E systems are not the same as project M&E systems. M&E methods and processes that work well within straightforward, time-bound projects may not work in complex programmes, or at organisational level, or may work differently. This paper describes some of the main differences between project and complex M&E systems. These differences are covered under the following headings:

- the scope of an M&E system;
- the purpose of an M&E system;
- different levels;
- decentralisation of M&E; and
- pathways to change.

## *Scope of a complex M&E system*

In any development intervention it is always important to establish what an M&E system covers. Some elements of M&E, such as setting objectives, developing indicators, carrying out baselines and collecting data, are always covered by an M&E system. And processes such as planning, learning and reporting are often (but not always)



integrated into a wider system (for example, a planning, monitoring, evaluation and learning (PMEL) system).

However, complex M&E systems usually need to interact with other management functions and processes. These include knowledge management, financial management, data storage, marketing, fundraising, quality assurance, and research. In many organisations or complex programmes, these functions are split into different departments.

Consequently, staff running a complex M&E system may need to rely on functions and processes such as knowledge management, learning or data storage which are essential to the operation of the system, but which lie under the control of other departments. Formal systems and processes are therefore needed to support coordination across these different departments (Preskill and Mack 2013).

In a project M&E system the issue of coordination is not so important. The same project staff members are usually responsible for all aspects of the project – planning, M&E, learning, financial management, reporting, etc. – and there is less need for coordination across different departments. A project M&E system tends to rely far more on personal relationships and communications than on formal systems and processes.

## Purpose of a complex M&E system

The purpose of an M&E system influences a range of decisions, such as how plans are developed, who develops objectives and indicators, and how, the type of tools used to collect and analyse information, the extent of learning and sharing of M&E findings, and even how much money and time are spent on M&E. In a project M&E system it is always important to define the primary purpose of the system before deciding how to approach M&E.

The situation in a complex M&E system may be more complicated. There may indeed be a primary overall purpose for the M&E system. However, people at different levels of an organisation or complex programme are likely to make different, and sometimes competing, demands on that system. M&E can be carried out for many different purposes (see box opposite) and in a complex M&E system it is likely that many, if not all, of these purposes will need to be addressed at some stage or other.

This means that a complex M&E system needs to be flexible enough to enable different stakeholders at different levels of an organisation or complex programme to adapt, implement and use M&E processes to meet a variety of needs. For example, within a large organisation, project-level M&E is almost always used for project management, and may also be used to demonstrate accountability towards supported communities. At programme or sector level, M&E information may be used to enhance communication between different stakeholders or provide evidence to support advocacy or policy influencing work. At head office level in large NGOs, M&E is often used for fundraising and marketing, or accountability to donors and supporters.

Purposes of M&E
<ul style="list-style-type: none"><li>• Project or programme management (making immediate decisions to manage an existing project or programme)</li><li>• Accountability to different stakeholders, whether upwards to donors, governments and supporters or downwards to partners and supported communities</li><li>• Learning, in order to contribute to improved planning and performance in current or future projects or programmes</li><li>• Resource allocation (deciding how and where resources should be allocated)</li><li>• Enabling supervision and control of staff, partners or aid recipients by ensuring that money is spent appropriately, and/or ensuring the projects and programmes are compliant with appropriate standards or legislation</li><li>• Enhancing communication within and across projects and programmes</li><li>• Enhancing the participation or empowerment of beneficiaries within projects and programmes so they can influence or control decisions that affect them</li><li>• Providing evidence that can be used for advocacy or policy influencing work</li><li>• Providing information that can be used for marketing, publicity or fundraising work</li></ul>

Organisations and complex programmes generally last longer than time-bound projects. Complex M&E systems can take much longer than project M&E systems to design, test and implement, and may remain in place over many years, if not decades. Over longer timescales it is not only possible that the purposes for which M&E is carried out will change, it is likely. This may be because of changing political imperatives, evolving organisational requirements, changes in the external environment, changes in key personnel, or a host of other factors. A complex M&E system needs to be flexible enough to cope with constant change, and needs to be designed with potential shifting priorities in mind.

## Different levels

A project M&E system usually only needs to consider one or two levels of operation. But complex M&E systems tend to operate on numerous levels. In this context, a level is defined as a place where '*plans are made and/or information is collected, analysed, summarised, shared or used*' (Simister 2009, p5). For example, an INGO might work in several regions. Each region may include a number of different countries. Country work might be broken down further into programmes and projects, often implemented through partner agencies. At each of these levels, plans are made, and information is collected, analysed and used. Importantly, in a complex M&E system, information collected at one level (e.g. project level) can also be analysed, summarised and used at other levels (e.g. programme or country level).

For many CSOs the situation is even more complicated. An INGO with a broad mission may work in a number of

sectors such as health, education and governance. Consequently, it may be more important for that INGO to summarise and analyse information by sector rather than by geography. For example, an INGO may wish to analyse information across different health programmes in multiple countries, instead of summarising information across different sectors within a country. In this case the ‘sector’ level becomes equally as important as the ‘country’ one.

Some organisations or complex programmes analyse information on mainstreaming or cross-cutting issues such as the environment, gender or disability. Others need to understand change *within* their partners as distinct from the changes achieved *by* their partners, especially if capacity development forms a major part of their vision or mission. Some organisations establish M&E procedures that evaluate their contribution within networks or coalitions. Still others may want to focus part of their M&E systems on their own added-value work, or internal organisational matters.

The need to operate at many levels, and ensure that information and analyses flow between them, is arguably the biggest difference between a complex M&E system and a project M&E system. Indeed, what looks from the outside like a complex M&E system is usually a series of overlapping and interlocking M&E systems at different levels, with information and analysis (hopefully) flowing between them (*ibid*). It has profound implications for how a complex M&E system operates. For example:

- Lesson learning is much more difficult to support across multiple levels. CSOs need to develop processes to ensure that institutional memory is not lost, and that lessons learned in one part of an organisation or complex programme can be shared, or retrieved when required by others.
- As the complexity of an M&E system increases, knowledge management becomes more of an issue. It becomes necessary to rely more on formal systems and processes for sharing data, knowledge and learning, and less on personal contacts and relationships. CSOs may find they need to develop sophisticated databases or management information systems. They may also need to put in place procedures to ensure that knowledge flows in different directions – not only from projects to head offices but also back again, and horizontally within, and sometimes across, organisations and programmes.
- Across organisations and complex programmes, aggregation and summarisation may become more important (and difficult) challenges. CSOs may need to summarise change across multiple development interventions in different sectors and locations.
- When an organisation or complex programme is implemented through multiple partners at different levels it is vital to be explicit about M&E roles and responsibilities. This may require a considerable amount of coordination.
- It is essential that a supportive environment for a complex M&E system is created and maintained. This

environment is hugely affected by organisational culture, and the efforts of leaders to create a vision for M&E that promotes the serious collection, analysis and use of information as an important ingredient in managerial decision-making. This culture does not exist automatically; it needs to be carefully developed and nurtured. A project M&E system can sometimes operate effectively in the absence of a supportive environment. A complex M&E system, never.

In summary, a complex M&E system has to operate as a genuine system, and cannot simply rely on one or two individuals to ensure that the right actions are carried out at the right time. In addition, a complex M&E system has to serve the differing needs of multiple stakeholders. This means it needs to be developed with a completely different mind-set than a project M&E system.

## **Decentralisation of M&E**

A complex M&E system should not just be designed to meet the needs of staff at the centre of an organisation or complex programme. It must also ensure that M&E works for different stakeholders at different levels. Within a complex M&E system projects, partners, programmes, sectors and countries need to be able to operate independent M&E approaches that nonetheless engage with each other to create an overall M&E system.

In a project M&E system, staff may set objectives and indicators, carry out a baseline or conduct a review. By contrast, the job of staff responsible for a complex M&E system is partly to provide a framework within which different levels of an organisation can carry out these functions. This might mean, for example, setting guidelines, policies or standards to support different parts of an organisation to set their own indicators or carry out their own baselines. Complex M&E systems need to be at least partially designed to facilitate the decentralisation of M&E decision-making at multiple levels, as well as ensuring that the needs of central-level staff are met.

Consequently, a number of important balances need to be maintained. Two stand out. Firstly, a balance needs to be struck between imposing common M&E policies, practices and procedures across organisations or complex programmes on the one hand, and leaving flexibility for local-level decision-makers to design their own solutions to meet their own M&E needs on the other. Too far in one direction and a complex M&E system becomes rigid and bureaucratic. Too far in the other direction and it loses coherence, and risks becoming a series of separate M&E systems that do not interact with each other in any meaningful way.

Secondly, a balance needs to be sought between the M&E needs of central staff within an organisation or complex programme, and staff working at other levels. This means trying to ensure that a complex M&E system delivers in core, central areas such as organisational learning, accountability upwards to donors, and providing information for marketing and global campaigns; as well as enabling sufficient flexibility for different levels to use M&E

for project / programme management, resource allocation, verification and control, and downwards accountability to communities and beneficiaries.

Seeking to balance different needs in this way may involve going beyond technical considerations and into the arena of power relationships within organisations. In particular, CSOs that are serious about facilitating rights-based approaches, or participatory approaches to M&E, need to develop and nurture a suitable overall framework that enables decentralised planning, monitoring, evaluation, learning and decision-making to take place.

When developing a complex M&E system, one of the biggest mistakes is to be so prescriptive about how M&E should be conducted that it leaves virtually no space for staff at different levels of an organisation or complex programme to find their own independent solutions in response to their own particular needs. By contrast, project M&E systems do not have to address this issue. This is because they usually operate on one, or at the most two, levels. Their task is more to select, collect, analyse and use information for a specific intervention in order to serve a limited number of pre-defined purposes.

## Pathways to change

Another major difference between project and complex M&E systems is that it can be much harder to define and measure change at organisational level (or in a complex programme) than at project level. This is for a number of reasons.

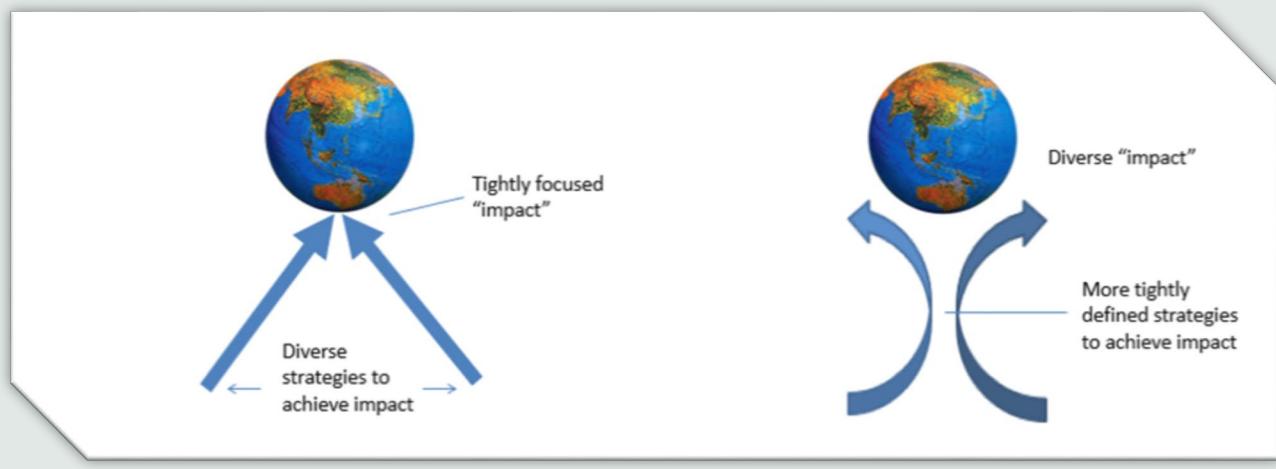
- Firstly, many organisations have multiple goals and objectives. These are sometimes in conflict with each other (Cyert and March 1963). Developing one or two statements to express the purpose of an organisation or complex programme is rarely straightforward.
- Secondly, organisations or complex programmes do not always operate under a single timeframe. Even if the work of an organisation is carried out under a specified strategic period, actual initiatives operate according to different timescales. For example, an INGO may operate multiple programmes and projects, all starting and ending at different times.
- Thirdly, it is much more difficult to articulate the goals and objectives of some organisations and complex programmes than others. This is demonstrated in the box below.

### Different Types of Organisational Goals

The diagram on the left, below, depicts an organisation (or complex programme) with focused, measurable goals that outline exactly what it is trying to achieve. For example, the Jubilee Debt Coalition, formed at the end of the last century, had a single focus on trying to bring about the cancellation of unsustainable developing country debt. In organisations of this kind, strategies may change over time, but the end goal remains the same and can be reasonably articulated and, perhaps, measured.

Organisations (or complex programmes) that fall towards the right-hand side diagram, on the other hand, use their available resources to maximise their impact. But this impact might be spread widely, and look very different in different places. This means the overall impact may not be easy to articulate or measure. Often the best that can be done is to list the different impacts of the various initiatives within the organisation. This does not mean these kinds of organisation are necessarily unfocused. Some organisations at this end of the spectrum may have a very specific focus on a strategy or tactic they employ in order to achieve their goals. For example, Oxfam has at times presented itself as a campaigning organisation, whilst the UK charity Voluntary Service Overseas (VSO) has focused on supporting developing countries through the work of experienced and professional volunteers. But for such organisations the question is not always *"how can we achieve our goal?"* but rather *"how can we maximise our impact given the resources we have?"*

In practice, many organisations combine elements of both diagrams. But organisations or complex programmes more closely aligned with the left-hand diagram generally find it much easier to articulate a small number of specific goals or objectives that reflect their desired impact. This makes impact measurement at organisational or complex programme level much easier.



- Finally, even if the work of an entire organisation or complex programme can be measured, beyond a certain level of complexity it is almost impossible to establish a reasonable counterfactual (an estimate of what the world would have been like without the organisation or complex programme, or if it had invested its resources differently). This means M&E inevitably comes down to a more subjective opinion of what has been achieved compared with other hypothetical possibilities, rather than an objective measurement.

A related challenge is the difficulty of predicting pathways to change, even if goals are clearly articulated and are susceptible to measurement. This matters because many M&E tools and concepts used within social development are based on an assumption, derived from project-level M&E thinking, that change, and pathways to change, can be accurately measured.

Consequently, in complex M&E systems pre-defined indicators and targets may be of less value than in straightforward, time-bound projects, and most complex M&E systems need to work with and through more adaptable results frameworks. Of course, many organisations and complex programmes are still expected to develop logical frameworks for donors, but these are more often used to illustrate some of the changes resulting from their work, or to succinctly summarise their overall programme. The logical frameworks are rarely used for managerial purposes.

Results-based management (RBM) also needs to be treated differently in a complex M&E system. RBM means '*systematically gathering and analysing information to understand whether institutions, policies and programmes are effectively and efficiently producing the expected results – and how improvements can be made for future performance*' (OECD 2014). Few would disagree that managers should take account of results when making decisions. But if an organisation or complex programme has no way of accurately assessing overall performance it becomes more difficult to apply RBM concepts. This does not mean that results should not be considered an important input to management. It just means their relative importance is lessened, and the focus of RBM needs to be

more on the management side than on the measurement side.

Another challenge for complex M&E systems is how to engage with the value-for-money agenda. If an organisation or complex programme cannot easily measure its overall performance then it becomes hard to assess its overall effectiveness (although it can still assess whether it is working in an efficient and economical way). By implication, many of the traditional tools used by CSOs to assess value-for-money at project level, such as Cost Benefit Analysis (CBA) or Social Return on Investment (SROI), simply do not work at organisational level. CSOs operating complex M&E systems therefore need to find different ways to engage with the value-for-money agenda.

## ***Summary***

Complex M&E systems are not the same as project M&E systems. They need to be treated and understood differently. Some things that work well at project level do not work, or work differently, at the level of entire organisations or within complex programmes. Project-level M&E solutions cannot simply be exported to organisational or complex programme level.

Perhaps the biggest challenge for complex M&E system developers is the absence of common rules, processes and guidelines. Each complex M&E system has to be developed according to the needs of the organisation (or complex programme) concerned. Whilst the experience of other programmes and organisations may be useful, those tasked with designing complex M&E systems often have to find unique solutions. An understanding of basic M&E principles and processes is obviously necessary, but it is not sufficient on its own, and a deeper appreciation of how complex M&E systems work in practice is needed.

*"An organisation or complex programme is not just a large project. And it cannot be treated as such for M&E purposes."*

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## ***Further reading and resources***

This short paper is based on a much longer paper produced for INTRAC, called "*Complex M&E Systems: Raising standards, lowering the bar*", by Nigel Simister. It is available from the INTRAC website at <https://www.intrac.org/wpcms/wp-content/uploads/2019/03/Praxis-Series-6.-Complex-ME-Systems.pdf>.

The next paper in this section of the M&E Universe looks at some of the common features of a complex M&E system, and examines how a complex M&E system works. Another paper in this section of the M&E Universe deals with project M&E systems.



## References

- Cyert, J and March J (1963). *A Behavioural Theory of the Firm*. Prentice Hall, Englewood Cliffs, New Jersey, cited on p33 of Carter, N, Klein, R and Day, P (1992). How Organisations Measure Success: The use of performance indicators in government. Routledge, London and New York.
- OECD (2014). *Measuring and Managing Results in Development Co-operation: A review of challenges and practices among DAC members and observers*.
- Preskill, H and Mack, K (2013). *Building a Strategic Learning and Evaluation System for Your Organization*. FSG, USA.
- Simister, N (2009). *Developing M&E Systems for Complex Organisations: A methodology*. INTRAC, 2009.

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### Author(s):

*Nigel Simister*

### Contributor(s):

*Peter Allen, Rachel Hayman, Dan James, Alison Napier and Vera Scholz*

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