BASELINES

To understand the changes brought about by a project or programme it is first necessary to understand what the original situation was. This is known as the baseline. Baselines can range from simple data collection exercises through to large, expensive surveys. They are an important part of many M&E systems. Baselines are normally carried out at or near to the start of a project or programme.

Most projects and programmes contain objectives and indicators that define the changes they are trying to influence. In order to assess these changes it is first necessary to understand the original situation. This involves collecting and analysing information on the objectives and/or indicators at the start of a project or programme. This is called the baseline. In theory, data on the objectives/indicators is then collected later in the project or programme, and the two situations are compared. Without a baseline it is much harder to evaluate progress, because changes cannot easily be compared with the original situation.

Baselines can range from largely informal or 'light-touch' exercises through to large-scale surveys or studies. Baselines are normally carried out at or near to the start of a project or programme. If a baseline is carried out at household or individual level then it is normally conducted after the target households have been selected. In practice, this means a baseline is often done after the design phase of a project or programme has been completed.

The primary purpose of a baseline is to allow a project or programme to evaluate performance by establishing what changes have occurred between the start and the mid- or end-point. However, baselines can sometimes be used for other purposes, since they provide useful information on the target population. For example, information collected during a baseline may reveal that the objectives or indicators established at the beginning of the project need to be adjusted. Baseline information can also be used to set milestones and targets.

All projects and programmes should carry out at least some baseline work (even if only recording what is already known), but a formal baseline study is most useful when:

- there is a clear understanding beforehand of the changes a project or programme wants to achieve;
- there is a clear rationale for how any desired changes can be linked to the work of a project or programme;
- there are sufficient resources and expertise to do the work properly;
- there is a clear plan for how to follow up the baseline study in the future; and
- the benefits of conducting a baseline study, and measuring the same variables later to assess change, outweigh the costs.

Sometimes organisations have to conduct baseline studies as a condition of funding, and therefore have no choice in the matter.

Some development practitioners also refer to a 'baseline' when talking about a situational analysis or needs assessment. A situational analysis is an analysis of a situation within a geographic location or sector. It normally involves an assessment of the challenges in that location or sector, and an analysis of who is currently working on those challenges. It also involves an assessment of the external socio-economic and/or political environment. A situational analysis normally seeks to identify the needs of a target population.

Information collected during a situational analysis can be used as baseline information in some circumstances, and can often provide a broad overview of the situation of a target population, prior to an intervention. However, because a situational analysis is normally carried out before a project or programme has been designed, and before objectives and indicators have been developed (or target populations identified) it is often necessary to develop a more focused baseline afterwards.

Baselines for different interventions

In some cases, the identification and recording of baseline data may be fairly straightforward, especially when projects or programmes are focused mainly on service delivery. Examples of baseline information could include the number of children in school at the start of a project or supported farmers' crop yields. But in other cases it may not be so straightforward. For example, programmes that seek to raise awareness of human rights or promote inclusive civil society may have much greater difficulties in establishing a clear baseline (Taylor, 2001). A general rule of thumb is that the easier it is to define appropriate indicators of change, the easier it is to develop the baseline.

The type of intervention also needs to be considered. A project aimed at supporting the livelihoods of rural households would not require the same kind of baseline data as a programme designed to influence government policies or support the capacity of partner organisations. The type of questions asked at baseline might be very different (see box below), as well as the methods used to collect and analyse that information.

Type of project	Sample questions for baselines
Project aimed at livelihoods development	• What assets do people have? • What is their disposable income? • How many meals a day do they eat? • Do they send their children to school?
Capacity development of partner organisations	• What areas of capacity do organisations wish to improve? • What is their current capacity in these areas? • Who is supporting them in these areas? • How else are they currently addressing capacity gaps?
Programme aimed at influencing government policies	• Is the policy currently under development or review? • Which key decision-makers (if at all) are interested in the policy? • Which external actors are interested, and what are they doing? • What is the public attitude towards the policy?

The type of intervention will often dictate the tools and methodologies that will be used to collect and analyse baseline information. For example, in a capacity development programme an organisational assessment might be used as a baseline. By contrast, a set of interviews with policy-makers and/or a straw poll of members of the public might be more useful for a policy influencing project. It is important to remember that the same tools and methodologies will also need to be used at a later date if information is to be comparable.

In some cases a project or programme may only be interested in a small number of cases, such as one or more government policies or a small number of partners receiving capacity development support. In these cases the baseline is likely to focus in detail on these individual cases. But where there is a large population – such as in a mass health or livelihoods programme – a more extensive baseline survey may be needed.

Within social development, baseline surveys can be carried out at individual, household, or community levels. In some cases a population is small enough that everyone can be covered by the survey. In most cases, though, baseline surveys are designed to cover only a sample of the population. There are many different techniques that can be used to develop the sample, and these are covered in a separate paper within the M&E Universe.

A large-scale baseline survey can be difficult to do well, may be costly, and can require significant expertise. This makes it even more important to plan it properly from the outset to ensure that resources are not wasted on an exercise that proves to be of little value.

Baselines and causality

The purpose of carrying out a baseline is primarily to compare the situation at the beginning of a project or programme with the situation at a later date in order to assess progress. Sometimes it can reasonably be assumed that any change is due to the development intervention concerned. For example, if a project or programme introduced a new service or technology to a community – such as a new water purification technique or a new method for planting and harvesting crops – it might be reasonable to assume that any major changes observed resulted from the support provided.

But in other cases it is not so clear. Targeted populations, communities or organisations may be receiving support from other interventions, and may also be affected by changes in the external social and political environment. In these cases it cannot always be assumed that any change seen over a period of time is due to a particular development intervention. A number of methods can be used to respond to this challenge.

- Sometimes, causality can be established through statistical analysis. For example, if a project intended to improve farmers' livelihoods through supporting their knowledge of intensive farming techniques then it might be possible to correlate the support provided with any improvement in livelihoods. This would mean demonstrating a statistical correlation between the support provided and the changes in livelihoods.
- Some projects or programmes use control or comparison groups that do not receive the same support as the targeted population. Baseline and repeat data is collected from the control or comparison group as well as the group receiving support. Any changes from the baseline can then be compared between the different groups to better establish the contribution of a particular project or programme to any changes observed. This type of approach usually relies on large surveys, and can be very expensive to implement.
- Sometimes organisations try to show the contribution of a project or programme by carefully mapping out the theory linking an intervention with the desired changes. Once change against the baseline has been established, evidence is generated at each level of the theory to develop a logical argument showing exactly how a project or programme contributed to any observed changes. These methods are often used when a project or programme seeks to influence change in a small number of cases, where there are not enough numbers to use statistical methods.

In all three cases, however, it is important to understand from the start how a project or programme will attempt to establish causality. This is because it will affect decisions over the type of baseline data collected, and who it is collected from.

Alternatives to baselines

There may be circumstances in which a proper baseline cannot be afforded, or where a project or programme is already being implemented and an appropriate baseline has not previously been carried out. In these cases there are alternatives that can be used.

- If a situational analysis was carried out, or any other kind of prior assessment in the project/programme area, this may include data on the scale or characteristics of a problem an intervention is trying to address. This information can sometimes be used as baseline data.
- People involved in a project or programme, especially targeted populations, will often have knowledge of what a situation was before the intervention began. This knowledge can be used to form what is known as a retrospective baseline (a baseline established at a later date).
- Other organisations might also have records that can be used to establish a retrospective baseline. For example, there may be government records, or the records of local institutions such as schools or hospitals.
- Some methods of data collection and analysis, such as the Most Significant Change (MSC) technique, are designed to be used in situations where change cannot easily be predicted, and therefore baselines cannot easily be generated or used.

It is also important to note that there are some kinds of change where baselines may be of little use. Social development work often has unexpected consequences, and by their nature these cannot be measured by comparing against a baseline. Therefore, any follow-up work designed to compare against a baseline should also search for unexpected change. In addition, where objectives or indicators have been modified or added during the life-time of a project or programme, there may be no baseline to compare against.

Challenges with baselines

It is a sad truth that much of the money spent on baselines by CSOs around the world proves to be wasted. Sometimes this is because projects and programmes change, making the baseline redundant or incomplete. However, it is mostly because staff have not properly thought through how the baselines will be used in the future.

Common problems include collecting too much data that is not needed, forgetting about the baseline once it has been completed, collecting data that is too general, and collecting data on people and locations that are not targeted by the project or programme.

Many if not most of these problems can be avoided with good planning and forethought. However, some challenges are associated with the length of time between the development and use of baselines. For example, if there is a requirement to carry out an external evaluation on a project or programme it is likely that the external evaluators will want to establish progress against the baseline. However, it is unlikely they will have had any involvement in the establishment of that baseline. At the same time, staff may have changed over the course of the project or programme, with institutional memory lost as a result.

This is why it is so important for organisations carrying out baselines to keep records that outline clearly why decisions were taken, how baselines were conducted, which particular groups or households were involved, which sampling techniques or tools were used, and why.

Some Do's and Don'ts of Baselines

Do...	Don't...
• Identify what you expect the project or programme will achieve to decide what to measure in the baseline. • Properly assess both the costs and benefits of doing a baseline study, and make decisions accordingly. • Carry out the baseline near to the start of the project or programme, as it may reveal information that requires you to change your objectives. • Make firm plans for how you intend to use your baseline during future impact assessments or evaluations. This will involve deciding who is likely to carry out that work, how and when. • Ensure that specific target groups are properly represented and identified in the baseline. • Record any methodologies or sampling techniques used so that these can be replicated at a later date.	• Select data for the baseline that is primarily dependent on external circumstances. • Assume that any changes recorded against a baseline are due to the project or programme intervention. • Collect data from people who are not members of the target population (unless they are part of a control or comparison group). • Forget to record the name and location of communities and individuals who have been interviewed in case you or someone else needs to revisit them. • Forget to ensure that all records, including any completed surveys or questionnaire sheets, are stored appropriately so they can be easily retrieved at a later date. • Lose the baseline!

Further reading and resources

Other papers in this section of the M&E Universe deal with setting objectives and indicators. A paper on sampling in included in the data collection section. A paper on quasi-experimental methods contains more information on the use of control and comparison groups.

Setting objectives | **Indicators**

Sampling | **Quasi-experimental approaches**

A very useful paper on the development of baselines has been produced by the International Federation of Red Cross and Red Crescent Societies. It is called *Baseline Basics* and is available at:
http://www.ifrc.org/PageFiles/79595/Baseline%20Basics%2010May2013.pdf

References

- Taylor, L (2001). *Good Monitoring and Evaluation: Guidance notes,* October 2001, PARC, IOD.

Author(s):
Nigel Simister and Janice Giffen

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

BASIC TOOLS FOR DATA COLLECTION

Many different methodologies can be used for data collection and analysis. Most are based around a core set of basic tools. These include interviews, focus group discussions, observation, photography, video, surveys, questionnaires and case studies. Data may also be generated through direct measurement, reviewing secondary data, and informal project / programme management processes.

Many different methodologies can be used for data collection and analysis. For people new to the world of monitoring and evaluation (M&E) the list can appear quite daunting. However, most methodologies are based around the same set of basic tools. These tools are listed in this short paper, and are described in more detail in other papers in this section of the M&E Universe.

The tools listed below can be used on their own, or can be applied as part of wider methodologies. For example, a survey could be designed and implemented as a stand-alone tool, but could also be implemented as part of a wider methodology, such as a Randomised Control Trial (RCT). Similarly, case studies or stories of change can be used in isolation, but can also be used as part of a wider methodology, such as Most Significant Change (MSC).

Within M&E, some complex methodologies are designed to cover both data collection and analysis. However, the basic tools listed below are not associated with specific analysis methods. All can be analysed using a range of different techniques and approaches. Some tools, such as case studies or focus group discussions, are more often analysed using qualitative techniques, whilst others, such as surveys, tend to be analysed quantitatively. But there are often exceptions to these rules.

Most of the tools listed below can be used at any stage of a project or programme cycle. They are routinely used during project or programme design, planning, monitoring, review, evaluation and impact assessment. The tools can be used for any purpose, including project or programme management, learning, and accountability to different stakeholders. They can be applied within any type of work, including service delivery, capacity development, advocacy and mobilisation. They are used in both development and humanitarian settings.

Data collection tools

A list of basic data collection tools includes the following.

- ***Interviews:*** Interviews are probably the most common tool used in planning, monitoring and evaluation. They can be carried out with one person at a time (individual interviews) or groups of people. They can be administered formally or informally. They can be carried out face-to-face or through remote media such as telephone and Skype. Interviews can also be conducted through written questions via letters or email. Interviews may be structured, semi-structured or open-ended. Structured interviews are based around a core set of questions that are always asked in the same order. Semi-structured interviews also contain a core set of questions, but allow the interviewer to ask supplementary questions, or change the order in which questions are asked.
- ***Focus group discussions:*** Focus group discussions (FGDs) are facilitated discussions, held with a small group of people who have specialist knowledge or interest in a particular topic. They are used to find out the perceptions and attitudes of a defined group of people. FGDs are typically carried out with around 6-12 people, and are based around a short list of guiding questions, designed to probe for in-depth information. FGDs are often used to solicit the views of those who would not be willing or able to speak up at larger group meetings. They may also be used to access the views of minority or disadvantaged groups, such as women, children or people with disabilities.
- ***Observation:*** At its most simple, observation involves 'seeing' things – such as objects, processes, relationships, events – and formally recording the information. There are different types of observation. Structured or direct observation is a process in which observations are recorded against an agreed checklist. Expert observation is usually carried out by someone with specific expertise in an area of work, and involves the expert observing and recording information on a subject. Observation may also be carried out as a participatory exercise. Where this is the case the intended beneficiaries of a project or programme are involved in planning an observation exercise, observing, and discussing findings.
- ***Photography and video:*** Photographs and videos show still or moving images. Photographs can be used on their own, but are more often accompanied by written captions, providing additional information. Videos are often accompanied by a commentary. The use of photography and video has become increasingly common within M&E over recent years. This is partly because of improvements in mobile phone technology, which has increasingly enabled people to produce cheap, high quality audio-visual products.

- ***Case studies and stories of change:*** A case study is not a data collection tool in itself. It is a descriptive piece of work that can provide in-depth information on a topic. It is often based on information acquired through one or more of the other tools described in this paper, such as interviews or observation. Case studies are usually written, but can also be presented as photographs, films or videos. Case studies often focus on people (individuals, households, communities). But they can also focus on any other unit of analysis such as locations, organisations, policies or the environment. Stories of change are similar to case studies. However, they have a specific focus on change, and are only usually developed after a project or programme has started.
- ***Surveys and questionnaires:*** These are designed to collect and record information from many people, groups or organisations in a consistent way. A questionnaire is a form containing questions. It may be a printed form or one designed to be filled in online. Questionnaires may be administered in many different ways. A survey, by contrast, is normally a large, formal exercise. It typically consists of three different aspects: an approved sampling method designed to ensure the survey is representative of a wider population; a standard questionnaire that ensures information is collected and recorded consistently; and a set of analysis methods that allow results and findings to be generated.

An additional set of tools comes under the heading of community participatory tools. This includes exercises such as mapping, ranking, timelines, calendars and diagrams. These can be used as tools for collecting data from community level, and are often included as basic tools in M&E exercises. However, they are more properly used as participatory methods of data collection and analysis that also allow communities to analyse their own situation and make their own decisions. This set of tools is included in the M&E Universe paper on Participatory Learning and Action (PLA).

Other ways of collecting data

In addition to the tools described above, there are also three other basic methods of collecting data that are widely used: direct measurement; the review of secondary data sources; and informal monitoring.

- Some changes can be ***measured directly*** through basic assessments or counting. For example, the amount of money spent on a project or programme can be measured directly; outputs such as trainings conducted or schools built can be counted; and some changes – such as people attending a hospital – can be recorded accurately. At outcome and impact level it is often harder to measure change directly. But in some sectors of work it is still relatively straightforward. In the health sector, for example, changes in blood sugar levels or height : weight ratios can be measured accurately. And in the livelihoods sector crop yields can be accurately recorded to directly assess change. Where feasible, direct measurement of change is usually the best method of data collection. But the tool used to collect the information (e.g. scales to measure weight, water testing kits to measure the quality of water, school registers to record attendance at school) is always different.
- In social development, when somebody collects data for their own purposes it is called primary data. Sometimes, however, information can be used for planning, monitoring or evaluation that has been collected by other people or organisations for their own purposes. This is known as ***secondary data***. Secondary data might include government statistics, NGO reports, newspaper or website articles, hospital records, research studies, evaluations conducted by other agencies, and community records – to name just a few. Secondary data is often a valuable source of information that can supplement other forms of data collection.
- Finally, most staff involved in projects and programmes build up an enormous fund of knowledge about those projects and programmes and the changes they influence. This knowledge comes through talking to different people, informally observing things when visiting the field, reading emails and reports, and generally being engaged in normal project/programme management activities. This kind of ***informal monitoring*** is frequently underused within M&E, but in some circumstances may be the most valuable kind of information. At the very least it often provides an important supplement to the information collected through more formal tools and methodologies

Summary

Although there are many complex M&E methodologies that can be used to collect and analyse information, many, if not all, are based around the same core set of tools and methods described in this paper.

For readers new to M&E it is important to remember this. A quick search of the internet will reveal hundreds of different M&E methodologies with complicated names. Some are designed for very specific purposes and may require specialist skills to administer. But most are variants on a theme, or are old ideas re-packaged. If an M&E practitioner can understand and apply the most basic tools of data collection then they should be able to apply almost any methodology for data collection and analysis.

Further reading and resources

Further papers in this section of the M&E Universe deal with many of the tools and methods described in this paper. Participatory Learning and Action (PLA) is covered under more complex data collection and analysis methodologies.

- Interviews
- Focus group discussions
- Observation
- Photography and video
- Surveys and questionnaires
- Case studies and stories of change
- Direct measurement
- Secondary data sources

Author(s):
Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

DATA ANALYSIS

The aim of data analysis is to help turn raw data into knowledge, which can then be used for decision-making and other purposes. Data analysis can take place at any stage of a project or programme cycle. There are many different types of data analysis. These include quantitative, qualitative and participatory analysis. Many projects and programmes use a combination of different types of analysis.

Raw monitoring and evaluation (M&E) data is not normally useful on its own. If it is to be useful it first needs to be analysed. The aim of data analysis is to help turn raw data – facts and opinions developed through formal or informal planning, monitoring, evaluation or research processes – into knowledge. In turn that knowledge can then be used for decision-making, or to ensure accountability to different stakeholders (Britton 1998).

Data analysis can take place at any stage of a project or programme. It can happen before a project or programme begins as part of the design phase, It can also happen during a project or programme, at the end, or a while after it has finished. Data analysis can be carried out at many different levels – within or across projects, programmes, sectors of work and organisations. In social development, data analysis is often encouraged within communities as part of a participatory development process.

Different types of analysis

There are many ways of categorising data analysis – far more than can be described in this paper. One way is to categorise it according to the type of data collected. (Note that many organisations, projects and programmes use a combination of different types of data analysis).

- **Quantitative** data analysis is used to analyse numbers rather than words. It can range from simple exercises to process and tabulate data through to very complicated processes designed to accurately measure quantitative changes with calculated degrees of precision.
- **Qualitative** data analysis, on the other hand, is used to analyse words – quotes, cases, transcripts, reports – and, sometimes, images. Qualitative methods rely on rules and processes which are very different from those of quantitative methods.
- Some M&E methodologies are designed to translate qualitative data into quantitative information through **rating or scaling** exercises. This involves developing ratings or scales based on qualitative analysis, and then processing them through quantitative methods.
- **Participatory** data analysis can involve quantitative or qualitative data analysis, and is often treated as a separate case. This is because participatory data analysis follows different rules, and is usually based on stakeholders' sensemaking and consensus rather than rigorously applied methods. The purpose of participatory analysis may also be quite different – encouraging stakeholders to analyse their own situations rather than coming to a conclusion based on an external viewpoint.

Another way of categorising data analysis is as follows.

- **Descriptive** data analysis is only concerned with processing and summarising data. This is often true of financial or administrative data analysis.
- **Theory driven** data analysis is used to test theories of change, assumptions or hypotheses. The aim is to analyse data to see if it confirms (or not) the theory or hypothesis.
- **Data or narrative driven** analysis involves letting patterns emerge from data, and then developing theories afterwards.

Qualitative data analysis can normally be applied to any of the three types described above. However, quantitative data analysis is rarely used with data or narrative driven analysis. This is because most quantitative data analysis techniques involve collecting predicted information for specified purposes.

Within M&E, there are also many data collection methodologies which have their own data analysis methods built into the process. For example, the Most Significant Change (MSC) technique includes defined processes for selecting, analysing and using stories of change. Contribution analysis has distinct methods for testing alternative theories of change. And quasi-experimental methods involve rigorous processes for assessing changes within target and control groups, and drawing conclusions afterwards.

Analysis questions

Separate papers in the M&E Universe series deal with processes used for quantitative and qualitative data analysis, as many of the processes are quite different. However, many of the questions designed to be addressed through data analysis are similar. Some of these are listed in the table on the following page (based partly on Gosling and Edwards 2003.

Common Analysis Questions

Process questions

- What work (activities undertaken or outputs delivered) has been carried out?
- What work was planned but not done? Why was this work not done?
- What problems have been encountered? How were these problems addressed (if at all)? If they were not addressed, why not?
- Which activities appear to have been particularly successful or unsuccessful? Why?
- Are there constraints to progress which could be addressed? If so, how?
- Are there constraints which cannot be helped? If so, what can be done to minimise their effects?

Change questions

- What changes have been realised? Were these expected or not?
- How do they compare with what was hoped for or anticipated?
- How important or significant are they? Are they likely to be sustainable?
- How have changes affected different groups?
- What made the changes happen? Which other factors (other than your own project, programme or organisation) influenced the changes?
- Are there expected changes that have not happened? If so, why have they not happened?

Action questions

- Is the project, programme or organisation still on track to deliver its objectives? If not, what needs to change?
- Are they still the right objectives? If not, how do they need to change?
- Are the activities and outputs still appropriate? Should some be stopped, or others added?
- How has the external political or socio-economic situation changed? How should the project, programme or organisation adapt as a result?
- What are others doing (or not doing) that might influence the project, programme or organisation? How should it adapt as a result?

Learning questions

- What lessons have been learned from implementing the work? How can these lessons be applied to future work?
- What needs to be done differently in the future, based on what has happened in the past?
- What lessons are there for other projects, programmes or organisations?
- What lessons might there be for policy-makers or other decision-makers?

M&E questions

- Are there questions about progress, change, actions or lessons that cannot be answered through current M&E processes?
- What further evidence or information needs to be produced in order to make future decisions?
- Are current indicators, methodologies and approaches appropriate? If not, how do they need to change?
- Is there a need for new or further research, review or evaluation?

Enhancing capacity for data analysis

Data analysis is often the hardest part of M&E to do well. Where it relies on following clearly defined rules and processes, it may be relatively straightforward. But in other instances it can be very challenging. Data analysis often relies on attributes such as experience, intuition, and an ability to handle complexity. This is especially true when interpreting findings in order to inform future plans.

To some extent, it is always possible to support people to undertake better data analysis. But there are limits. Some people are naturally better than others at data analysis. Some have more intuition; some are more experienced than others; and some are better able to handle complex information. Capacity support for data analysis can help build on existing skills or abilities. But the ability to analyse complex data – whether used to help design projects or programmes, or assess changes and lessons with a view to

improving – may be partly down to natural ability or talent, rather than acquired skills.

Of course, the challenges of data analysis are very different in different circumstances. For example, data analysis in a straightforward health project covering a single community may be a relatively simple matter, largely relying on mechanical processes. On the other hand, data analysis at the level of an international NGO working across many different sectors and countries is likely to be a much more complicated affair, requiring considerably more competency.

This section of the M&E Universe contains advice and information on a range of different approaches, tools and methods that can be used for data analysis. Ultimately, however, data analysis always relies to some extent on human interpretation, and is often subjective to at least some degree. It is not unusual for different stakeholders – even skilled and experienced researchers or evaluators – to examine the same data but come up with completely different analyses.

Further reading and resources

Further papers in this section of the M&E Universe deal with other topics related to analysis. These include quantitative analysis, qualitative analysis, and the use of rating and scalar tools. There are also papers dealing with cost-benefit analysis, triangulation, sensemaking and impact grids. These papers can be accessed by clicking on the links below. There is a further section of the M&E Universe dealing with complex methodologies for data collection and analysis.

- Quantitative analysis
- Qualitative analysis
- Ratings and scales
- Cost-benefit analysis
- Impact grids
- Complex collection and analysis methodologies
- Sensemaking
- Triangulation

References

- Britton, B (1998). *The Learning NGO*. Occasional Papers Series no. 17. INTRAC, July 1998.
- Gosling, L and Edwards, M (2003). *Toolkits: A practical guide to assessment, monitoring, review and evaluation*. Second edition. Save the Children, UK.

Author(s):
INTRAC

Contributor(s):
Dan James, Alison Napier and Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

DATA COLLECTION

Almost all monitoring and evaluation work involves data collection. There are many ways of collecting data. Data can be collected through basic tools, such as interviews, observation and surveys. This data can be analysed in a variety of different ways. More complex approaches combine different processes of data selection, collection and analysis within a defined tool or methodology.

Almost all monitoring and evaluation (M&E) work involves data collection. Data can be collected though many different mechanisms. Within M&E, there is little consistency in the terminology used to describe these mechanisms. Common terms include tools, templates, methods, processes, approaches, techniques, frameworks and methodologies. However, these terms are not very well defined. Within the M&E Universe, for the sake of simplicity, the following terminology is used.

- A ***tool*** is a simple method for collecting data. Tools include interviews, focus group discussions, observation, photography, surveys and questionnaires. Tools may be used in many different circumstances, and the information they generate can be analysed and used in many ways. Tools may also be called methods or processes.
- A ***template*** is an electronic or manual form used to record data. It usually consists of standard questions or headings with space to record answers or measurements.
- A ***methodology*** is a set of tools and processes that combine to form a consistent approach to data selection, collection, analysis and use. Examples of methodologies used in M&E include Randomised Control Trials (RCTs), Outcome Mapping (OM), Most Significant Change (MSC) and process tracing. Most methodologies incorporate the use of multiple tools and templates. Methodologies may also be called techniques, approaches or frameworks.

Using tools and methodologies in M&E

When INTRAC runs an M&E training event it always asks participants to state their expectations at the start. In many cases, participants hope to leave with new M&E tools or methodologies, which they believe will immediately improve their M&E capacity. They often leave disappointed. This is for a number of reasons. Firstly, there are no tools or methodologies that are appropriate in all circumstances. Secondly, most tools and methodologies need to be adapted to the context, and cannot be used *'off the shelf'*. Thirdly, the value of any tool or methodology is almost always dependent on how well it is used and applied.

Indeed, part of the skill of an M&E practitioner (or adviser) is to identify which tools and methodologies are appropriate under which circumstances, and then to adapt them as required to fit the situation. The aim of this section of the M&E Universe is to provide some background and information on the many different tools and methodologies available, to help M&E practitioners make these choices.

Selecting tools and methodologies

Many different factors influence decisions over which tool or methodology to select for an M&E task. Some of these are described below (see Bakewell, et. al., 2003).

- **The nature of the project or programme***:* Each project or programme is different, each with its own budget, goals, objectives and ways of working. A large project or programme involving thousands of beneficiaries, spread across wide geographical areas, does not require the same tools or methodologies as a project based in one small community.
- **The stage of the project or programme cycle***:* Some tools or methodologies, such as Outcome Mapping, are designed for use during design and planning stages. Others, such as MSC, can only be used after enough time has elapsed to see change.
- **The key questions that need answering***:* Some tools and methodologies are designed to identify the changes that have happened; others are better at explaining how and why change has occurred. For example, an RCT may show the level of change resulting from a project or programme, but information generated through qualitative tools such as interviews or focus-group discussions (FGDs) may help explain how or why that change happened.
- **The sector and type of work carried out***:* In some sectors of work, such as health, education and agriculture, it is common to use industry-standard tools or methodologies. For example, industry-standard tools can be used to measure the results of medical interventions, such as eye operations or nutrition programmes. Other tools and methodologies are designed to be used when carrying out specific types of work. For example, organisational capacity assessment tools (OCATs) are frequently used to monitor capacity development work.

- **Whether quantitative or qualitative analysis is needed**: Some tools and methodologies, such as surveys, are more appropriate for generating statistical data and findings. Others, such as FGDs, are better at generating in-depth qualitative information.
- **The degree of desired stakeholder participation**: Different tools and methodologies may be selected depending on how important it is to engage people in participatory M&E. Some tools and methodologies, such as Participatory Learning and Action (PLA), are designed to be used in a participatory way with stakeholders. Others, such as RCTs, need to be applied according to rigidly defined standards, and provide less flexibility for participation.
- **The time and resources available**: Some tools, such as interviews or photography, can be used very quickly and with few resources. Others, such as large-scale surveys, may require significant time and expense.
- **The available expertise**: Many tools can be applied by people with little or no M&E knowledge or training. On the other hand, complex methodologies such as RCTs or Qualitative Comparative Analysis (QCA) may require significant expertise. Complex methodologies may be impractical for some CSOs if the skills and expertise required to design and implement them is not readily available.
- **A focus on pre-defined indicators**: Some tools and methodologies require accurate predictions of change to be effective. Others are more capable of handling unexpected or negative changes. For example, a quasi-experimental approach normally requires a baseline to be established, covering pre-defined indicators of change. On the other hand, the methodology known as outcome harvesting can help capture change whether or not it was predicted.

As can be seen from the wide range of different influences listed above, selecting appropriate M&E tools and methodologies for a development intervention is not always easy. In some cases a combination of different tools or methodologies may be needed in order to meet multiple requirements. This is why a one-size-fits-all tool or methodology for data collection and/or analysis is often not a realistic proposition.

That said, many CSOs throughout the world never use complex methodologies for data collection and analysis, and rely mainly on simple tools such as interviews, FGDs and photographs, perhaps supplemented by a few case studies or stories of change. As stated earlier, the primary task of an M&E practitioner (or adviser) is often to help decide which combination of tools / methodologies is appropriate, and under which circumstances. The next task is then to adapt the selected tools or methodologies to the particular context.

Tools and methodologies covered in the M&E Universe

The M&E Universe contains papers on many tools and methodologies that can be used for data collection. These have been divided into two groups.

- The first group contains a set of basic tools. These can be used on their own or in combination. They generate data which can be analysed in many different ways. They can be implemented as stand-alone tools or as part of wider methodologies. The tools include interviews, FGDs, observation, photography, video, surveys, questionnaires, case studies and stories of change.
- The second group contains more complex methodologies for data collection and analysis. These include RCTs, quasi-experimental approaches, QCA, MSC, process tracing, contribution analysis, Outcome Mapping, outcome harvesting, organisational assessment tools, social network analysis, appreciative inquiry and tracer studies.

Of course there are many more tools and methodologies than are covered in the M&E Universe. However, most, if not all, are either adaptations of existing methodologies or variants on a theme. Once an M&E practitioner has understood the principles on which the tools and methodologies covered in the M&E Universe are based, he/she should find it much easier to adapt existing ones or design new ones to meet different circumstances.

> *"Every decade seems to produce some kind of tool, approach or methodology that is considered 'universally applicable' - the logframe, Participatory Rural Appraisal, Results Based Management and now Randomised Control Trials. We have yet to find such a tool or approach and we probably never will."*

Further reading and resources

The M&E Universe contains two papers that cover basic tools of data collection and complex methodologies for data collection and analysis respectively. These papers contain links to further papers covering each individual tool and methodology separately. Four other papers in the M&E Universe deal with related topics: sampling; the use of secondary data sources; the principles of data collection; and the use of ICT in M&E. These can be accessed by clicking on the links below.

Basic tools for data collection
Sampling
Principles of data collection
Complex collection and analysis methodologies
Secondary data sources
ICT in monitoring and evaluation

References

- Bakewell, O; Adams, J and Pratt, B (2003). *Sharpening the Development Process; A practical guide to monitoring and evaluation*. INTRAC, UK.

Author(s):
INTRAC

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

DATA USE

Monitoring and evaluation (M&E) information can be used in many ways. The three most common are learning, accountability and project or programme management. It is important to be clear from the start of a project or programme who needs to use M&E information, when and how. Engaging with potential users at an early opportunity increases the likelihood that M&E information will be used later on.

Monitoring and evaluation (M&E) is not an end in itself. No matter how well information is selected, collected, analysed and communicated it will make no difference to a project or programme unless it is used properly. It is therefore important to plan for data use right from the start of a development intervention.

Unfortunately, many CSOs have tended in the past to design M&E systems (or evaluations) without properly considering how to use the information afterwards. This is the wrong way around. Rick Davies (1996) refers to the fate of many M&E systems, which involve a large amount of effort and interest setting them up, lesser concern for data generation and analysis, and even less interest in actually using the information. To avoid this fate, CSOs need to be very clear about:

- who needs to use M&E information;
- what they need to use it for;
- when they need to use it; and
- how they intend to use it.

This means engaging with potential users at the earliest possible opportunity to properly assess their requirements and increase the likelihood of M&E information being used later on.

Factors influencing the use of M&E information

Many different factors influence how M&E information is used. Some of these are described below.

- Different organisations and stakeholders use M&E in different ways, depending on their place within the aid chain. For example, donors and host governments often use M&E information to hold CSOs accountable for results or ensure that regulations and legislation is properly complied with. Large CSOs may use M&E information to attract profile and funds, or to learn across different programmes. Operational partners or field staff may use M&E information to manage projects and programmes. And beneficiaries may use M&E information to better understand their own circumstances and take ownership over work that affects them.
- M&E information can also be used differently at different levels of a CSO. For example, at project level, M&E information is almost always used for project management and may also be used for accountability towards beneficiaries. At programme or sector level M&E information may be used to enhance communication between different stakeholders or provide evidence for advocacy work. At head office level in large NGOs, M&E is often used for fundraising and marketing, or accountability to donors and funders. Ideally, M&E information should be used for learning and improving at all levels of a CSO.
- M&E usage often depends on the type of work being carried out. If a CSO is engaged in service delivery, using tried and tested methods, M&E is more likely to be used for project management to ensure that projects remain on track. CSOs experimenting with new or innovative programmes are likely to devote a lot more resources to learning in order to improve the programmes and, eventually, expand or replicate them.
- The type of M&E carried out clearly also has a significant influence on usage. Routine monitoring information is often used for project management, whereas reviews, evaluations and impact assessments may be more focused on accountability and learning.

Small CSOs may operate M&E systems for one or two purposes only. But larger CSOs may operate M&E systems which are used in various ways at different levels of the organisation. This makes it even more important to fully understand how different stakeholders intend to use M&E information before planning and designing a system or approach.

Learning, accountability and project management

The three most commonly cited uses of M&E information are project or programme management; learning and improving; and accountability.

Project or programme management: M&E information is routinely used by CSO staff at field level to manage projects and programmes on an ongoing basis. This includes tracking resources, ensuring they are used properly, addressing problems as they occur, taking advantage of opportunities, and ensuring that projects and programmes are managed in the best way possible. Many CSO staff

spend a huge amount of time monitoring activities, deliverables, budgets, finances, procurements, contracts, compliance, relationships, logistics, equipment, personnel, risks and actions, as well as the external environment. This kind of monitoring is often ignored within academic debates on the use of M&E information, but is actually where ninety per cent of M&E activity takes place.

At the other end of the scale there is an ongoing debate around the contribution of M&E to the management of large, complex programmes of work. This is known as adaptive programming or adaptive management. Adaptive management involves regular processes for the collection and analysis of information, which is then used to make changes to a programme throughout its lifetime. Adaptive management is heavily dependent on having good learning processes and systems within a programme.

Learning and improving: There is a large degree of overlap between M&E and learning. M&E can contribute to learning in many ways. This includes generating new learning, highlighting the need to investigate an issue in further depth, capturing and communicating learning generated through informal processes, and supporting processes designed to jointly make sense of existing information (sensemaking).

Many M&E systems or evaluation approaches also include mechanisms to ensure that the learning generated through M&E processes is then translated into decision-making. This enables M&E information to contribute directly to improved performance within a project or programme.

Accountability: One of the most important reasons for carrying out M&E is to be accountable to different stakeholders. Accountability means different things in different circumstances depending on who is accountable, to whom, and for what. Broadly, there are four types of accountability for CSOs (see Hayman 2013). M&E information is routinely used to support all four types.

- Upwards accountability normally means the accountability of a CSO to its public or private donors. It can also include accountability to host governments or regulatory bodies.
- Downwards accountability usually means the accountability of a CSO to its beneficiaries, to any partners it funds or supports, or to other stakeholders that might be affected by its work.
- CSOs can also demonstrate sideways or horizontal accountability. This means being accountable to sister organisations working in coalitions, partnerships or networks.
- CSOs may also demonstrate self accountability. For example, small CSOs that represent the needs of their memberships may be accountable to those members. Staff working in a CSO might need to be accountable to managers. And CSOs are often accountable to boards, trustees or steering committees.

CSOs can be held accountable for many different things. This includes compliance with rules or standards, finances, processes, activities, deliverables and medium- to long-term changes.

Other uses of M&E information

In addition to project or programme management, learning and accountability, there are also several other common ways to use M&E information. Some of these are described briefly below.

- ***Supervision and control:*** Information collected for project management purposes may be used to enable managers to supervise and control project staff, or CSOs to supervise and control projects run by operating partners. Donors and host governments also use reports generated through M&E to supervise recipients of aid money.
- ***Resource allocation:*** Project management information may be used for resource allocation. This means using M&E information to help decide how and where resources should be allocated. An extreme version of this is called Payment by Results. This is where payments to CSOs are conditional on the achievement of predicted results.
- ***Policy influencing:*** CSOs involved in advocacy or policy influencing often use information collected through M&E processes to provide evidence that supports their efforts (or the efforts of others) to change or oppose government policies. Information acquired through M&E processes may also be used to held build a critical mass of support around an issue.
- ***Communication:*** M&E information is sometimes communicated to specific stakeholders to achieve a defined purpose. But the communication of M&E information can also be an end in itself. It can help increase understanding between different stakeholders by helping them to appreciate each other's perspectives.
- ***Marketing and fundraising:*** Many CSOs seek to raise funds from individuals or commercial organisations, or solicit their support in other ways such as volunteering, taking part in campaigns or attending events. M&E information is often used to support these efforts.
- ***Enhancing participation:*** M&E can also have value as a process, particularly where CSOs operate participatory M&E systems. Done well, these can enable different stakeholders to increase their participation within a project or programme. Sometimes, M&E systems or evaluations incorporate special processes through which beneficiaries can increase their involvement in a project or programme. These include complaints mechanisms and beneficiary feedback mechanisms.

Further reading and resources

Many of the different ways of using M&E information mentioned in this paper are covered in separate papers within this section the M&E Universe. These include papers on learning, accountability, project and programme management, adaptive management, communication and fundraising and marketing. There are also separate papers on reporting and learning-based M&E systems.

- Learning
- Accountability
- Project and programme management
- Adaptive management
- Communication
- Fundraising and marketing
- Reporting
- Learning-based M&E systems

References

- Davies, R (1996). *An Evolutionary Approach To Facilitating Organisational Learning: An experiment by the Christian Commission For Development in Bangladesh.*
- Hayman, R (2013). Transparent, accountable, legitimate, credible: NGO responses to scrutiny. *Ontrac newsletter, no. 53*, January 2013. INTRAC, Oxford, UK.

Author(s):
Nigel Simister

Contributor(s):
Anne Garbutt and Alison Napier

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

DEVELOPING A PLAN

Most projects and programmes develop a formal written plan at the start. In many cases these plans contain information on how monitoring and evaluation will be conducted. The way in which a plan is developed, and the content of the plan, also have implications for how monitoring and evaluation is carried out later on.

A plan is usually a written document that describes the problems or challenges a project or programme will attempt to address, potential solutions, and activities designed to contribute to desired changes. Plans may be developed at many different levels: for example, strategic plans based at organisational, regional, country or sector level; programme or project plans; and operational plans such as annual, quarterly or monthly plans and budgets.

Plans may be developed for many different purposes. Some plans are developed to acquire approval or funding. Other plans may be developed to guide implementation over the course of a programme or project, or to allow managers to supervise or control work. Plans may be developed as stand-alone pieces of work, or they might have to fit within wider geographical or organisational plans. They may be written according to the needs of an implementing agency or they may have to be developed under headings dictated by other agencies, such as governments or donors. They might be designed to satisfy internal management needs or largely written for an external audience.

This can present difficulties for monitoring and evaluation (M&E) practitioners. Planning and M&E are very closely related, and ideally plans should always be developed to reflect as accurately as possible a project or programme's challenges and proposed solutions. Yet with so many different ways of developing plans, and so many different motivations, there are bound to be cases where plans do not truly reflect the reality on the ground – either the nature of the challenge or the ability of an organisation to respond to that challenge. This is one of the key reasons why M&E practitioners should always be involved in planning processes wherever possible.

The process of developing a plan

For small organisations without external funders planning may be an implicit exercise resulting in little more than a few ideas on a piece of paper, or even in the heads of staff members. On the other hand, large organisations may have lengthy and complicated project/programme cycle management procedures that dictate how plans are developed and refined. But in either case the process through which plans are developed is likely to have a significant effect on future M&E work. This is for two main reasons.

Firstly, some of the key decisions on how to conduct monitoring and evaluation are taken at the planning stage. For example, objectives, indicators and the tools used to collect indicators are often identified at the planning stage, either before a project or programme begins or near to its start. Decisions on whether and/or how to conduct a baseline also need to be taken near to the start of a project or programme.

Secondly, the way in which plans are developed is likely to affect the ownership of monitoring and evaluation processes later on. For example, if an organisation hopes to develop a participatory monitoring and evaluation system then there needs to be some level of participatory planning. This might involve communities contributing to the identification of problems, the suggestion of solutions, the development of objectives and indicators, and the identification of methodologies for collecting information. If the selection of objectives and indicators is not at least partially influenced by communities then it will be much harder later on to persuade them to get involved in the collection or analysis of M&E information.

Equally, the way in which collaborative programmes are planned has implications for M&E. For example, some intermediary NGOs develop programme plans and then invite partners to comment, whilst others seek to develop plans collaboratively with partners. In the latter case there is likely to be much greater participation of partners within programme M&E processes as well.

Planning tools and methodologies

There are many different tools and methodologies that may be used to assist project or programme design and planning. Some of these are used purely for design and planning, whilst others may also influence how monitoring and evaluation is carried out at a later stage. Some examples of common tools and methodologies used in design and planning, and how they might influence M&E at a later stage, are described below.

- **Context or situational analysis:** This is an analysis and description of the current situation and context surrounding the problem, challenge or opportunity a project or programme hopes to work on. A situational analysis usually describes a situation in detail, focusing in particular on the primary intended beneficiaries and

how they are affected by the different challenges or problems identified. Findings from situational analyses are commonly used in baseline studies.

- **Visioning:** Visioning is a technique that helps stakeholders imagine and describe what an ideal situation might look like in a number of years' time. Visioning is designed to be a starting point to help people think about the end situation, and therefore what immediate changes need to be pursued. Visioning can be very useful in helping people to collaboratively develop longer-term indicators of change.
- **Stakeholder analysis:** A stakeholder analysis is an analysis of the people, groups or organisations that may influence or be influenced by a project or programme. Stakeholder analysis often informs decisions over which groups to inform, consult or control at different stages of a project or programme. Decisions on who to involve in planning, monitoring and evaluation may be taken during a stakeholder analysis
- **Problem analysis:** A problem analysis is normally conducted with different stakeholders, and is designed to achieve consensus on detailed aspects of a problem or challenge. Problem analysis often ends up with a problem tree, which illustrates not only how problems are inter-linked but also what might be the root causes. It is quite common to then develop an objectives tree or similar tool that includes a series of objectives at different levels, with the relationships and linkages between them clearly identified. An objectives tree may have implications for how objectives are defined within a project or programme, and how indicators and baselines are developed.
- **PRA/PLA:** PLA (Participatory Learning and Action) used to be called PRA (Participatory Rapid/Rural Appraisal). It is based around the participation of a broad range of different stakeholders, especially those affected by a project or programme, and consists of a large number of participatory tools and techniques. PLA / PRA can be used at any stage of a project or programme cycle, although it was originally designed to be used at the appraisal and planning stages. PLA / PRA is designed to gain an in-depth understanding of a community or situation, and is often used for M&E purposes. Using PRA / PLA at the planning stage has huge implications for how a project or programme might be monitored and evaluated at a later stage.
- **Scenario planning:** Scenario planning is a strategic planning method designed to help generate flexible, long-term plans. It involves developing different pictures of how the future might evolve – scenarios – and then considering how a project, programme or organisation might need to change if those scenarios become reality. Scenario planning relies on effective monitoring and review mechanisms. Organisations need the will and the power to make changes rapidly in the face of changing situations, and appropriate monitoring and review processes to identify those changes.
- **The logical framework:** The logical framework is a very common planning tool. It contains a set of objectives at different levels, and includes indicators against each objective. It also outlines the tools or methodologies that will be used to collect information on those indicators. Projects and programmes often base their entire M&E system on the information contained within a logical framework, developed at the planning stage.
- **Outcome Mapping:** Outcome Mapping focuses on changes in the behaviour of the people, groups and organisations influenced by a programme. Like the logical framework, it is a planning methodology that has implications for how monitoring and evaluation is conducted. However, Outcome Mapping is designed to deal with complexity, and is not based around linear models of change. Outcome Mapping comes with its own set of monitoring practices, based around the logging and recording of changes (outcomes) over the course of a project or programme.

> *"The decisions you take at the planning stage, and the way in which your plans are developed, are likely to have significant implications for how M&E is conducted. Start as you mean to go on."*

Reviewing plans

Perhaps the most important thing when developing a plan is to recognise that almost all plans are at some stage disrupted by changing situations. A plan is a necessary document that should guide the implementation of a development intervention, but it is only a guide, and should not be allowed to dictate events. A good monitoring and evaluation system will seek to test the assumptions behind a plan and constantly review the plan in the light of emerging evidence. A normal project or programme would be expected to review and update its plan many times over its lifetime.

Therefore, it is best to ensure a written plan is as short and simple as possible, whilst imparting the necessary information. This includes:

- being clear about the key messages;
- being honest about what it is a project or programme hopes to do or achieve;
- being clear and consistent in the use of language; and
- ensuring that staff joining the project or programme at a later date can adapt and change the plan as required.

The content of a plan

All plans are different, but there are often common elements that are contained in a strategic, programme or project plan. Some of these elements are contained in the box on the following page.

A Project or Programme Plan

Background and overview: The rationale and context for the project or programme. This can include: a summary of the findings from any previously undertaken situational analysis work; a summary of any key lessons learned during previous phases of the project/programme or other relevant work; a description of the geographic locations or sectors covered by the project or programme; the proposed timing and duration of the project/programme; and a description of the key target group(s) that it is hoped will benefit, together with a rationale for why they have been selected.

Goal, objectives and indicators: The objectives describe the specific, timebound changes that the project/programme intends to bring about within its scheduled timeframe. The goal may be a wider aspiration which is not necessarily timebound, and to which many organisations might contribute. Indicators may be defined against the project/programme objectives.

Project/programme design: The key working approaches employed to achieve the goal and objectives described above. This section could include relevant strategies and a description of key working approaches, and a description of how these might evolve over the period of the project/programme. It might also include a list of key deliverables, a description of key activities that will be undertaken over the course of the project/programme, and a brief description of the exit strategy, if appropriate. In some cases a project or programme might also wish to describe how it is addressing organisational cross-cutting issues such as gender, disability or the environment.

Partners and stakeholders: A description of the main partners or organisations that will work on the project or programme, or with which the project/programme hopes to collaborate, together with any other key actors, and their role within the project or programme. This could include organisations that might be the target of policy influencing work, or whose support needs to be gained. In a larger programme, this section might also contain details of smaller projects run by individual partners.

Resources: A description of the resources that will be required to implement the project or programme. This will include human resources, financial resources and other support needs, along with an assessment of how these might change over the course of the project or programme.

Risk assessment and management: An outline of the main risks and assumptions associated with the project or programme and how these will be managed. This section might also include notes on protection, staff security and any risks associated with partnerships with different groups.

Monitoring and evaluation: A brief description of how the project or programme will be monitored and evaluated over its lifetime. This should include a summary description of any baseline work conducted, any specific monitoring processes, details of any scheduled mid-term reviews, evaluations or impact assessments, key external reporting schedules, and details of how learning will be shared both within and outside the project or programme.

Annexes: A project or programme plan might also contain annexes containing more detailed information. This could include some of the following:

- A logical framework or equivalent planning tool
- A detailed budget for the project/programme as a whole, or the first part of it
- A detailed M&E plan, including an indicator matrix specifying who is responsible for collecting indicators against the main objectives, how they intend to collect them, and when
- An activity chart or Gannt chart outlining detailed activities to be carried out

Further reading and resources

Further papers within this section of the M&E Universe describe the influences that affect the design and implementation of M&E approaches, and the development of M&E approaches and plans. There are also papers relating to two of the planning methodologies mentioned in this paper, PLA/PRA and the logical framework. To access these papers directly, click on the relevant links below.

- Influences on the M&E approach
- Participatory learning and action
- Developing an M&E approach
- The logical framework

Some other useful resources that cover a range of different planning tools and methodologies, some of which have been mentioned in this paper, are as follows:

- *Tools for Development: A handbook for those engaged in development activity*, *version 15* (2003). Published by the UK Department for International Development and available online.
- Guijt I. and Woodhill J. *A Guide for Project M&E*. International Fund for Agricultural Development. Available in English, French, Spanish and Arabic.
- A series of practical tools for international development can be found at *www.tools4dev.org*.
- Gosling L. and Edwards M. (2003), *Toolkits: A practical guide to planning, monitoring, evaluation and impact assessment,* 2nd edition. Save the Children, London. This book is available through the Save the Children website

Author(s):
INTRAC

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

ICT IN MONITORING AND EVALUATION

Over the past two decades, many new tools and methodologies for monitoring and evaluation have become available. Innovation has frequently been driven by advances in information and communications technology. New processes, tools and methodologies inspired by advances in technology have brought new opportunities, but also new challenges, for development agencies.

Over the past two decades, many new tools and methodologies for monitoring and evaluation (M&E) have become available. A few are genuinely new, whilst others are based on well-established research methodologies. Many, unfortunately, are simply old ideas re-packaged and re-labelled.

Where there has been genuine innovation, it has often been driven by advances in information and communications technology (ICT). New processes, tools and methodologies, inspired by advances in technology, have brought new opportunities, but also new challenges, for development agencies, including CSOs.

Tools supported by ICT

This section is primarily based on a paper called "Innovations in Monitoring and Evaluating Results", produced by the United Nations Development Programme (UNDP) in 2013. That paper describes the tools and methodologies in further detail, and points to further reading (see UNDP 2013).

Beneficiary feedback mechanisms (BFMs): BFMs are *"the systems and processes that give the recipients of aid the opportunity to comment, make suggestions, express gratitude or criticise the products, services or targeting of an aid project of which they may be recipients"* (Jump 2013 p10). Mechanisms used to encourage beneficiary feedback include suggestion boxes, group meetings or one-on-one interviews. Increasingly, BFM is being facilitated through texting and voicemail from mobile phones. In theory, this can make it much easier for different stakeholders to provide their views directly to project or programme staff.

Crowdsourcing: Crowdsourcing involves obtaining information from large groups of people, especially an online community. This can be done very quickly and easily nowadays using mobile phone technology or open source software platforms. Crowdsourcing is most useful for M&E when an organisation wants to produce rapid quantitative information. However, it can also be used when seeking to gain information on sensitive issues such as corruption, where a large amount of anonymous information may be required.

Data exhaust: Data exhaust refers to the passive use of data from people accessing digital services. Whenever people use mobile phones or access the internet they leave trails behind them, and these can sometimes be used for M&E purposes. For example, many organisations that run websites keep records showing who accesses these websites, when and how often. Another example could be the analysis of social media interactions, which might show an organisation how its campaign messages are being received.

Data visualisation: Data visualisation tools allow data to be represented graphically and interactively. Examples include interactive websites, infographs, data dashboards and maps. Within M&E, data visualisation can be used to help analyse trends and patterns. It can also increase the ability of a development agency to communicate information to institutional donors, supporters and partners.

Intelligent Infrastructure: Infrastructure such as roads, bridges and buildings can be equipped with remotely accessible electronic senses to provide information on access. The data can be used to determine how and when infrastructure or services are used. For example, intelligent infrastructure can be used to record how many people are entering hospitals or resource centres. In some cases intelligent infrastructure can support automatic monitoring leading to decision-making. For example, it is possible to design wells that self-report when they are broken.

Micro-narratives: Micro-narratives are short stories or testimonials recorded by different stakeholders. They are normally personal stories, generated through conversations, or through social-media sites. Pattern detection software can be used to translate the qualitative information into quantitative information. The use of micro-narratives can potentially allow development agencies to collect qualitative information from a very large number of citizens, yet still draw meaningful insights.

Mobile data collection: Mobile data collection (MDC) involves collecting structured information through mobile phones, tablets or Personal Digital Assistants (PDAs), using specially-designed software applications. MDC is often used to run surveys. MDC has many potential advantages over paper-based survey methods:

- it enables the collection of audio, photographic, video or geographic information;
- it can improve the accuracy of data collection, because software can be designed to guide question-making or identify inconsistencies;

- it means data collected during a survey can be processed immediately, and avoids the need for data to be entered twice – once on a paper sheet and once onto a centralised computer; and
- it allows for adaptations – to sampling design or to questionnaire design – to be made in real-time, when data starts to come in.

INTRAC has recently worked on two projects that support mobile data collection. One project in Rwanda uses clinically trialled sensors, capable of diagnosing certain eye disorders, which is being used to evaluate the coverage of a primary eye-care programme. Another project involves the use of mobile apps to administer literacy tests.

Real-time, simple reporting: This means producing frequent reports, including text, pictures, audio recordings and videos, which can be generated and delivered through computers or mobile devices. Real-time, simple reporting can reduce formal reporting requirements for project managers, and can make reports more interesting. The power to record the faces and voices of beneficiaries can also help bring reports to life. Real-time reporting means project managers can provide more frequent updates, which can theoretically enhance real-time decision-making as well. Sometimes beneficiaries can be encouraged to engage in real-time reporting, using social media to give status updates of projects.

Remote sensing: Remote sensors can be used to observe distant targets using information from satellites or other airborne devices. This can be useful when access to an area is limited because of physical or security issues. Potentially, remote sensing can be used during humanitarian disasters when some locations become completely isolated. Remote sensing can also be used to observe major, physical changes in fields of work such as deforestation, climate change and natural resources. INTRAC has seen examples of where remote sensing has been used to assess roof construction within villages, in order to examine changes in economic status (where tin roofs are an indication of wealth).

When to use ICT-based solutions

Civil society organisations (CSOs) have often been in the vanguard of organisations experimenting with new, ICT-supported solutions. However, organisations need to carefully consider when and where an innovation should be used. A recent UNDP project (UNDP 2013) has developed some criteria for guiding decisions on when to apply new innovations. These criteria can be summarised as follows.

- A key question is whether or not the innovation meets a clearly identified need. Just because something can be done does not mean it should be done. To be useful a new tool or methodology should meet a need that cannot not be met by more traditional or cheaper tools or methodologies.
- Another key issue is whether there is sufficient organisational capacity to understand, develop, implement and use the innovation. As far as ICT is concerned, this includes having (or being able to access) the expertise needed to understand what technology is available and practical, and what are the likely costs and benefits.
- A third important issue is whether there is willingness (or power) to change established M&E practice. This is especially important for innovations that encourage the real-time collection and analysis of data. The value of real-time data will only be seen if learning and decision-making mechanisms are adjusted accordingly.
- An obvious question is whether there are sufficient resources for initial investment. Many technological innovations save time and money in the long-run, but most require money and expertise to be devoted at the start.
- If the innovation involves the active participation of different stakeholders then a key issue is whether or not there is sufficient incentive. For example, it is technically possible for any development agency to set up an online survey, using a platform such as Survey Monkey. But if the response rates are low because people are not motivated to participate, results may be inconclusive or misleading.

Decisions on whether or how to use ICT-supported tools and methodologies are usually based on some form of cost-benefit assessment that weighs the potential benefits against the likely costs. If full costs and benefits are not known then one option is to trial new tools and methodologies in small pilot projects, before expanding further.

Opportunities and challenges

Each of the different tools and methodologies described earlier in this paper has their own particular strengths and weaknesses. In general, however, the opportunities offered by ICT-inspired innovations within M&E can be summarised in three areas.

- Firstly, many of the innovations (e.g. BFMs, crowdsourcing, data exhaust, mobile data collection, real-time simple reporting) present opportunities for real-time information to be generated and analysed throughout a project or programme cycle from planning through to evaluation. This contrasts with more traditional methods of M&E that tend to be focused around baselines, mid-term reviews and final evaluations. Potential benefits include more regular testing of theories of change and more regular adaptation of plans. (ibid)
- The second area concerns increased engagement of citizens. Methods such as BFMs, crowdsourcing and micro-narratives encourage the more active participation of different stakeholders, and can open up new communication channels between projects / programmes and their intended beneficiaries. Other methods (e.g. data exhaust, intelligent infrastructure, remote sensing) enable many more stakeholders to be considered, although in these cases data collection is

more extractive, and stakeholders are merely passive suppliers of data (ibid).

- Thirdly, some innovations can help improve the quality or consistency of data. This is done by building quality control into the tool or methodology (e.g. mobile data collection) or by enabling new methods of data collection that can be triangulated against data generated through more-established methods.

Some of the main common challenges are as follows.

- The nature of innovation means that new challenges will always emerge. Therefore, the first organisations to pilot or use new innovations need to learn quickly and pass this information on to others.
- Access to technology often follows existing inequalities, such as wealth, gender or geographic inequalities. Therefore, technology-based M&E may not reach the most marginalised. For example, through its involvement in a recent pilot project, INTRAC observed that increasing access to BFMs via Short Message Service (SMS) texting could potentially exclude the most marginalised women in the project, as only those literate enough to write an SMS, and wealthy enough to own a handset separately from their husbands, could engage.
- Participation is generally acknowledged as a good thing within M&E, although it has long been recognised that it can be difficult to manage. Vastly increasing participation through innovative tools and methodologies may also vastly increase expectations, and new processes and mechanisms may need to be put in place to ensure that participation does not merely become data extraction (Raftree 2012).
- Innovative methodologies such as BFMs, crowdsourcing and micro-narratives may also open up the potential for unwelcome or abusive opinions to be aired. Social monitoring sites are not always easy to handle, and organisations new to the field need to develop ways to handle unwanted or unwelcome contributions.
- Many established M&E methodologies require careful sampling to ensure that results or opinions reflect wider populations. There is a danger that the appeal of getting information from large numbers of respondents will overshadow the need to ensure that they are representative of the wider population. Big data does not necessarily mean good data.
- When describing the ideal 'learning' NGO, Britton (1998, p4) draws a distinction between:
    - *information:* the raw material of facts, opinions and ideas;
    - *knowledge:* systematically organised information which, by the processes of analysis, comparison, testing and generalising, can be used to answer complex questions; and
    - *wisdom:* uniting the facts and insights of knowledge with the fruits of experience in a way which can usefully guide action.

  Whilst many innovative methodologies generate a large amount of *information,* and some (e.g. data visualisation) can support enhanced *knowledge,* it is important to recognise that the ultimate aim is to enhance *wisdom*. It is therefore important to recognise and support the human capacities needed to translate information into knowledge and wisdom. ICT innovations can only take an organisation so far when it comes to data analysis.

Finally, there are new ethical issues that need to be addressed with new innovations. These are perhaps most important when dealing with issues around passive data collection, such as data exhaust and remote sensing, where it may not be feasible or practical for participants to give consent to their information being used.

Further reading and resources

The paper *Innovations in Monitoring and Evaluating Results* (see UNDP 2013) contains information on all the innovations covered in this paper in further detail. A useful summary of debates around mobile data collection can be found at the Better Evaluation website at http://betterevaluation.org/evaluation-options/mobile_data_collection. A paper on beneficiary feedback mechanisms, based on a literature review (see Jump 2013) also contains a chapter on the role of technology in BFMs.

Probably the best-known crowdsourcing platform in the social development sphere can be found at www.ushahidi.com

References

- Britton, B (1998). *The Learning NGO.* Occasional Papers Series no. 17. INTRAC, July 1998.
- Jump, L (2013). *Beneficiary Feedback Mechanisms: A literature review.* Development Initiatives, April 2013.
- Raftree, L. (2012). *12 Tips on Using ICTs for Social Monitoring and Accountability.*
- UNDP (2013). *Innovations in Monitoring & Evaluating Results*. United Nations Development Programme, November 2013.

Author(s):
Nigel Simister and Dan James

Contributor(s):
Vera Scholz

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

IMPACT ASSESSMENT

Impact assessment involves the assessment of long-term and/or significant changes brought about through a development intervention or series of interventions. It can be carried out through many different tools, methodologies and approaches. Impact assessment is always focused on change, and pathways towards change, rather than on activities or deliverables.

Impact assessment involves the assessment of long-term and/or significant changes brought about through a development intervention or series of interventions. Impact assessment is not a tool or methodology. Instead, it can be carried out through many different tools, methodologies and approaches. What sets impact assessment apart from other monitoring and evaluation (M&E) efforts is that it is always focused on change, and pathways towards change, and never focuses purely on activities or outputs (deliverables).

The first challenge faced by CSOs wishing to carry out impact assessments is how to define impact. There are many different definitions within social development. Perhaps the two most common are as follows:

> *"The positive and negative, primary and secondary, long-term effects produced by a development intervention, directly or indirectly, intended or unintended" (OECD 2010)*

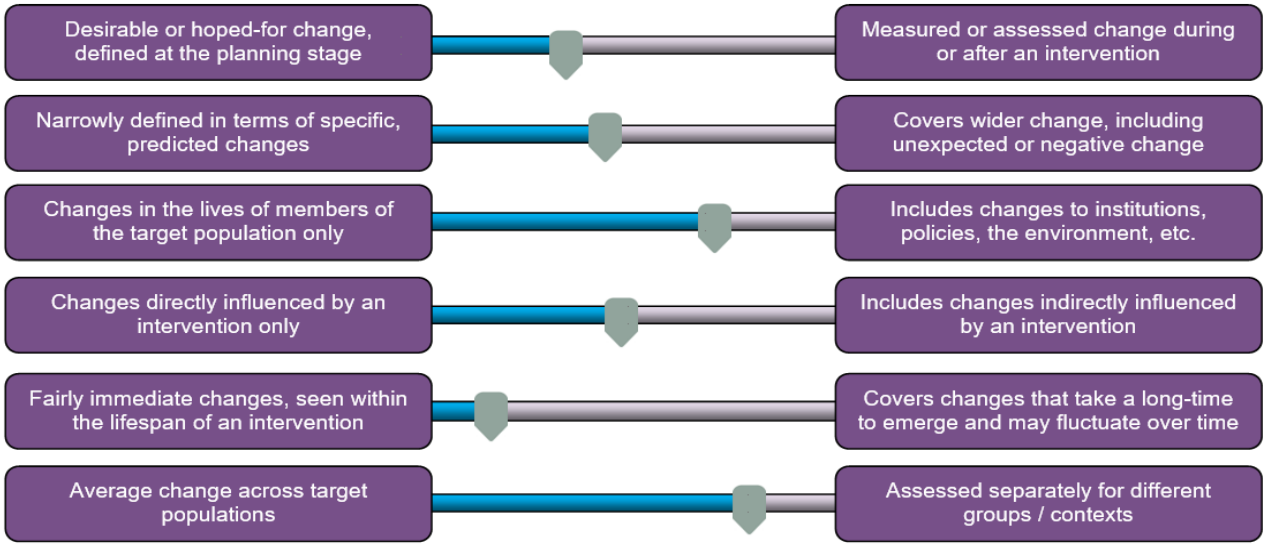
> *"Lasting or significant change – positive or negative, intended or not – in people's lives brought about by an action or a series of actions" (Roche 1999).*

Even between these two definitions there are different interpretations. The OECD definition refers only to long-term effects, whereas the Roche definition acknowledges that impact may involve short-term, significant changes such as saved lives within health or humanitarian interventions. On the other hand, the Roche definition only covers changes in people's lives, whereas the OECD definition is broader, and can include long-term changes in areas such as organisational capacity and policy as well.

In some circumstances the avoidance of negative change can also be classed as impact. For example, in the humanitarian sector an important aim of some programmes may be to avoid famine. And for environmentalists a key objective may be to preserve biodiversity. In both these circumstances impact can be understood as avoiding the harm that might have occurred without a development intervention (CONCORD 2010).

Another challenge for CSOs is that the word 'impact' is often used interchangeably with terms such as 'results', 'outcomes' and 'effects'. All of which means impact assessment is a hard concept to define exactly.

Recent research (see Hearn and Buffardi 2016) has attempted to capture how *'impact'* is defined and used in different circumstances by development agencies. This is summarised in the diagram below, which shows that understanding of impact (the 'sliders' in the diagram) can vary from agency to agency across six dimensions. Obviously, the way in which an organisation understands impact along each of these different dimensions will have a profound effect on how it approaches impact assessment.



INTRAC takes a broad view of impact assessment, and sees it as an attempt to answer some basic questions (O'Flynn 2010).

- What has changed because of a development intervention (or interventions)?
- Which groups have been affected (or unaffected) by the changes?
- How were the changes brought about?
- How significant are they?
- Are they likely to last (or have they lasted)?

Taken together, this set of questions provides a framework that can be applied in most situations, regardless of the definition of impact. For example, the questions could be applied in a small health project, delivering significant and life-changing benefits over very short time periods. But equally, they could be applied in a long-term governance programme seeking to change relations between governments and civil society over a twenty-year period.

The purpose of impact assessment

In general, the purpose of impact assessment for CSOs is similar to the purpose of any M&E-related activity. The one difference is that impact assessment is not normally carried out purely for project or programme management purposes. Different purposes can include the following (see O'Flynn 2010, Hailey and Sorgenfrei 2004):

- to better understand what long-term or sustainable changes have occurred in order to improve the effectiveness of current or future interventions;
- to be accountable to different stakeholders, including donors, supporters, partners and beneficiaries;
- to use the findings to advocate for changes in policies, strategies and practices; and
- to communicate achievements internally and demonstrate long-term successes, in order to motivate staff and other stakeholders, justify funds received, and solicit further funding.

Impact assessment is particularly important when CSOs are working in new or innovative situations, where there is no proven theory of how interventions lead to desired changes. It is perhaps less important in circumstances where CSOs are following well-established routes to change, such as delivering mosquito nets to affected populations to reduce the spread of malaria.

Types of impact assessment

There are many different ways of going about impact assessment. Some of the more common ways are described below.

- One way is to carry out an impact assessment at the end of a project or programme. This often takes the form of an impact evaluation that seeks to assess actual change compared to anticipated change. Impact evaluations tend to be led by external experts.
- Some impact assessments are carried out a while after the completion of a project or programme. These studies can make a better assessment of whether any changes were sustained after the project or programme finished.
- Another way of carrying out impact assessment is to investigate impact throughout a project or programme. This can be done by embedding questions on impact into an organisation's monitoring processes, and by assessing change on an ongoing basis. This is sometimes known as impact monitoring.
- Some larger agencies conduct major studies of the impact of their programme work. These studies are resource intensive, and cost a lot of money and staff time. They often involve expert evaluators, but can also involve beneficiaries throughout the process. The studies often begin with a baseline study at the start of a programme and may continue until well after the programme has ended.
- Participatory approaches to impact assessment tend to involve different stakeholders, including beneficiaries, at all stages of the project or programme cycle. Stakeholders are involved in both identifying the changes they wish to see, and assessing whether, and how, those changes have been realised.
- Some M&E methodologies, such as the most significant change (MSC) technique or tracer studies, can be used to monitor and evaluate change throughout a project or programme.
- It is sometimes possible to establish impact through research studies, carried out at the same time as projects or programmes, at the end, or sometime afterwards. Research studies can range from large, well-resourced exercises to small-scale, rapid exercises that can generate findings quickly and cheaply.

It is important to note that these different approaches are not mutually exclusive, and in some circumstances impact assessment may be carried out through multiple different approaches.

Measurement, assessment and illustration

Another way of looking at impact assessment is to divide initiatives into those looking to measure change, those looking to assess change, and those attempting only to illustrate change. Again, these terms are often used interchangeably.

- **Measuring change** implies that it is possible to accurately define the change an intervention is attempting to bring about, and then establish that change (as well as the intervention's contribution to that change) beyond reasonable doubt. Large studies involving experimental designs (e.g. randomised control trials or quasi-experimental approaches) may attempt

to measure change in selected, pre-defined indicators through the use of large baseline surveys and control or comparison groups.

- Many CSOs are unable (or unwilling) to engage in large studies such as those described above. Unless the impact they are looking for is straightforward and easily measured, they instead choose to collect evidence using qualitative methods, such as interviews, observation, focus group discussions, photography, and different forms of participatory methodologies. These methods enable them to balance evidence from different stakeholders, methodologies and locations and come to a critical **assessment of change,** and an intervention's contribution to change.
- Sometimes it is not possible (or practical) to measure impact, nor to make a reasonable overall assessment. In these cases, CSOs may attempt to **illustrate change** instead. This means developing some case studies or stories of change that show how development interventions have impacted, or are impacting, on the lives of different groups or stakeholders. The case studies or stories of change may not be representative, but may show the different ways in which people's lives are being affected.

In some cases, impact assessment starts by looking at a project or programme, and then traces change forward to see how activities have translated into outputs, outcomes and eventually impact. This is often the case with impact evaluations that try to assess the impact of an individual project or programme.

An alternative is to assess (or measure) impact across a targeted population – perhaps being less focused on predicted changes – and then work backwards to assess whether, and how, different initiatives have contributed to those changes. This may be a preferred option if an impact assessment is designed to cover the cumulative effects of many different projects or programmes over time.

Links to Theory of Change

Along with other agencies, CSOs are increasingly linking impact assessment to Theory of Change (ToC) thinking. A Theory of Change is a theory, or model, of how a development intervention is intended to produce change. Theories of Change are often represented as logic models or impact pathways that show how changes at one level are expected to contribute to changes at other levels. Typically, ToCs also include major assumptions, as well as descriptions of what else might influence the desired changes other than the development intervention concerned.

CSOs have always had their own implicit understanding of how change happens, represented in mission and vision statements, but have not always made these explicit (O'Flynn 2010). However, more and more CSOs are developing explicit ToCs, and these can provide an important framework for undertaking impact assessment. Some of the benefits are as follows (see also Rogers 2012).

- Theories of Change inform organisations where to look for change. They articulate expected changes at different levels, which can be investigated using different methods and approaches.
- Theories of Change can make the production of evaluation (or impact assessment) questions easier, as there is an explicit model of change that shows what was expected to happen. This also makes the definition of indicators much easier.
- Theories of Change can also ensure that different stakeholders agree on what changes were expected and why, and what might constitute long-term success or failure. Alternatively, they can bring any differences in opinion to the surface so they can be investigated and resolved.
- If impact is not expected within a timebound project or programme then Theories of Change can help to articulate outcomes that can be realised within the timeframe of the project or programme, and that are important steps along the way to longer-term impacts. This helps make clear the changes that are necessary to achieve long-term impact, even if that impact cannot be measured or assessed at the time.
- If initiatives are unsuccessful, a Theory of Change can help establish where things stopped working. For example, if early changes were realised but they failed to translate into later changes, an impact assessment could investigate why. This makes it easier to find out whether impact was not achieved because the theory was incorrect, or because the project or programme wasn't implemented correctly.
- Most theory-based evaluations require a ToC of some kind. Sometimes these are available beforehand, and sometimes they need to be developed or adapted at the start of the evaluation. Theory-based evaluations may also develop alternative theories of how change came about, and then explore evidence which strengthens or weakens these alternative theories.
- Theories of Change usually contain critical assumptions. In impact assessment, these assumptions may be tested to see if they hold true or need to be changed. Theories of Change can thereby help reinforce or reject different assumptions about how change happens.

In most cases nowadays when impact assessment is taken seriously it is linked to a formal and explicit Theory of Change. However, an important aspect of many impact assessments is also the search for unexpected and/or negative changes – those changes that may not have been covered by a Theory of Change, but which have happened anyway. The formal separation of expected and unexpected change may not be so important for accountability purposes, but is very important for learning and improving, and especially for feeding the results of impact assessment work into future interventions.

Challenges

Along with the challenge of defining impact and knowing where to look for change, there are a few other challenges that are common to impact assessment across many agencies.

- Impact assessment exercises may cost a great deal of time and money. Establishing change at the level of individuals and communities can be very difficult and time consuming. And if the findings are to be used to shape future development interventions there needs to be a fair degree of certainty about any conclusions and recommendations, which also adds to the cost.
- Many CSOs work through partners. In some circumstances it is difficult to work out what is being achieved by a CSO and what is being achieved by their partners. Sometimes it is not even clear who should be carrying out the impact assessment.
- Even where change can be accurately measured or assessed it can be very challenging to attribute that change to an intervention or set of interventions. There are always many other socio-economic and political influences on people's lives, and they are often affected by the work of many different organisations. This is particularly true when CSOs work in areas such as policy influencing, where there are usually multiple different actors contributing to change.
- There are now so many different tools and methodologies to choose from that CSOs may feel overwhelmed by all the different possibilities. This can lead to designers and planners of impact assessment approaches over-complicating the process. In some cases, pressure to adopt specific approaches or methodologies can also lead to CSOs and partners adopting tools they are not comfortable with or do not properly understand.
- Larger organisations, such as International NGOs (INGOs) or large Southern NGOs (SNGOs), are often put under pressure to aggregate impact across many different programmes, sectors and countries. While these NGOs may be able to conduct impact assessment in individual projects and programmes, they often find it very hard to aggregate impact across their organisations.
- Finally, there has been a tendency in recent years for donors to view large statistical studies, based on experimental designs, as the only valid form of impact assessment. Sometimes, CSOs have felt that their own impact assessment procedures are not valid, or not valued. In very recent times this has led to a greater interest in making qualitative approaches more rigorous.

Some do's and don'ts of impact assessments are shown in the table below (see O'Flynn 2010, Stern 2015).

Some Do's and Don'ts of Impact Assessment

Do...	Don't...
• encourage the development of a Theory of Change that makes explicit the impact you hope to see, and any assumptions you are making. At the very least, be clear about what you are hoping will change, for whom, and why it is important. This will help direct your impact assessment efforts. • be realistic about what your organisation(s) can directly influence, and what it can only indirectly influence. • work, as far as possible, to build impact assessment into ongoing planning, monitoring, review and evaluation processes. • try and ensure stakeholder input at all stages of the design and delivery of impact assessment processes. • make sure you are listening to your key constituency – whether that is beneficiaries, communities or partners. They will know best the impact you are having! • try and create a culture of learning and critical thinking within your organisation. • use impact assessment findings widely and creatively.	• bother too much about the jargon and definitions of impact. In the end, most people know what they mean by impact, even if they cannot define it precisely. • over claim on what your organisation can realistically influence. Be clear about when you are measuring impact, when you are assessing it, and when you are only illustrating it. • try and use complex tools or methodologies unless you have the experience and expertise to use them properly, and understand when they are, and are not, appropriate. • treat beneficiaries or communities as homogenous entities. Always make efforts to understand how interventions impact on different groups, such as women and men, youth, etc. • ignore findings from impact assessments, even when they are not what you want to hear. • carry out an impact assessment without being clear about what you want to know, why you want to know it, and how you intend to use any findings. • use one method only, or collect information from one source only.

Further reading and resources

Other papers in this section of the M&E Universe deal with monitoring, evaluation, types of evaluation, review, research and impact evaluation.

- Monitoring
- Evaluation
- Types of evaluation
- Reviews
- Research
- Impact evaluation

Most of the material dealing with impact assessment is focused on impact evaluation. The book by Roche (1999) provides a good historical background to impact assessment within NGOs. The articles by CONCORD (2010) and O'Flynn (2010) referenced below, also provide useful overviews.

The recent article by Hearn and Buffardi (2016), also referenced below, expands on the different understandings of impact as summarised in the diagram on the first page of this paper.

References

- CONCORD (2010). *An Approach to Impact-Oriented Programming, Implementation, Monitoring and Evaluation: A CONCORD discussion paper.* September 2010. European NGO Confederation for Relief and Development.
- Hailey, J and Sorgenfrei, M (2004). *Measuring Success: Issues in performance measurement*. INTRAC, Occasional Paper Series 44.
- Hearn, S and Buffardi, A (2016). *What is Impact?* ODI, Methods Lab, February 2016.
- OECD (2010). *Glossary of Key Terms in Evaluations and Results Based Management*. OECD, 2002, re-printed in 2010.
- O'Flynn, M (2010). *Impact Assessment: Understanding and assessing our contributions to change.* M&E Paper no.7. INTRAC, October 2010.
- Roche, C (1999). *Impact Assessment for Development Agencies*. Oxford: Oxfam/NOVIB.
- Rogers, P (2012). *Introduction to Impact Evaluation*. http://www.betterevaluation.org/en/node/1543, retrieved on 15th June 2017.
- Stern, E (2015). *Impact Evaluation: A guide for commissioners and managers.* BOND, May 2015.

Author(s):
Nigel Simister

Contributor(s):
Maureen O'Flynn, Vera Scholz, Alison Napier

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

INDICATORS

Indicators are commonly used in social development to provide evidence of change. They form an important part of most monitoring and evaluation systems and approaches. There are many different types of indicator, including quantitative and qualitative indicators. They can be developed in different ways, according to the context.

Indicators are defined in different ways by different organisations. Two definitions are shown below, but there are many others:

> *"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." (OECD 2010)*

> *"An observable change or event which provides evidence that something has happened – whether an output delivered, immediate effect occurred or long-term change observed." (Bakewell, et. al. 2003, p21)*

It is important not to confuse evidence with change. An indicator is something that helps provide evidence that a change has happened – it is not the desired change itself.

Indicators may be designed to measure a project or programme's desired changes at output, outcome or impact level. But indicators can also be used to help identify organisational (internal) change, as well as changes in the external environment.

Different types of indicators

Indicators can be categorised in different ways. One way is to differentiate between quantitative and qualitative indicators.

- ***Quantitative indicators*** are reported as numbers, such as units, prices, proportions, rates of change and ratios.
- ***Qualitative indicators*** are reported as words, in statements, paragraphs, case studies and reports.

Note that it is not the way in which an indicator is worded that makes it quantitative or qualitative, but the way in which it is reported. If an indicator is reported using a number then it is a quantitative indicator. If it is reported using words then it is qualitative. A popular misconception is that a qualitative indicator measures the quality of a change. This is not true.

Both quantitative and qualitative indicators have strengths and weaknesses, and usually both are needed within a project or programme. For example, a detailed case study on changes in people's lives will reveal little unless the reader has some idea of how many people are involved. Similarly, reports counting the number of people affected by a project may need to be supplemented by descriptive information illustrating changes in individual lives. Some of the key differences between quantitative and qualitative indicators are outlined below.

	Quantitative	Qualitative
Expression	Numbers	Words
Coverage	Provide information on width and scope of work	Provide in-depth information on changes at strategic points
Analysis	Analysed through statistical data methods	Analysed through summarising, reduction and scoring
Limitations	Often need to be interpreted through qualitative enquiry	Often apply only to a small number of people or situations, and therefore run the risk of being anecdotal

In addition to quantitative and qualitative indicators, there are also other kinds of indicators.

- ***Mixed indicators*** contain an element of both quantitative and qualitative data. For example, *'# and description of policies changed regarding child protection'*. These indicators can be used to show both the scale and depth of change. In this example, reporting on the number of policies changed would give the scale of change, and the individual descriptions would show the range of policies influenced.
- ***Scoring and rating indicators*** are quantitative indicators. They are sometimes collected directly, but may also be generated from qualitative data. For example, participants might be asked to state their satisfaction with training on a scale from 1 to 10, or rate their satisfaction according to pre-defined categories such as 'very satisfied', 'satisfied', and 'unsatisfied'. Alternatively, an evaluator might interview participants, and then provide a rating based on their answers.

- Simple 'yes/no' or ***binary indicators*** can be used to define whether something has happened or not. For example, *'a new law on forced migration is enacted before the end of 2015'*.
- In some circumstances, ***pictures*** can also be used as indicators. Along with words and numbers, pictures can contain information that provides evidence of change. For example, photographs taken before and after a project can show how the physical environment of a village has changed.
- ***Proxy indicators*** measure change in an indirect manner. In other words, a proxy indicator does not measure something directly. Rather it measures it through a related factor or variable. For example, the distribution or acceptance of condoms is sometimes used as a proxy measure for reduced rates of transmission of HIV. This is because there is a known correlation between the use of condoms and HIV transmission rates.
- ***Framing (or basket) indicators*** are used when it is difficult to easily predict the changes resulting from a piece of work. They define the domain in which change is expected to occur. For example, *'changes in the lifestyles of women following an empowerment project'*. They are not usually used to measure change, but instead are used to collect and bring together different examples of change under a common theme.

Defining indicators

Until recently, many indicators were developed according to the Quantity, Quality, Time and Place (QQTP) protocol. This meant that an indicator would be defined to be specific about:

- **Quantity:** 300 midwives
- **Quality:** 300 midwives trained in traditional birthing techniques
- **Time:** 300 midwives trained in traditional birthing techniques by the end of 2016
- **Place:** 300 midwives in Southern Uganda trained in traditional birthing techniques by the end of 2016

Although many organisations still define indicators in this way, a new industry standard is emerging, where indicators increasingly appear as neutral statements (e.g. *'# of new jobs created'*, not *'50 new jobs created'*). These indicators do not contain specific numbers, and should not include words such as 'increase', 'reduction' etc. The intention is to ensure that indicators remain as neutral criteria providing evidence of change, rather than targets to be achieved.

Organisations that use neutral indicators may choose – or be required to – link those indicators up with baseline, milestone and target statements. If indicators are quantitative then the baselines, milestones and targets include numbers. If they are qualitative then the baselines, milestones and targets include words. Some simple examples are shown in the table at the foot of the page.

Whether neutral or not, a good indicator is still expected to be specific about time and place. It should be clear which target groups are covered by the indicator and what are the expected timescales for change.

The relationship between indicators and tools

Some indicators can be collected using many different methods of data collection and analysis. However, many indicators only have meaning when they are linked to the specific tools or methods used to collect them. For example, if a survey is designed to ask a question such as *'would you rate your engagement with a school as high, medium or low?'* then an indicator might be *'# and % of respondents that say they have a high engagement with the local school'*. Without having first developed the survey the indicator would be meaningless.

This means the order in which indicators and tools are developed sometimes needs to be reversed. In some cases it makes sense to develop an indicator first, and then assess which tools could most usefully be used to collect the indicator. In other cases it makes sense to identify the tools of information collection and analysis first before finalising the indicators.

Indicator	Baseline	Milestone 1	Milestone 2	Target
% of girls in project areas who report living free from violence over the past year	10%	25%	35%	50%
# of children completing one year of basic primary education in project-supported schools	0	600	800	1,200
Capacity of supported partner to develop own project proposals	Partner has no ability to develop independent project proposals	Partner can develop proposals with assistance from supporting agency	Partner is capable of developing independent project proposals	At least two project proposals are favourably received by donor agencies
Policy on use of common grazing land exists	No policy supports the use of common grazing land by project beneficiaries.	Local government officials agree to look into the issue, and attend meetings	A new proposed policy is outlined and sent out for consultation.	Policy on use of common grazing land is adopted by local government.

Disaggregation

Indicators, especially quantitative ones, should always be disaggregated where relevant. This means ensuring that information can be separated out to show differences between target groups. Common criteria for disaggregation include gender, disability, marginalised groups, and people living with HIV&AIDS.

Where indicators are designed to be disaggregated then associated information such as baselines, milestones and targets also needs to be disaggregated, as in the example below.

Indicator	Baseline	Target
% of targeted children suffering from diahorrea in the past 2 weeks in programme villages, disaggregated by gender	40% (35% boys) (45% girls)	30% (30% boys) (30% girls)

Selecting and using indicators

There are many ways in which indicators can be developed or selected.

- Indicators might be developed by project or programme staff on their own.
- They may be selected by brainstorming with a wider group of stakeholders.
- Many organisations facilitate the involvement of beneficiaries in selecting indicators at some stage in the process. This is often a key aspect of participatory monitoring and evaluation.
- Some organisations have checklists or menus of common indicators to select from.
- Some organisations require standard indicators to be set for specific programmes or sector areas (especially if they wish to aggregate information).
- Some donors require specific indicators to be used by organisations receiving their funds.
- In some areas of work, such as health or water and sanitation, there may be industry-specific indicators.
- There are sometimes specific guidelines for setting indicators (e.g. SPHERE indicators for programmes involved in emergency situations).

In general terms, the more stakeholders that are involved in the process the greater the ownership of the indicators. However, the downside is that the process of identifying, selecting and refining indicators often takes much longer.

Frequently, whatever process is used leads to a large number of potential indicators – often far too many to use effectively. Once a range of possible indicators has been developed it is useful to ask a few questions in order to establish whether they are realistic or not. Sometimes the answers to these questions might lead to the discarding of potential indicators. This helps to narrow options, and ensure that any remaining indicators are realistic. Some suggestions for questions are contained in the box below.

Questions to ask when refining indicators

- Will you be able to collect information on your indicator? If so, where will you get the information from?
- Is it likely to be accurate (credible)?
- How much will it cost to get the information in terms of staff time, beneficiary time and money?
- How often will you have to collect it?
- Does it require baseline information? If so, can you get this information?
- Do your staff have the capacity (or desire) to collect the information honestly and accurately?
- How far can you attribute the indicator to your efforts?
- Will the indicator tell you anything you did not know before?
- Will it help you make decisions to improve future performance?
- Will it help you to be accountable to different stakeholders?
- How else will it help you (if at all)?

Once the indicators have been selected the final step is to operationalise them by defining them clearly, and stating who will collect them, when, how often and which tools or methodologies will be used. This is explained further in the separate paper on M&E plans.

It is also important to remember that some indicators may emerge over the course of a project or programme, and other indicators may need to be removed or adjusted. This might be because the indicators prove too difficult or expensive to use, or because of changes in the external socio-economic environment, or because they simply don't work as planned. A good M&E system or approach will allow for the addition, removal or adjustment of indicators from time to time as a matter of course.

> *"An objective that cannot be measured may still have value as a guiding or inspiring objective. An indicator that cannot be collected is a worthless parasite."*

Further reading and resources

Chapter 5 of the INTRAC book *Sharpening the Development Process: A practical guide to monitoring and evaluation* (see reference below) is dedicated to indicators. Other papers in this section deal with setting objectives and outputs, outcomes and impact. There are also papers on linking indicators between different levels of an organisation and developing M&E plans.

Setting objectives
M&E plans
Programme indicators
Outputs, outcomes and impact

References

- Bakewell, O; Adams, J and Pratt, B (2003), *Sharpening the Development Process; A practical guide to monitoring and evaluation*. INTRAC, UK.
- OECD (2010). *Glossary of Key Terms in Evaluations and Results Based Management.* OECD, 2002, re-printed in 2010.

Author(s):
Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

INFLUENCES ON THE M&E APPROACH

Many different factors can influence the design of a monitoring and evaluation (M&E) approach. These include the purpose for which M&E is carried out, the type of work being undertaken, the nature of the organisation carrying out the work, and the available resources. Demands from external organisations such as donors, supporters or governments, may also need to be considered.

At some stage most development interventions – whether a large, multi-country programme run by an international organisation or a small project based in a remote village – will need to decide how, when and where to carry out monitoring and evaluation (M&E). They will then have to develop an M&E approach, system, framework or plan (the terminology is not consistently used within social development and does not really matter at this point).

It is almost always easier to make key decisions about an M&E approach during the planning stage of a project or programme, as the range of potential options is greater. For example, halfway through a project or programme it may be too late to develop a baseline to compare results with a starting point. Equally, it is much more difficult to develop a participatory M&E system if a project or programme was not designed in a participatory way.

However, whether it is developed at the planning stage or afterwards, there are a number of key influences that affect the way in which an M&E approach is designed. These are grouped into five areas as follows:

- non-negotiables;
- the purpose for which M&E is carried out;
- the type of work being undertaken;
- the nature of the organisation carrying out the work; and
- the available resources.

Non-negotiables

Whilst it might be nice to have the freedom to develop an M&E approach from a blank sheet of paper, in reality there are almost always different stakeholders to satisfy. These can be divided into two groups: external and internal stakeholders.

External stakeholders might include powerful institutions such as donors and governments. They might also include the public, partners or intended beneficiaries. Internal stakeholders, especially within larger organisations, might include head offices, regional offices and country offices, as well as organisational departments such as marketing and fundraising departments, or human resource departments. All these different actors and stakeholders may have expectations concerning an M&E approach, and may make demands that then need to be satisfied.

The nature of these demands varies. Some of the more common requirements are to:

- develop a specific planning tool (such as a logical frameworks);
- define objectives within broader donor, government or organisational strategic objectives;
- capture specific indicators;
- use specific tools of data collection and analysis;
- facilitate external reviews and evaluations; and
- produce reports at specific times and/or according to fixed formats.

In some cases, those designing an M&E approach can find that there is virtually no room for manoeuvre, and the M&E approach is almost completely defined before a project or programme starts (see case study below).

Case study: VSO in Southern Africa

In 2005, INTRAC helped develop an M&E system for a VSO (Voluntary Service Overseas) programme in Southern Africa, designed to combat HIV&AIDS. The system was designed to cover a range of work carried out in six countries in the region. However, a number of factors affected the potential scope of the new M&E system:

- New international guidelines on monitoring and evaluating VSO projects had recently been issued by the VSO head office in London. These were non-negotiable.
- The programme had two major donors. Each donor had its own differing information requirements. These requirements were a basic condition of funding.
- The six participating countries had developed their own independent M&E procedures and practices before they had become part of the programme, and wished to continue using these.

This left very little room for manoeuvre. Rather than being designed with a blank page approach, the new programme M&E system instead attempted to reconcile and streamline the various information demands made by different agencies, both internal and external.

Sometimes it might be possible to push back on different demands, and attempt to negotiate solutions. At other times it might be simpler to accept the different demands and design an M&E approach to take them into account.

Either way, demands from different external and internal stakeholders are likely to have a significant effect on how M&E is conducted during a project or programme.

The purpose for which M&E is carried out

Another key influence is the purpose for which M&E is intended. An M&E approach designed to enable basic project or programme management will not be the same as one primarily designed to show accountability to governments or donors. Equally, an M&E approach designed to learn and improve will not be the same as one intended to support marketing or fundraising.

Smaller organisations are more likely to develop M&E approaches that are aimed at one particular purpose, whilst larger ones may develop M&E approaches that serve multiple purposes. But in either case it is always important to ensure that organisations are clear about how they and others intend to use M&E information.

The purpose for which M&E is carried out always influences a range of decisions. These include 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 is spent on M&E.

The type of the work undertaken

Many decisions on how an M&E approach is designed depend on the exact nature of the development intervention. At the most basic level, more time and resources will need to be spent on M&E if a project or programme is working in a new or innovative area where the learning of lessons may be considered more important than the actual benefits for a small population. In such cases a great deal of effort may be put into M&E. By contrast, a simple project designed to distribute mosquito nets may not need or want to invest nearly as much in M&E.

For some types of work there may be industry standard M&E approaches. For example, in the health sector there are many industry-standard indicators. In some sectors of work there are also common methodologies for data collection and analysis. These include Household Economic Analysis for livelihoods projects, and Knowledge, Attitude and Practice (KAP) surveys for work in the field of HIV&AIDS.

The strategies used to promote change also have a very significant influence on the M&E approach. The type of M&E methods used to assess basic service delivery projects are very different from those designed to assess capacity building, policy influencing or community mobilisation work. Each type of strategy tends to include its own particular indicators, tools, methodologies and approaches, and these are often radically different from one another.

The nature of the organisation

Clearly, the needs of a large, international NGO working across multiple sectors and countries are very different from the needs of a small organisation working in a single village, where there may in fact be no need for a formal M&E system at all. In general, the larger and more hierarchical the organisation, the more need for formalised planning and M&E approaches that assist internal communications as well as learning and accountability.

Another important factor is the ethos of an organisation, which is heavily influenced by its leadership. For example, an organisation that sees itself as rights-based is much more likely to invest time and effort in participatory planning and M&E as a matter of principle. Culture is also a key determinant. Some organisations are very open to self-questioning – constantly wanting to ask themselves whether they are doing the right thing, whether they are making a difference, and what else might they be doing to bring about change. Such organisations are perhaps more likely to devote time and resources to M&E and learning than an organisation that sees itself primarily as an agency contracted to deliver services dictated by donors or governments.

The available resources

Finally, there is the issues of resources. These include the capacity of staff to design or carry out M&E tasks, the number of staff available, the time they have to devote to M&E, and the amount of money that can be spent on M&E. The level of resources available will perhaps have the greatest influence over the design of an M&E approach. For example, a process that must be completed within days and with no extra resources will require a very different M&E approach to one that has a timeframe of many months and a large budget.

The capacity of staff to design and carry out M&E tasks may be a large constraint on the ability of an organisation, project or programme to use complex tools and methodologies. In some cases organisations use outside help, such as M&E consultants, to help set up or maintain M&E systems or approaches; but it is still by and large internal staff who will be the primary stakeholders.

Other factors may be important. For instance, in some cases, internal staff may have the ability and motivation to conduct excellent M&E, but they may have little time available or support from senior management. In addition, the money available to an organisation has to be spread across many different areas, and the requirement to keep overhead costs down often means that less money is spent on M&E than might otherwise be desirable. A question for many organisations, programmes and projects is how much money to spend on M&E, and whether that money would be better spent elsewhere – for example spending less money on assessing the impact of a piece of work and perhaps supporting more people as a result.

Summary

There are many influences that affect the design and delivery of an M&E approach. Some of these derive from an organisation itself whilst some influences are external. The influencing factors will, in combination, set boundaries on what can or cannot be achieved through M&E. INTRAC believes that the combination of different influences effectively means it is pointless searching for magic bullets or 'off-the-peg' M&E systems that will serve all an organisation's M&E needs. Instead, M&E approaches need to be carefully tailored to the needs of the relevant project, programme or organisation on a case-by-case basis.

Ultimately, many organisations need to draw a balance between developing planning, monitoring and evaluation approaches that serve their own needs, and also trying to meet the needs of donors, governments and head offices. This is never an impossible exercise, but does often require careful navigation between different influences and expectations. Ultimately, the purpose of INTRAC's M&E Universe Map is to support M&E practitioners' efforts in this area by making clear the range of available options. But it is also important to recognise that developing an M&E approach is not always an easy task, and there is often a large gap between theory and practice.

Further reading and resources

Further papers in this section deal with the development of an M&E approach, and the development of M&E plans that describe how the M&E approach will work. Other papers can be found on two of the subjects covered in this paper: how M&E data is used and the resources available to carry out M&E.

- Developing an M&E approach
- M&E plans
- Data use
- Resources for M&E

Two other papers that deal with influences on M&E approaches for different sized organisations are detailed below. The M&E Guide for Small and Diaspora NGOs is more suited for smaller NGOs, whilst the second document is aimed at larger organisations.

- Monitoring and Evaluation: A guide for Small and Diaspora NGOs, by Anne Garbutt, October 2013. This document is available from the INTRAC website.
- Investing in Monitoring, Evaluation and Learning: Issues for NGOs to consider, by ITAD, in association with NEF Consulting, and edited by Jennifer Chapman, March 2014. This document is available from the BOND website at www.bond.org.uk/investing-in-mel

Author(s):
Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

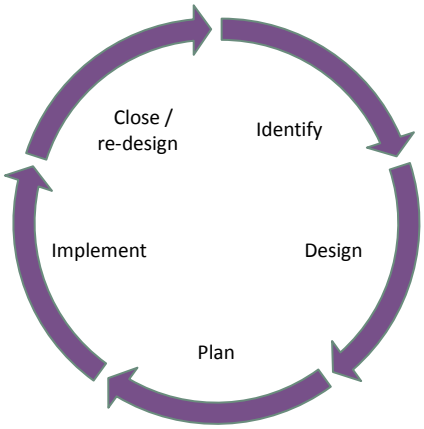
M&E FUNCTIONS

Monitoring and evaluation are different functions which are related to each other. They are widely known under the acronym of M&E. However, they are not the same, and they sometimes have different purposes and practices. There are many other functions related to M&E. Some come under the broad heading of M&E, whilst others interact with M&E to varying degrees, depending on circumstances.

There are many different functions related to monitoring and evaluation (M&E). Some come under the broad heading of M&E, whilst others interact with M&E to varying degrees, depending on circumstances.

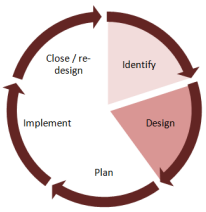
The different functions described in this paper, and in other M&E Universe papers, are carried out at different stages of the project / programme cycle. These stages are summarised in the diagram opposite. A project or programme is first identified and/or conceived. Then there is a design phase, following which a plan is developed. Next, the project or programme is implemented. After this it may be closed, extended, expanded or re-designed.

Not all projects or programmes follow the same cycle, and sometimes the different stages overlap or are carried out in a different order. For example, information acquired during planning or implementation may lead to a re-design of the project or programme. However, the diagram represents a simple model that can be used to show when different functions are usually carried out.

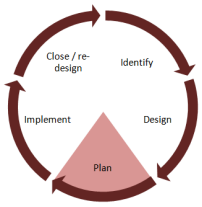


The section below describes different functions related to M&E. The diagrams show when they are most commonly used. The darker the shading, the more likely the function is to be used at that stage of the project / programme cycle. However, there are often exceptions to these rules.

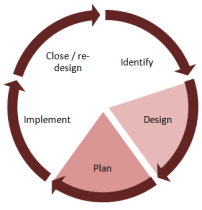
Different functions and their place within the project / programme cycle



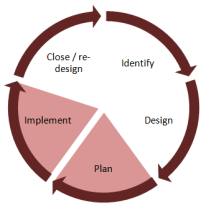
A **situation analysis** is an analysis of a situation within a geographic location or sector. It normally involves an assessment of the challenges in the location or sector, and an analysis of who is currently working on those challenges, what they are doing and what capacities they have. It also involves an assessment of the external socio-economic environment. A situational analysis is usually carried out during the design phase of a project or programme, and contributes to the planning phase. In some circumstances it may be used to help identify projects or programmes.



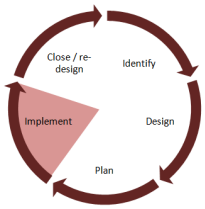
A **plan** is produced after a project or programme has been designed. A plan usually includes a written description of working approaches, goals, objectives, activities, indicators, budgets, etc. In straightforward projects plans often include pre-defined activities that are intended to achieve the desired objectives. In more complex situations plans are developed that recognise the need for flexibility throughout the period of the project or programme. M&E is often heavily based on planning, and may later lead to the adjustment of plans during implementation.



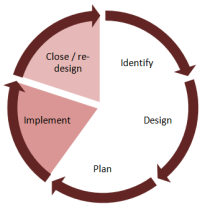
A formal **appraisal** is often done at the end of the design and planning phases, before permission is given for a project or programme to proceed. An appraisal critically reviews all aspects of a project or programme. It checks that the working approaches designed to achieve the goals and objectives are realistic, and that the project or programme is likely to be good value for money. An appraisal might also assess the relevance and/or feasibility of the project or programme. Sometimes appraisals can lead to further design or planning work being carried out.



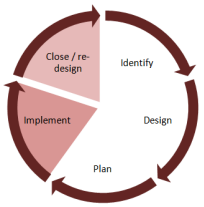
To understand the changes brought about by a project or programme, it is necessary to understand what the original situation was. This is known as the **baseline**. Baselines can range from simple, informal exercises to large, expensive surveys. They are an important part of many M&E systems. Baselines usually collect information on project or programme objectives and/or indicators. They are normally carried out at or near to the start of a project or programme, either at the end of the planning phase or at the beginning of the implementation phase.



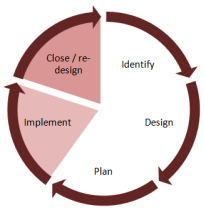
Monitoring is the systematic and continuous collection and analysis of information about the progress of a development intervention. Monitoring is done to ensure that the people who need to know about a development intervention are properly informed so that management decisions can be taken in a timely manner. Monitoring is conducted throughout the implementation of a project or programme. It often feeds into evaluations, and may also contribute to alterations in plans and budgets. Sometimes it can lead to the re-design of projects or programmes.



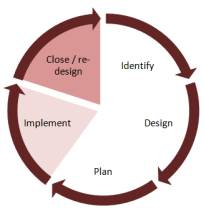
A **review** can take place at any time throughout a project or programme, and can focus on any aspect of the work. It is a very imprecise term that has different meanings in different circumstances. Most people use the term to refer to an exercise that is a bit less than an evaluation. A review can be regular or ad hoc, formal or informal, broad or narrow, internal or external, or any combination of these. Reviews are an integral part of many M&E systems. Some projects and programmes have a formal review at the end instead of an evaluation.



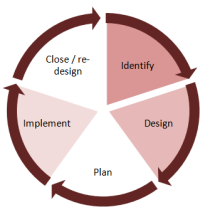
An **audit** is carried out to check that projects or programmes are complying with rules, regulations and procedures. Audits are often carried out on financial policies and practices. But they can also be carried out to review other processes such as risk management or compliance with government regulations. Audits are different from evaluations because they are concerned with compliance rather than performance. They are usually carried out during implementation, but can also be carried out at the end of a project or programme.



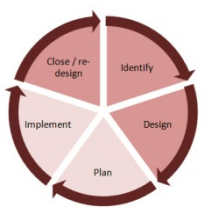
An **evaluation** is normally carried out at a significant time during a project or programme. This might be at the mid-point, at the end, or sometime afterwards. Evaluations may also be carried out when a project or programme is about to move into a new phase, or in response to a critical issue. Most CSO evaluations are carried out at the level of projects and programmes, although evaluations can also be carried out at country, region or sector level. The purpose of an evaluation is often to assess the performance of a project or programme against its objectives.



Impact assessment involves the systematic assessment of long-term and / or significant changes – positive or negative, planned or unplanned – brought about by a development intervention or series of interventions. Impact assessment is always focused on the impact of interventions, rather than on activities or outputs. Impact assessment may be carried out during the implementation of a project or programme, but it is most often carried out at the end, or even some time afterwards.



There are many occasions when **research** can be used within the project or programme cycle. Research is often conducted as part of the identification or design stage. Research may also be carried out alongside projects or programmes to better understand evolving contexts. In complex programmes, research may be commissioned to look more in-depth at an issue or generate findings that can then be used to improve the programme. Increasingly, large-scale or major evaluations and impact assessment studies are becoming indistinguishable from research.



A **Theory of Change** (ToC) approach to planning and evaluation is now considered an essential practice for many large organisations, programmes and projects. Most ToCs include a description of how change happens in a particular context, a description of the role an organisation and its partners play in contributing to change, and critical assumptions. A ToC may be developed before a project or programme starts, to feed into the design and planning phases. Theories of Change are also commonly used as frameworks for evaluation and impact assessment.

The difference between monitoring and evaluation

Monitoring and evaluation are different functions that are related to each other, and are widely known under the acronym of M&E. However, they are not the same, and they sometimes have different purposes and practices. The key differences, as outlined in the table below, are as follows: (see Bakewell et. al. 2003).

- Monitoring is normally carried out throughout a project or programme. Evaluations are carried out at certain times, for example at the end of a project or programme, or at the mid-point. All projects and programmes are monitored, but some are never formally evaluated.
- Monitoring tends to focus more on day-to-day activities, and is more concerned with the process of an intervention. Evaluation tends to focus more on progress towards objectives and goals.
- Monitoring is usually carried out by in-house project staff, and sometimes by beneficiaries as well. Evaluation may also involve these stakeholders, but is normally led by external evaluators or facilitators.
- Monitoring is conducted through the systematic collection, analysis, storage, sharing, reporting, communication and use of information on a regular and ongoing basis. Evaluation, on the other hand, often includes additional data collection exercises, such as large surveys.

	Monitoring	Evaluation
Timing	Continuous throughout a project	Periodic review at significant point – end, mid-point, end of phase etc.
Scope	Day to day activities; outputs; indicators of process and output	Progress towards objectives and goals; indicators of outcome and impact
Participants	Management, project staff, beneficiaries	External evaluators / facilitators, donors, management, project staff, beneficiaries
Process	Regular meetings, interviews, monthly / quarterly reviews	Extraordinary meetings, additional data collecting exercises
Written outputs	Regular reports and updates to donors, management and beneficiaries	Written report with recommendations for change, presented in workshops for different stakeholders

These rules are not universal, and there are often exceptions. It is sometimes more helpful to view traditional monitoring and evaluation as two opposite ends of a spectrum, with a large amount of overlap. For example, project staff might decide to conduct a series of case studies on beneficiaries at regular intervals throughout the project's lifetime, in order to assess changes in their lives. This meets the criteria for monitoring as it is a continuous, on-going exercise, carried out by internal staff. On the other hand the exercise also seeks to assess the changes brought about by the project, and could therefore be understood as evaluation. In this case there is no clear distinction.

Although there are always exceptions, the differences between monitoring and evaluation outlined above nonetheless provide a useful summary that holds true in many straightforward projects and programmes.

Monitoring and evaluation in complex programmes and organisations

In large, complex programmes, and across whole organisations, the distinctions between monitoring and evaluation may begin to break down completely, and the categorisations above become unhelpful. For example, Oxfam GB carries out evaluations on a sample of its policy influencing projects every year, using a methodology adapted from process tracing. These evaluations clearly aim to uncover the changes brought about through Oxfam's work, and are often carried out by external evaluators. Yet they form part of an ongoing, systematic, organisational process. In these cases it is probably more helpful to categorise the work as part of an organisational M&E system, rather than worrying too much about whether it counts as monitoring or evaluation.

Equally, in complex programmes and organisations the clear distinctions between M&E and other functions such as impact assessment, research and review also begin to become blurred. For example:

- the Most Significant Change (MSC) technique is a methodology designed to uncover stories of change through an ongoing systematic process that can be used for monitoring, review, evaluation or impact assessment;
- impact assessment is often conducted as part of an impact evaluation, but may also be carried out through ongoing impact monitoring; and
- many large evaluations and impact assessment studies use research methods and standards, and are often indistinguishable from large research studies.

In summary, it is helpful to understand the key differences between monitoring and evaluation in simple projects and programmes, and important to understand the different purposes and practices of each. But in complex programmes, and at organisational levels, the distinctions are not always as clear. In these cases a rigid adherence to the formal definitions may become unhelpful.

Further reading and resources

Many of the functions mentioned within this paper are described more fully in other papers in the M&E Universe. These can be accessed by clicking on the links below.

- Monitoring
- Evaluation
- Theory of change
- Developing a plan
- Reviews
- Impact assessment
- Research
- Baselines

References

- Bakewell, O; Adams, J and Pratt, B (2003). *Sharpening the Development Process; A practical guide to monitoring and evaluation*. INTRAC, UK.

Author(s):
Nigel Simister

Contributor(s):
Alison Napier

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

M&E PLANS

Good planning is often the most essential part of a monitoring and evaluation (M&E) system. The purpose of an M&E plan is to encourage project or programme staff to clarify what M&E tasks they intend to carry out, and why, before a project or programme begins, or near to the start. An M&E plan also ensures that these decisions are adequately documented.

Details of how monitoring and evaluation (M&E) will be carried out within a project or programme should be written up at the earliest possible time. Sometimes an overview of M&E forms part of a project or programme plan. Often, however, there is a need to provide greater detail. This is captured in an M&E plan. An M&E plan should enhance understanding amongst different stakeholders of the tasks ahead, and should also alert planners to the time and resources required for proper monitoring and evaluation work (Taylor 2001).

There is no set process for developing an M&E plan. Good practice suggests as wide an engagement with different stakeholders as possible. Certainly, anyone expected to carry out the work contained in the plan should be informed or consulted during its development.

Timing may also vary. If a project or programme is based on a logical framework or similar planning tool it may make sense to develop the M&E plan after this has been finalised. This is partly because a well-developed planning tool often supplies a lot of the information that should be contained in an M&E plan. But it might also be wise to wait until after project or programme funding has been approved before devoting too much time to an M&E plan. For this reason, M&E plans are often developed during the start-up phase of a project or programme.

As with any plan, it is important that an M&E plan is reviewed from time to time to ensure it remains relevant. Changes might need to be made because M&E systems or processes are not working properly, or because the project or programme itself has changed, and the M&E approach needs to be altered as a result.

Types of M&E plan

There are two types of M&E plan that are commonly in use amongst CSOs. The first is a plan for collecting indicators, and the second is a wider plan designed to look at broader aspects of M&E. The narrower indicator plan is designed to ensure that firm plans are in place to collect the indicators defined in a project or programme plan. This kind of M&E plan is often shown as a grid, with a different indicator on each line (see example below). The information contained in the grid may cover some of the following:

- the relevant output or objective;
- the indicator;
- the source of information used to collect the indicator;
- the person responsible for collection;
- when the indicator should be collected; and
- how often the indicator should be collected.

Some indicator grids also include columns designed to show any disaggregation required (e.g. gender). Others include columns for baselines, milestones and targets and/or contain information showing who analyses the information, and how, as well as who collects it.

The second type of M&E plan is a much wider plan designed to cover all different aspects of M&E. This wider plan often incorporates an indicator plan such as the one below. However, it also covers issues around the analysis and use of information, reporting schedules, learning mechanisms, training, knowledge management and resources as well. Some common areas covered by M&E plans are shown on the following page.

A Typical Indicator Collection Plan

Objective	Indicator	Source	Who collects?	When?	How often?
To enhance the agricultural productivity of farmers in the Basin region	Percentage increase in yield of maize crops	Quantitative survey of farmers	M&E department	September (the end of the harvest season)	At baseline, mid-point and end of project
	Farmers' use of new technologies	Focus group discussions with farmers	Project extension workers	During project reviews	Six-monthly
	Engagement of government officials with local farmer groups	Discussions with local government officials	Evaluation team	During final evaluation	Once

M&E Plan

Overview: A covering note describing who was involved in producing the M&E plan and how, when it was developed, when it was last revised, and when it will next be reviewed. The overview could also cover any key principles that will guide the implementation of M&E. It should contain a statement of the main purpose of the outlined M&E activities (see Davies 2008).

Planning Tools: Which planning tools were used in the development of the plan that might affect M&E, e.g. a logical framework or Outcome Map.

Objectives: The main goals, objectives and outputs of the project or programme. If a logical framework (or similar) exists then the objectives should be copied over from that document.

Indicators: Indicators might also be copied over from a planning tool. An indicator grid (see previous page) might be included to show for each indicator who collects it, when, where and how. Some M&E plans also contain information on baselines, milestones and targets against each indicator. If it is intended to identify indicators during the course of the project or programme then an explanation of how this will happen should be included.

Baselines: An explanation of how baseline data will be collected (if at all), who will carry out the work, when, and which methodologies might be used. If the project or programme plans to use control or comparison groups the methodology or approach should also be described.

Tools of information collection and analysis: Any specific tools or methodologies used to collect and analyse information. Sometimes this will be included within an indicator grid.

Evaluation: Plans and schedules for external evaluations, impact assessment or research work, including the rationale and timing of such work and who will carry it out (if known). If particular methodologies are to be used then they should also be described. Major internal reviews might also be covered under this section.

Participation: An outline of the different stakeholders that will be involved in M&E and the extent of their involvement. This includes their role in collecting and analysing information and using that information for different purposes. Any specific information needs of key stakeholders should also be described.

Data analysis process: Any key processes or methods designed to analyse data. This could include details of who will carry out the work, which methodologies will be used, when and where.

Reports: A reporting schedule outlining which different reports will be produced over the course of the project or programme, including a summary of who they will be written for, when and how often.

Learning mechanisms: An outline of any learning tools or mechanisms that will be used within the project or programme, including brief accounts of how they might be conducted, who might be involved, and how any learning might be shared or used.

Knowledge management: Any details on how data will be stored, processed and shared within or outside the project or programme. This could include details of any systems or processes designed to facilitate information flows or feedback loops. This section might also include details on how the results of the project or programme will be fed back to the targeted beneficiaries.

Training: A training schedule for how different stakeholders – internal and external – might be trained over the course of the project. This could also include details on inductions for new staff, or a statement of training needs for project/programme M&E staff.

Resources: An outline of the resources required for implementation of the M&E plan. This could include a statement of costs in terms of money and staff time, and an outline of the needs of staff responsible for developing and maintaining the M&E plan.

Annexes: An M&E plan might also contain annexes containing more detailed information. These could include some of the following.

- An attached logframe (or equivalent)
- An indicator grid
- A report schedule
- An M&E training plan
- A budget
- An activity or Gannt chart, outlining key M&E activities to be carried out over the course of the project or programme

Further reading and resources

Further papers in this section deal with the development of an M&E approach, and the factors that might influence that approach.

Developing an M&E approach

Influences on the M&E approach

A short note by Rick Davies contains a useful guide covering what should be covered by an M&E plan. There is also a section on M&E plans in the IFAD Guide to M&E, section 4.3.

- *What Should be Found in an M&E Framework/Plan?* by Rick Davies, second Draft, Tuesday, 01 April 2008. This document is available from the www.mande.co.uk website.
- *A Guide for Project M&E*, by Irene Guijt and Jim Woodhill, produced by the International Fund for Agricultural Development. This is available freely from the internet.

References

- Davies, R (2008). *What Should be Found in an M&E Framework/Plan? Second draft,* www.mande.co.uk (cached)
- Taylor, L (2001). *Good Monitoring and Evaluation: Guidance notes,* October 2001, PARC, IOD.

Author(s):

Nigel Simister

Contributor(s):

Alison Napier and Vera Scholz

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

MONITORING

Monitoring is the systematic and continuous collection and analysis of information about the progress of a development intervention. Monitoring is done to ensure that all the people who need to know about an intervention are properly informed, and so that decisions can be taken in a timely manner. There are many different types of monitoring, including financial monitoring, process monitoring and impact monitoring.

Within social development, monitoring can be defined as the *" … systematic and continuous collecting and analysing of information about the progress of a piece of work over time"* (Gosling and Edwards 2003, p12). Monitoring is done to ensure that all the people who need to know about a development intervention are properly informed about it. It is also done so that management decisions can be taken in a timely manner.

Traditionally, monitoring differs from evaluation because it is carried out by internal rather than external staff, it is ongoing rather than periodic, and it focuses more on activities and outputs than on outcomes and impact. In addition, monitoring usually relies on a system, rather than being a one-off exercise carried out a specific point in time.

Different types of monitoring

There are many different types of monitoring. Some of the most common types are described below. However, these are known by different names in different organisations.

- **Process** or **performance monitoring** focuses on the activities carried out as part of a development intervention. It is designed to assess whether and/or how well those activities are being implemented. It also covers the use of resources. Process monitoring is designed to provide the information needed to continually plan and review work, assess the success or otherwise of the implementation of projects and programmes, identify and deal with problems and challenges, and take advantage of opportunities as they arise.
- **Results** or **impact monitoring** aims to assess the changes brought about by a project or programme on a continuous basis. Often this means assessing changes in a target population (e.g. individuals, communities, supported organisations, targeted decision-makers). Impact monitoring can be used to assess progress towards goals and objectives, as well as unintended change. Despite the name, impact monitoring is more often associated with changes at outcome, rather than impact, level.
- **Beneficiary monitoring**, or **beneficiary contact monitoring**, is a specific type of impact monitoring that aims to track the perceptions of project or programme beneficiaries (IFRC 2011). It can include beneficiary feedback mechanisms and beneficiary complaints mechanisms. Beneficiary monitoring can be seen as a specific type of participatory monitoring and evaluation (M&E).
- **Situation monitoring**, sometimes known as **scanning**, is concerned with monitoring the external environment. Sometimes this is done through defining and collecting indicators relating to issues such as the local political situation, changes in the economy, and the activities of other development actors. At other times, situation monitoring simply means keeping eyes and ears open in order to assess what is happening outside of a project or programme that might influence it.
- **Financial monitoring** is concerned with the monitoring of budgets and finance, and is linked to auditing. It is usually concerned with tracking costs against defined categories of expenditure.
- **Administrative** or **logistics monitoring** covers issues such as the maintenance of premises, transport, personnel, stock-keeping, and other forms of administration.
- **Compliance monitoring** is designed to ensure compliance with issues such as donor regulations, grant or contract requirements, government regulations, and ethical standards (ibid).
- **Management Information Systems** (MIS) are usually associated with computer-based systems, although some CSOs operate paper-based Management Information Systems. An MIS can cover any aspect of monitoring, but is more often associated with process, financial, administrative and compliance monitoring.

The remainder of this paper is largely concerned with process and impact monitoring. This is sometimes known collectively as **programme monitoring**.

The purpose of programme monitoring

Programme monitoring has many purposes, depending on the type of monitoring and the context. However, the primary purpose is to collect regular information on progress, and then use this to make constant adjustments to support the management of a project or programme. This includes ensuring plans and budgets are being

followed, and changing them when necessary. In this regard, good monitoring is often indistinguishable from good management.

In different circumstances, monitoring can also serve several other purposes. Some of the more common are:

- providing managers, staff and other stakeholders with information on the progress being made towards stated goals and objectives in order to demonstrate accountability to different stakeholders;
- providing information that enables approaches and strategies to be changed in response to evolving situations;
- identifying whether there is a need to change goals, objectives, plans or budgets over time;
- testing project or programme assumptions on a regular basis;
- identifying the need for further information or research;
- providing information that enhances ongoing learning, both within and outside a project or programme; and
- demonstrating or communicating activities and changes to other audiences for marketing or fundraising purposes.

Different perspectives on monitoring

INTRAC has often conducted an exercise in training where it asks workshop participants from large NGOs to identify the most important purpose of M&E, from a pre-defined list of ten different purposes. These include learning, improving, accountability, marketing, allocating resources and project management.

The results of this exercise are very consistent, but are almost entirely dependent on the location of the training. When carried out at head office level, learning, improving and accountability (both upwards to donors and downwards to partners and beneficiaries) almost always come out on top. However, in the field staff almost always choose project management as the most important purpose.

This reflects the fact that operational staff spend a huge amount of their time on routine monitoring that they consider essential for keeping projects and programmes on track. This includes drivers filling in forms, finance staff monitoring budgets, project staff writing field visit notes, management recording meeting minutes, administrative staff filing press reports or photographs, and all the other necessary tasks involved in managing a project or programme. Yet these kinds of activities are rarely acknowledged in evaluation literature.

Whilst not a robust study, these experiences suggest that the whole learning versus accountability debate for M&E may be an artificial construction led by evaluation experts and head offices in the North. At the very least, it provides grounds for questioning whether more attention needs to be focused on supporting people to do the basics of M&E right, rather than concentrating exclusively on complex evaluation methodologies and approaches.

The different functions of programme monitoring

The process of programme monitoring is hugely dependent on a variety of factors. How an organisation goes about programme monitoring depends on:

- what it has to do because other organisations (such as governments, donors or partners) expect it as a condition of support;
- the type of work it is undertaking (e.g. service delivery, capacity development, policy influencing, mobilisation);
- the sector of work (e.g. health, governance);
- the nature and culture of the organisation; and
- the available resources to carry out the work.

Because monitoring is essentially an internal task, monitoring systems need to be tailored to each individual organisation and situation. There is no one-size-fits-all solution. However, it is likely that most monitoring systems will need to carry out many if not all of the different functions described below.

It is important to note that in most monitoring systems these functions are all happening at the same time. Information is being collected, recorded, stored, shared and analysed at the same time as information is being used, reports written, and plans made or adjusted. There is no sequential step-by-step process, such as might be seen in an evaluation.

Planning: M&E and planning are always very closely linked. This is even more so for monitoring than evaluation. This is because feedback loops for monitoring are usually much shorter. In other words, the information generated through monitoring can result in changed plans immediately, whereas evaluation only feeds into changed plans at periodic intervals. Both process and impact monitoring may involve assessing unexpected change, but they are also closely concerned with monitoring progress against pre-planned objectives, activities, indicators, milestones and targets.

Process monitoring is often associated with short-term plans dealing with activities. These can include annual, quarterly, monthly and weekly activity plans, often with associated budgets. The purpose of much monitoring is to ensure that plans are being delivered as expected, and to take appropriate action where they are not.

Collecting information: Most CSOs spend a large amount of time collecting information on an ongoing basis. Sometimes information is collected through formal tools such as semi-structured interviews, structured observation and focus group discussions. A lot of monitoring also involves the routine collection and recording of numeric data on pre-defined templates.

However, monitoring may also involve unstructured information collection, particularly when visits are carried

out to the field. This kind of monitoring – observing what is happening, listening to different stakeholders, and talking to different people or groups – is often as important, if not more so, than formal monitoring exercises.

During monitoring, information is routinely collected on pre-defined objectives and indicators, or activities described in activity plans. However, information can also be collected on activities and changes that were not anticipated, or changes in the wider environment that might affect a project or programme.

Recording information: Some monitoring information can be acted on immediately. For example, if there is low attendance at community meetings in the morning then meetings can be switched to the afternoon. Often, however, monitoring information needs to be recorded so that it can be stored, shared, analysed, reported or used at a later date. Most CSOs have a variety of different forms and templates that are designed to capture and record monitoring information.

Often, forms and templates are designed to record straightforward numeric data, such as the number of villagers attending meetings, the amount of savings collected, or the number of times community groups have met with government decision-makers. But many CSOs also encourage staff and/or beneficiaries to keep log books, scrap books, journals or diaries to capture facts, thoughts, analyses, quotes, reactions, photographs, descriptions of events, etc. These can be used to record both quantitative and qualitative data.

Another form of recording covers the production of minutes or descriptions of meetings attended by different stakeholders. Meeting minutes can be used to ensure that everyone has the same understanding of the points raised, or agreements made.

Storing information: Some monitoring systems can result in a very large amount of information being collected and recorded. This information needs to be stored appropriately so that it can be retrieved and used for different purposes as and when necessary. The type of storage system depends heavily on the type of information collected. For example:

- numeric data that needs to be processed and analysed may be kept on a spreadsheet or database;
- meeting minutes may only need to be stored so that they can be accessed during the next meeting;
- log books, diaries and journals may need to be accessed at a later date when analysing information in order to produce reports;
- field visit reports need to stored so that they are available to the person carrying out the next field visit, but may also need to be accessed by staff attempting to analyse common trends; and
- information gathered through interviews and observation may need to be stored so that it can be retrieved when reporting against activity plans or logical frameworks.

Working out what information to store, and how and when to store it, is often the most difficult part of designing a monitoring system.

Analysing information: Analysis processes range from producing tables and graphs that summarise statistical information through to generating lessons and trends from large amounts of qualitative data. Many simple monitoring tools are designed to enable basic data analysis. For example, Gannt charts or other simple monitoring charts are designed to track project and programme activities over time, and compare this with planned or predicted progress.

Sometimes, analysis within a monitoring system is carried out by individuals. At other times CSOs facilitate processes to allow different individuals or groups to jointly analyse and interpret data. This is known as sense-making. Sense-making can happen through a variety of different processes. These include staff meetings, partner meetings, community meetings, stakeholder reviews and workshops. Sense-making can be done on an ongoing basis. But sometimes it is done on a periodic basis. For example, many CSOs conduct analysis meetings on a quarterly, biannual or annual basis to regularly review what is happening within their projects and programmes, and decide what needs to be done about it.

Within programme monitoring, analysis is often quite simple and is based around a series of common questions, like the ones in the box below (see Gosling and Edwards 2003). Many CSOs also develop more specific monitoring or learning questions that can then be used to guide analysis. These questions may be specific to a particular project or programme, or they may be common across many different projects and programmes.

Basic Analysis Questions

- What work has been carried out?
- What work was planned but not done?
- Why was this work not done?
- What problems have been encountered?
- How were these problems addressed (if at all)?
- If they were not addressed, why not?
- What opportunities have been identified?
- What changes have there been in target populations?
- Is the project or programme on track to deliver its objectives?
- Are they still the right objectives?
- What lessons have been learned?
- How can these lessons be applied to future work?
- How has the external situation changed (e.g. political, socio-economic etc.)?
- What immediate adjustments need to be made to plans?
- What longer-term adjustments might need to be made?

Sharing information: Monitoring data, once collected, recorded, stored and analysed, often needs to be shared

with different stakeholders if it is to be useful. These stakeholders may include staff or managers within a project or programme, beneficiaries, partners, donors, or any other kind of stakeholder. It is important to know who needs (or would like) which information, when and where. Otherwise there is a risk of people become overwhelmed with information that they do not need and cannot use.

There are many ways of sharing information – some traditional, some innovative, and some based on modern technology. For example:

- formal or informal reports can be used to disseminate information to different stakeholders (see next section);
- emails are useful for sharing information with different groups of people;
- photographs can be shared with different stakeholders to show activities undertaken or illustrate changes;
- cartoons or pictures are often an effective way of sharing information which has been captured through monitoring processes;
- many organisations produce regular newsletters as part of an ongoing monitoring system;
- blogs – short written pieces that can be used to promote or discuss ideas – are being used more frequently to disseminate or discuss monitoring findings;
- organisations are increasingly using social network sites, such as Twitter and Facebook, which allow information to be shared and discussed; and
- there are a number of other modern methods of sharing information that are becoming more common, such as weblogs, chat rooms and podcasts.

CSOs operating participatory monitoring systems often try to ensure that beneficiaries analyse and use monitoring information alongside project and programme staff. This implies that methods need to be developed to share monitoring information with beneficiaries in a way that they can best comprehend and use. This is often resource intensive, as meetings may need to be held with many different groups of stakeholders – some of whom may be illiterate or semi-literate – in order to ensure they can fully participate within the monitoring process.

Reporting information: Reporting information is just one way of sharing information. Many CSOs have to produce regular reports for donors and/or government agencies, or for their own leaders and Board members. Indeed many CSOs spend a great deal of time producing different reports for different audiences.

Using information: Monitoring information can be used in many ways. The key purpose is to make changes, where necessary, to plans, budgets or targets, or to modify working approaches, especially when projects and programmes are operating in difficult or constantly changing environments.

Many CSOs also consider it important to provide opportunities to discuss findings with all the people who are interested in, or affected by, a project or programme, including beneficiaries. In this way, monitoring data can help CSOs be accountable to their own partners, communities and beneficiaries, as well as donors and supporters.

Monitoring data may also support institutional learning, contribute to marketing and public relations, provide evidence for advocacy, and inform resource allocation decisions. These are all covered in the section of the M&E Universe concerned with data use.

Finally, monitoring information gathered during a project or programme is often used during later evaluations and/or formal reviews. Evaluations and reviews regularly fail, or achieve less than they should, because there is simply not enough good monitoring data to properly judge what progress has been made, or to assess how a CSO contributed to any changes identified.

The balance between monitoring and evaluation

For many years, monitoring has been seen as the *'poor relation'* of evaluation (see Pratt and Boyden 1985, Simister 2000). Evaluation is often seen – especially by donors – as more valid because it is largely conducted by outside experts, using established and transparent methodologies. As a result, a great deal of energy, resources and advice has gone into the field of evaluation, with support for monitoring more limited.

However, in many circumstances monitoring may be more important than evaluation, especially for CSOs that want to learn from their experiences and use this to improve performance. There are two main reasons for this. Firstly, monitoring is almost always conducted by in-house project staff, while evaluations are frequently conducted by outside consultants. This means that the monitoring process provides greater opportunities for CSO staff to utilise their own knowledge and experience, while the learning resulting from evaluations is often focused more on the needs and perceptions of outside agencies.

Secondly, because monitoring is a continuous process, rather than a periodic one, it enables adjustments to be made in a timely and methodical way. This means that lessons can be applied immediately rather than waiting months or even years for a formal evaluation to be conducted.

But if monitoring is the more important of the two in many circumstances, it is also more difficult to do well (Gosling and Edwards 2003). This is because it relies on a system, rather than being a one-off task carried out by a dedicated team or individual. To serve a useful purpose, this system needs to generate information that is relevant, accurate and timely for a range of different stakeholders. This is often a difficult exercise, especially as many CSO staff engaged in monitoring are not M&E specialists.

There are signs that the balance between monitoring and evaluation is slowly shifting, especially with the new emphasis on adaptive management (covered by a separate paper in the M&E Universe). This is being driven by two main things.

- Firstly, there is a greater understanding of complexity in development. In complex projects and programmes it is impossible to accurately predict at the start when and how activities will lead to outputs and then outcomes. Instead, constant assessment and re-assessment is needed to react to different circumstances. This implies that ongoing monitoring may be more useful than periodic evaluation.
- Secondly, advances in technology mean it is now possible to monitor change cheaply and quickly in ways which would not have been possible even ten years ago. Information that was only previously collected at the beginning and end of projects can now be collected and analysed on an ongoing basis using mobile phones and tablets.

One interesting new development is the movement to incorporate ongoing assessment into evaluations. Two types of evaluation – developmental evaluation and real-time evaluation – can both be seen as attempts to merge the disciplines of monitoring and evaluation to get the best of both worlds; rigorous information on change, collected in a timely manner to support internal staff to make real-time adjustments to projects and programmes.

Further reading and resources

This section of the M&E Universe contains papers on evaluations, different types of evaluation, impact assessment, review and research. Other sections of the M&E Universe cover data collection, analysis and use. Two specific forms of evaluation with relevance to monitoring – developmental evaluation and real-time evaluation – can also be accessed through the links below.

- Evaluation
- Types of evaluation
- Impact assessment
- Reviews
- Research
- Data collection
- Data analysis
- Data use
- Developmental evaluation
- Real-time evaluation

A useful publication covering monitoring as well as evaluation is a guidebook produced by the International Federation of Red Cross and Red Crescent Societies (see http://www.ifrc.org/Global/Publications/monitoring/IFRC-ME-Guide-8-2011.pdf). Other books covering monitoring systems for CSOs include Gosling and Edwards (2003) (see below) and the INTRAC book *'Sharpening the Development Process'* by Bakewell et. al. (2003). This can be purchased via the INTRAC website.

References

- Gosling, L and Edwards, M (2003). *Toolkits: A practical guide to assessment, monitoring, review and evaluation.* Second edition. Save the Children, UK.
- IFRC (2011). *Project/programme Monitoring and Evaluation (M&E) Guide. International Federation of Red Cross and Red Crescent Societies*. Geneva, 2011.
- Pratt, B and Boyden, J (eds.) (1985). *The Field Directors' Handbook: An Oxfam Manual for Development Workers.* Oxford University Press, Oxford.
- Simister, N (2000). *Laying the Foundations: The role of data collection in the monitoring systems of development NGOs.* Occasional paper 01/00. Bath, Centre for Development Studies, University of Bath.

Author(s):
Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

OUTCOME MAPPING

Outcome Mapping focuses on changes in the behaviour of the people, groups and organisations influenced by a project or programme. Like the logical framework, it is a planning methodology that has implications for how monitoring and evaluation is conducted. However, Outcome Mapping is designed to deal with complexity, and is not based around linear models of change.

Outcome Mapping was originally developed by the International Development Research Centre in Canada. The first comprehensive Outcome Mapping manual was produced in 2001. Outcome Mapping seeks to identify and assess changes in the behaviour of people, groups and organisations with which a project or programme works directly. It does not seek to prove causality or attribution for those changes, but instead attempts to show logical linkages between the changes and a project or programme's activities, thereby enabling contribution to change to be understood (Earl et. al. 2001)

Outcome Mapping is a participatory planning methodology, which has implications for how monitoring and evaluation is conducted. It is based on the principle of participation, and purposefully includes those implementing a project or programme in both design and data collection to encourage ownership and the use of findings. It was designed to be a *"consciousness-raising, consensus-building, and empowerment tool for those working within a development programme"* (ibid, p4).

Some people use the complete Outcome Mapping methodology, whilst others apply only some of its elements and principles. Outcome Mapping forms part of a portfolio of tools and methodologies that address complexity, and increasingly are being seen as alternatives to the more linear, measurement-based models of the logical framework and results-based management.

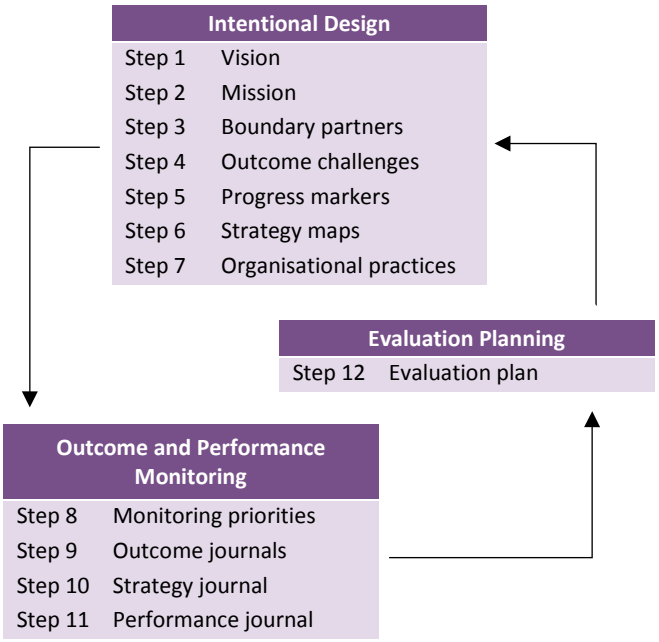
How it works

Outcome Mapping is designed to be used at the beginning of a programme, after the main focus of that programme has been decided. There are three key stages to planning an outcome map.

1. The first stage, Intentional Design, helps a programme establish consensus on the changes it aims to help bring about, and plan the strategies it will use. It helps answer four questions:
    - what is the vision to which the project or programme wants to contribute?
    - who are its boundary partners?
    - what are the changes that are being sought?
    - how will the project or programme contribute to the change process?
2. The second stage, Outcome and Performance Monitoring, provides a framework for the ongoing monitoring of the programme's actions and the boundary partners' progress toward the achievement of 'outcomes'. Monitoring is based largely on self-assessment.
3. The third stage, Evaluation Planning, helps the programme identify evaluation priorities and develop an evaluation plan.

These key stages, and the steps within them, are summarised in the following diagram. Each of the individual steps is designed to be addressed at the planning stage, using a participatory process, and wherever possible involving a full range of stakeholders. A brief explanation of the individual steps of Outcome Mapping is contained below.

(These explanations are taken directly from the Outcome Mapping manual produced by Earl et. al. in 2001. Interested readers should access that manual for a more complete explanation of each stage, and a set of workshop exercises that can be used to facilitate and plan Outcome Mapping.)

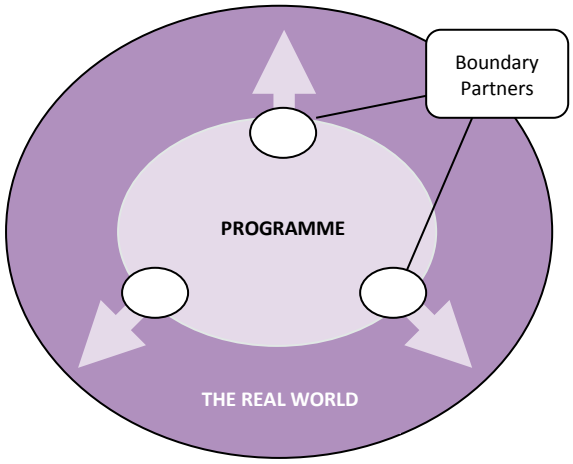


Although the steps are all designed to be used at the planning stage, they also set the scene for how monitoring and evaluation will be conducted later on. For example, journals may be developed that will later be used for ongoing monitoring

Firstly, a vision is developed (STEP 1) that reflects the large-scale, development-related changes that the programme hopes to encourage. The vision describes economic, political, social, or environmental changes that the programme hopes to help bring about. The programme's activities should contribute to the vision, but not be solely responsible for achieving it.

Next, a mission statement is developed (STEP 2) that describes how the programme intends to support the vision. The mission statement states the areas in which the programme will work towards the vision, but does not list all the activities which the programme will carry out.

Then boundary partners are identified (STEP 3). These are the individuals, groups, or organisations with which the programme interacts directly, and where there will be opportunities for influence (see diagram below). Boundary partners may be individual organisations but might also include multiple individuals, groups, or organisations if a similar change is being sought across many different groups (for example, research centres or community groups).



In STEP 4 an outcome challenge statement is developed for each boundary partner. It describes how the behaviour, relationships, activities or actions of the individual, group, or institution will change if the programme is extremely successful. Outcome challenges are phrased in a way that emphasises behavioural change.

A set of progress markers are then identified (STEP 5) for each boundary partner. These are desired visible, behavioural changes ranging from the minimum one would expect to see the boundary partners doing as an early response to the programme, to what it would like to see, and finally to what it would love to see them doing if the programme were having a profound influence.

These progress markers represent changes that are easily measurable, and will show if progress is being made towards the desired outcomes of the programme. They are designed to show progress as a group of markers rather than as individual indicators, which are more common when working with logical frameworks. An example of a set of progress markers is shown in the table below.

Expect to see partner ...	• organising staff training to interact with communities better • inviting communities to contribute opinions • visiting communities in the field on a regular basis
Like to see partner ...	• developing policies and protocols for engaging with communities • receiving and discussing comments from community groups • regularly meeting to consider communities' opinions and comments • making amendments to projects based on community feedback
Love to see partner ...	• developing projects and programmes alongside communities • inviting community representatives onto decision-making forums • being accountable to communities through regularly reporting on progress and lessons learned

In STEP 6 a strategy map is developed to help identify the strategies used by the program to contribute to the achievement of each outcome challenge. For most outcome challenges, a mixed set of strategies is used because it is believed this has a greater potential for success.

The purpose of STEP 7 is to identify the organisational practices that the programme will use to be effective. These organisational practices describe a well-performing organisation that has the potential to support the boundary partners and sustain change interventions over time.

Monitoring priorities are then identified (STEP 8) to focus time and resources on where they are most needed. Monitoring priorities are divided into three areas: organisational practices; progress toward the outcomes being achieved by boundary partners; and the strategies that the programme is employing to encourage change in its boundary partners.

STEPS 9-11 consist of the establishment of journals to monitor progress over time in the three areas described above. Firstly, an outcome journal is established to record changes for each boundary partner. It includes the progress markers set out in step 5; a description of the level of change as low, medium, or high; and a place to record who among the boundary partners exhibited the change.

Then, in order to provide the programme with a systematic way to monitor its actions in support of its boundary partners, Outcome Mapping provides a strategy journal, which can be adapted. This journal records data on the

strategies being employed, and is filled in during the programme's regular monitoring meetings.

A performance journal is also created for the programme which records data on how it is operating as an organisation to fulfil its mission. This is also filled in during regular monitoring meetings.

The final step (STEP 12) is to develop a descriptive plan of a proposed evaluation for the programme. This outlines the evaluation issue, the way findings will be used, the questions, sources and methods to be used, the nature of the evaluation team, the proposed dates and the approximate cost. This information is intended to guide the evaluation design.

Strengths and weaknesses

Unlike some advocates of the logical framework approach to planning, supporters of Outcome Mapping do not claim it is appropriate in all situations. This, added to the fact that Outcome Mapping is rarely forced on organisations as a condition of funding, means debates surrounding Outcome Mapping are less intense than those surrounding the logical framework. But there is still a divergence of opinion; some who have used Outcome Mapping love it as a methodology, and some dislike it.

Some of Outcome Mapping's strengths can be listed as follows.

- It introduces monitoring and evaluation at an early stage of a programme, and ensures that monitoring and evaluation is built into programme design.
- Outcome Mapping is a participatory tool and therefore encourages multi-stakeholder dialogue, as well as learning amongst different participants. It is designed to contribute to the development process itself.
- Because it is based on outcomes of observable behaviour change, it can be more intuitive for field workers to grasp than the sometimes more abstract language of objectives.
- It encourages programmes to assess both the outcomes of programmes – therefore focusing clearly on change – and the processes through which those outcomes are generated.
- It is much better than linear planning tools at dealing with complexity. Outcome Mapping does not seek to show direct attribution for change resulting from a single source. This means Outcome Mapping may be more appropriate for the monitoring and evaluation of programmes with multiple inputs.
- Because Outcome Mapping involves the identification of a spread of possible outcomes (progress markers) ranging from those stakeholders expect to see to those they would like or love to see, it avoids the need for precise predictions about the pace of change at the beginning of a project or programme. This means it is particularly useful when the pace of change cannot easily be predicted.
- Because of its focus on boundary partners, Outcome Mapping is good at dealing with programmes with a special focus on organisational change. It can therefore be used to support the monitoring and evaluation of capacity development – an area which people find particularly difficult to assess using more linear tools (see Simister and Smith 2010).

However, Outcome Mapping is not appropriate in all circumstances. Some of its limitations have been described as follows.

- Because it deals with contribution rather than attribution it cannot easily be used for processes that require hard measurement of results, such as cost-benefit analysis or value for money assessment.
- As with any participatory methodology, Outcome Mapping requires a great deal of time, effort and patience to do well. Significant resources are required both in terms of programme staff and the people, groups and organisations being supported.
- Outcome Mapping may be best used at the level of small programmes or larger projects. It is not a tool that is necessarily appropriate for handling large, complex programmes, because it may be difficult to identify who will change and how. Earl et. al. (2001) point out that to be effective Outcome Mapping must be sufficiently specific to enable the identification of key groups who will be influenced by a programme. Equally, Outcome Mapping may not be appropriate for small projects where the investment of time needed would not be proportional to the likely benefits.
- The journaling approach to tracking progress means the technique generates a lot of data, creating challenges for data analysis.
- Outcome Mapping is good at identifying changes within supported groups who are part of the process, partly because it encourages self-reflection and self-assessment. It may not be so useful for identifying change for people, organisations or groups that lie outside a programme, such as the targets of policy influencing work.
- Outcome Mapping does not focus predominantly on impact assessment. It recognises the need to look at long-term changes in people's lives brought about by development interventions, but regards this as the responsibility of a programme's boundary partners. If donors require in-depth impact assessment then Outcome Mapping needs to be supplemented by other tools and methodologies.
- In comparison with the logical framework, Outcome Mapping is less able to provide a short, concise summary of a project, programme or organisation.

Adaptations

Although Outcome Mapping can be, and frequently is, used as a methodology in its entirety, it is often adapted, and can be used in conjunction with other methodologies such

as the logical framework. Indeed it is perfectly possible to embed an Outcome Map within a logical framework, or set logframe indicators that can be generated by Outcome Mapping processes.

Individual features of Outcome Mapping – such as the setting of progress markers at expect to see, like to see and love to see levels – are often used, even when the entire methodology is not. Many CSOs have also carried out work that is based on the principles of Outcome Mapping – such as participatory planning, understanding of complexity, valuing contribution rather than attribution – without necessarily adopting the process in its entirety.

Further reading and resources

The M&E Universe contains other papers dealing with subjects that address complexity within planning, monitoring and evaluation. These include Theory of Change, scenario planning and most significant change methodology.

The logical framework

Scenario planning

Theory of Change

Most Significant Change

The most comprehensive guide to Outcome Mapping is a guide written by Earl et. al. in 2001 (see reference below). This is available at www.outcomemapping.ca/download/OM_English_final.pdf. There is also an Outcome Mapping community website at www.outcomemapping.ca which is regularly updated and contains much information on how Outcome Mapping is being used and applied. Further information, and a more comprehensive reading list for Outcome Mapping, can be found at the Better Evaluation website at http://betterevaluation.org/

References

- Earl, S; Carden, F and Smutylo, T (2001). *Outcome Mapping: Building learning and reflection into development programmes*. Evaluation Unit, International Development Research Centre (IDRC), Ottawa, Canada.
- Simister, N and Smith, R (2010). *Monitoring and Evaluating Capacity Building: Is it really that difficult?* Praxis paper no. 23, INTRAC, January 2010.

Author(s):
Neil MacDonald and Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

OUTPUTS, OUTCOMES AND IMPACT

Outputs, outcomes and impact are terms used to describe change at different levels. Outputs are the products, goods and/or services which result from a development intervention. These are designed to produce outcomes – the short- to medium-term effects of an intervention – and eventually impacts. Whilst the terms are in common use, there is great inconsistency in how they are interpreted.

Most organisations understand the key difference between the things they do (activities) and the ultimate changes they wish to help bring about (impact). But the distinction is not always helpful. In order to achieve desired long-term changes, there may be many steps between an organisation's activities and the desired impact. The results chain (see below) attempts to categorise these steps by breaking them down into manageable stages – inputs, activities, outputs, outcomes and impact.

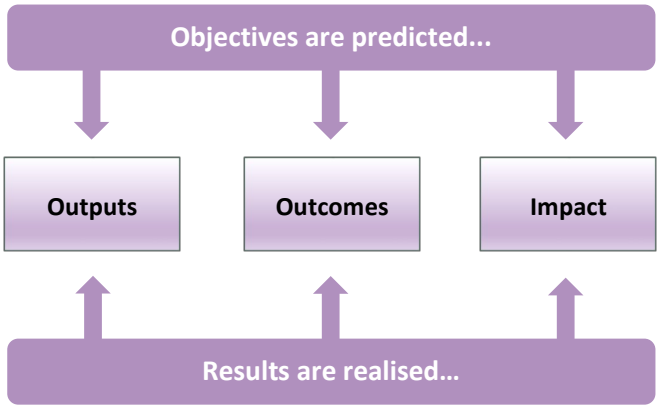
The definitions below were developed by OECD DAC in 2002 (OECD 2010). But it is important to note that different organisations use different definitions, and there may be little consistency between them.

Impact	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.
Outcomes	The likely or achieved short-term and medium-term effects of an intervention's outputs.
Outputs	The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
Activities	Actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources, are mobilised to produce specific outputs
Inputs	The financial, human, and material resources used for the development intervention.

In this results chain, inputs are used in order to carry out activities. Activities lead to services or products delivered (outputs). The outputs start to bring about change (outcomes) and eventually this will (hopefully) contribute to the impact. For example, if an organisation was providing seeds to farmers, the seeds themselves, any transport costs, staff costs etc. would be inputs. Activities undertaken would include travelling to the field to deliver seeds and, possibly, conduct training with farmers. The outputs could be the seeds distributed and the people trained. The outcomes could be that the farmers plant the seeds, the seeds grow into crops, the crops are harvested, and then eaten or sold. This would contribute to the desired impact, which might be a better standard of living in the long-term for farmers and their families.

Another term that is commonly used is 'results'. Results is defined by OECD DAC as the *"output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention"*. 'Results' is defined differently by different organisations. Some only use it to describe actual achievements whilst others use it to describe predicted change.

A simplified diagram of how these different terms relate to each other can be found in the diagram below. It will not satisfy every organisation or situation but it will work as a rule of thumb for M&E practitioners.



Potential Confusions

Although in theory these different areas are easy to distinguish, in practice it can be more difficult. There are three areas of overlap where there is often confusion.

Firstly, there is sometimes confusion between activities and outputs. Some activities are clearly not outputs; for example taking photographs of possible locations for a new well, talking to different villagers to find out where it might

be situated, negotiating with potential suppliers of parts, etc. But when it gets to the level of 'digging a well' it is easier to see how there might be confusion. The act of 'digging a well' is clearly an activity whilst the actual well dug is often considered an output as it is a product (deliverable) of a project or programme. This confusion is surprisingly common, and many projects or programmes feel unfairly treated when their outputs (or output indicators) are criticised for being too activity-based.

The second confusion is between outputs and outcomes, and here the difference can be more subtle. Some definitions of output only include the deliverables of a project or programme, whilst others interpret initial changes (such as enhanced knowledge or understanding following a training course, or community organisations engaging with government following community mobilisation meetings) as outputs. The OECD DAC definition, for example, allows that an output "*may also include changes resulting from [an] intervention which are relevant to the achievement of outcomes.*"

There is no real solution to this difficulty and M&E practitioners need to deal with it on a case-by-case basis. Even when an organisation has very clear definitions and guidelines on the difference between outputs and outcomes, different people may still interpret the terms inconsistently.

The third confusion is between outcomes and impact, and here it is largely a matter of judgement. Again, a great deal depends on the definition. For example, the OECD DAC definition (*'positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended'*) allows for long-term changes in institutional capacity or policy change to be classed as impact. However, the preferred definition for many CSOs is *"lasting or significant change – positive or negative, intended or not – in people's lives brought about by an action or a series of actions"* (Roche 1999), which focuses more on change at individual or household level.

The preferred solution of the author, in a desire for a less complicated life, is to define outputs as the services or products delivered that are largely within the control of an agency; impact as the lasting or significant changes in people's lives brought about by an intervention or interventions; and outcomes as everything in between.

Working with outcomes

Outcomes are usually very important for an M&E system. This is because they provide early information on whether a project or programme is on course, and whether any desired changes are beginning to happen. For instance, if a deliverable of a project is to provide seeds to farmers, an early outcome might be that 90% of the seeds have been planted by farmers. This does not mean the project or programme has achieved its desired impact, but it means that it remains on track. If the farmers are not planting the seeds, this lets project staff know that adjustments are required, and the ultimate impact is not likely to be achieved.

On the other hand, if an organisation waited to measure the ultimate impact of the project or programme without bothering to look at the outcomes, by the time it found that farmers and their families had not improved their living standards because they had not planted or harvested the seeds it would be too late to do anything about it.

Any M&E system or process designed to feed into management decision-making needs to assess outcomes on a regular basis. The danger otherwise is that M&E focuses only on what is being delivered, assuming that if products or services are delivered properly they will automatically translate into change. This is rarely the case.

It is also important to remember that whilst there might be one single stated purpose of a development intervention, there will usually be many different layers of outcomes. In the example above, it is hoped that increased seed use will lead to improved yields, better harvests, increased cash for farmers, and ultimately better livelihoods for their families. An M&E system at project or programme level would usually hope to identify all the different layers of outcomes and assess these on a regular basis.

Different perspectives

One of the things that confuses M&E practitioners the most is that something can be an output (deliverable) and an outcome (change) at the same time, depending on different perspectives.

For example, if an intermediary NGO were to undertake capacity building with a Southern CSO it would be reasonable to consider the training itself as an output, and any improvement in the Southern CSO's work, such as improved engagement with marginalised groups, as an outcome. But for the Southern CSO the engagement with marginalised groups would be an output (deliverable) of its work. The improved engagement could therefore be seen as both an output and an outcome at the same time.

> *"There is no objective way of saying whether something is an output or an outcome. It depends partly on which angle you look at it from."*

This is also a dilemma for many large organisations and donors that try to draw up complex sets of indicators and classify them into 'output' and 'outcome' indicators. In case 1 in the example shown on the next page an organisation might carry out eye operations in the field (outputs) in order to improve sight (outcomes/impact). But it might also train local partners to carry out the operations (case 2) to a higher standard – in which case the training is an output and the carrying out of effective operations by partners an outcome. So what at first sight seems to be a clear deliverable – the carrying out of effective eye operations – may be an outcome of an organisation's work in different circumstances.

Case 1		Eye operations carried out to standard *(output)*	Improved eyesight for patients *(outcome)*	Improved quality of life *(impact)*
Case 2	Eye surgeons trained by partner *(output)*	Eye operations carried out to standard *(outcome)*	Improved eyesight for patients *(outcome)*	Improved quality of life *(impact)*

In this case it would not be possible to generically classify '*eye operations carried out to standard*' as either an output or an outcome, as it would always be dependent on the context.

This is not a large problem when using planning or M&E methods that are designed to deal with complexity, such as Outcome Mapping or the Most Significant Change technique. But in complex programmes it can be a real problem, especially when using linear tools such as the logical framework, which are usually developed from a single perspective.

Further Reading and Resources

Further information on the difference between outcomes and impact can be found in the M&E Universe paper on impact assessment. Another related paper in the planning section of the M&E Universe deals with setting objectives.

Impact Assessment

Setting objectives

References

- OECD (2010). *Glossary of Key Terms in Evaluations and Results Based Management.* OECD, 2002, re-printed in 2010.
- Roche, C (1999). *Impact Assessment for Development Agencies.* Oxford: Oxfam/NOVIB.

Author(s):
Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

PROGRAMME INDICATORS

Some programme indicators are designed to be collected at programme level. Others are designed to capture, summarise or aggregate information collected at project or partner level. It is important to clarify how information on indicators is transmitted between different levels of a programme.

Indicators are routinely developed, collected and analysed in most social development projects. They can also be developed and used at programme level. Programmes may range from a collection of a few projects working on a common theme to large global, regional, country or sector programmes. Sometimes programme indicators are not designed to be collected directly, but instead rely on information collection at lower levels. This is often true of strategic indicators – indicators set against strategic objectives in global, regional, country or sector plans.

If a CSO plans to use programmatic indicators it is important that it develops and clarifies processes that enable information on indicators to be transmitted between different levels of the programme. The risk otherwise is that nobody takes responsibility for collecting the indicators, and the monitoring and evaluation (M&E) system for the programme falls into disuse as a result.

The five cases below illustrate ways in which programmatic indicators can be defined and collected. The principles can be applied at any level from a simple programme working in one locality through to a large global, regional, national or sector programme. The first three cases are the most common.

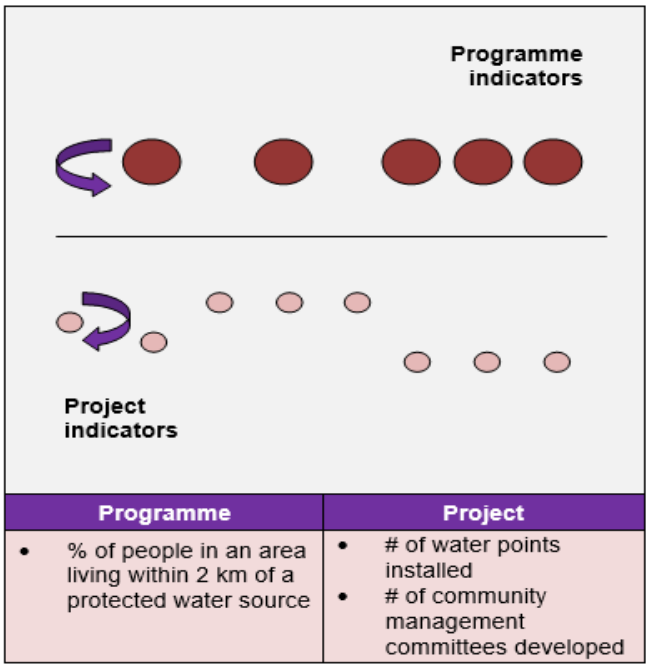
Case 1: Independent indicators

In the first case the two sets of indicators (programme and project indicators) are collected independently. Programme indicators are selected that can be collected by programme staff using their own resources. In the example shown in the diagram opposite, the *'% of people in an area living within 2km of a protected water source'* could be collected via a survey, or by using a system of water point mapping. Projects might then collect their own indicators, such as the *'number of water points installed'* or *'number of community management committees formed'*. Even though the results at programme level may depend partly on activities carried out at project level the two sets of indicators are not formally linked.

Case 2: Framing or basket indicators

Framing (or basket) indicators are not specific and cannot be collected directly at programme level. Instead they are used to identify broad areas or domains of change. More specific indicators at project level are then captured and summarised under the framing indicators.

Case 1: Independent indicators



Programme	Project
• % of people in an area living within 2 km of a protected water source	• # of water points installed • # of community management committees developed

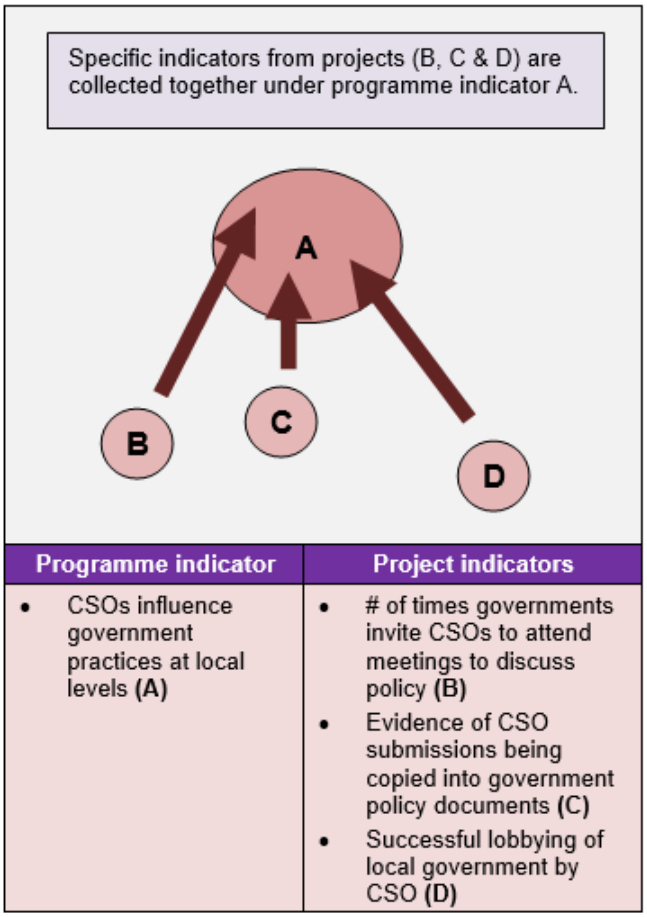
In the example shown on the following page a programmatic framing indicator might be *'CSOs influence government practices at local levels'*. This kind of indicator cannot be collected directly as it is too vague. Instead, it relies on specific, tangible indicators or evidence being produced from project level, such as:

- *# of times government invites CSOs to attend meetings to discuss policy*
- *Evidence of CSO submissions being copied into government policy documents*
- *Successful lobbying of local government by CSO*

These three tangible indicators from different projects could all be collected under the one framing indicator at programme level, as examples of the type of change that a programme is achieving.

However, it is important to recognise that this kind of indicator can rarely be used to *measure* programmatic change. Instead, it is used to generate examples or illustrations of the type of changes that are occurring within a programme. The indicator is basically a mechanism for collecting together and summarising a number of specific changes under a common theme.

Case 2: Framing or basket indicators



When using framing indicators, project indicators may be quantitative or qualitative. They need not necessarily be indicators at all, and information on unexpected or negative changes can also be mapped onto the programme indicator. One big advantage of using framing indicators is that project staff are free to collect indicators which are useful to them and reflect their own needs without referring to the programme indicators. Indeed, there is no theoretical reason why project staff should know about the existence of the programme indicators at all.

Case 3: Aggregated indicators

Indicators from different projects can also be added together at programme level to provide an aggregated indicator. In this case the indicator must be defined in exactly the same way at both project and programme level. An example of this is *'# of farmers with increased crop yields of 30%'*. Aggregated indicators are always quantitative.

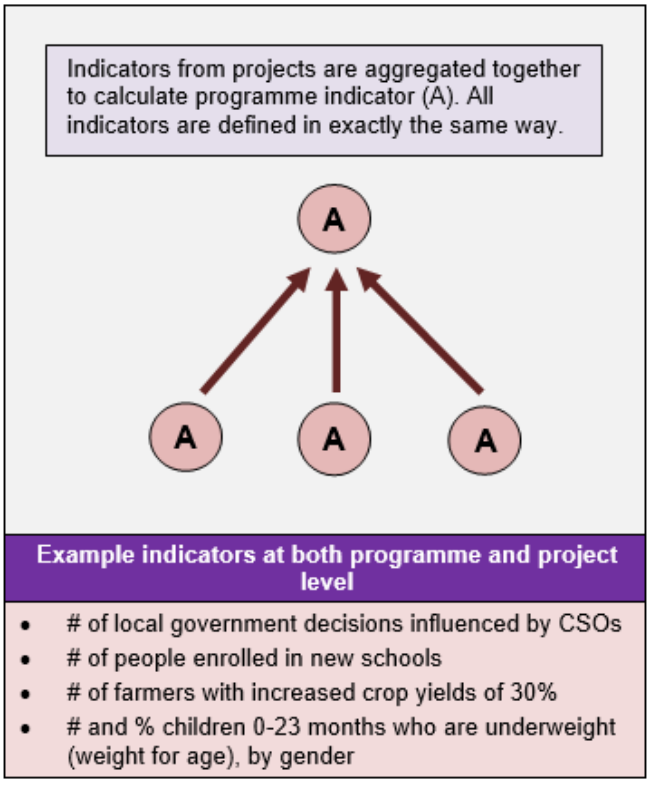
If a programme intends to aggregate indicators it needs to ensure that any indicators are defined and used in the same way throughout all the projects covered by the programme. In practice this often means using common tools and approaches to collect the indicator, over similar timeframes. Specifically:

- the same indicator definitions need to be used;
- all relevant projects need to collect the information;
- change needs to be assessed over similar timescales;
- the same (or similar) tools and methods need to be used;
- the quality of information collection needs to be consistent; and
- contributions to change should be similar.

The risk otherwise is that different numbers are added together to produce a meaningless total. For instance, in the example provided it would be meaningless to add together numbers from different projects if there were different understandings of what was meant by an increase in crop yield.

CSOs often want to aggregate information across multiple projects as it enables them to summarise performance across different interventions. However, aggregating indicators is never as easy as it sounds. In practice, it is essential to ensure that indicators are comprehensively defined at the start of a programme, so that all project staff work to the same indicator definitions. Indeed, a major implication of this approach is that all relevant partners and projects need to be told (or persuaded) to use the standard indicators. Some examples of aggregated indicators can be found in the diagram below.

Case 3: Aggregated indicators



The challenge of aggregation is significant when applied to output indicators. Even more complex difficulties are faced when programmes attempt to aggregate information at outcome or impact level. The more complex and intangible the outcome, the greater the difficulties in aggregation, and the more work needed beforehand to ensure that different projects use the same definitions and procedures when collecting information on the indicators. Although INTRAC

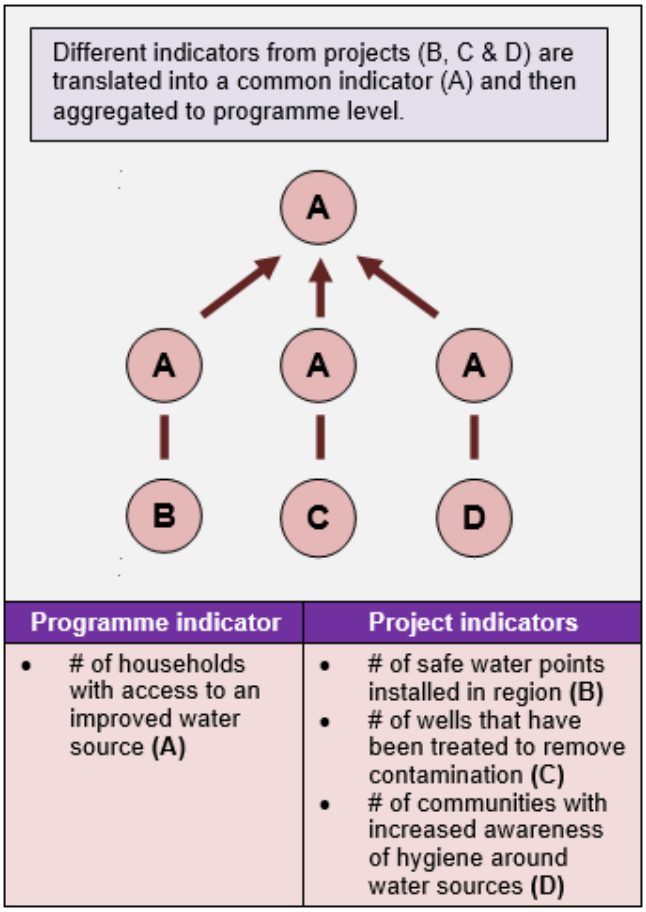
has seen attempts to aggregate indicators after the event (for example, taking indicators developed independently within a large number of projects and seeking to aggregate them) it has never known this to be done successfully.

Case 4: Translated indicators

Translated indicators are less common, and can be seen as a halfway house between cases 2 & 3. Projects still report on different indicators (as in case 2). However, those indicators are then 'translated' into a common indicator (as in case 3) later in the process. Theoretically, this could be done by project staff, but in practice the translation is more commonly the task of programme staff.

In the example shown below, three different project indicators are all converted into a common indicator before being aggregated. For instance, programme staff could measure or estimate the number of households with access to newly installed water points (the first project indicator). They could also measure or estimate the number of households being served by wells treated for contamination (the second project indicator). The two numbers could then be aggregated under the common programmatic indicator *"# of households with access to an improved water source"*.

Case 4: Translated indicators



Programme indicator	Project indicators
• # of households with access to an improved water source (A)	• # of safe water points installed in region (B) • # of wells that have been treated to remove contamination (C) • # of communities with increased awareness of hygiene around water sources (D)

Of course, this may be easier in some cases than others, and programme staff may find it much harder to estimate the number of households benefitting from increased awareness of hygiene around water sources (the third project indicator in the example). Such estimates would have to rely on some assumptions, e.g. that increased awareness is reflected in behaviour, and that improved behaviour leads to improvements in the quality of water sources. However, with some effort this should not be too difficult an exercise.

There are many examples of where these kinds of indicators have been used within planning and M&E work. Some of the most common are as follows.

- In cost-benefit analysis or social return on investment, different kinds of social benefits are routinely translated into monetary values to enable aggregation and comparison.
- Health programmes often convert different indicators collected within projects into DALYs (disability-adjusted life years) – understood as the additional number of years of healthy life for a person.
- Rating indicators may be used to aggregate and compare performance based on different project indicators. For example, project performance expressed in terms of different project indicators can be translated into a RAG (red, amber, green) rating and then aggregated into a programme indicator.

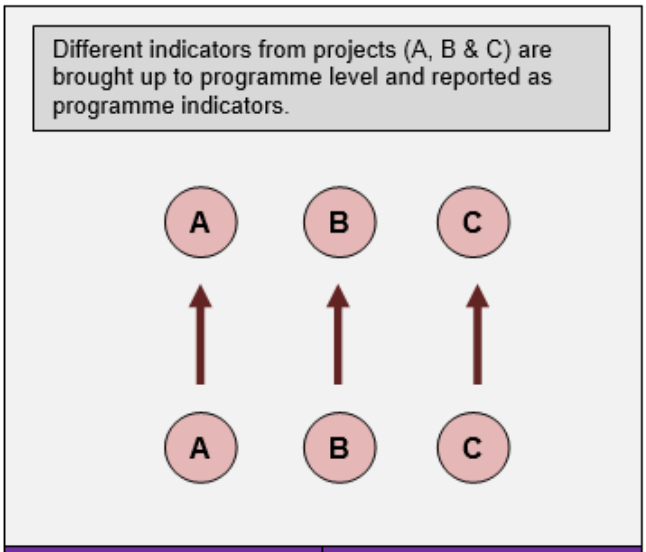
However, using translated indicators is seldom an easy exercise, and – as with aggregation – should not be undertaken lightly. There is a significant risk that the value of some project indicators may be lost in translation; for example through placing arbitrary economic values on social benefits. The main advantage of using translated indicators is that some level of aggregation can be achieved even if project indicators have not been defined or collected in the same way from the start of a programme.

Case 5: Cluster indicators

In the final case, some programmes define indicators that are basically project indicators which have been brought up to programmatic level. This is often the case in cluster programmes, where programmes have little or no added value and are really only collections of projects brought together for marketing or communications purposes. In the example provided, three different indicators collected by projects have been brought up to programme level. Each indicator, when reported at programme level, only covers the work of an individual project.

> *"If a CSO wishes to link indicators across different levels then it needs to create the mechanisms to do so. It will not happen on its own. Indicators are not magnets."*

Case 5: Cluster indicators



Programme indicators	Project indicators
• # and description of government policies that have been influenced by CSOs **(A)** • Degree of civil society space open to indigenous NGOs **(B)** • Level of participation of community groups in political processes **(C)**	• # and description of government policies that have been influenced by CSOs **(A)** • Degree of civil society space open to indigenous NGOs **(B)** • Level of participation of community groups in political processes **(C)**

Summary

Programme indicators are not always defined and used in the same way as project indicators. In some cases a great deal of thought needs to go into developing programme indicators and ensuring they are linked to indicators at project levels. Programmes often use a combination of the five cases shown above to provide a range of information, some of which is reliant on information coming through project indicators and some of which can be collected independently at programme level.

Further reading and resources

Further information on how to aggregate and summarise information across different levels of an organisation can be found in the M&E Universe paper on aggregation and summarisation.

Aggregation and summarisation

Indicators

The material in this paper is mostly taken from a paper called *"Summarisation of Portfolio Change"* by Nigel Simister, published in 2016. This can be found on INTRAC's website at https://www.intrac.org/wpcms/wp-content/uploads/2016/09/Summarising-portfolio-change-results-frameworks-at-organisational-level.pdf.

Author(s):
Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

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.

A project M&E system covers all the work carried out during and/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.

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.

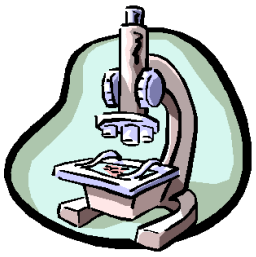
Learning mechanisms Project M&E systems often include learning mechanisms. These are developed so that project staff and/or beneficiaries can generate, share and apply lessons from within the project. Learning mechanisms can range from simple team meetings to more structured review and sensemaking sessions, 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.

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 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.

Author(s):
Nigel Simister

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.

RESOURCES FOR M&E

Monitoring and evaluation (M&E) systems enable projects, programmes or organisations to define, select, collect, analyse and use information for a variety of purposes. To function properly an M&E system needs to be adequately resourced. Resources can be divided into three broad areas: finance, personnel and time. It is especially important to consider the time spent on M&E when running a participatory M&E system.

Monitoring and evaluation (M&E) systems enable projects, programmes or organisations to define, select, collect, analyse and use information for a variety of purposes. To function properly an M&E system needs to be adequately resourced. In order to establish the level of resources required it is useful to divide M&E work into two broad areas.

- Firstly, there are things a project, programme or organisation *has* to do. This includes M&E required for basic project or programme management, and any M&E required for accountability to donors or internal stakeholders, such as boards, trustees or senior management. This work is non-negotiable. Therefore, the only decision to make is the level of resources required to make sure the work is carried out to an acceptable standard.
- Secondly, there are things a project, programme or organisation *wants* to do. This might include M&E designed to generate learning in order to improve future performance, or demonstrate accountability downwards to partners and communities. In this case it is important to carefully balance the costs and benefits of an M&E system. This means making sure that resources devoted to M&E are appropriate, and could not be better spent elsewhere.

For the purposes of this paper, resources can be divided into three broad areas: finance, personnel and time.

Finance

Good M&E often costs money. The amount of money available for M&E significantly influences how an M&E system is designed and implemented. The costs of running an M&E system include (see Gosling and Edwards 1995):

- paying staff to collect, record, translate and analyse data;
- payments to staff responsible for training, support and supervision;
- payments to staff responsible for maintaining and/or modifying the system;
- payments to any external consultants required;
- administrative costs for items such as report forms, tablets, mobile phones or computers; and
- larger capital costs for premises, transport, accommodation, etc.

Some CSOs have designated budgets to cover M&E. Others do not, and include M&E costs in wider budgets. Indeed, it can sometimes be difficult to agree what an M&E cost is. Although it is relatively easy to cost a major exercise, such as a review, M&E workshop, evaluation or baseline survey, it is not always that straightforward.

This is because there is often a large degree of overlap between management and monitoring. Both require the regular collection and analysis of information on a day-to-day basis in order to effectively track resources and deliver activities and outputs. Many monitoring activities – such as visiting projects in the field, talking to beneficiaries, implementing complaints mechanisms, etc. – are indistinguishable from good management practices. Therefore, it is not always easy to decide what counts as an M&E cost, and what should instead be costed under project or programme management.

In addition, M&E costs are often hidden. For example, management information systems necessary for storing and processing M&E information may be included in organisational development budgets; goods such as computers or vehicles may be included in capital costs as they are used for multiple purposes; the salaries of staff who spend part of their time on M&E may be covered under project management budgets; and workshops or conferences that devote some of their time to M&E may be covered under general training budgets. This means it can be difficult to decide how much money is actually being devoted to M&E within a project or programme.

An often-quoted rule is that a project or programme should spend around 5-10% of its budget on M&E. However, this figure can vary enormously between different organisations. For example, a recent study of over 90 projects run by NGOs showed a range from 0% to 25% (ITAD 2014). In part, this may be because of the difficulty of deciding when to allocate costs to M&E, as described above. However, there are other reasons why costs vary.

- If a CSO is delivering services according to a tried and trusted formula it may need to spend a smaller portion of its budget on M&E – just enough to make sure that projects are on track, and delivering what they are supposed to deliver. On the other hand, if a CSO is implementing innovative or pilot work it may want to spend a much larger portion of its budget - perhaps up to 30 or 40% - in order to establish whether it is worth

upscaling or replicating the work elsewhere, and, if so, what changes need to be made.

- CSOs using M&E primarily for accountability to donors or governments may find that M&E systems can be run relatively cheaply. CSOs wishing to learn in order to improve performance, demonstrate accountability to service users, or engage in participatory M&E may find they need to devote far more resources to M&E.
- In some cases, CSOs may need to budget for unexpected costs, particularly when working in uncertain or complex environments. This is in case there is a sudden and urgent need to carry out M&E work in order to find out more about an issue. In these circumstances, the amount of money spent on M&E depends on how a project or programme progresses.

Clearly, it is not always easy to set or follow simple rules when allocating budgets for M&E. However, it is always important to ensure that an M&E system has sufficient funding to serve its core functions. If funds are insufficient then either more funding needs to be sought, or the ambition of the M&E system needs to be lowered.

Personnel

In any M&E system it is important to have sufficient personnel to carry out necessary tasks. At the bare minimum this involves data collection. It usually also includes other tasks, such as analysis, reporting, learning and data management. Within projects and programmes run by CSOs, M&E work is usually either carried out by project / programme managers, who spend some of their time on M&E, or, if the project or programme is large enough, by dedicated M&E staff. More rarely, M&E might be contracted out to a separate group, such as a research institute or consultancy service.

As well as the physical availability of staff, their capacity to carry out M&E tasks needs to be considered. This is important because it dictates what kind of M&E system can be implemented. It is essential to match the ambition of an M&E system to existing M&E capacity. Where intermediary NGOs work through partners it is also vital to understand the capacity of staff within those partner organisations.

Often there is a mismatch between what a CSO wants to achieve through an M&E system and the existing staff capacity. In these cases there are a number of possible actions that can be taken (see IFRC 2011).

- Staff capacity can be developed through formal or informal training. Formal training might include courses or workshops on M&E-related subjects, and can be facilitated by internal CSO staff or external facilitators. Informal training could include on-the-job guidance and feedback, and might also include peer-support and mentoring. Physical resources such as manuals or online-guides can also be used to enhance capacity.
- Sometimes, M&E support can be provided from within an organisation, programme or project. For instance, an M&E unit within an organisation might provide on-going help and assistance to programmes and projects run by that organisation, or by its partners. Or there may be significant M&E experience elsewhere within an organisation that can be utilised.
- Outside consultants can be employed. This may be to carry out a specific task, such as a baseline study or evaluation. But consultants might also be employed to support ongoing M&E tasks.

Sometimes, however, it is not possible to do any of these things. It may be hard to find staff of the required quality who are prepared to work in a remote area or for a limited salary. And there may be a limit to how far the capacity of existing staff can be developed. In these cases, as described above in the section on finances, CSOs, and those funding them, may need to accept a lower level of ambition for the M&E system.

Within projects and programmes it is also important to have someone with overall, designated responsibility for an M&E system. An M&E system does not run itself, and needs to be regularly maintained. This means making adjustments where necessary, and seeking to ensure that the system remains relevant. Overall responsibility could lie with a dedicated M&E staff member, a project or programme manager, a team or working group, or even an external, independent or semi-independent M&E unit. This person or team should be responsible for the overall maintenance of the M&E system, and should coordinate with other individuals and groups as required.

Time

Along with finance and personnel, the third resource element is *time*. If people carrying out M&E tasks within a wider system are designated M&E staff than the time they spend on M&E is non-negotiable. It is what they are paid to do, and why an organisation employs them. If, however, staff are expected to combine M&E responsibility with other tasks then time becomes more of an issue.

Project and programme staff are usually expected to balance and perform multiple tasks. Time spent on M&E is time that cannot be spent elsewhere. If M&E tasks are necessary for project / programme management then CSO staff normally find the time. But M&E is often carried out for other purposes, such as supplying information to donors or head offices. In these cases, CSO staff may see M&E as less important than other, more urgent, tasks.

This means that it is important not just to consider the financial and personnel resources available to a project or programme, but also to consider the proportion of time that should be spent on M&E. Again, this is partly about matching the ambition of an M&E system to the available resources. For example, most CSOs say they want their staff to learn from M&E work in order to contribute to improved performance. But unless the CSO enables staff time for sharing and discussing learning it is unlikely to happen.

Participatory M&E

If a CSO implements its own projects or programmes then it can assess the level of resources needed within those interventions, and make plans accordingly. If working through partners, it may need to consider the resources required by its partners, including their staff capacity to carry out M&E tasks.

Some CSOs encourage full beneficiary involvement in planning, monitoring and evaluation. This is often done to build up local capacity in order to ensure the sustainability of a project or programme. Participatory M&E places extra demands on an M&E system. For instance, it may be necessary to train, manage and supervise community members. Or extra costs may be incurred in hiring skilled facilitators to enable participatory M&E. Extra resources therefore need to be considered.

It is even more important that the resources of supported communities or beneficiaries are considered. Although they are not usually paid, community members may have to devote significant time to M&E activities. This may be time that could be spent productively elsewhere. Therefore, it is important to balance the costs to the community with the potential rewards. This is especially important if M&E is treated as an extractive exercise that uses community members to generate data, rather than a truly participatory exercise that empowers them to take more control over their own lives.

Further reading and resources

Other papers in this section of the M&E Universe deal with two other subjects relating to resources: 'the supporting environment for M&E' and 'data and knowledge management'. There is a dedicated paper on participatory M&E in the 'M&E debates' section of the M&E Universe.

The supporting environment for M&E

Data and knowledge management

Project M&E systems

Participatory M&E

A guidebook produced by the International Federation of Red Cross and Red Crescent Societies (see IFRC (2011), referenced below) includes sections on human resources, capacity building and M&E budgets, and contains a lot of useful information.

References

- Gosling, L and Edwards, M (1995). *Toolkits: A Practical Guide to Assessment, Monitoring, Review and Evaluation*. Save the Children Development Manual No.5, London.
- IFRC (2011). *Project/programme Monitoring and Evaluation (M&E) Guide. International Federation of Red Cross and Red Crescent Societies*. Geneva, 2011.
- ITAD (2014). *Investing in Monitoring, Evaluation and Learning: Issues for NGOs to consider*. ITAD, in association with NEF Consulting. Jennifer Chapman (ed.), March 2014.

Author(s):
INTRAC

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.

RESULTS-BASED MANAGEMENT

Results-Based Management (RBM) is a performance management strategy that has increasingly been adopted by institutional donors over the past decade. It has significant implications for strategic planning, monitoring and evaluation. RBM places the measurement of results at the heart of management. There are passionate debates about how useful or appropriate it is within social development.

Results-Based Management (RBM) has been around for a long time. It has become increasingly popular in the donor community, particularly since the Paris Declaration on Aid Effectiveness in 2005, where countries from around the world agreed to change the way in which donor and developing countries collaborated. There is no single, agreed definition of RBM, but a typical definition is as follows:

> *"RBM is a management strategy by which all actors, contributing directly or indirectly to achieving a set of results, ensure that their processes, products and services contribute to the achievement of desired results (outputs, outcomes and higher-level goals or impact). The actors in turn use information and evidence on actual results to inform decision making on the design, resourcing and delivery of programmes and activities as well as for accountability and reporting."* (UNDG 2011, p2)

There are a number of key elements to RBM. These include the following (see Hailey and Sorgenfrei 2004; Bakewell and Garbutt 2005; Mango 2014).

1. The identification of clear and measurable objectives.
2. The identification of indicators to measure progress towards objectives.
3. The setting of targets associated with objectives and indicators.
4. The establishment of a monitoring system to regularly collect data and compare targets with actual results.
5. The use of evaluations to provide complementary performance information that is not available from monitoring systems.
6. The use of performance information for internal management accountability, learning and decision-making, as well as for reporting to external stakeholders and partners.

Increasingly, RBM has become associated with the use of linear planning tools such as the logical framework (or logframe) and with results chain terminology. A results chain is the sequence of results considered necessary to achieve desired objectives. This begins with inputs, which are used to carry out activities and deliver outputs. It is hoped that these will help bring about a set of outcomes that will eventually contributed to the desired impacts.

RBM debates

RBM is hugely controversial within the social development context, and there are fierce debates about how appropriate it is in different circumstances. Supporters of RBM argue that it reflects an increasing concern with greater accountability between large institutions and host governments – something that is seen as an inherently good thing. They also point to the fact that the purpose of RBM is partly to enhance the role of strategic planning, monitoring and evaluation within management processes. Again, this is something most would agree is a reasonable goal.

Some supporters of RBM acknowledge that the '*management*' side of RBM has often been overlooked, but see this as a failure of application rather than of RBM principles. For example, the UNDG RBM manual explicitly notes the flexibility needed to change activities and strategies when needed, in collaboration with a range of different stakeholders (UNDG 2011).

Indeed as one INTRAC colleague is fond of saying, *"why wouldn't you want to manage by results?"* As M&E practitioners surely we should want to see our work taken seriously, and considered when managers make decisions.

On the other hand, some critics argue that RBM is often applied in a very rigid way, with a focus on the achievement of hard, measurable results. This can lead to a number of problems.

- Firstly, there may be a bias towards doing what is measurable. The risk is that targets and performance indicators over-simply development efforts by assuming that only verifiable and measurable facts are important, and other types of knowledge have less value (Eyben 2013). This then encourages agencies to focus on programmes seeking to bring about simple, measurable change instead of more complex initiatives with goals that are difficult to measure. As former USAID President Andrew Natsios commented recently: *"… those development programs that are most precisely and easily measured are the least transformational, and those programs that are most transformational are the least measurable"* (Van Ogenvalle et. al. 2012).
- A second potential bias is that RBM may encourage the pursuit of short-term rather than long-term change. In

social development some changes take many years to materialise, and may be due to the contributions of many different organisations. This does not always sit well with the need to manage by results over short timescales.

- Thirdly, RBM may not be so appropriate when working in areas where there are different views of what constitutes success. This is because RBM encourages a focus on measurable, unambiguous indicators and targets, whereas the reality in many social development settings is that there are different interpretations of what constitutes success.
- Fourthly, there is an argument that RBM has become too dominant. Some argue that what used to be creative tension between a *"flexible and enabling role in supporting an empowerment process of social change and the obligation to demonstrate results and fulfil internal rules and regulations ... is no longer creative"* because the obligation to demonstrate results has become increasingly dominant (Eyben 2013, p5).

INTRAC's own experiences over the past few years confirm that many CSOs are coming under increasing pressure to justify funding through the measurement of results at different levels, and some of this is down to the RBM agenda. International NGOs and CSOs operating complex programmes may find it most difficult to conform to RBM principles, as it can be very difficult to measure results and summarise performance across different locations and sectors. This inevitably affects CSOs further down the funding chain, as demands and expectations are pushed downwards.

But the debate is also framed in the context of an ever-sharpening divide between development practitioners wedded to RBM principles and those more in favour of complexity theory. The latter can be characterised as preferring M&E approaches such as Most Significant Change, Outcome Mapping and stories of change to logframes, measurable targets and evidence-based approaches. Discussions around RBM therefore need to be seen as part of much wider debates around social development and the contribution of the aid industry as a whole.

Summary

Many debates within the field of monitoring and evaluation (M&E) are about how tools or approaches are applied, rather than their intrinsic value, and RBM is no different. Indeed the principles on which RBM is based – greater accountability, more harmonisation, taking M&E seriously – are hard to argue with.

But it is also evident that any system designed to manage by results is harder to apply in situations where change is intangible, long-term or contested. This is the arena in which many CSOs operate, and it is perhaps not surprising that so many (by no means all) are suspicious of the RBM agenda.

Ultimately, assessing results should always play a part in management. Of course this involves assessments of predicted, measurable change. But management is also about making value judgements about changes, identifying unexpected or negative changes, monitoring the external environment, and constantly questioning what else could be done instead of what is being done. RBM focuses most keenly on one aspect of management – the identification and measurement of predicted, measurable change – and INTRAC believes it is important that this is balanced by other methods and approaches that enable more flexible and nuanced monitoring and evaluation of projects and programmes.

"To measure whatever can easily be measured is okay as far as it goes
To disregard that which cannot easily be measured is artificial and misleading
To presume that what cannot easily be measured is not very important is dangerous
To say that what cannot easily be measured does not really exist is fatal."

Source: Adapted from Yankelovich (1972)

Further reading and resources

Other papers in this section deal with logical frameworks and how to make logical frameworks more useful in complex situations.

The logical framework

Beyond logframes

Many organisations have manuals on Results-Based Management (RBM) and many are freely available on the internet. One such is the United Nations Development Group manual (see reference below). A critique of the evidence and results agenda by Rosalind Eyben is available from the Big Push Forward website.

- *Results-Based Management Handbook: Harmonizing RBM concepts and approaches for improved development results at country level,* United Nations Development Group, October 2011. This manual is available from: https://undg.org/wp-content/uploads/2016/10/UNDG-RBM-Handbook-2012.pdf
- *Uncovering the Politics of 'Evidence' and 'Results': A framing paper for development practitioners,* by Rosalind Eyben, April 2013, is available from http://bigpushforward.net/wp-content/uploads/2011/01/Uncovering-the-Politics-of-Evidence-and-Results-by-Rosalind-Eyben.pdf

References

- Bakewell, O and Garbutt, A (2005). *The Use and Abuse of the Logical Framework Approach*. SIDA, 2005.
- Eyben, R (2013). *Uncovering the Politics of 'Evidence' and 'Results': A framing paper for development practitioners*. April 2013. Big Push Forward.
- Hailey, J and Sorgenfrei, M (2004). *Measuring Success: Issues in performance measurement*. INTRAC, Occasional Paper Series 44.
- Mango (2014). *What is Wrong With Results-Based Management?* www.mango.org.uk/Guide/WhyRBMnotWork
- UNDG (2011). *Results-Based Management Handbook: Harmonizing RBM concepts and approaches for improved development results at country level*. United Nations Development Group, October 2011.
- Van Ogenvalle, J; Maarse, A; Temmink, C; Boutylokova, E; and Huyse, H (2012). *Dealing with Complexity Through Planning, Monitoring & Evaluation (PME): Mid-term results of a collective action research process.* Praxis paper 26. INTRAC, PSO and HIVA.
- Yankelovich (1972). *"Corporate Priorities: A continuing study of the new demands on business."*

Author(s):
Nigel Simister

Contributor(s):
Anne Garbutt

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

SETTING OBJECTIVES

An objective describes a change a project, programme or organisation wants to achieve or influence. They can be set at many different levels from broad strategic objectives to very specific project objectives. They can range from simple deliverables that are under the control of a project or programme to long-term goals which may be dependent on many different factors. Setting good objectives makes monitoring and evaluation easier and more effective.

"A meaningful plan for monitoring and evaluation can only exist in relation to clearly defined objectives and strategies" (Okali et al 1994). A good monitoring and evaluation (M&E) system cannot make up for poor project or programme design. If objectives are unclear or poorly designed then M&E becomes much more difficult. By contrast, if objectives are clear then the task of an M&E system is often straightforward. That is to:

- establish how far objectives are being met;
- assess what else is changing; and
- identify what revisions a project or programme needs to make as a result.

Broadly, an objective describes what a project, programme or organisation wants to achieve or influence. Objectives are known by many different names. These include goals, aims, purposes, outcomes, overall objectives, specific objectives, results and (sometimes) outputs. However, whatever terminology is used, an objective should be more than an activity. It represents what an organisation is trying to achieve or change, not what it does.

Objectives may be set at many different levels within an organisation. They can range from broad strategic objectives at international, national or sector level down to very specific project objectives. Sometimes these objectives may be closely linked. For example, project objectives may be required to feed into programme objectives, which in turn might be expected to feed into country, regional or organisational objectives.

Three types of objectives are commonly used within projects and programmes:

- Some objectives are mostly within an organisation's control, for example ensuring that people are trained or children inoculated. These usually reflect the outputs (deliverables) of a project or programme.
- Objectives can also be designed to reflect the changes that are hoped for within a project or programme's lifetime. A project or programme would be expected to have a significant influence over these changes, although they would normally be subject to other influences as well.
- At the other end of the scale, a goal or aim might be a much wider change that is not designed to be achieved within the lifetime of a project or programme, and might depend upon the contribution of many different organisations, as well as external factors.

Measuring objectives

Some argue that objectives should be SMART, as shown in the table below. (Note that some organisations use different words. For instance, achievable may be replaced by appropriate; relevant by realistic, etc.)

Specific	*Defining exactly what needs to change*
Measurable	*Ensuring the change can be measured or verified*
Achievable	*Ensuring the required objective can actually be achieved*
Relevant	*Appropriate to the specific intervention*
Timebound	*Designed to be achieved within a specified period*

This means that objectives should be set so that a project or programme knows exactly how they can be measured and when to measure them. In theory this enables certainty about whether or how far an objective has been achieved. Clearly, this is much easier to do when setting objectives for a very specific project than for a set of broad strategic objectives. But some people believe it should be an aspiration for all objectives.

Others argue that this is too limiting, and that it can be dangerous to be too specific about objectives when working in areas such as capacity development or governance where many things are too complex to be measured, or where there is no clear agreement about what constitutes success. They argue that if all objectives must be measurable, then organisations may decide not to attempt important changes just because they cannot easily be measured.

It is important to note that there are different ways in which an objective can be 'measurable'. For example an objective can be timebound, and contain numbers that

allow it to be measured directly (*e.g. 12,000 children enrolled in school by the end of 2018 in South Sudan).* Or it can be expressed in more vague terms (*e.g. improvement in quality of education of children living in South Sudan*) and then measured using very specific indicators.

INTRAC believes that it is sometimes appropriate to develop SMART objectives. But in some cases it may be more appropriate to develop broad objectives and attempt to assess progress using more specific indicators, which might change over time. In other cases there may be some value in developing guiding objectives – objectives that are designed to inspire and shape, but which cannot accurately be measured.

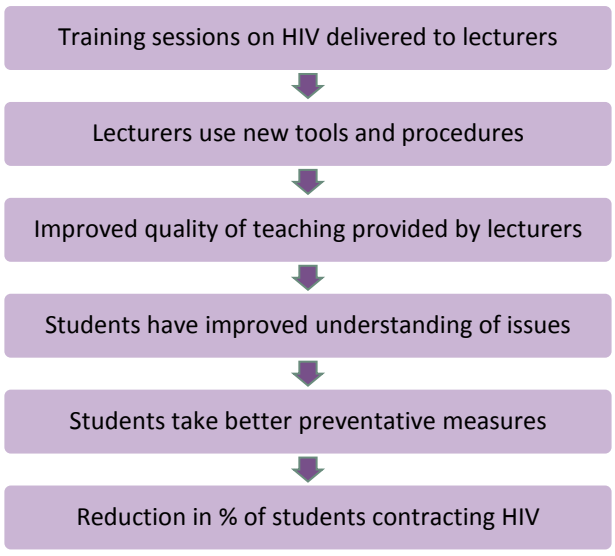
There are no hard rules in this area and context is key. A rule of thumb would be to develop a set of objectives and associated indicators that in combination are as specific as possible about any desired changes, given the particular conditions and circumstances.

It is also important to recognise that just because something is measurable does not mean it will ever actually be measured. Most objectives can be measured to some degree with the right mixture of data collection and analysis tools. But sometimes the expense or difficulty means it is not considered worthwhile.

Ambition of objectives

In any project or programme there is likely to be a hierarchy of potential objectives at different levels ranging from short-term, small-scale changes through to longer-term, wider changes. This can cause problems for project or programme planners when setting objectives at the start of a development intervention.

The example below illustrates this using a set of objectives derived from an HIV&AIDS awareness-raising project. In this project, training sessions on HIV were given to university lecturers in order to enable them to provide better information to their students. In turn, this was expected to result in better understanding amongst students, and eventually changed behaviour, leading to lower transmission rates.



Some planning, monitoring and evaluation tools are designed to handle complex sets of objectives at different levels (e.g. objectives or problem trees, Outcome Mapping, impact pathways). However, in many cases project or programme staff are asked to select one objective to fit into a project proposal or logical framework, and it can then be very difficult to identify the right level of ambition.

Unfortunately, objectives are not always developed with M&E in mind. For example, when trying to get approval for a project or programme people are sometimes tempted to set objectives at a very high level (e.g. reduction in percentage of students contracting HIV). This might make a proposal look more ambitious, which could mean it is more likely to gain approval or funding, even if the achievement of the objective is dependent on many other factors or not realistic given the timescales. On the other hand, where it is known that resources will be allocated according to whether or not objectives have been achieved, project or programme staff might be tempted to set objectives at a very low level (e.g. lecturers use new tools and procedures).

These are the realities of life, and there is no point in insisting that people set realistic objectives if doing so means they don't get the funding necessary to try and achieve them! However, as far as good M&E is concerned, neither of the two scenarios described above is helpful. In the first case staff risk trying to demonstrate the achievement of objectives that are unlikely to be achieved in the project period, or are dependent on too many other factors. In the second case, the objectives might be achieved easily, but fail to bring about real change because they did not represent significant or lasting change.

As far as possible, project / programme staff should try to ensure that realistic objectives are set at different levels, against which progress can then be assessed. Where this proves difficult there are two main options. The first is to set one objective but then to develop a range of indicators to assess progress at different levels. In the example provided this might mean setting a single overall objective (such as *'reduction in % of students contracting HIV'*), and then turning the remaining objectives statements into indicators, as follows.

- # of training sessions provided
- extent of use of new tools and procedures
- quality of teaching on HIV provided by lecturers
- % of students with improved understanding of issues
- # and % of students taking preventative measures

The second option would be to develop an objectives or problem tree, or use a similar tool that could show the different hierarchy of objectives and the relation between them. This could then be attached to a proposal or logical framework to show in greater detail the complexity of the project or programme. It could also be used as a more useful and worthwhile basis for monitoring and evaluation.

Dimensions of Change

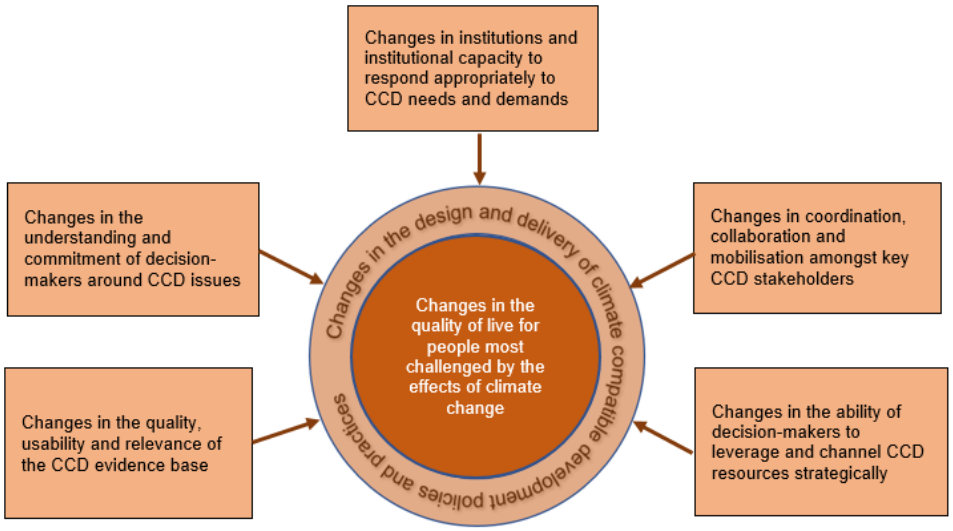
Many large NGOs expect different projects and programmes to develop specific objectives and then link them to broader, strategic objectives. Increasingly, organisations are going further and are developing dimensions or domains of change.

Dimensions of change are broad areas of change to which different levels of an organisation are expected to contribute. The dimensions normally embody the areas of change an organisation believes it should and could be influencing. The dimensions themselves are often very broad and generic, as they are designed to be applied in very different contexts and at different levels. By contrast, country, programme and project objectives are expected to reflect the relevant dimensions, but be specific to the local context. Two examples of different sets of dimensions of change used by different organisations are provided below (see CDKN 2010 and Save the Children UK 2004).

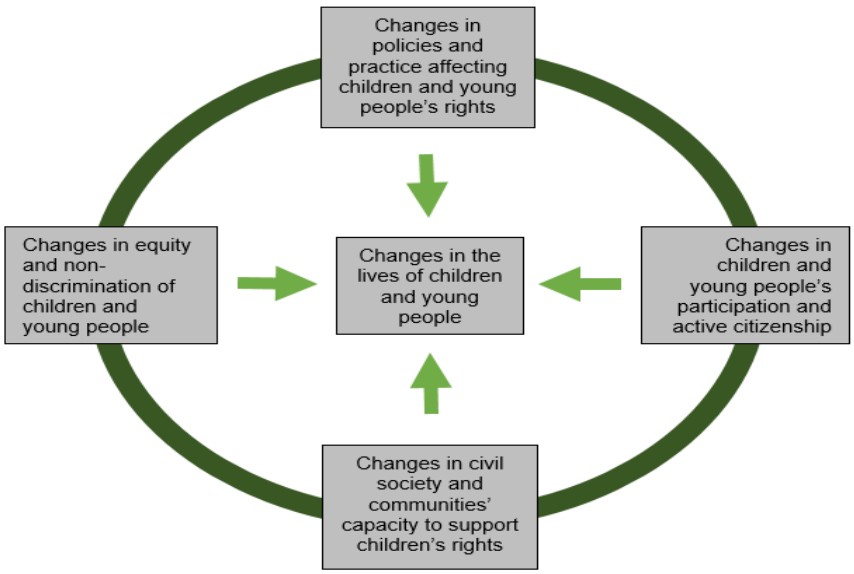
Dimensions of change are often very useful for guiding planning. Some organisations also develop and use dimensions of change because they believe that they provide a focus for M&E, and can help summarise progress or achievements across a range of different types of development interventions in different locations. However, others have argued that this has less to do with a real desire to measure impact across an organisation, and more to do with marketing and fundraising (e.g. Giffen 2009).

The evidence to-date suggests that using dimensions of change can help focus the work of an organisation, programme or project at the design and planning stages. It is less certain whether using dimensions of change adds much to monitoring and evaluation in any meaningful way. A dimension of change is not 'measurable' as such, and often the best that can be done is to bring together a series of examples under each dimension to illustrate the type of changes that are occurring.

CDKN Programme on Climate Compatible Development (CCD)
Dimensions of Change



Save the Children UK Dimensions of Change



Further reading and resources

Further information on setting objectives at different levels can be found in the associated papers on outputs, outcomes and impact. Other papers in this section of the M&E Universe deal with indicators, developing plans, and influences on the M&E approach.

- Indicators
- Developing a plan
- Outputs, outcomes and impact
- Influences on the M&E approach

References

- CDKN (2010). *CDKN M&E Plan.* M&E Department, CDKN, 2010
- Giffen, J (2009). *The Challenges of Monitoring and Evaluating Programmes.* M&E Paper 5, INTRAC, December 2009
- Okali, C; Sumberg, J; and Farrington, J (1994). *Farmer Participatory Research: Rhetoric and Reality.* IT Publications, London.
- Save the Children UK (2004). *Global Impact Monitoring: Save the Children UK's experience of impact assessment*, by Simon Starling, Marta Foresti and Helen Banos Smith. Save the Children UK, January 2004

Author(s):
Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

THE LOGICAL FRAMEWORK

The logical framework, otherwise known as the logframe, is the most common planning tool used in social development. It is also the most hotly debated. Originally designed for use in simple timebound projects, it is now used for interventions ranging from small projects to organisational core funding. The logical framework is often used as a basis for monitoring and evaluation.

The logical framework was originally created as a planning tool for military purposes, and was then further developed by NASA to plan space programmes. After being adopted by USAID in the 1970s, the logical framework, or logframe, has since spread to all areas of the development sector. It is the tool of choice for official donors for planning and performance assessment, and is closely associated with results based management approaches (Hailey and Sorgenfrei 2004; Earle 2002).

A logical framework can have many different purposes depending on the context, and it is probably this that has made it so popular. It was originally conceived as a planning tool, aimed at supporting the management of planned processes. However depending on the circumstances, a logframe can be:

- a planning tool;
- a tool for programme management;
- the basis for M&E within a project or programme;
- an accountability mechanism;
- a succinct summary of a piece of work;
- a 'window' into the work of an organisation or complex programme;
- a linear theory of change; or
- a mechanism for seeking funding.

With so many potential uses, the logical framework is truly the Swiss Army Knife of the development community.

How it works

The original logical framework was based on a simple grid. It described what a project or programme needed to do to achieve its goal by outlining a hierarchy of objectives. A typical example is shown in the diagram opposite.

Starting with the narrative summary column, the goal defines the longer-term impact that a project or programme aims to contribute to. The goal may be designed to be achieved after completion of the project or programme, and may depend on the actions of many different agencies, as well as changes in the external environment. The next row down deals with the objectives or purpose of the project or programme – the changes it hopes to directly influence within its lifetime. The outputs row includes the tangible products or services the project or programme aims to produce. The last two rows cover the activities of the project or programme and the resources required (inputs).

Narrative summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
Goal:			
Objectives:			
Outputs:			
Activities:			
Inputs:			

The second column – objectively verifiable indicators – defines the information that needs to be collected to indicate whether or how far the goal, objectives and outputs have been achieved. The third column – means of verification – shows the methods that will be used to collect the indicators, such as interviews, observation or review of secondary sources. The final column identifies the key risks and assumptions that might influence the success or otherwise of the project or programme.

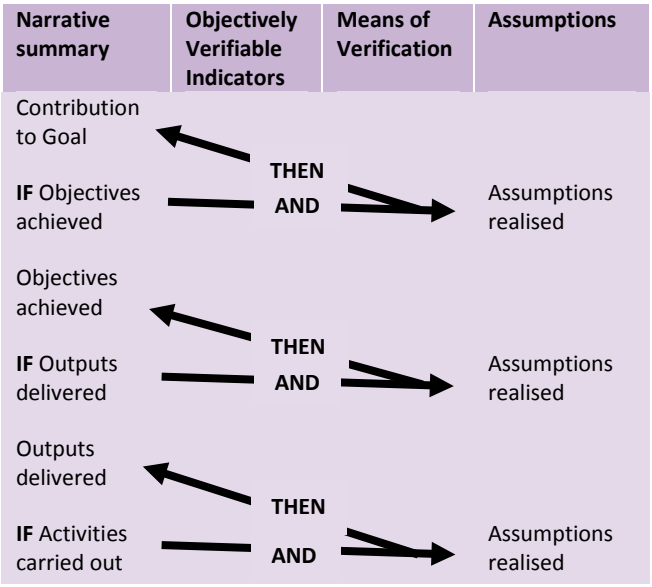
When developing a logical framework it is normal to first work down the left-hand column by identifying the goal, objectives, outputs, activities and inputs. Theoretically, the assumptions column should then be filled in from bottom to top, followed by the middle two columns.

If a logical framework is done properly, the hierarchy of objectives should read logically from the bottom to the top. If the inputs are sufficient the activities can be carried out. If the activities are carried out then the outputs will be produced. If the outputs are produced then the objectives should be realised. And if the objectives are realised they should contribute to the ultimate goal.

However, the tool recognises that in social development work things do not always go according to plan, and there are many factors that may influence whether outputs translate into objectives or objectives into the goal. The purpose of the assumptions column is to make these external factors explicit at the start of a project or programme, and encourage staff to take appropriate

mitigating action. The logic of the logical framework is therefore as follows:

- **IF** the activities are carried out **AND** the assumptions are realised **THEN** the outputs should be delivered.
- **IF** the outputs are delivered **AND** the assumptions are realised **THEN** the objectives should be achieved.
- **IF** the objectives are achieved **AND** the assumptions are realised **THEN** the project or programme will contribute to the goal.



Different versions

All logframes are based on a similar logic. But there are many different versions, all with their own features and terminologies. This can be very confusing at times. The table below shows some of the terminology that has been used by a range of different institutions in the past. Note that some logical frameworks also cover different levels of results. For example, the DFID and USAID logframes have space for inputs whilst the EC and World Bank logframes do not (see diagram below).

DFID	EC	World Bank	USAID
Impact	Overall objective	Goal	Goal
Outcome	Purpose	Development objective	Purpose
			(Sub-purposes)
Outputs	Results	Outputs	Outputs
Activities	Activities	Activities	
Inputs			Inputs

Some logframes (such as the USAID example) allow for an extra level between outputs and purpose (or outcomes).

Others include extra columns for different elements such as baselines, milestones, targets and benchmarks. However, the principle of the vertical logic model always remains the same.

Strengths and weaknesses

There have been many fierce debates around the strengths and weaknesses of the logical framework. This is so with any tool, but the difference with the logical framework is that its use is often enforced, and development practitioners are not free to pick and choose when they use it. This perhaps explains why it is so controversial.

Some of the key strengths of the logical framework are as follows: (see Bakewell and Garbutt, 2005).

- It forces people to think through how a project or programme intends to bring about change, and explain how activities might produce outputs and contribute to objectives and goals. Many people working at INTRAC remember how game-changing the logical framework was when first introduced, and how it helped transform thinking in many projects that had not previously fully considered the links between activities and desired changes.
- By acknowledging, identifying and reviewing risks and assumptions that lie beyond the control of project or programme management, and which might affect progress, the logical framework helps those managers develop mitigating actions. Unfortunately, however, whilst sometimes seen as the most important part of a logical framework, the articulation of assumptions is often taken the least seriously.
- The logical framework immediately puts the focus on monitoring and evaluation by ensuring there are clear benchmarks for success and failure. It also helps ensure there are plans for how and when information will be collected throughout the lifetime of a project or programme.
- It provides a simple summary of the key elements of a development initiative in a consistent and coherent way. This means people can quickly understand the broad outline of a project or programme – what it is trying to do and how. This is part of what makes it so valuable for donor agencies.
- The logical framework is a relatively simple and well understood tool. Although some have argued that people in developing countries do not like the logical framework, that has not necessarily been the experience of the authors. Many people working within social development like the logical framework, and find it straightforward to use.

However, the logical framework also has some weaknesses. Some of these are limitations of the tool itself, and others are because of how it is used in different situations (ibid).

- Some argue that the logical framework approach inhibits participatory planning, as it is often developed and devised in head offices rather than in the field. Even

if many stakeholders are involved in its initial development, it may be impractical to keep going back to those stakeholders if a logical framework needs to be changed over the course of a project or programme.

- Some feel that the logical framework is too rigid and tends to lock projects and programmes into one path to change, whereas in reality there may be many different paths. The danger is that a project or programme using a logical framework continues on a pre-defined path instead of evolving and adapting in the light of experience and events. One of the reasons for this is that a logical framework is often treated as a contractual document, and project or programme staff may feel they have to carry out the activities defined in the logical framework as initially planned.
- Another concern is that indicators are usually articulated at the start of the project or programme, rather than coming to light along the way. Some argue that in some types of development interventions divergence from a project or programme plan is the norm rather than the exception. Yet projects and programmes may still be judged based on indicators developed at the design stage of a project or programme.
- The logical framework is based on a very linear logic that emphasises cause and effect. It can sometimes be seen as quite mechanistic. In reality change can be a very complex process.
- Logical framework thinking may encourage reviews and evaluations to focus on expected consequences (i.e. performance against pre-defined indicators) to the exclusion of unexpected changes, whether positive or negative.
- Finally, a logical framework often represents a simplification of reality. This is not necessarily a serious challenge in a simple time-bound service delivery project. But when logical frameworks are applied to the work of complex programmes or international organisations they may result in an over-simplification, which is unhelpful. This is the subject of a separate paper in this section of the M&E Universe called '*Beyond Logframes*'.

Summary

The logical framework divides opinion as no other tool or process used in international development. Bakewell and Garbutt's research into the use of the logical framework (2005, p12) found that:

> *"The world ... divides between those who see the [logical framework] as a universal approach whose application is hindered by people's lack of understanding; and those who see it as a more particular approach, which is embedded in a worldview largely associated with Western positivist thinking, and alien to the rest of the world. Both universalists and particularists may find the [logical framework] useful, but both groups have to face the fact that some people 'just don't get it'. The former tend to see the problem lying with the people, while the latter locate the problem in the [logical framework]"*

That finding is probably as true now as it was then. There may also be some truth in the opinion sometimes expressed that *'logical people are more likely to like the logical framework'.* But it is hard to come to any real consensus as opinions differ so widely.

The authors of this paper have worked with many people in the North and the South who are good at developing logical frameworks and people who are not so good; people who like logframes and people who loathe them; people who use them because they want to and people who use them because they have no choice; people who take them seriously when developing them and people who treat them as a box-ticking exercise designed to keep donors happy; and people who develop logframes over a period of time with extensive engagement from different stakeholders and those who fill them in an hour before the deadline for a funding proposal.

For now, logical frameworks are a reality of the development world, and would appear to be here to stay for the immediate future. That being the case, they are likely to continue to wield a significant influence over how monitoring and evaluation is planned and executed within development projects and programmes.

Further reading and resources

Further papers in this section of the M&E Universe deal with Results Based Management and how logframes can be adapted for use in complex programmes and organisations. There are also papers on two other tools and methodologies used in planning, Outcome Mapping and scenario planning.


Results-Based Management


Beyond logframes


Outcome Mapping


Scenario planning

A generic explanation of the logical framework is contained in a paper written by Wiggins, S. and Shields, D. (1995). "Clarifying the 'Logical Framework' as a Tool for Planning and Managing Development Projects" in *Project Appraisal 10(1)*, pp 2-12. This is available from various places on the internet.

Many organisations have manuals on how to use their own versions of the logical framework. DFID's principle document is called Guidance on Using the Revised Logical Framework, (edited in January 2011) and is available from the website address: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/253889/using-revised-logical-framework-external.pdf

The INTRAC paper *"The Use and Abuse of the Logical Framework Approach"* (see reference below) is available from the INTRAC website, and was the result of primary research conducted on behalf of SIDA in 2005.

References

- Bakewell, O and Garbutt, A (2005). *The Use and Abuse of the Logical Framework Approach*. SIDA, 2005.
- Earle, L (2002). *Lost in the Matrix: The logframe and the local picture*. Paper for INTRAC's 5th Evaluation Conference: Measurement, Management and Accountability? 31st March – 4th April 2003, The Netherlands.
- Hailey, J and Sorgenfrei, M (2004). *Measuring Success: Issues in performance measurement*. INTRAC, Occasional Paper Series 44.

Author(s):
Anne Garbutt and Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.

THEORY OF CHANGE

A Theory of Change approach to planning and evaluation is increasingly being considered essential practice within social development. Theories of Change can be developed in many ways. Common elements include an articulation of how change happens in a particular context, clarification of an organisation's role in contributing to change, and the definition and testing of critical assumptions.

The term *'Theory of Change'* first emerged in the 1990s. Its purpose at that time was to address some of the problems evaluators faced when trying to assess the impact of complex social development programmes. These included poorly articulated assumptions, a lack of clarity about how change processes unfolded, and insufficient attention being given to the sequence of changes necessary for long-term goals to be reached (O'Flynn 2012). Theory of Change thinking has progressed rapidly since then, and is becoming increasingly popular.

Theory of Change can be seen as an *"on-going process of discussion-based analysis and learning that produces powerful insights to support programme design, strategy, implementation, evaluation and impact assessment, communicated through diagrams and narratives which are updated at regular intervals"* (Vogel 2012, p5). A Theory of Change can also be seen as a product, and is often presented as a mixture of diagram and narrative summary.

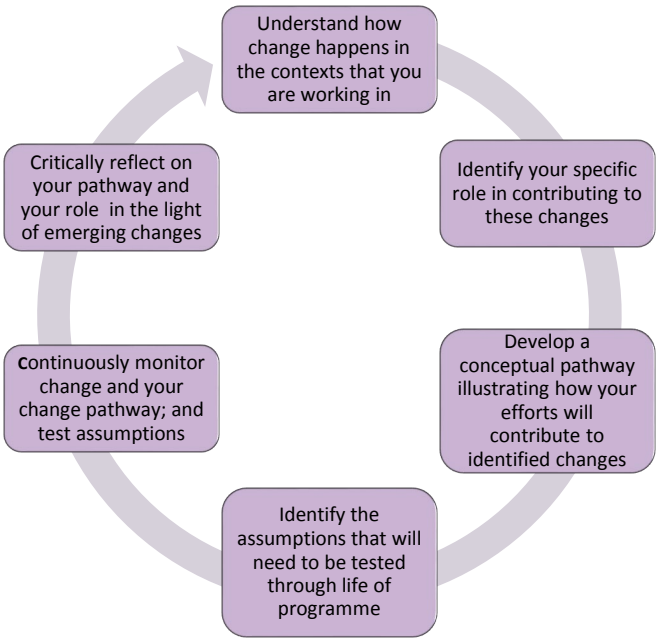
Theories of Change may be set at organisational, programme or sometimes project levels. They can be developed and used in many ways for different purposes. However, they are perhaps most useful for complex organisations and programmes involving multiple partners, as they enable a shared understanding of how change happens and an organisation or programme's own role in bringing about change (see James 2011).

Elements of a Theory of Change

Theories of Change may differ greatly between different organisations, both in the process of developing them and the look of the final product. However, there are some elements that are common to many theories of change (see diagram opposite and sections below).

Identifying how change happens: Developing a Theory of Change normally involves carrying out some analysis of the forces which have the potential to affect any desired outcomes (Jones 2010). The first step, therefore, is normally an assessment of how change could happen in relation to a particular issue. This can include an assessment of:

- which factors in the external context might help or hinder change;



- who has the power to influence change, positively or negatively;
- what or who needs to change, and at which levels (e.g. national, regional, community); and
- over what timeframes.

The assessment may be based on common understandings of how change happens amongst the different stakeholders developing the Theory of Change. In some circumstances research might be commissioned to generate additional insights and conclusions about how change happens in a particular context. Methodologies such as power analysis, stakeholder analysis or gender analysis might also be used. And if others have conducted similar assessments in the past then their findings can be used to arrive at a consensus.

Identifying your own role: Whilst the analysis of how change happens does not usually address an organisation's own intervention, the next stage attempts to explicitly identify an organisation or programme's own contribution to change. The main purpose of this stage is to be able to identify which changes an organisation and its partners can contribute to directly and/or indirectly, and which areas of change are beyond their scope.

Developing a conceptual pathway: Once there is clarity about the potential roles that an organisation (or group of organisations) can play, the next stage involves identifying an achievable long-term goal, clarifying and identifying the key changes which need to be in place for this goal to be realised, and then discussing and agreeing for an organisation or programme:

- who it needs to work with and how;
- what changes in their knowledge, attitudes, skills and behaviour are required; and
- what activities or working approaches are needed to contribute to those desired changes.

The results of these discussions are often presented as a conceptual map which illustrates the linkages between an organisation's work and the desired medium and long-term changes it seeks to influence. This can be done in different ways, but at present three types of conceptual process are most often used (Jones 2010).

1. The most well-known conceptual pathway is the ***causal chain***. It describes a succession of elements – inputs, activities, outputs, outcomes, impacts – with different elements in combination leading to the next element. Objectives trees and impact pathways are both types of causal chains. Causal chains can range from simple logic models, such as the ones contained in a logical framework, to much more complex flow charts and diagrams with arrows pointing in all directions.
2. ***Dimensions of change*** can also be used. This involves developing areas or domains of change that in combination are considered important in contributing to the desired goals. Dimensions of change are most likely to be used within broad, organisational Theories of Change that are meant to be applied in different contexts at different times.
3. Some conceptual pathways are designed to capture ***behavioural change*** of different actors, based on the idea that actors and agency are a key driving force for change. The most common method for applying this at the moment is Outcome Mapping, which helps organisations define desired changes in actors' behaviour at different levels – changes that a programme *expects* to see over its lifetime; changes it would *like* to see; and changes it would *love* to see and that would indicate long-term sustainable change.

In each case, the idea is to make explicit the kind of change that an organisation or programme is seeking, and how the work it carries out helps support that change at different levels. In many (not all) cases the conceptual pathway also becomes a summarising diagram that can easily communicate the Theory of Change to different stakeholders. Some people call the conceptual pathway, and the thinking behind it, a *Theory of Action*, to distinguish it clearly from the *Theory of Change*, which is more concerned with how change happens.

Identifying assumptions: A critical part of Theory of Change thinking is the articulation of assumptions. Either at this point in the process, or in parallel with earlier stages, an organisation or programme develops a series of assumptions. These assumptions are often linked to specific places in the conceptual pathway, and can be seen as conditions that are necessary for change at one level to influence change at another level.

Theory of Change thinking encourages the testing of these assumptions throughout an organisation or programme's lifetime. The combination of the conceptual pathway with its associated assumptions are what makes a Theory of Change analogous to a scientific theory – a theory that can be tested and sometimes disproved, resulting in an amendment to the theory, or sometimes its complete abandonment.

Ongoing monitoring of change: Regular monitoring of change forms an important part of Theory of Change thinking. Many organisations choose to link their monitoring and evaluation systems to their Theories of Change, either by setting indicators at each level of change on their conceptual pathway, or by attempting to assess change directly (James 2011). This enables organisations to assess where change is happening, and where it is not happening, and to track whether or not they are making progress towards their longer-term goals or impact.

Within Theory of Change thinking it is also important for organisations to look at the changes that are occurring in combination with their assumptions. This can be done by comparing assessments of change at different levels and attempting to draw conclusions about how change at one level is (or is not) influencing change at another. In particular, if change is occurring at one level but failing to translate into change at another level there is a good indication that assumptions may be false or incomplete. This might mean approving, amending or discarding assumptions.

Critically reflecting: Critical reflection is a vital part of Theory of Change thinking. Monitoring or evaluating change, and reflecting on critical assumptions, should lead an organisation or programme to question itself on a regular basis. Important questions to ask include the following.

- Is the Theory of Change still valid?
- Is the organisation / programme working with the right people in the right way?
- To what extent have anticipated changes led to changes in the lives of targeted populations?
- What is now better understood than before?
- What needs to change in the understanding of how change happens, or an organisation or programme's specific role within that?

Through this critical reflection, organisations can gradually refine their Theory of Change; better articulating how change happens and their particular role in helping bring about that change, and better appreciating the assumptions that underpin their work.

Different entry points for Theory of Change

There are different entry points for Theory of Change. It is possible to enter the Theory of Change planning and reflection cycle from any of the six steps outlined above. For example, organisations that are about to revise their organisational strategy may reflect on how change happens (step 1), before they identify and describe their particular contribution, role and added value (step 2). Alternatively, evaluators conducting a theory-based evaluation of a programme often start by working with programme staff to construct a conceptual pathway and set of assumptions for a programme after the event, especially if no Theory of Change was developed at the start.

What defines a Theory of Change approach is not when or where you enter the cycle. Rather a Theory of Change approach is defined by the consistency with which the different steps in the cycle are followed through and completed over time.

Links to planning, monitoring, evaluation and impact assessment

Theories of Change can be linked into different management processes through project and programme cycles. Whilst a Theory of Change is not a planning tool per se, it can provide essential analysis that is needed in order to develop effective plans. So, for example, a Theory of Change at organisational level might enable the development of a better strategic plan, whilst a Theory of Change at programme level might enable the development of a more robust logical framework or other type of planning document.

As described above, there may also be links between the Theory of Change and the monitoring process. Critical parts of a conceptual framework, and the linkages between change at different levels, may be continually assessed, with programme alterations made based on real-time M&E data.

However, the most significant links are with evaluation and impact assessment processes. This is because a Theory of Change often lays out the expected story in advance of the changes happening, which means that it provides an explicit framework for the assessment of long-term change. With its focus on this longer-term change, Theory of Change thinking, in conjunction with appropriate impact assessment methodologies, can help address some of the bigger questions facing organisations in international development.

- What actually changed as a result of our efforts? For whom? How significant was this?
- Did we work in the right way with the right people at the right time?
- Does our Theory of Change still hold? If not, what is wrong with it? What do we need to do differently?

Theory of Change thinking includes no specific guidelines or recommendations for data collection. But when done properly it helps lay out a framework within which planning, monitoring, evaluation, impact assessment, learning and improving can all take place more effectively. It is also important to note that many methodologies used for evaluation (e.g. process tracing, contribution analysis, realist evaluation) require Theories of Change to be developed as part of the evaluation.

This does not mean that Theory of Change thinking necessarily makes monitoring and evaluation easier. On the contrary, it sometimes makes it much more difficult. But, if done properly, it makes it more useful because it better reflects the reality of what is happening (Green 2014).

Theory of Change debates

Supporters of Theory of Change thinking see many benefits in the approach (see James 2011):

- it develops a common understanding amongst all stakeholders of what an organisation or programme is trying to change and how;
- it can strengthen the clarity, effectiveness and focus of organisations and programmes;
- it provides a framework for monitoring, evaluation and impact assessment;
- it helps improve partnership by identifying strategic partners and supporting transparent conversations around change;
- as a product, a Theory of Change can be used to communicate work clearly to others;
- it empowers people to become more active and involved in programmes; and
- by explicitly dealing with long-held assumptions, Theory of Change thinking can also support innovation and 'out of the box' thinking.

Indeed, for its supporters Theory of Change thinking presents an exciting and powerful potential for CSOs to address the uncertainties and complexities of social development in a new and radical way.

Others, however, are more cautious, and worry that Theory of Change thinking may be merely a passing fad that soon becomes a tick-boxing exercise to suit donors – *'logframes on steroids'* as Green (2014) fears. Others, e.g. Macleod (2012), point out that it is not particularly new and that there are many examples of organisations in history that have had clear and explicit ideas of how change happens and their role within that, such as the Anti-Slavery Society (formed in 1823) or more latterly the Jubilee 2000 debt campaign.

Some are also concerned that Theories of Change often involve a large amount of time and resources if they are to be done effectively, and that this might be difficult for staff who are already under extreme time pressures. Whilst not a problem if staff genuinely desire to develop Theories of Change, it becomes a problem if external organisations begin to demand Theories of Change as a condition of funding, against the wishes of those staff.

As Vogel (2012) points out, Theory of Change thinking is not a magic bullet, and is only really re-emphasising the kind of deeper analysis that the logical framework was intended to promote when it was first introduced. In some quarters, developing a logical framework has become a superficial, contractual exercise and there are fears that Theory of Change thinking could follow suit.

Theory of Change thinking requires a commitment to take a *'reflective, critical and honest approach to answer difficult questions about how our efforts might influence change, given the political realities, uncertainties and complexities that surround all development initiatives'* (ibid, p5). This requires organisations to have the willingness but also the power and opportunity to be realistic and flexible in their programming at the design stage and during implementation. Most importantly, they need to be willing and able to reflect on, and adapt, their plans in the light of new learning and insights. History suggests this is by no means a given.

Summary

INTRAC believes that, at its best, Theory of Change provides the opportunity to think more clearly and strategically about how to contribute to significant, lasting changes for real people. It is not designed to replace results frameworks such as the logical framework, but to complement them.

Having facilitated Theory of Change processes at all levels, INTRAC provides the following tips for those organisations thinking about developing a Theory of Change.

- Ensure that there is the appetite, time, resources and, essentially, Senior Management buy-in before embarking on any Theory of Change efforts within an organisation.
- Build on what is already in place. All organisations and programmes work to implicit Theories of Change. The trick is to make these explicit and find ways to fill the gaps in the six-stage process.
- Don't skip over the 'how change happens' analysis. This understanding of the dynamics of change, and the trends, actors and factors that are opening opportunities for change, is key to an organisation deciding where and how to focus efforts to achieve real change.
- The support of an external facilitator at some point can help organisations to lift their thinking above the *'business as usual'* model.

Further reading and resources

Theory of Change is a fast-moving field at the moment, and documents can quickly become obsolete as soon as they are published. There is no one comprehensive publication on Theory of Change at the moment. Readers wishing to know more are encouraged to read the documents contained in the references below, following the links in the bibliography as required.

INTRAC currently runs a course on Theory of Change.

References

- Green, D (2013). *What is a theory of change and how do we use it?* August 2013. Oxfam (blog). http://oxfamblogs.org/fp2p/what-is-a-theory-of-change-and-does-it-actually-help/
- James, C (2011). *Comic Relief and Theory of Change.* Comic Relief, June 2011.
- Jones, H (2010). *The Monitoring and Evaluation of Policy Influence, A scoping review for the Department for International Development.* ODI, July 2010.
- Macleod, R (2012). *Theory of Change: A sceptical view.* INTRAC (blog), September 2012.
- O'Flynn, M (2012). *Theory of Change: What's it all about?* ONTRAC no. 51, INTRAC, May 2012.
- Vogel, I (2012). *Review of the use of Theory of Change in International Development: Review report.* DFID, April 2012.

Author(s):
Maureen O'Flynn and Clare Moberly

Contributor(s):
Alison Napier and Nigel Simister

INTRAC is a not-for-profit organisation that builds the skills and knowledge of civil society organisations to be more effective in addressing poverty and inequality. Since 1992 INTRAC has provided specialist support in monitoring and evaluation, working with people to develop their own M&E approaches and tools, based on their needs. We encourage appropriate and practical M&E, based on understanding what works in different contexts.