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.
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

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<thead>
<tr>
<th>Do…</th>
<th>Don’t…</th>
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<tbody>
<tr>
<td>Identify what you expect the project or programme will achieve to decide what to measure in the baseline.</td>
<td>Select data for the baseline that is primarily dependent on external circumstances.</td>
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<tr>
<td>Properly assess both the costs and benefits of doing a baseline study, and make decisions accordingly.</td>
<td>Assume that any changes recorded against a baseline are due to the project or programme intervention.</td>
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<tr>
<td>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.</td>
<td>Collect data from people who are not members of the target population (unless they are part of a control or comparison group).</td>
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<tr>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td>Ensure that specific target groups are properly represented and identified in the baseline.</td>
<td>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.</td>
</tr>
<tr>
<td>Record any methodologies or sampling techniques used so that these can be replicated at a later date.</td>
<td>Lose the baseline!</td>
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Further reading and resources

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

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](http://www.ifrc.org/PageFiles/79595/Baseline%20Basics%2010May2013.pdf)

References


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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.