Indicators and Targets

When do you need indicators?

Activities, projects, programmes and strategies are all about creating change. If we want to know whether our actions are working we need to be able to identify whether change is happening. In some situations the desired change is directly visible. We may, for example, want to increase the number of children attending primary school. This is a tangible change which can easily be measured by looking at school attendance records. Where we have project objectives such as these we can measure them directly and assess whether or not our activities are working. Often however, the change that we want is less tangible; our objective may perhaps be to increase parents’ perception of the value of education. This is less concrete and cannot be measured directly, we therefore need to look for things that can be measured that indicate or point to a change in parent’s attitudes. These then become our indicators. Indicators therefore consist of information that signal change and enables us to spot differences. Indicators are not the same as the desired change but suggest that the desired change is happening. Where change is obvious, measure it directly and there is no need to use indicators; where change is less obvious then we need to identify and measure indicators.

![Flowchart]

This guide provides advice on how to develop and use indicators along with the linked idea of targets.
Elements of a good indicator

Indicators must be measurable, specific and reliable.

Measurable

- If you cannot gather data on the indicator then obviously it is of no use as an indicator and you will need to think of an alternative. When considering an indicator ask yourself whether data (quantitative or qualitative – see box) is available or might be gathered with realistic levels of effort or cost and within the time required. Think also about the quality of the data - how accurate is it likely to be? Do you trust it? If the accuracy of the data is likely to vary wildly then you may not be able to draw any meaningful conclusions from it - in which case you will be better off selecting a different indicator.

Specific

- Ambiguity is the enemy of a good indicator. When selecting an indicator you need to be very clear about what exactly it is that you will be measuring. You need to be precise about the population, the location, the unit of measurement and the quality or standard of change
  - Population. Specify the people who will be assessed, breaking this down if necessary into sub-groups. Is it adults or children; men or women; parents or teachers; employed or unemployed; those directly involved in the activities or the wider community? Be specific.
  - Location. Where is this population located? Are you referring to the people in the communities where the project has been working or to the district as a whole? Do you mean those in the countryside or those in the town? Again, be specific.
  - Unit of Measurement. What exactly will you be measuring? What is it that is changing?

Quality

- Be careful about using words such as ‘improved’, ‘adequate’ or ‘appropriate’. These are ambiguous words that can be interpreted in different ways by different people. If you must use them then you need to define what is meant by them in the particular context so that everyone is clear what is and is not considered an improvement. Try to be specific whenever you can.
Reliable

- In this context reliable means that you will get the same result regardless of who does the measuring; the subjective view of the assessor should have only a marginal influence on the measurement.

Quantitative and Qualitative

Indicators can either be quantitative or qualitative; it is generally good practice to combine a mix of both into any monitoring and evaluation system.

Quantitative

- These indicators measure quantity or amount. They are a straightforward method of data collection because either the element being measured exists or doesn’t exist and therefore quantitative indicators tend to be very reliable. However, their apparent simplicity can mean that the data can easily be abused if it is used out of context or if issues such as margins of error are not properly understood.

Qualitative

- These indicators measure judgements, perceptions, feelings and emotions. Qualitative indicators are more complicated than quantitative indicators as they will usually capture a range of possible responses and can therefore be less reliable as the perception of the assessor may influence the measurement. However, they are invaluable in demonstrating changes in attitudes which can be fundamental to enduring change. Care needs to be taken to avoid unconsciously weighting different perceptions. Sometimes we can fall into the trap of thinking that the views of the most articulate or most powerful are somehow more ‘right’ than others.

Qualitative indicators will often contain numbers so it is important to look at what is actually being measured. If it is an opinion, belief or way of thinking then it is qualitative. If, however, it describes an event or situation it is probably quantitative.

Targets

Indicators are the things that you look for to suggest that change is happening. However, if you want to know that an objective has been achieved then you need to know how much change has taken place. This is where targets come in. A target
specifies how much change is expected to take place and will usually consist of three elements: the starting point or baseline; the level to be achieved and the deadline.

Baseline

- If you want to know how much change has happened then you need to know the level before the intervention starts – this is called the baseline and should normally be established during the project design stage. In cases where this is not possible then establishing the baseline should be an early objective of the intervention.

Level to be achieved

- This is your definition of how much change is sought to achieve the objective. These may change over the course of an intervention with lower targets being set initially leading to higher levels as the intervention progresses. They define the trajectory of change over the course of the intervention. Benchmarks and thresholds may also be relevant here.

Deadline

- Time management must form part of any target. The target must state when the level of change is expected to be achieved. This helps identify whether or not an intervention is on track.

Benchmarks

A benchmark is a reference point against which achievements can be assessed. They are usually derived from international standards or guidelines, from industry norms or from achievements in similar situations elsewhere.

Threshold

This is a target that when reached should trigger a reaction. This may be to cue the next phase of the intervention or to allow activities to start elsewhere. It may also mark the point at which change may become statistically significant.

Indicator sets

So far we have just looked at indicators as they relate to a single objective, however it is more usual to think in terms of sets of indicators that together allow the progress of an intervention as a whole to be assessed. The diagram below shows a typical objectives
tree with activities (not shown) leading to outputs that in turn lead to outcomes which ultimately create the desired impact. In most situations the outputs are tangible (i.e. the number of people attending training workshops) and can therefore be measured directly; a few may be less tangible and may require indicators. As one moves up to the outcome level it is less likely that you will be able to measure them directly and so indicators will be required. At the impact level it will be rare to be able to measure change directly and therefore indicators will be required. Any monitoring and evaluation process will therefore contain a series of direct measurements and indicators that together allow you to identify whether objectives (outputs, outcomes and impact) have been achieved.

The diagram also contains a number of red boxes and lines that are worth considering. By focusing on the black boxes in the diagram you run the risk of not identifying possible negative outcomes from your activities. As part of the project design it is always worth considering what else might happen as a result of your activities, what are the main risks? By doing this you may identify some plausible outcomes that would be unhelpful. It is wise to identify a few indicators that specifically look out for these potential pitfalls as they can help you identify risks before they are realised and allow you to adjust the intervention so the risks can be mitigated.

The lines that connect the boxes are also important. These represent your assumptions about how change happens. Some of these may be tried and tested approaches in which you have a lot of confidence, others however may be new and as yet unproven ideas. If these new approaches are critical to the success of the intervention then it is wise to test these assumptions early in the intervention. You can do this by identifying indicators that look not at the boxes either end of the connecting line but at the
assumption itself. What suggests that the assumption is valid? What suggests that it is invalid? Try to include a few indicators that will help you test this assumption.

A good set of indicators will therefore include:

- A mix of quantitative and qualitative indicators.
- Indicators and direct measurements that relate to desired objectives.
- Indicators that relate to undesired objectives or risks.
- Indicators that test high risk assumptions.

How to develop a set of indicators and targets

There are four steps in developing a good set of indicators for an intervention: understanding, identifying, refining and testing.

Understanding

- Key to any effective monitoring and evaluation process is a thorough understanding of the environment. Good indicators will fall out naturally from a good object analysis and from a good theory of change. These will help you to understand the dynamics of the issue and how you think change will happen – both of which are vital foundations for success.

Identifying

- **Ask stakeholders.** Stakeholders and beneficiaries in particular are likely to have the most insightful views on what will indicate the desired change. Involve them in designing the monitoring and evaluation process and get their views on what would make good indicators.
- **Describe success.** Ask yourself what would success look like? How would you recognise it?
- **Break down the problem.** Break the objective down into its component parts (look at any problem trees or other such charts that you may have developed as part of the project design process). Do these suggest any areas that could indicate change?
- **Borrow from others.** You are encouraged to borrow ideas from others. Look at what similar projects or programmes have used, ask other organisations and spend time surfing the many online sources (see useful references). You do need to be careful doing this however, as indicators may well be context specific and will usually need to be amended to suit the new context. Although it is tempting to do this first, you are strongly advised to do the three bullets above.
first as this will give you a much better understanding and allow you to form your own view without being overly influenced by what others are doing.

**Refining**

Developing an indicator set should be an iterative process as part of the project design phase. You will need to balance the selection of objectives alongside the ability to assess change and the ease of data collection. You may find that the identification phase leads to a large number of possible indicators - if so, whittle these down to a practical number that is proportionate to the size and scope of the intervention. Keep asking yourself ‘can I gather this data? How reliable is it? Does it tell me something useful?’ Aim for a mix of quantitative and qualitative indicators that draw on a range of different sources and which cover the most important or high risk elements of the intervention. Focus the indicator set on what matters most. As part of this process you should capture your logic. As you develop your set of indicators you will make assumptions about the links between your indicator and the change that it is pointing to. Write these logic steps down as they will be invaluable when you, or quite possibly someone else, come to evaluate the intervention. It allows someone new coming in to understand why and how you have come up with the range of indicators and to follow your logic. The process of doing this can also highlight weaknesses in your logic, allowing you to refine the indicators accordingly.

**Testing**

Having identified a suitable set of indicators - test them. Make up data, including some from the extremes, and look at what this is telling you. If you find that it sheds little light on the level of change or if there is little variation when you populate the model with extremes of data then your indicator set is flawed and will need to be revisited.

**Examples:**

**Quantitative indicator and target**

*An increase from one in 2012 to ten in 2013 in the number of women in Ekwendeni district who have started their own businesses during the 12 month period from 1 January 2013 to 31 December 2013.*
Indicator

- **Population**: Women – in this case no differentiation has been made between types of women. In some situations you might want to focus on a certain age range or on separating category such as widows.
- **Location**: The district of Ekwendeni.
- **Unit of Measurement**: The number of women that have started new businesses.
- **Quality**: The quality here is simply whether or not a woman has started a business. There is no breakdown into the success or profitability of the businesses or even whether they are still operating. A woman may have started more than one business but she still only counts once.

Target

- **Baseline**: One – discussion with the community showed that only one woman had started a business the previous year.
- **Level**: Ten – based on the level of resource being put into the project, the overall number of women in the parish and the known success rates from similar projects elsewhere it was felt that a plausible target would be for ten women to start a new business.
- **Deadline**: 31 December 2013

Qualitative indicator and target

*An increase from 25% in 2012 to 40% by the end of 2013 in the number of married men in Ekwendeni district who believe that women can run a profitable business.*

Indicator

- **Population**: Married men
- **Location**: Ekwendeni District.
- **Unit of Measurement**: The percentage that believe women can run a profitable business.
- **Quality**: The quality here is fairly black and white – do they or do they not believe. A questionnaire may offer greater subtlety allowing a greater range of possible responses.

Target

- **Baseline**: 25% – taken from a survey conducted when the project was first being considered.
Level: 40% – based on the level of resource being put into the project, known success rates from similar projects elsewhere and on data taken from more developed areas of the country.

Deadline: the end of 2013.

Indicator Checklist

CREAM checklist:

Clear: indicators should be precise.

Relevant: appropriate to the changes and evaluation.

Economic: can be obtained at a reasonable cost.

Adequate: the ability to provide sufficient information.

Monitorable: easily monitored, and amenable to independent validation.

SPICED checklist:

Subjective: key informants (beneficiaries/stakeholders) have a special position or an experience that gives them unique insight which may yield high return time-wise. What may be seen by some as 'anecdotal evidence' becomes critical data because of the source's value.

Participatory: indicators should be developed together with those best placed to assess them, ie. with the project's ultimate beneficiaries, local staff and other stakeholders.

Interpreted and communicable: locally defined indicators may not mean much to others, which means they need to be explained or interpreted to different stakeholders.

Cross-checked and compared: the validity of indicators needs to be cross-checked by comparing different indicators and progress, and by using different stakeholders and methods to ensure validity.

Empowering: the process of developing and assessing indicators should be empowering in itself and should allow stakeholders to reflect critically on their changing situation.

Diverse and disaggregated: there should be a deliberate effort to seek out different indicators from a range of groups and across gender. The data needs to be recorded in such a way that these differences can be assessed over time.