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.

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.

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