

# THEORY-BASED EVALUATION



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A theory-based evaluation is usually based on an explicit theory of change or logic model that explains the theory of a development intervention or set of interventions. Theories of change (or logic models) generally include a chain of results from inputs, activities and outputs through to outcomes and impact, thereby showing the links between causes and effects. Theories of change may be very simple – such as the kind of logic model contained within a standard logical framework – or much more complicated.

Theories of change or logic models are often represented by flowcharts, known as critical pathways, impact pathways, causal maps or objectives trees. However, theories of change might also be depicted as dimensions or domains of change, outcome maps, or any other kind of graphical representation. More sophisticated theories of change generally include additional features such as assumptions, risks, the influence of other actors and the potential effects of the wider socio-economic environment.

A theory-based evaluation normally attempts to assess change at each stage of the theory to test the linkages (assumptions) between different levels of change. Essentially, a theory-based evaluation sets out to test the theory to see if it holds true. If it does, the job of the evaluator is to produce a plausible case, with evidence, that shows what has changed, and explains how a development intervention contributed to that change. A plausible case is defined as one that a *'reasonable person would accept, given the evidence'*.

Many methodologies for data collection and analysis involve the use, adaptation or development of a theory of change. Some methodologies, such as process tracing or contribution analysis, also involve the development of alternative theories of change. These are then investigated to test alternative theories of how any observed changes might have come about, other than through the development intervention concerned.

It could be argued that most evaluations that focus on change are theory-based to at least some degree, as most look for predicted changes. However, a theory-based evaluation is normally understood as an evaluation that works with an explicit and testable theory of change or logic model. Some of the key features of a theory-based evaluation are contained in the box above (Stern 2015).

## Key Elements of a Theory-based Evaluation

- They are designed to answer the question of what worked (by measuring or assessing the changes brought about by a development intervention), but also why and how it worked (by examining the processes that led to those changes).
- They generally examine wider contributions to change, such as the actions of other interventions or changes in the wider socio-economic environment.
- They work with an explicit theory – a theory of change or logic model – that underpins the development intervention being evaluated.
- They are based on two distinct parts: a conceptual part, which concentrates on developing the theory of change or logic model and using it to guide the evaluation; and a second part that involves collecting evidence to establish whether and/or how an intervention produced the desired changes.

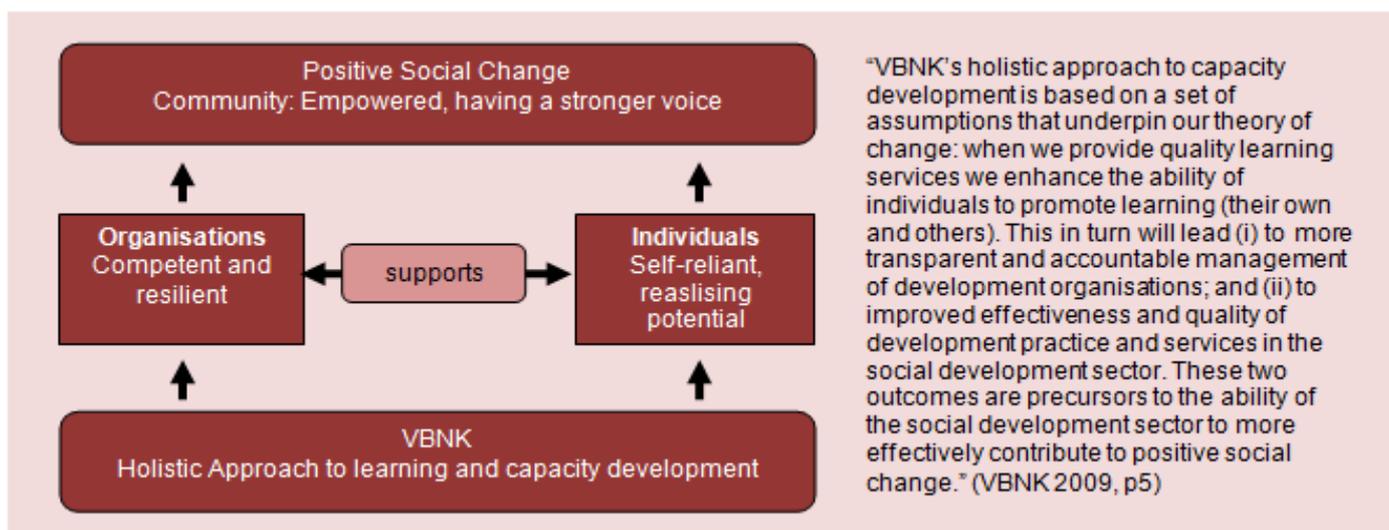
## When to use theory-based evaluation

Theory-based evaluations may be used alongside almost any other type of evaluation. For example, a theory-based evaluation often forms an important part of an impact evaluation, a case-based evaluation or a realist evaluation.

Theory-based evaluations can be used with individual cases (such as a single policy change) or with multiple cases, such as farmers receiving livelihoods support or organisations receiving capacity development support. They can be used in any sector and with any kind of work. In some senses, a theory-based evaluation can be seen as the default evaluation type. Most CSO evaluations are at the very least based around a logical framework or similar planning methodology, even if they are not based on a more explicit theory of change.

Theory-based evaluations can only be used when there is some kind of predicted change to assess. They may not be appropriate very early on in a project or programme, before the project / programme has had time to contribute to changes at outcome or impact level. Equally, a theory-based evaluation would not be appropriate when a project or programme is genuinely exploratory – in other words when the potential outcomes / impact are not known and cannot reasonably be estimated beforehand. In these cases other types of evaluation may be more useful.

## Theory of Change for VBNK



### How it works

There is no set method for carrying out a theory-based evaluation. As with many other evaluations, the methods used depend on the nature of the intervention. For example, if an intervention is concerned with improving crop yields or health outcomes then it might be appropriate to carry out a large quantitative study designed to generate statistically significant findings. Or if an intervention is concerned with capacity development then an organisational assessment methodology could be used.

In general, however, a theory-based evaluation always consists of three major components:

- the use, adaptation or development of a theory of change or logic model to explicitly set out the theory of the intervention;
- the collection of information at different levels of the theory of change (or logic model) to see whether or not, or how far, the desired changes have occurred; and
- an exploration of the links between changes at the different levels to test assumptions, and to confirm or reject the theory linking the levels.

A fourth component is normally added, which covers the collection of information on unexpected or negative changes influenced by the development intervention being evaluated.

This is illustrated using the theory of change in the diagram above. This very simple theory of change was developed by VBNK, a Cambodian organisation that works in the field of capacity development. A theory-based evaluation based on this theory of change would seek to assess change at different levels, including community, organisational and individual level. This might be achieved through a variety of methodologies such as participatory surveys in the community, organisational assessment tools for organisations, learning surveys for individuals, etc. The evaluation would also seek to establish what kind of support had been provided by VBNK.

The links between the different boxes could then be examined. For example, the evaluation could seek to assess whether support to individuals was genuinely supporting organisational development, or whether support provided to organisations had helped enhance individual capacity, and if so how. The evaluation might also seek to generate evidence that showed whether and/or how enhanced capacity at organisational and individual level had contributed to the empowerment of communities. If the theory of change was confirmed then a plausible argument with evidence could be developed and presented. If not, the assumptions would need to be further investigated to see why the theory had proved to be unreliable.

### Challenges

A theory-based evaluation can be carried out in most situations. The main challenge comes when a project or programme has no explicit theory of change or logic model, and it is difficult or impossible to develop one as part of the evaluation. This can only really happen when an intervention has been designed badly, or with no consideration of the desired changes.

Another challenge may be where a project or programme has an explicit theory of change or logic model, but where the intervention has evolved since it was developed (White 2009). In these cases it should be possible to update or adapt the theory as part of the evaluation.

As is always the case – as well understood by physical scientists – it is not possible to conclusively prove a theory, although it is sometimes possible to disprove it. At best, a theory-based evaluation may help provide a convincing and plausible case that shows what changes have occurred, and how a development intervention or interventions contributed to those changes. The theory will then be assumed to hold true until or unless contradictory evidence comes to light, in which case it will either need to be refined or abandoned.

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## Further reading and resources

Links to some of the other types of evaluation contained in this section of the M&E Universe can be found by clicking on the links below. There are also links to papers on theory of change and logical frameworks, both of which may be used as the basis for theory-based evaluation. Two methodologies that make extensive use of theories of change – process tracing and contribution analysis – can also be accessed through the links below.



The Better Evaluation website ([www.betterevaluation.org](http://www.betterevaluation.org)) contains the largest set of resources in the world covering evaluation in the social development sector. The site offers step-by-step guidance for those managing or implementing evaluations. Experienced evaluators or those with an interest in evaluation are recommended to go to that site and search through the different materials.

## References

- Stern, E (2015). *Impact Evaluation: A guide for commissioners and managers*. BOND, May 2015.
- VBNK (2009). *Annual Impact Assessment Report*. VBNK, September 2009
- White, H (2009). *Theory-Based Impact Evaluation: Principles and practice*. Working paper no. 3. International Initiative for Impact Evaluation, June 2009.

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