



Capturing results using contribution analyses

Initial experience with theory-based evaluations

What is effective in development cooperation? How, why and under what conditions? The more complex projects are, and the greater the extent to which they are integrated into national strategies, the more difficult it is to clearly measure their effectiveness. This explains the strong international interest in evaluation methods that are capable of responding to this challenge. Contribution analysis has succeeded randomised control studies (RCTs) as the evaluation design that is currently the focus of international discussion. Whereas RCT as an experimental method addresses the question of whether a specific intervention, and not other causes, has contributed to a specific result, contribution analyses provide plausible evidence of how the observed result was achieved. The Monitoring and Evaluation Unit has assessed the experience it has gained with contribution analyses to identify recommendations for the possible use of such analyses, against the backdrop of the project setting in partner countries.

Results orientation is one of the key quality features of GIZ's work. Our projects and programmes are regularly evaluated so that we can reliably and credibly substantiate the results of our work. What we are primarily interested in here is finding answers to the following questions: What is effective? How? Why? Under what conditions? There is currently a shift away from randomised control studies, which have been the focus of attention for the past five years, towards efforts to find an alternative to experimental impact evaluations. This is because randomised control studies can only be used within very narrow limits in development evaluation practice. Specialist literature is therefore now devoting greater attention to contribution analysis. This paper presents the opportunities and limitations of contribution analyses against the background of our own experiences, and identifies recommendations for their use in GIZ.

What is a contribution analysis?

Contribution analysis is a theory-based evaluation approach that can draw plausible conclusions on the contribution a programme makes to achieving results. The basic question to be asked is: 'What needs to happen so that the intended results can be achieved?' So a contribution analysis is suitable for the qualitative recording of results, but not for their quantitative measurement. It analyses as precisely as possible why results occurred or did not occur, and what role the programme or external factors played in achieving

results or not. For this purpose, contribution analysis offers a systematic procedure consisting of six steps. Each step acts like a learning loop and addresses weaknesses that were identified in the previous step.

Step 1: Set out the attribution problem to be addressed

The analysis starts by asking a number of questions to gain an initial impression of how the evaluated programme may have contributed to the observed results. Suitable questions include the following:

- What kind of contribution can the programme be expected to make?
- Did the programme make this kind of contribution, and if so, how?
- What other influencing factors need to be considered?
- Why did the observed result occur?

Step 2: Describe the theory of change

These questions serve to determine the theory of change (ToC), which is the main tool used by each contribution analysis. In order to evaluate findings, the first step is to clarify which results can be expected in the first place. The ToC therefore describes how the programme plans to achieve the intended objectives and results. To do so, the ToC focuses on those sections of the results chain that are of special interest for subsequent examination. GIZ describes the ToC using its results model.

Step 3: Gather the existing evidence on the theory of change

In the third step, the hypotheses of the results model are compared with actual results. Is there empirical evidence for the results chains described in the ToC? In principle, all methods of qualitative and quantitative data collection and evaluation can be used to prove the ToC. Three key questions are asked in this step: What evidence can be found that the targeted results actually occurred?

- What evidence can be found to confirm or disprove each individual hypothesis?
- What evidence can be found for alternative explanations and the influence of external factors and risks?

Step 4: Present the contribution story

The contribution story is put together from the information obtained in Step 3. This is the key step in the contribution analysis. The contribution story explains why it is reasonable to assume that the programme helped to achieve the observed results, and how it did this. It includes:

- the programme context
- planned and achieved objectives
- possible alternative approaches for explaining the observed results and a justification of why the initial approaches are not convincing.

Step 5: Seek out additional evidence

The contribution story is now critically examined. How credible is it? What makes it less robust? Weaknesses and alternative explanatory approaches offer indications of the aspects on which more information needs to be obtained or additional data have to be collected.

Step 6: Strengthen the contribution story

The new information that has been collected is used to revise and strengthen the contribution story. The additional evidence from Step 5 is intended to make the causal relationships between results more plausible. If this is not the case, the programme probably makes no essential contribution to the observed changes. The ToC of the evaluated programme should then be changed.

Two examples of application at GIZ

Contribution analysis was used at GIZ for the corporate strategy evaluation on scaling up and broad impact, and for the joint GIZ/KfW evaluation of a private sector development programme in Kenya's agricultural sector. It was examined how the programme had helped to increase the production volume, sales revenues and employment, and thus also boost the income of the target group

Example I: Corporate strategy evaluation on scaling up and broad impact

The evaluation of scaling up and broad impact aimed to identify mechanisms, approaches and success factors that support scaling-up processes and promote broad impact. A further aim was to examine the influence that scaling up has on achieving broad impact. Scaling-up processes are complex interventions that usually have a structure-building or system-building character. They are influenced by a number of external factors and consist of different activities and processes that frequently involve several governmental and administrative levels. In this context, clearly defined quantitative results can only be measured to a limited extent. The Monitoring and Evaluation Unit therefore opted for the theory-based contribution analysis approach rather than an experimental or quasi-experimental, rigorous evaluation approach that uses control and comparison groups, in order to make statements on the cause-and-effect relationship between successful scaling up and the achievement of broad impact.

The challenge when analysing the extent to which a causal relationship can be established between scaling-up processes and broad impact was that the projects had no explicit results model. The theory of change was therefore reconstructed during the evaluation using various methods such as data and document analyses, study of the relevant files, portfolio screening and online surveys. The case studies in particular made it possible to identify proof of hypotheses concerning results and assumed causal relationships, and to successively build a contribution story.

Exemplary hypotheses: Factors that influence scaling up

Hypothesis	Match with theory
Structural characteristics (term of a project, amount of funding) influence successful scaling up	Disproved
Instrument mix influences scaling up	Disproved
Implementation of a multilevel approach influences scaling up	Confirmed (weak positive relationship)
Orientation of project towards extending results to the target group level influences scaling up	Confirmed (strong positive relationship)

¹ **Scaling up** is a specific impetus during a project or after its completion with the aim of transferring concepts, approaches and methods either to a new level (vertical scaling up), to a new unit at the same level (horizontal scaling up) or to a new context (functional scaling up).

² **Broad impact** describes a needs-driven and qualitatively appropriate improvement for a significantly large group of final beneficiaries that continues beyond the term of the project.

Findings

The evaluation identified spaces, drivers and pathways that can be used for successful implementation of scaling-up processes and help to determine how broad the impact of a project can be. For example, it turned out that successful projects consciously use sector strategies for their scaling-up approaches. If sector strategies have high political priority, they are able to leverage scaling-up effects. A long-term GIZ presence on the ground, which gave rise to robust networks, also proved to be a key prerequisite for successful scaling up. To support scaling-up initiatives and encourage autonomy, it proved useful to involve political partners and organisations that have sufficient financial resources and broad-based staff levels.

The key driver is the multilevel approach. Projects with a multilevel approach include measures at micro, meso and macro level and should address at least two of these levels. Another key driver are national monitoring systems that record relevant developments in the sector if they are used to determine needs and are accessible to all relevant actors and the general public. Projects can also use individuals as drivers. If successful key individuals in the cooperation system make a personal effort to achieve the project's objectives, they actively contribute to disseminating approaches and concepts.

Integration of a scaling-up strategy into a project's architecture is a key pathway for harnessing leverage effects and making them visible. Projects that want to trigger successful scaling-up processes also actively and systematically search for new partners who can disseminate concepts and approaches. Learning forums for sector actors are other key pathways that offer opportunities for exchange and thus reveal scaling-up potentials.

Example II: Private sector development programme in Kenya's agricultural sector

The programme objective was to increase production volume and the employment rate, and to improve market access. The evaluation was designed to examine whether this had been achieved, and to assess the intended development results (impact): Did the standard of living of rural households improve in the programme regions?

Exemplary hypotheses:

Hypothesis	Data material	Match with theory
The programme reached subsistence farmers by developing value chains	Focus groups; semi-structured interviews with farmers	Confirmed
Higher agricultural production generates demand for labour	Focus groups; semi-structured interviews with experts	Confirmed

Findings

The success of the programme was determined separately for the FC module (KfW) and the TC module (GIZ). For the TC module, it was shown that the changes in production, revenues and employment were very different in the individual value chains. The available data for dairy goats, mangoes, passion fruit and sweet potatoes proved that significant growth in production and revenue had been achieved. This was not the case with fish and potatoes. Positive employment effects could only be identified in connection with meat, passion fruit and sweet potatoes. The differences are due among other factors to the price development for specific products and the fact that the promotion measures differed in terms of their effectiveness.

In the FC module (small-scale irrigation and rural road construction project), it was proved that significantly more high-quality products are being cultivated and that harvests in the programme region have risen from 1.6 to 2.2 harvests per annum. Substantial growth in production was established for the key crops (bananas, sweet potatoes and various vegetable types). The sales revenues are also higher.

In the TC module, the intended increase in income and the planned number of 56,000 companies could not be achieved. However, tangible unintended positive changes were observed in the target groups' standard of living. Interviews confirmed improvements in health, nutrition, education, standard of living and gender equality.

For the FC module, the small-scale irrigation projects provided improvements in the living standards of small-scale farmers in the project region. Random interviews above all confirm improvements in nutrition, health, drinking water supply and school attendance. In the road construction project, randomly selected farmers in the road catchment area also confirmed that their income had increased substantially due to better market access. The additional income was invested mainly in durable goods and in extending the cultivated areas by acquiring land. There are therefore indications that the FC module helped achieve the intended impact of increasing income from farming.

Position of the Monitoring and Evaluation Unit

GIZ has already established standard tools that can be used to carry out contribution analyses. Only three of the six steps of a contribution analysis really involve additional work, because Steps 1-3 are already carried out when drawing up the results model and establishing the results-based monitoring system (RBM) for a project. Putting both in place is a standard requirement for all GIZ projects and programmes.

³ **Spaces** describe the (financial, political, institutional, etc.) framework conditions that (positively or negatively) influence the dissemination process and can in turn be influenced by the project. **Drivers** are forces, actors or incentives systems that have a relevant influence (positive or negative) on the dissemination process and can be actively shaped by the project. **Pathways** are the operative processes that may lead to the dissemination of projects and concern the mechanisms via which drivers and spaces are used by the projects

Strengths of contribution analyses

An evaluation can only make well-founded statements on a programme's results if it examines the assumed results logic of the programme in detail. This is precisely what the first two steps of the contribution analysis are systematically designed to do. The theory of change explicitly describes a results model that is only implicit at some projects. Furthermore, Steps 1 and 2 offer in opportunity to involve commissioning parties, clients and potential users of the evaluation at an early stage and to make them aware of causal links between results and the difficulty of recording these in an appropriate manner. What are the findings of the analysis to be used for? Which decisions should be made based on the findings? The answers to these questions determine how certain we need to be about the programme's contribution and how useful the findings will be. There are rarely enough funds and time available to examine all results chains of the ToC to the same extent. The description of the theory of change in Step 2 of the contribution analysis therefore makes it possible to record results as cost-efficiently as possible. This is because it focuses on the causal relationships that are particularly relevant in a certain context. The analysis goes on to examine how good the results model was and how the theory was applied in practice. One strength of the contribution analysis lies in its ability to present contradictory evidence in a transparent manner.

Limitations of contribution analyses

Although no specific conditions need to be put in place for conducting a contribution analysis (e.g. the possibility of forming comparison or control groups, as is required for (quasi-)experimental designs), we should not forget that it can be very time-consuming. Practical use of the contribution analysis reaches its limits particularly in Step 5. Critical examination of the contribution story demands much more time from all stakeholders. After all, they must be prepared to read and comment on a draft of the evaluation report, not just the final version. If it becomes clear in Step 5 that additional data need to be collected, sufficient time and an adequate budget need to be made available. In addition, data collection in two phases and potentially two field assignments by the evaluators have to be envisaged when planning an evaluation based on a contribution analysis.

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Conclusion

The Monitoring and Evaluation Unit does not consider the contribution analysis to be an 'easier option' than time-consuming (quasi-)experimental designs. A complete contribution analysis also involves considerable time and financial outlay. Rather than being a method, contribution analysis is a systematic procedure that works with empirical evidence. The methods by which this evidence is to be obtained are not prescribed; they depend on the type of hypothesis to be examined. (Quasi-)experimental designs can also be used in this context. Far from being alternatives, contribution analyses and RCTs may therefore logically complement each other.

When is it worthwhile to carry out a contribution analysis?

Whether a contribution analysis is used or not also depends on the information required. Whereas (quasi-)experimental methods are primarily designed to provide robust evidence of results, contribution analyses aim to obtain information on change mechanisms and to clarify outstanding questions on causal links between results and on results logics. The considerable amount of time and work required to carry out a contribution analysis is worthwhile especially if a project design is to be used again or revised, or if recurring hypotheses are to be examined for their general validity. Contribution analyses should therefore only be used for strategically selected evaluations, in particular when we need to examine complex or complicated relationships. Selection criteria may be:

- the corporate-policy relevance of a project
- the amount of the commission for a project
- the geographic scope of the intended results, and high-scaling-up potential.

Cofinanced projects are also a good option for sharing the high costs involved in contribution analysis.

However, the Monitoring and Evaluation Unit recommends that standard tools of commission management such as the results model and the RBM system should be used to apply a contribution analysis approach to all evaluations.

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<http://mymande.org/evalyear>