Outcome mapping: A method for tracking behavioural changes in development programs

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Outcome mapping is a methodology for planning, monitoring and evaluating development initiatives that aim to bring about social change. The process of outcome mapping helps a project team or program to be specific about the actors it targets, the changes it expects to see and the strategies it employs. Results are measured in terms of the changes in behaviour, actions or relationships that can be influenced by the team or program. The methodology is comprised of several tools, which can be adapted to different contexts. It enhances team and program understanding of change processes, improves the efficiency of achieving results and promotes realistic and accountable reporting.

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Introduction

Development agencies seeking to assess and report on the outcomes of their programs face significant challenges that are inherent in the development process. Changes in the well-being of intended beneficiaries can occur before or after a program ends; they may not take the form anticipated; and they may be influenced by the actions of stakeholders who remain beyond the reach of the program. International development is highly complex and changes are not unidirectional. Outcomes interact with each other and the causes of change usually cannot be isolated. It is therefore very difficult for managers to attribute change to specific program components and to compare results across different sites or initiatives. This Brief outlines a methodology developed by the International Development Research Centre (IDRC) to assist program teams to learn from and report realistically on their achievements by tracking the connections between what they do and what happens. The methodology, adapted from the 'outcome engineering' approach (Kibel, 1999), is called 'outcome mapping'. It is being used in project and program planning, monitoring and evaluation in a variety of settings and takes account of the multiple and interacting factors that shape sustainable improvements in human and ecological well-being.

First introduced in 2001 by Earl et al., the methodology continues to develop. It is being applied and adapted by research and development organizations in Latin America, Asia and Africa. A list of documents that illustrate the experiences of outcome mapping users can be found on the IDRC website (IDRC, 2005a).

Expressing results as changes in behaviour

Outcome mapping focuses on change processes and outcomes. It defines the limits of the program's influence, promotes strategies that are appropriate to the context and recognizes the potential contributions of other actors. Development results (or outcomes) are measured as changes in the behaviour and relationships of actors with which the program interacts directly. Performance is assessed as the program's contribution to influencing those changes. With outcome mapping, it is possible to develop and use indicators that facilitate comparison and learning while retaining the relevant contextual details of the story at each site or in each case.

A key innovation of outcome mapping is to look at development results as changes in behaviour. For example, a research team in Kenya is seeking to improve crop yields by identifying appropriate and ecologically sound agronomic practices for use on small family farms. Knowing that pests and other challenges to production can evolve gradually or emerge suddenly, the researchers are seeking to build collegial, enduring relationships with farmers so they can work together to identify and solve current and future problems. The researchers want the farmers

Outcome mapping terms

- Boundary partners: Individuals, groups or organizations with which the program interacts directly and which the program hopes to influence.
- Intentional design: The planning stage, where a program reaches consensus on the macro-level changes it wants to influence and the strategies to be used.
- Outcome challenge: Description of the ideal changes the program intends to influence in the behaviour, relationships, activities and/or actions of a boundary partner.
- Progress markers: A set of graduated indicators of changed behaviours of a boundary partner that focus on the depth or quality of the change.

to consider themselves as partners in identifying problems, setting up trials and collecting and interpreting data. While the ultimate goals relate to sustainable improvements in crop yields, the involvement of farmers and their application of the research findings are also important, achievable outcomes, especially since many factors affecting crop yields are beyond the scope of the current project. In this example, changes in farmer behaviour – before, during and after the project – are among the development results sought by the team. Therefore, they need to collect data on farmer behaviour to assess progress, to identify ways to improve project performance and to report on the results achieved (see Smutylo, 2001 for more details).

Outcome mapping is especially useful in projects where success depends on behavioural or social change. Data on the relevant behaviour of important actors can complement that on more tangible parameters such as crop yield, soil fertility, nutritional status, water quality or erosion. With this approach, rather than looking to assign credit for achieving a particular impact, the emphasis is on monitoring and reporting on changes in the actions of the actors involved. The technique also helps to gauge progress within the local context and to deepen understanding of local change processes.

The three stages of outcome mapping

Outcome mapping provides tools that help a development program to think holistically and strategically about how it intends to achieve results. It encourages a team to introduce monitoring and evaluation at the planning stage and to link them to project implementation and management. It also links implementation to outcomes, so it is well suited to the complex and long-term nature of international development programs, where different outcomes are not easily or usefully separated. Focusing monitoring and evaluation on identified 'boundary partners' (see box on page 1) allows the program to measure results within its sphere of influence, to obtain useful feedback that can help improve performance and to take credit for its contribution to outcomes rather than for the outcomes themselves.

Outcome mapping is usually initiated through a participatory process at a design workshop led by an internal or external facilitator who is familiar with the methodology. This event is geared to the perspectives of those implementing the program and focuses on planning and assessing the changes they want to help bring about. It is useful to include boundary partners in the initial workshop for their input on the relevance, activities and direction of the program. The workshop allows the group to confirm and express the macro-level changes it would like to support, decide how it will influence these changes and select appropriate strategies. It also provides a basis for subsequent discussions with partners to negotiate or adjust program intentions. Ideally, the monitoring and evaluation system would have been outlined at the planning stage of the program. However, this is not always the case, so outcome mapping has elements and tools that can be brought in later and adapted for use on their own or combined with other frameworks. The full process involves three stages of thinking (see Figure 1 and IDRC, 2005b).

Figure 1. The three stages and twelve steps of outcome mapping

Stage 1. Intentional design: Helps a project team to clarify and reach consensus on the macro-level changes they would like to support and to plan appropriate strategies. The team should clearly express the long-term, downstream impacts that they are working towards, bearing in mind that the program will not achieve them single-handedly. These goals provide reference points to guide strategy formulation and action plans (rather than acting as performance indicators). Progress markers (see box on page 1), which are used to track performance, are developed for each boundary partner. These identify the incremental (and often upstream) changes that the program realistically hopes to influence, which prompt behavioural change and build the foundations of sustained social change.

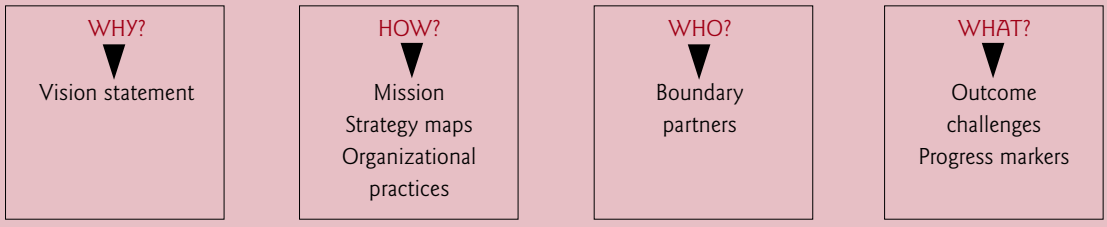

Figure 2. The four basic questions of the intentional design stage

Outcome mapping does not help a team identify program priorities. It is appropriate and useful only when a program has already chosen its strategic direction and wants to chart its goals, partners, activities and progress towards anticipated results. After clarifying the changes the program intends to influence, the team should select activities that maximize the likelihood of success. In essence, the intentional design stage helps articulate answers to four basic questions (see Figure 2), each of which is tied to one or more of the twelve steps

Stage 2. Outcome and performance monitoring: Provides a framework for monitoring actions and boundary partners' progress towards outcomes/goals. The performance monitoring framework builds on the progress markers, strategy maps and organizational practices developed in the intentional design stage. There are three data collection tools: a) an outcome journal monitors boundary partner actions and relationships; b) a strategy journal monitors strategies and activities; and c) a performance journal monitors the organizational practices that keep the program relevant and viable. These tools provide workspace and processes and help the team reflect on the data they have collected and how it can be used to improve performance.

Within this framework, the team can identify a broad range of monitoring information, possibly more than they can feasibly use. Consequently, they may have to make choices, selecting only the information that they can afford to collect. Being realistic about what information to collect and use is important when it comes to program evaluation. Rather than trying to evaluate all aspects of a program, the team can decide to conduct a strategic evaluation, focusing on a particular strategy, issue or relationship in some depth.

Stage 3. Evaluation planning: Helps the team set priorities so they can target evaluation resources and activities where they will be most useful. At this stage, evaluation planning outlines the main elements of the evaluations to be conducted.

Using outcome mapping

A recent study commissioned by IDRC (Ortiz, 2005) compares outcome mapping with 'results-based management', a method used widely by the Canadian International Development Agency (CIDA) and other international aid agencies. The study concludes that the two methods are compatible and that outcome mapping can contribute important elements to results-based management, such as supporting stakeholder learning in relation to the management of the program, fostering social communication as a basis for interactive participation, and strengthening local institutions. The following case studies illustrate the flexibility of use of outcome mapping.

The Ceja Andina Project

Organization: Ecopar Corporation
Location: Carchi Province, Ecuador

The Ceja Andina project aims to study the use of agro-biodiversity by local communities and to explore the possibility of integrating natural and agricultural biodiversity into the living systems of the region.

'Outcome mapping (OM) is used to identify changes in attitudes of the various stakeholders toward the forest, their agricultural land, environmental innovation and participation. Use of the methodology has grown beyond a monitoring and evaluation exercise to provide a space for social learning among strategic project partners, as well as institutional learning within the executing organization of the project. Monitoring has become a social analysis exercise, which looks closely at the way development, the sustainable use of biodiversity and community-based natural resource management are being promoted, facilitated, supported, executed and/or led by organizations and local actors. Based on this utilization of the methodology, the project has taken outcome mapping and adapted it to meet project needs, with the aim of progressing the methodology into a useful tool for various actor groups. This has been achieved without any formal training by any project staff on the methodology.

'Initially, there was some trepidation with the methodology. We asked ourselves: Are we using it correctly? What are we doing right? What are we doing incorrectly? However, we quickly discovered the flexibility of OM; we were able to adapt it and use it in a way that best suited our needs as a project. The innovation process that took place in the application of the OM process has resulted in better understanding and iterative improvements in project management and multi-stakeholder collaborative actions. This in turn has helped the project cope with the complexity of participatory resource management and guided the project's impact pathway, focus and research efforts. Rather than prove results and impacts, the project has been able to focus on improving interventions that encourage local actor-led development processes and interactive modalities in research and development initiatives. As a project, we have been able to focus on how we are performing well, and also how others are performing well, towards a common goal and not only for the final achievement of that goal. We recognize that we may not be able to control that goal, but we can certainly analyse our own, and others', advancement, progress and process along the way to a common vision. Finally, we have explored qualitative processes based on behavioural changes of strategic partners and of team members and the products that they have achieved.'

Source: Ambrose, K. 2004. Constructing collaborative learning: Outcome mapping and it's multiple uses in the project cycle of a SUB initiative. Ceja Andina Project, Corporación Ecopar, Quito, Ecuador.
See also: http://www.idrc.ca/en/ev-27705-201-1-DO_TOPIC.html

The Agro-industry and Market Development Project for Arracacha

Organizations: Social and Economic Studies Institute, Bolivia; Ministry of Agriculture, Ecuador; School of Education and Health for Peasants, Peru; The International Potato Center (CIP) and the Consortium for the Sustainable Development of the Andean Region (CONDESDAN)
Location: Coroico, Bolivia; San Jose de Minas, Ecuador; Cutervo, Peru

The project objective was to support the cultivation of arracacha and processing it into rallado, a traditional sweet. A second goal was to strengthen local capacity to produce and market fresh and processed arracacha. Outcome mapping was used to develop a monitoring framework for project activities in the three different countries. Due to the complexity of monitoring all the boundary partners, the team decided to select one boundary partner per country and each country chose a different type of partner. Journal reporting on each boundary partner was conducted every three months and was found to be particularly useful for project reporting to the donor agency.

'Outcome mapping was used in tracking changes in behaviour of members of the agro-alimentary chain of arracacha producers, merchants and consumers. Use of this methodology was well suited to participatory management of the project and helped promote collective action based on the establishment of a shared vision and well-defined roles. Monitoring permitted a process of action/reflection, which allowed what didn't work to be left behind, what was going well to be improved, and what was wrong to be corrected.'

Source: Raj, H. 2004. Exchange of outcome mapping experiences, report on a workshop: http://www.idrc.ca/en/ev-61574-201-1-DO_TOPIC.html
See also: Domínguez, S.S. and Delgado, R., 2002. Report on the adaptation of the outcome mapping methodology to the Arracacha Agroindustry and Market Development Project: http://www.idrc.ca/en/ev-26829-201-1-DO_TOPIC.html

Further reading

Earl, S., Carden, F. and Smutylo, T., 2001. Outcome Mapping: Building Learning and Reflection into Development Programs. Ottawa, Canada: International Development Research Centre.

IDRC 2005a. Examples of outcome mapping use: http://www.idrc.ca/en/ev-27705-201-1-DO_TOPIC.html

IDRC 2005b. Facilitation manual and facilitator summary sheets: http://www.idrc.ca/en/ev-62236-201-1-DO_TOPIC.html

Kibel, B.M. 1999. Success stories as hard data: an introduction to results mapping: http://www.pire.org/resultmapping/FIrst%20page.htm

Ortiz, N. 2005. From programme management to development programmes: a comparative study of results-based management and outcome mapping. Ottawa, Canada: International Development Research Centre.

Smutylo, T. 2001. Crouching impact, hidden attribution: overcoming threats to learning in development programs. Ottawa, Canada: International Development Research Centre: http://www.idrc.ca/en/ev-26968-201-1-DO_TOPIC.html

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