# Learning from complexity:

the International Development Research Centre's experience with Outcome Mapping

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### Introduction

In its conceptual and practical work over the past few years, the Evaluation Unit of the International Development Research Centre (IDRC)<sup>1</sup> has encountered four fundamental challenges in assessing and reporting on development impact that inhibit learning by developmentresearch organisations. First, while development-research organisations are under pressure to demonstrate that their programmes result in significant and lasting change in the well-being of large numbers of intended beneficiaries, such 'impact' is often the product of a confluence of events for which no single organisation can realistically claim full credit. Therefore, when an organisation sets out to demonstrate that its programmes are the 'cause' of development improvements, it runs into serious difficulties in terms of how to measure the impact of its work. Second, in order for change to truly take root, ownership and control must have shifted from the external organisation to exogenous actors and organisations. In other words, ideas and approaches must have become integrated with a range of events, activities, customs, laws, and policies within the local context so that they fall outside the purview of the external organisation. As noted by Terry Smutylo:

[A] paradox exists for external agencies under pressure to take credit for results at the 'outcome' and 'impact' stages; for it is at these stages where their influence, if they have been successful, is low and decreasing relative to that of other actors. Attribution for results which naturally goes to the dominant influences associated with those results may empirically overlook antecedent project components.

(Smutylo 2001:5)

Third, assessing long-term development impacts does not usually provide the kind of information and feedback required to improve a programme's performance. It provides 'clueless feedback', which

neither tells the organisation about its specific contributions to change, nor provides data on how to improve its efforts (Smutylo 2001:6). Fourth, the heavy emphasis on demonstrating the impact of programmes has meant that the development of learning capacities within organisations themselves has been ignored. Consequently, assessing impacts on development, especially from the perspective of an external agency, is problematic both methodologically and in terms of the value of the findings for learning organisations. Nonetheless, many organisations continue to struggle to measure results far beyond the reach of their programmes.<sup>2</sup>

To address this problem, IDRC has been working with a number of organisations in Asia, Africa, and Latin America to develop and field test a methodology called Outcome Mapping which takes account of the complexity of development processes and focuses explicitly on learning.3 It establishes a vision of the human, social, and environmental improvement to which a programme hopes to contribute and then focuses monitoring and evaluation on factors and actors within its sphere of influence. The richness of a programme's performance story is told using systematically collected qualitative data. Although outlining a complete case study of a programme's use of Outcome Mapping goes beyond the scope of this short article, this paper will show how the fundamental principles of Outcome Mapping relate to organisational learning theory and discuss some of the challenges associated with applying theory to practice. Our experience with a number of applied development-research programmes has demonstrated that, despite best intentions, learning does not happen naturally, but it can be built into work practices through data collection and reflection processes. Outcome Mapping has proved a robust methodology to help programme teams think holistically and strategically about the results they want to help bring about and also to learn from their experiences.

This article presents Outcome Mapping as it pertains to development programmes,4 but it can also be adapted for use at the project or organisational levels. Regardless of the level, the fundamental 'learning agenda' of Outcome Mapping remains the same - to encourage evaluative thinking, participatory decision making, open sharing of successes and failures, and a willingness to engage in regular processes of thoughtful reflection and learning.

Outcome Mapping is based on three principles, which we view as essential to encourage learning:

- planning for and assessing both external results and internal performance:
- the cyclical nature of planning, monitoring, and evaluation; and,
- systematised self-assessment as a consciousness-raising, consensus-building, and empowerment tool for those working directly in a programme.

Each of these principles encourages a programme to think holistically about its work in order to improve, and offers more generalisable lessons about encouraging learning and reflection that may be of value to others, whether or not they are using Outcome Mapping.

# What is Outcome Mapping?

Maps are cognitive guides. They locate us, helping us figure out where we are now in relation to where we have been and where we are going. (Michael Quinn Patton in Earl et al. 2001)

Outcome Mapping is an integrated planning, monitoring, and evaluation methodology. It takes a learning-based and use-driven view of evaluation guided by principles of participation and iterative learning. As a process, it is embedded in organisational learning principles and offers strategies for increasing a programme's ability to improve its performance. It fosters programme learning by incorporating self-assessment and reflection processes throughout the planning, monitoring, and evaluation stages. It begins with a facilitated workshop to design a programme and monitoring system, followed by a series of self-assessment workshops to monitor change and refine strategies, with periodic evaluation studies as required.

In terms of measuring results, the originality of the methodology lies in its shift away from assessing the development impact of a programme (e.g. poverty alleviation, reduced conflict, etc.), to a focus on behavioural change. Outcome Mapping is built on the premise that behavioural change is fundamental to sustainable development. Outcomes are defined as changes in the behaviour, relationships, activities and/or actions of the people, groups, and organisations with whom a programme works directly. By using Outcome Mapping, a programme will not be claiming the achievement of development impacts but rather to have contributed to the achievement of outcomes. These outcomes, in turn, enhance the possibility of development impacts, but the relationship is not necessarily one of direct cause and effect. This shift significantly alters the way a programme understands its goals and assesses its performance and results: its contributions to development are planned and assessed based on its influence on the partners with whom it is working to effect change. Focusing monitoring and evaluation on changes in partners illustrates that, although a programme can influence the achievement of outcomes, it cannot control them because ultimate responsibility for change rests with its partners. In essence, development is accomplished through changes in people's behaviour – and this is the central concept of Outcome Mapping.

## Planning for and assessing external results and internal performance

Outcome Mapping recognises that development is a complex process comprising three parallel dynamics: first, the changes in the behaviours, actions, activities, and/or relationships of the people, groups, and organisations with whom a programme works directly; second, the strategies that a programme employs to encourage change in its partners; and, third, the functioning of a programme as an organisational unit. It builds an understanding not only of changes in the development setting in which a programme is working, but also monitors and assesses its strategies and activities and the extent to which the programme is learning and adapting to new conditions. As such, Outcome Mapping assesses a programme holistically and is based on the premise that a programme needs to know not only about development results, but also about the processes by which they were attained, and about its internal effectiveness. It is through the combination of information and knowledge in these three areas that a programme can build a better understanding of what it is achieving and how it can improve its levels of success.

Through assessing these three elements of a programme, Outcome Mapping unites process and outcome evaluation. Therefore, Outcome Mapping is well suited to the complex functioning and long-term aspects of international development programmes, where outcomes are intermeshed and cannot be easily or usefully segregated from each other. By considering the myriad actors and factors that contribute to development processes, it focuses on how a programme facilitates rather than causes change and looks to assess contribution rather than attribution. Outcome Mapping encourages a programme to link itself explicitly to processes of transformation and provides it with the

information it requires in order to change along with its partners. Looking at how the three elements interrelate and the context in which change occurs is essential to programme learning. A programme does not operate in isolation from other factors and actors, and therefore cannot plan and assess as though it did. Systems thinking is not simple and straightforward, however, and requires a commitment to ongoing reflection and analysis. As Peter Senge points out:

Seeing interrelationships, not things, and processes, not snapshots. Most of us have been conditioned throughout our lives to focus on things and to see the world in static images. This leads us to linear explanations of systemic phenomena.

(Senge 1990:15)

International development programmes are particularly prone to excluding themselves from the system in which development change occurs. By separating themselves from development processes (i.e. something 'we' help 'them' accomplish) and explaining change by using linear reasoning, programmes lose the opportunity to explore their full potential as change agents. Outcome Mapping encourages a programme to think of itself as part of the change process and to embrace complex reasoning and multiple logic systems. Raj Verma, of the Nagaland Empowerment of People Through Economic Development Programme (NEPED), described the change in the programme team's understanding of their role after using Outcome Mapping for a self-assessment of their first phase and the planning of their second phase as follows: 'The often repeated and echoing question in Outcome Mapping "what or who needs the change?" raised us from being providers of development, achieving outputs, to actually believing we were agents of change.'

## The cyclical nature of planning, monitoring, and evaluation

[T]he key differentiating factor in the success of an organization is not just the products and services, not just its technology or market share, but the organization's ability to elicit, harness, and focus the vast intellectual capital and goodwill resident in their members, employees and stakeholders. When that intellectual capital and goodwill get energized and focused, the organization becomes a powerful force for positive change in today's business and societal environments.

(Kaner 1996:viii)

Outcome Mapping is a process in which programme staff engage, not a product that is provided to them. In it, planning, monitoring, and evaluation are not discrete events but are designed to be cyclical with each feeding the other. Monitoring and evaluation considerations are introduced at the planning stage and all programme staff are encouraged to think evaluatively throughout the programme cycle. That is, they are encouraged to think critically and ask questions about what they want to achieve and how they will know whether they have been successful. The cyclical nature of planning, monitoring, and evaluation is important because development programmes are part of an open system. The context in which a programme operates is continuously changing, so staff need to be engaged in ongoing reflection and learning so that the programme remains relevant and appropriate. It is impossible to plan for all eventualities; therefore, a successful programme is one that assesses and adapts to changing situations in an intelligent way based on thoughtful reflection. This idea resonates well with those engaged in international development programmes because they have often experienced a well-thought-out plan being thwarted by an unexpected 'external factor' - war, natural disaster, or a change in government - and therefore are adept at thinking about how to work in complex environments.

A key challenge is that despite the enthusiasm for iterative learning and active engagement in the planning processes, many programmes have difficulty putting in place an effective and consistent monitoring system. The problem does not appear to be a lack of commitment, sense of usefulness, or ownership of the process. Rather, it is lack of time as other work demands take over and there is no time for group reflection. This poses a fundamental challenge for those supporting the incorporation of reflective practices in programmes, because it is unavoidable that learning takes time. Furthermore, it cannot be outsourced! Outcome Mapping attempts to address this problem by encouraging programme teams to be realistic about what they can manage in terms of monitoring and evaluation and to prioritise their information needs based on intended use. Prioritising information needs is a difficult exercise because programme staff genuinely want to know about many aspects of their work and tend to be over-ambitious about what is feasible with the available resources. For example, a programme supporting research into tobacco control used Outcome Mapping to plan its second three-year phase, and chose to focus data collection on only one of its partners - researchers in developing

countries. They felt that understanding changes in the researchers' behaviours (e.g. engaging marginalised groups in the research process, publishing articles in peer-reviewed journals, influencing tobaccocontrol policies and programmes in their countries), and the factors and actors that contributed to that, would best reflect the development outcomes the programme was helping to bring about in this nascent field. Furthermore, the programme team could use the data collected both to fulfil reporting requirements and to provide themselves with credible information and knowledge with which to improve the programme's activities and interventions.

## Systematised self-assessment and group learning

Outcome Mapping is based on principles of participation and purposefully includes the programme implementers in both designing and undertaking the data collection so as to encourage ownership and use of findings. It is premised on the belief that those engaged in the programme can benefit from working as a group to systematically collect, analyse, and interpret data. It is intended as a consciousness-raising, consensus-building, and empowerment tool for those working directly in a development programme. By actively engaging the team in the monitoring and evaluation process, Outcome Mapping empowers them to articulate, with accurate and reliable data, what they do to support outcomes, and to harness group wisdom to improve their performance. In essence, it tries to implant the passion and enthusiasm of programming into the assessment process. Recognising this emotional element of learning is crucial to encouraging programmes to engage in learning and reflection processes. As noted by Senge, 'People's natural impulse to learn is unleashed when they are engaged in an endeavor they consider worthy of their fullest commitment' (Senge 1990:13). Outcome Mapping moves away from the notion that monitoring and evaluation are done to a programme and instead actively engages the programme team in the design of a monitoring framework and evaluation plan and promotes self-assessment. For example, a women's health and empowerment programme in India is using Outcome Mapping to document and assess its own capacity development in the areas of gender, monitoring and evaluation, and applied research. The women have identified behavioural markers that indicate progressive change and are using these to negotiate expectations among themselves, assess progress, and determine future strategies. Their selfassessment findings are not intended to be shared with others but will serve their own purposes as programme implementers.

Outcome Mapping is usually initiated through a participatory workshop led by an internal or external facilitator, and then regular monitoring workshops are held in which the programme team collects and analyses data in order to plan new, or refine existing, activities. Group learning is an essential component of the methodology because of its power to harness organisational knowledge. Michael Doyle states that the key to engendering learning in an organisation is:

by creating psychologically safe and involving group environments where people can identify and solve problems, plan together, make collaborative decisions, resolve their own conflicts, trouble-shoot and self-manage as responsible adults. Facilitation enables the organization's teams, groups, and meeting to be much more productive. And the side benefits of facilitated or self-facilitated groups are terrific: empowerment, a deepening of personal commitment to decision and plans, increased organizational loyalty, and the building of esprit de corps.

(Kaner 1996:viii)

Outcome Mapping workshops are intended to be participatory and, wherever feasible, can involve the full range of stakeholders, including the partners in whom behavioural change is sought. Nonetheless, genuine participation is not simple (especially in the context of an externally funded development programme) and hierarchy and politics can affect learning. A programme using Outcome Mapping needs to carefully consider who should participate and ensure that participants feel comfortable sharing their experiences (positive and negative), engaging in self-assessment, and brainstorming on how to move forward. In their desire to use participatory approaches, donor agencies sometimes ignore the power imbalances that necessarily exist between the institution funding a programme and its beneficiaries. In order to create the optimum space for critical assessment and learning by a programme team, participation needs to be considered in each instance and should be requested in a spirit of equitable collaboration, acknowledging the complexity of existing relationships.

Outcome Mapping has been developed in organisations where monitoring and evaluation are intended primarily to help programme learning and improvement. Making reflection an organisational priority has proved to be a prerequisite for the successful integration of the learning processes associated with Outcome Mapping. When

incentives and rewards have instead been directed towards reporting for the purposes of accountability, Outcome Mapping has proved an inappropriate approach to monitoring and evaluation. Outcome Mapping can only be as empowering, participatory, and learningoriented as the organisational context in which it is implemented.

### Conclusion

Outcome Mapping helps a programme to be specific about the actors it targets, the changes it expects to see, the strategies it employs, and its effectiveness as an organisational unit. It is particularly valuable for monitoring and evaluating development programmes, whose results and achievements cannot be understood through quantitative indicators alone but also require the deeper insights of a qualitative, contextualised story of the development process. Outcome Mapping will not help a programme create generic lists of 'lessons learned' or 'best practices'. Instead, it will help it weave the plots of the three elements related to its work: first, the changes in the behaviours, actions, activities, and/or relationships of the people, groups, and organisations with whom a programme works directly; second, the strategies that a programme employs to encourage change in its partners; and third, the internal effectiveness of that programme. Outcome Mapping provides a programme with processes through which to collect data and to reflect on the change processes in order to guide its actions knowledgeably.

#### Notes

- IDRC is a public corporation created in 1970 by the Parliament of Canada. Its mandate is to initiate, encourage, support, and conduct research into the problems of the developing regions of the world and into the means for applying and adapting scientific, technical, and other knowledge to the economic and social advancement of those regions.
- 2 For a full discussion of problems associated with measuring attribution and impact see Terry Smutylo (2001).
- 3 Dr Barry Kibel, Pacific Institute for Research and Evaluation, was

instrumental in introducing his Outcome Engineering approach and working closely with us to adapt some of these ideas to the development research context. Methodological collaboration with the West Africa Rural Foundation (FRAO) and testing with the Nagaland Empowerment of People Through Economic Development Programme (NEPED) and the International Model Forest Network Secretariat (IMFNS) have greatly informed this adaptation process. Ongoing testing with a number of other initiatives continues to enrich the process.

4 For the purposes of this article, a programme is defined as a group of related projects and activities with a specified set of resources (human, capital, and financial) directed towards the achievement of a set of common goals within a specified period of time.

#### References

Earl, Sarah, Fred Carden and Terry Smutylo (2001) Outcome Mapping: A Guide to Building Learning and Reflection into Development Programmes (with a Foreword by Michael Quinn Patton), Ottawa: IDRC.

Kaner, Sam (1996) Facilitator's Guide to Participatory Decision Making (with a Foreword by Michael Doyle), British Columbia: New Society Publishers.

- Senge, Peter M. (1990) 'The leader's new work: building learning organizations', Sloan Management Review 32(1):7-23.
- Smutylo, Terry (2001) 'A crouching impact, hidden attribution: overcoming threats to learning in development organisations', paper presented at Block Island Workshop on Cross Portfolio Learning, 22-24 May, available at www.idrc.ca/ evaluation/crouching\_impact.pdf/

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