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**THEORY OF CHANGE: A SHORT LITERATURE REVIEW AND ANNOTATED
BIBLIOGRAPHY**

**Theory of Change Supplement:
A short literature review and
annotated bibliography**

A STAP document

December 2019

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Contents

S1. General developments.....	4
S2. Specific areas of guidance.....	6
S3. Annotated bibliography.....	14
S3.1 On-line sources and grey literature.....	14
S3.2 Some GEF agency-related sources.....	17
S3.3 Peer reviewed literature.....	19
S4. References.....	22

Introduction

The Theory of Change (ToC) Primer responds to the RAPTA framing (O’Connell et al., 2016; O’Connell et al., 2019) for ToC; this background note collates some grey and reviewed literature as context and to confirm that the RAPTA framing is up to date.

Sources were reasonably systematic searches of Web of Science for refereed papers (searched on ‘theory of change’ and filtered to review-style papers in the last 5 years, and added literature accessed for the STAP [durability paper](#)), and via Google for on-line sites and sources (searching for ‘theory of change’ generally, but also explicitly in conjunction with key GEF agency names – World Bank, FAO, UNEP/UN Environment, UNDP/UNDG, etc), plus various additional materials supplied by reviewers.

S1. General developments

As many sources indicate, Weiss (1995) among others popularized the term “Theory of Change” as a way to describe the set of assumptions that explain both the mini-steps that lead to the long-term goal and the connections between program activities and outcomes that occur at each step of the way. Whilst understanding the causal links was important from the start, early presentations tended to be simple illustrations of what outputs were expected to lead to what outcomes and longer term impacts (e.g. using simple Planning Triangle© and logic models, where causality is implicit) to outcome chains (which encourage more thinking about how and why change occurs), nicely outlined by Harries et al. (2014). In parallel with this, increasing emphasis has been placed on the process of developing a ToC and its value in building a common team or partner or stakeholder understanding of what is to be achieved, thus contributing to the durability of outcomes (e.g. Rogers and Coates, 2015). Today the *theoryofchange.org* website, supported by the social enterprise ActKnowledge, provides a valuable consolidation of ToC approaches and documentation that many other organisations draw upon, though there are many other sources as noted below.

A DfID review found in 2012 that, among ToC professionals, the constituent parts and approaches to ‘best practice’ ToC were quite consistent (Vogel, 2012), but that there remained diverse reasons for carrying out ToCs and consequent divergence in many detailed aspects of approaches (Stein and Valters, 2012). Echoing this more recently, from survey responses and the literature, Maru et al. (2018b) found four challenges to the widespread use of ToC: (i) different interpretations of ToC; (ii) incoherence in relationships among the constituent concepts of ToC; (iii) confused relationships between ToC and project “logframes”; and (iv) limitations in necessary skills and commitment for enacting ToC. These challenges are echoed at times in our informal discussions about ToC through the GEF ‘family’.

Definitions: these are surprisingly diverse, although they all indicate that a ToC makes explicit the logic of how an intervention is expected to produce results. For example, Vogel (2012) cites Rick Davies as defining ToC as “the description of a sequence of events that is expected to lead to a particular desired outcome”, and Dhillon and Vaca (2018) talk of “the hypothesis about the way that a program brings about its effects...essentially the logic behind an intervention”. Many sources indicate that the term ToC is used both for the product (the chain of logic) and the process (of collectively identifying the logic). Importantly, most sources go on to emphasise this is not all – for example, Harries et al. (2014) say: “A theory of change is a tool to help you describe the need you are trying to address, the changes you want to make (your outcomes), and what you plan to do (your activities). ... A theory of change is often represented in a diagram or chart, but a full theory of change process involves more than this. It should help you consider and articulate the assumptions and enablers that surround your work and explain why you think your activities will lead to the outcomes you want. It should also challenge you to develop clear aims and strategies and explore whether your plans are supported by evidence. By the end of a theory of change process, you should have a clear idea of what your organisation or project wants to achieve and a strategy to do this.” Similarly, White (2018) argues that a ToC is a unifying framework to address “not just the question of what works, but also how, where, for whom and at what cost?” All practical guides also emphasise the role of ToC in helping define success indicators that may then drive monitoring.

Rehfuss et al. (2018) provide a more formal taxonomy of ToC approaches, distinguishing those undertaken before an intervention from those intended to support adaptive learning through an

intervention, more or less iteratively; and approaches based more on describing the system in which the interaction between participants, the intervention and its context takes place, as opposed to those focused on the causal pathways leading from the intervention to multiple outcomes.

Dhillon and Vaca (2018) provide a good recent review of ToC, noting that its key distinctive elements from other approaches are to identify specific causal links among outputs and outcomes, describe the causal pathways by which interventions are expected to have effect, and be explicit about assumptions which include an analysis of risks (or barriers, here) to success (see their Fig.4, p.69; their Fig.6, p.71 shows how these go beyond other methods). They argue that good ToCs need to evolve to include more meaningful causal strands, clarity about the area of accountability (especially outcomes needed for success but for which the intervention agency does not hold itself accountable), and consideration of unintended effects. Many of these points are taken up in the RAPTA framing. Dhillon and Vaca (2018) and Davies (2018) also provide some guidelines for presentation options, and a list of online tools available to assist this (p.82).

Purposes: Harries et al. (2014) (following Stein and Valters (2012)) usefully summarise reasons for doing a ToC, that can be found scattered through many other sources:

- Strategy: Help teams work together to achieve a shared understanding of a project and its aims; Make projects more effective; Help identify and open up 'black boxes' in thinking.
- Measurement: Help determine what needs to be measured (and what does not) so you can plan your evaluation activities; Encourage teams to engage with the existing evidence base; Act as the basis for claims about attribution.
- Communication: Quickly communicate a project's aims; Bring the process of change to the forefront.
- Partnerships: Help with partnership working.

The Annie E. Casey Foundation in the US provides a more general call to arms: "Some stakeholders may react in frustration to the theory of change development process because they view it as 'taking time to think' which takes time away from 'doing the work.' However, the thinking involved in building a theory of change does not in any way preclude doing the work ... it is almost impossible to determine whether progress has occurred in a community change initiative if you have not explicitly identified the steps to progress. Communities have too much at stake to engage in work without a clearly defined purpose." The World Bank Independent Evaluation Group adds to this from an evaluation perspective (Vaessen, 2016): "Notwithstanding the differences between intervention design and evaluation, the two are closely linked. In an ideal world, evaluators build on the espoused theories of development practitioners (and related stakeholders), which are articulated during the intervention design phase and are informed by past experience and existing knowledge about what works and under what circumstances. The circle of knowledge accumulation is complete when evaluations feed into the knowledge repositories that inform intervention design."

This key aspect of the ToC – its contribution to structuring meaningful measurement of success – has also been highlighted since the early literature (Davies, 2018). This is not only *post hoc* evaluation, but also emphasises the role of ToC as a learning aid through the life of a program, helping to identify early when it becomes apparent that an intervention cannot meet its goals because assumptions are not being met. Most recently, this has developed to ToC reviews providing a structured approach to flexible

adjustments during the life of an intervention (e.g. Maru et al., 2018b; Thornton et al., 2017). In the latter case, the ToC can become a boundary object that helps ensure that adaptive flexibility is bounded within a logical structure, rather than abused to cover up project failings.

Reviewing many DfID projects, Vogel (2012) concluded more generally that the benefits of ToC approaches are that they require both logical thinking and deeper critical reflection; they ensure that consensus exists on the basic elements of ToC; ToC is best kept flexible, not prescribed (i.e. regard approaches as being 'ToC thinking' rather than overly-prescriptive steps); ToC should inspire and support innovation and improvement in programmes; and working with ToC requires performance management approaches to accommodate uncertainty and flexibility – and in fact ToC also provides a tool to manage this, as noted above (cf. Thornton et al., 2017).

Assessing the ToC: Dhillon and Vaca (2018) also propose an explicit set of indicators of how good the ToC process itself is likely to be (see their Fig.8, p.74), including the strength of the evidence base cited, the degree to which causal links are explicit, level of representation detail, degree of testing of causation, and levels of participation; this provides a set of general criteria against which funders like the GEF might assess the quality of ToCs. Davies (2018) also addresses the quality of ToCs, though more from the evaluation perspective.

Colby and Collins (2013) note a number of 'red flags' for quality assessment of a ToC process, aimed more at those commissioning a ToC process than for assessment afterwards. These were:

- There is no mandate or buy-in from key decision-maker(s)
- Don't have the right people participating
- Outcomes are stated as actions or interventions not conditions
- Outcomes are compound statements
- Outcomes are too vaguely stated to make decisions
- Outcomes not in chronological order
- Backwards mapping doesn't always work right away
- Not enough time and follow through given to the process
- Facilitation is not set up and run properly

S2. Specific areas of guidance

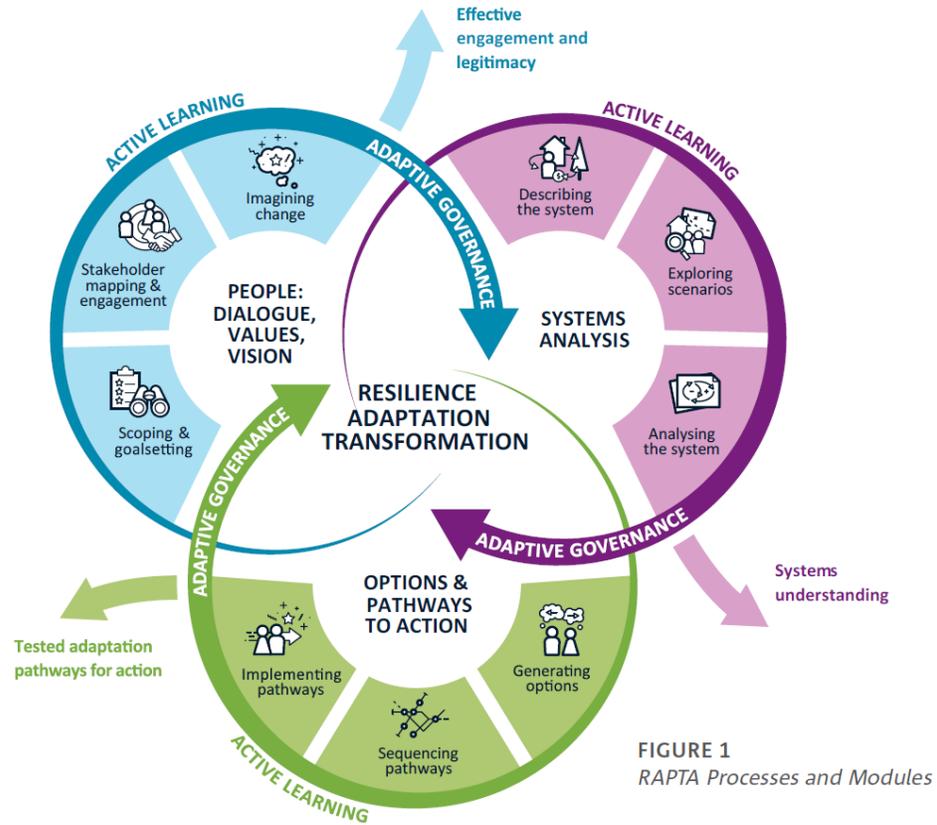
In its comprehensive approach to project and program planning, RAPTA (O'Connell et al., 2019: p.17-18) identifies four key steps in developing a ToC, as well as some precursors or inputs, and a fifth step that links to other elements of planning. Importantly, RAPTA, embeds ToC within the whole planning process, as illustrated in [Figure S1](#). RAPTA argues for a strong emphasis on a systems approach with well-considered partner and stakeholder engagement to inform the causal links in the ToC; these emphases are not unique across the sources reviewed here, but are particularly important to the GEF's goal of achieving systemic, transformative and long-lasting impact, and so are highlighted in this guide. Almost all sources on ToC highlight links to monitoring and evaluation, but to different ends.

RAPTA outlines ToC only briefly. The most extensive repository of material about doing ToCs is on the *theoryofchange.org* website. Most of the sources we uncovered in use by GEF agencies derived some of their guidance from here. Notable on this website are the primer and facilitator material (Taplin and Clark, 2012; Taplin and Rasic, 2012), as well as many other supporting materials at

<https://www.theoryofchange.org/library/publications/> and <https://www.theoryofchange.org/library/presentations/>. However, there is also a variety of more recent, partly derivative sources of value noted in

Table 1, and several other useful sources that promote a similar sequence without necessarily labelling steps (e.g. Harries et al. (2014) and the derivative CLINKS/NPC (2014); UN Development Group (2017) and related UNDP Effectiveness Group (2016); UN Environment Evaluation Office (2017); Dhillon and Vaca (2018); Maru et al. (2018b)).

Figure S1: summary diagram from RAPTA version 2 (O’Connell et al., 2019); theory of change is discussed under ‘imagining change’, at top left.



Key steps:

[Table 1](#) non-exhaustively summarises the steps recommended in a variety of ToC guides. From these it can be seen that, despite different explicit numbers of steps, etc, common factors include clarity on the vision/objective, working back from the impacts through the outcomes to needed outputs from the intervention, being clear on the rationale for and assumptions behind the causal links (citing evidence or noting where it may need to be developed), exploring barriers and enablers explicitly (often described as risks), reflectively analysing what is the necessary and sufficient set of intervention pathways, clarifying the area of responsibility (whilst identifying what else must be done by who for the overall intervention to work), developing indicators of success related to each causal pathway, and describing the ToC with a diagram and a narrative accompaniment (that properly includes a rationale for the intervention, a situation analysis, a description of the diagram, key elements of evidence, and a MEL plan - Harries et al. (2014)).

Table 1: Key recommended steps in developing a Theory of Change from various reviewed sources (sometimes paraphrased here).

Source	Recommended steps
RAPTA (O’Connell et al., 2019) [p.18, abbreviated]	<ol style="list-style-type: none"> 1. Clarify goals and work backwards to specify necessary and sufficient long-term, medium-term and immediate outcomes, outputs, activities and resources to achieve them 2. Describe the causal logic and assumptions, organised into ‘pathways’ of impact. Create preliminary narratives to explain these 3. For pathways within scope, list the evidence that exists or is required to support the Theory of Change. Challenge existing assumptions and logic, ensuring key assumptions are valid 4. Identify partnerships to lead or support impact pathways outside scope 5. Iteratively consider implications for Scoping and Goal Setting, Stakeholder mapping and engagement, Adaptive governance and Active learning. Revisit throughout the process
TasCOSS https://www.tascosslibrary.org.au/how-write-theory-change-0	<ol style="list-style-type: none"> 1. Identify the problem you are working to address 2. Work out what you want to achieve (your long term goal) 3. Walk backwards to get where you want to go! 4. Explain your ‘assumptions’ 5. Now work out what you will do to achieve your desired outcomes 6. Draw a line above your area of responsibility 7. Develop indicators to measure whether you have been successful 8. Summarise and explain your Theory of Change
UNHCR Lebanon (p.9) https://data2.unhcr.org/en/documents/download/66489	<ol style="list-style-type: none"> 1. Focus on the high-level change the sector intends to contribute to in the current context 2. Identify what is needed for the desired development change to happen 3. Establish and make explicit the related key assumptions underpinning the theory of how change happens, and major risks that may affect it 4. Identify partners and actors who will be most relevant for achieving each result, taking into account the related risks and assumptions
theoryofchange website, various sources, e.g. Taplin and Clark (2012) (also accessed through World Bank wiki)	<ol style="list-style-type: none"> 1. Identify long-term goals 2. Backwards map and connect the preconditions to achieve the goals; explain why these preconditions are necessary and sufficient 3. Identify your basic assumptions about the system 4. Identify the interventions that will create your desired change 5. Develop indicators to measure progress on outcomes 6. Quality review – plausible, feasible, testable? 7. Write a narrative to explain the logic of the initiative
Poverty Action Lab, also through World Bank wiki	<ol style="list-style-type: none"> 1. Analyze the situation 2. Clarify the program goal 3. Design the program/product 4. Map the causal pathway 5. Identify explicit assumptions 6. Design specific, measurable, achievable, reliable and time-bound indicators 7. Convert to logical framework
UNDG (Latin America) for several UN bodies	<ol style="list-style-type: none"> 1. Analysis of situation and context 2. Identify pre-conditions 3. Identify role of related parties 4. Make assumptions and risks explicit 5. Validate it 6. Turn it into a narrative

UN Development Group (2017)	<ol style="list-style-type: none"> 1. Focus 2. Identify what is needed for change 3. Reflect assumptions and risks 4. Identify partners and actors
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Process: Specific guides also provide different insights into *how* to carry out ToC processes, including practical advice on process. Some key points from Harries et al. (2014) and Taplin and Rasic (2012) are:

- Factors affecting your approach: (Harries et al. (2014), p.9)
 - The purpose of your theory of change
 - Size and complexity of the project – for a whole organisation or a single project or campaign (can develop a high-level, overall theory of change for an organisation alongside more detailed ones for individual projects).
 - Stage of development
 - Direct or indirect impact on service users
- In workshops, start by brainstorming or writing on post-it notes to populate a general theory of change and get your group talking. Only move towards specific issues and refinements once everyone has had a chance to have input
- Probe for assumptions in a group setting, to reveal underlying differences in preconceptions. Listen for hidden assumptions and challenge them (nicely!). Especially get a clear rationale where there seems to be disagreement
- Hold off on listing specific outputs and activities till the essential logic of short and longer-term outcomes is reasonably clear as key pre-conditions for achieving the goal
- Your theory of change will never be perfect. Avoid wasting time worrying too much over wording and specific links. The main aim is to produce something that everyone broadly agrees with that is useful for your aims
- Quality review (aimed at *plausible, feasible, testable*; also *necessary and sufficient*) should be on-going during the ToC process (Taplin and Clark, 2012)
- A summary narrative is an essential part of the ToC process and one key product. It “explains the pathways of change, highlights some of your major assumptions, rationales, and interventions, and presents a compelling case as to how and why your initiative expects to make a difference. The narrative may also contain some information that is additional to what is in your theory, such as your overall vision, the history of how your initiative came to be, and some community context” (Taplin and Clark, 2012). It should be kept to 1-2pp
- A ToC diagram is a useful part of the documentation – these may come in many forms, with guidance of its development provided by van der Laan (2019), but also discussed by Dhillon and Vaca (2018) and Davies (2018) among others
- Taplin and Rasic (2012) recommend that a first meeting should ideally be 3-4 hours, though for a smaller team a full day will be valuable. Where stakeholders are being engaged, they also suggest a minimum of 6-8 people to get diversity of viewpoints, 15 or so being ok
- It’s useful to have a ‘Parking lot’ sheet of paper on the wall to acknowledge and capture issues that might disrupt the flow of the meeting, without being diverted on to them

Participation: many guides speak about the importance of involving people (after Harries et al. (2014), Taplin and Clark (2012); Taplin and Rasic (2012) with added notes):

- Engage a range of people: this may include practitioners, volunteers, managers, services users and external stakeholders. It is not necessary or efficient to involve everyone with an interest in your work; a group of 3-10 people seems to work well
- Is the process in a workshop or by talking to people individually? – workshops are more efficient and tend to be the most common approach. They need to be facilitated so that everyone feels able to contribute, regardless of their position in the organisational hierarchy
- Developing a theory of change can be demanding and people lose focus after a few hours. Spend between half a day and a day on it at most. You can always reconvene the group later, which will allow time for writing-up, reviewing and taking stock
- Useful to split a big group into smaller ones who may move around the room commenting on the logic of different causal pathways once these are firming up
- Bringing in more viewpoints can help to think through all possible causal pathways and thus avoid unintended consequences. For a good example of how unintended consequences can emerge from not considering enough possible causal pathways, see Bloem (2019a,b), discussing how the regulation of conflict minerals in central Africa to reduce conflict may have in fact tragically increased conflict through other causal pathways

Iteration: Most guides emphasise that a complete ToC is not achieved in one meeting, and in fact the ToC is an on-going work in progress. In addition to continuing to develop the logic of the ToC, this is also true because of applying it for different primary reasons through the lifecycle of an intervention.

- “ToC is a living tool” (Learning for Action¹). “It is typical for a theory of change outcome map to be revised several times before it provides a complete and clear picture of your community change effort” (Organizational Research Services, 2004)
- It’s best to create a Theory of Change before you’ve decided how your program will be constructed...but you can also view creating a Theory of Change for an existing service as an opportunity to test the structure and logic of your program – it could lead to service improvements (TasCOSS²)
- A theory of change is an iterative process: as well as sending the draft to the people who attended the workshop, you may find it useful to circulate it more widely for further feedback, for example, to senior managers and partner agencies (Harries et al., 2014)
- A theory of change should be seen as a working document. You can always update it to reflect learning and new situations (Harries et al., 2014)

Monitoring, evaluation and learning (MEL): As a core original rationale for ToC, all guides say something about indicators, learning, and testing the logic on which the ToC is based.

- Ideally, every outcome/precondition should be accompanied by at least one indicator to measure success (USAID OFP, 2016); in practice an intervention may later decide some are more important to spend resources collecting than others (Taplin and Clark, 2012)
- Indicators should be able to address 4 target elements, along the lines of “*How many of who/what will reach what level by when?*”

¹ See <http://learningforaction.com/what-is-a-theory-of-change>

² See <https://www.tascosslibrary.org.au/how-write-theory-change-0>

- The ToC process should work out what outcomes ought to be prioritised for monitoring, and to discuss how in general terms; but it is a task for a smaller group of evaluators to design the detailed measurements, tools, data sources and timeframes for this after a workshop (Taplin and Rasic, 2012)
- Some aspects of clarity of logic in the ToC matter particularly for evaluation, as discussed by Davies (2018)

S3. Annotated bibliography

S3.1 On-line sources and grey literature

<https://www.tascosslibrary.org.au/how-write-theory-change-0>: Good summary on a page from Tasmanian COSS, includes recommendations like writing up on sticky notes, thinking ‘headlines’, need to do as a team. “It’s best to create a Theory of Change before you’ve decided how your program will be constructed: you start with the long-term outcome you want to see and work backwards to work out how it will be achieved. It’s a way of designing a new program...but you can view creating a Theory of Change for an existing service as an opportunity to test the structure and logic of your program – it could lead to service improvements.”

<https://www.theoryofchange.org/what-is-theory-of-change/toc-background/toc-origins/>: provides a brief history – “Weiss (1995) popularized the term “Theory of Change” as a way to describe the set of assumptions that explain both the mini-steps that lead to the long-term goal and the connections between program activities and outcomes that occur at each step of the way. She challenged designers of complex community-based initiatives to be specific about the theories of change guiding their work and suggested that doing so would improve their overall evaluation plans and would strengthen their ability to claim credit for outcomes that were predicted in their theory.”

<https://www.theoryofchange.org/toco-software/>: Theory of Change On-line (TOCO), a tailor made software tool from ActKnowledge for recording the outputs of a ToC workshop.

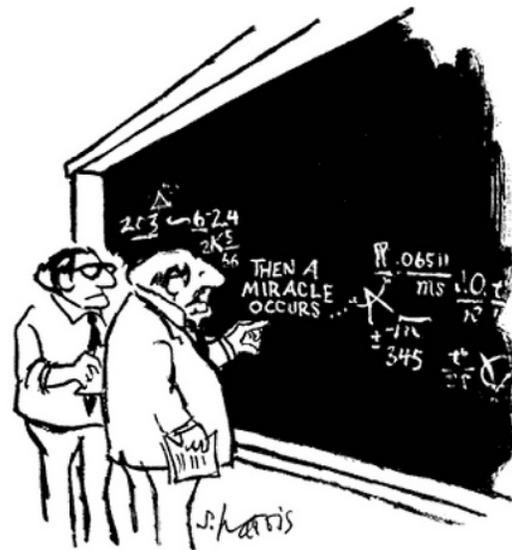
<https://www.theoryofchange.org/what-is-theory-of-change/>: “Theory of Change is essentially a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context. It is focused in particular on mapping out or “filling in” what has been described as the “missing middle” between what a program or change initiative does (its activities or interventions) and how these lead to desired goals being achieved. It does this by first identifying the desired long-term goals and then works back from these to identify all the conditions (outcomes) that must be in place (and how these related to one another causally) for the goals to occur. These are all mapped out in an Outcomes Framework.

“The Outcomes Framework then provides the basis for identifying what type of activity or intervention will lead to the outcomes identified as preconditions for achieving the long-term goal. Through this approach the precise link between activities and the achievement of the long-term goals are more fully understood. This leads to better planning, in that activities are linked to a detailed understanding of how change actually happens. It also leads to better evaluation, as it is possible to measure progress towards the achievement of longer-term goals that goes beyond the identification of program outputs.”

Essentially clarifying step 2 in this famous cartoon (credit: Sidney Harris)...

<https://www.theoryofchange.org/what-is-theory-of-change/faqs/>: “A Theory of Change is a specific and measurable description of a social change initiative that forms the basis for strategic planning, on-going decision-making and evaluation.” The term is also applied to the methodology used to create a Theory of Change.

“A Theory of Change provides a roadmap to get you from here to there. If it is good and complete, your roadmap can be read by others and show that you know how to chart your course. This is helpful with constituents, staff, partners



“I think you should be more explicit here in step two.”

organizations and funders. More importantly, if it is good and complete, you have the best chance of making the change in the world you set out to make and of demonstrating your successes and your lessons along the way.”
“developing a theory usually implies getting numerous stakeholders to the table, and funders have learned that initiatives that the community or key stakeholders do not support are not likely to produce outcomes”

When to stop? “Sometimes, it is necessary to have a very “broad” theory: that is, account for every precondition for your long-term goal, and sometimes it’s important to have a “deep” theory: work a pathway that your initiative will be working on all the back to the very first step needed. Other times, e.g. for evaluation, you may only need to model what you are doing in a summary form. That will allow evaluation of key outcomes, but not provide enough detail for programmatic decision-making. How far to go is always a prime consideration when undertaking theory construction.”

<https://www.theoryofchange.org/library/publications/> - multiple useful sources

<https://www.theoryofchange.org/library/toc-examples/> for some specific examples in multiple languages, though mostly 2013 or earlier.

<https://www.theoryofchange.org/library/presentations/> - various presentations

[https://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/2011 - Montague-Clouse - Theory of Change Basics.pdf](https://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/2011_Montague-Clouse_Theory_of_Change_Basics.pdf) - e.g. an early useful short primer (Montague-Clouse and Taplin, 2011) emphasises ToC is both a process and a product; emphasises clear vision, causal pathways, indicators of success – specifically: “ToC is a planning process created specifically for community change efforts. ToC is not a general theory of how change happens; rather, the theory is specific to your effort. ToC is useful for setting goals, strategic planning, and program evaluation. ToC is a process and a product – a structured thinking process that allows groups to turn their theories about what needs to change and why [and how] into a ‘causal pathway’ and a product that illustrates the results of the ToC process.”

Definition: a causal pathway is “a step-by-step, backwards mapping process through which a group determines all the preconditions necessary to reach an ultimate vision.”

https://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/TheoryofChangeFundamentalsWebinarJune2013.pdf: Colby and Collins (2013) identify a series of Red Flags regarding ToC quality/failings.

Earlier source Clark and Anderson (2004): “Theories of Change link outcomes and activities to explain HOW and WHY the desired change is expected to come about. They require justifications at each step – you have to articulate the hypothesis about why something will cause something else (it’s a causal model, remember!). They also require identifying indicators, because you need to know HOW WELL a precondition needs to be met in order to get to the next step. Theories of Change are best when you need to design a complex initiative and want to have a rigorous plan for success; evaluate appropriate outcomes at the right time and the right sequence; and explain why an initiative worked or did not, and what exactly went wrong.”

“Undertake a TOC process that is a manageable scope for your organization. Make sure you get stakeholders to articulate what has to happen IN ORDER for goals to be met and their assumptions about why.... Then, summarize your theory in ways that serve the purposes of your different constituents, such as residents, funders, Boards, etc. This may be in some form of logic model, but if this is a summary of an underlying theory, it will be a much more powerful tool.”

Vogel (2012) for DfID reviews the use of ‘Theory of Change’ in international development. “The description of a sequence of events that is expected to lead to a particular desired outcome” quoting Rick Davies.

<https://www.dgmt-growingconfidence.co.za/content/why-theory-change-important>: Brief explanation in schools development context.

<https://usaidealarninglab.org/lab-notes/what-thing-called-theory-change>: “Not only does the ToC show the outcomes/preconditions, it also outlines the causal linkages in an intervention between the shorter-term, intermediate, and longer-term outcomes. The identified changes are mapped—as the “outcomes pathway”—showing each outcome in logical relationship to all the others, as well as chronological flow. Ideally, every outcome/precondition should be accompanied by at least one indicator to measure success.”

https://assets.publishing.service.gov.uk/media/57a08a66ed915d622c000703/Appendix_3_ToC_Examples.pdf: examples from DfID –meeting expectations here to varying degrees but all showing basic elements.

<https://www.thinknpc.org/wp-content/uploads/2018/07/Creating-your-theory-of-change1.pdf> Excellent full documentation of ToC process (from New Philanthropy Capital) (Harries et al., 2014), including considering enablers (they distinguish internal and external enablers, the former being more under project control). See Box 1 (p.8) for key components as outputs, p.9 for “factors affecting your approach” and Box 3 (p.10) for tips incl not being too complex & Box 3: Tips on the theory of change process. Also good chapter on representations from simple Planning Triangle© and logic models, where causality is implicit to outcomes chains which encourage more thinking about how and why change occurs (pp.11ff, esp p.15). Highlights importance of adding a narrative, p.18, suggesting elements of context, assumptions, evidence and internal/external enablers. Discusses measurement (p.22) through 4 pillars: map ToC, prioritise what you measure, choose level of evidence, select sources and tools; and using ToC to improve (p.26).

p.6: “A theory of change is a tool to help you describe the need you are trying to address, the changes you want to make (your outcomes), and what you plan to do (your activities)”, See Box.

CLINKS/NPC (2014) (built from but extends aspects of Harries et al. (2014)) also provides a workshop template with timings (Appendix 4, p.32-33), and an example of providing evidence (Appendix 5, p.34ff).

<https://data2.unhcr.org/en/documents/download/66489>: Nice visual summary (from Lebanon office), including example diagrams; mentions risks as barrier and need to think about mitigation plans for all of them. What is a Theory of Change? “A representation of how and why a complex change process will succeed given specific assumptions; a blueprint of all the building blocks needed to achieve the longer-term goals of a particular intervention.” (slide 3)

<http://learningforaction.com/what-is-a-theory-of-change> (US NGO): “ToC is a living tool”. Explicit about stages of articulating the ToC, measuring/planning/ implementation, and continuous improvement. [Lots of good stuff but distinguish a ‘program model’ that sounds a bit too much based on what you’re already doing and improving it, maybe; though they do also caution against just mirroring what you are doing!]

<https://learningforsustainability.net/theory-of-change/>: multiple further sources here (2019)

van der Laan (2019) provides a simple guide to putting together the visualisation of a ToC, though these are very varied (see Primer, Appendix 3).

<http://fosonline.org/>: the Foundations of Success website provides further material, mostly labelled as the Results Chain approach (see Margoluis et al., 2013) which is closely aligned to the ToC philosophy

and essentially provides the causal logic component of ToC – see <http://fosonline.org/library/using-results-chains/> and a version for USAID at https://usaidlearninglab.org/sites/default/files/resource/files/biodiversity_howtguide2_508.pdf

<https://www.aecf.org/resources/theory-of-change/>: Another earlier example of how-to from the The Annie E. Casey Foundation in the US (Organizational Research Services, 2004). Good call to arms: “Some stakeholders may react in frustration to the theory of change development process because they view it as “taking time to think” which takes time away from “doing the work.” However, the thinking involved in building a theory of change does not in any way preclude doing the work ... it is almost impossible to determine whether progress has occurred in a community change initiative if you have not explicitly identified the steps to progress. Communities have too much at stake to engage in work without a clearly defined purpose.”

Test and share and revise: “It is typical for a theory of change outcome map to be revised several times before it provides a complete and clear picture of your community change effort.” P.23

<https://www.betterevaluation.org/en/node/5280>: Actually from BetterEvaluation (DFAT and partners initiative) about evaluation, but emphasises that a ToC is the first step to this. Also mentions unintended results, positive or negative, and longterm durability (sustainability).

<https://mande.co.uk> – Rick Davies’ monitoring and evaluation website – provides other useful material, e.g. at <https://mande.co.uk/2018/lists/participatory-toc-development/participatory-approaches-to-the-development-of-a-theory-of-change-beginnings-of-a-list/>

S3.2 Some GEF agency-related sources

World Bank: through World Bank Group, WB-DIME Wiki

https://dimewiki.worldbank.org/wiki/Theory_of_Change - ToC built in 6 steps, based on *theoryofchange.org* site, also drawing on Poverty Action Lab 7 steps (see

Table 1 above for these).

World Bank Independent Evaluation Group blog (Vaessen, 2016): “Notwithstanding the differences between [intervention design and evaluation], the two [processes] are closely linked. In an ideal world, evaluators build on the espoused theories of development practitioners (and related stakeholders), which are articulated during the intervention design phase and are informed by past experience and existing knowledge about what works and under what circumstances. The circle of knowledge accumulation is complete when evaluations feed into the knowledge repositories that inform intervention design. Unfortunately and unsurprisingly, intervention realities are often quite different from this ideal: intervention design tends to be insufficiently informed by existing knowledge repositories, program theories are insufficiently articulated, and evaluators have to do a lot of digging to reconstruct the causal logic underpinning interventions.”

World Bank provided additional in-house documents which showed compatible ToC steps, and ‘what makes a good ToC’ (openness, participatory, clarity, plausibility, practicality); and a set of ‘common challenges in formulating a ToC’:

- disconnect between interventions and desired outcomes
- components don't cover all aspects of the ToC to achieve the PDO
- ToC is not plausible – not based on evidence
- critical assumptions are not sufficiently addressed
- ToC is too complex to understand the key messages – avoid too many arrows

FAO: MAFAP (Monitoring and Analysing Food and Agricultural Policies) II Theory of Change <http://www.fao.org/3/a-i4244e.pdf> is good example of assumptions, diagram and actions. Perhaps not explicit barriers and enablers, though some in the assumptions. And for food systems approach <http://www.fao.org/3/ca2079en/CA2079EN.pdf>, p.5.

UN Environment: UN Environment Evaluation Office (2017) *Use of Theory of Change in Project Evaluations*. “A Theory of Change (TOC) of a project intervention describes the processes of change by outlining the causal pathways from outputs (goods and services delivered by the project) through direct outcomes (changes resulting from the use of outputs by key stakeholders) through other ‘intermediate states’ towards impact, in UN Environment’s case - long term changes that deliver (or lead to) environmental benefits and improved human living conditions.” “...best presented as a narrative description that is accompanied by a diagram”. Outlines key requirements of ToC – including comprehensive, plausible, complete and measurable (p.4). And then use in evaluation. NB Talks of “ToC at design” and “ToC at evaluation” where the latter may be updated to incorporate any (formalised) project change during implementation.

Some example diagrams at

<https://wedocs.unep.org/bitstream/handle/20.500.11822/7138/TOC%20Diagrams.pdf?sequence=1&isAllowed=y>

Description of a ToC (not the detailed process): <https://www.unenvironment.org/es/node/16893>

UNDG (Latin America) – good summary of ToC for UN:

<https://undg.org/wp-content/uploads/2017/02/16.-2016-10-18-Guidance-on-ToC-PSG-LAC.pdf> - “At every key point in the ToC, ask the question “why do I think change will happen?”” Some more examples, and a lit that is mostly covered here now. Simple, iterative diagram (p.2; and to right), surrounding text emphasises causality.



See also UN Development Group (2017) – this provides an

underpinning UNDG guide to ToC which is compatible with other sources for intent, but slightly oversimplifies the steps to 4 (focus, change analysis, make assumptions and risks explicit, identify partners and key actors).

UNDP – articulates ToC at highest level in their current strategic plan (see Annex 4). Also see UNDP Effectiveness Group (2016) section 3 for program/project discussion.

See USAID OFP (2016) – good but mostly compatible in process.

S3.3 Peer reviewed literature

Maru et al. (2018b): Valuable recent review of ToC in agricultural R4D special issue. “...ToC is yet to be appropriately mainstreamed into development by donors, researchers and practitioners. We carried out a literature review, triangulated by interviews with 26 experts in African and Asian food security, consisting of researchers, advisors to programs, and donors. Although 17 (65%) of the experts had adopted ToC, their responses and the literature revealed four challenges to mainstreaming: (i) different interpretations of ToC; (ii) incoherence in relationships among the constituent concepts of ToC; (iii) confused relationships between ToC and project “logframes”; and (iv) limitations in necessary skills and commitment for enacting ToC. A case study of the evolution of a ToC in a West African AR4D project over 4 years which exemplified these challenges is presented. Five recommendations arise to assist the mainstreaming of ToC: (i) select a type of ToC suited to the relative complexity of the problem and focal system of interest; (ii) state a theory or hypotheses to be tested as the intervention progresses; (iii) articulate the relationship between the ToC and parallel approaches (e.g. logframe); (iv) accept that a ToC is a process, and (v) allow time and resources for implementers and researchers to develop ToC thinking within projects.”

Maru et al. (2018a): From the same special issue, focuses on actual impact pathways for R4D in development agriculture. “...underpinning Theories of Change... four emerging impact pathways focused on (1) market linkage, (2) social capital, (3) institutional change or (4) innovation capacity as critical mediating factors.”

IEO (2018): describes a GEF ToC for transformation. “For this evaluation, transformational interventions are defined as engagements that help achieve deep, systemic, and sustainable change with large-scale impact in an area of global environmental concern. The underlying theory of change is that by strategically identifying and selecting projects that address environmental challenges of global concern and are specifically designed to support fundamental changes in—i.e., “flip”—key economic markets or systems, GEF interventions will be more likely to cause a large-scale and sustainable impact, subject to the quality of implementation/execution and supportive contextual conditions.”

Cowie et al. (2018): module D (of 5): Describes a ToC for LDN. “Achieving Neutrality presents the theory of change (logic model) articulating the impact pathway for LDN...”

Boshoven et al. (2018): A general ToC for achieving biodiversity conservation. “...Key findings from the theory of change include: (a) the role of implementing partners evolved and expanded over time, from helping to establish individual enterprises to building alliances and business partnerships between communities and the private sector; (b) it takes longer than the typical three- to five-year donor funding cycle to put in place the multiple enabling conditions that are needed for the sustainability of enterprises and conservation outcomes; (c) typically only a small percentage of community members receive direct cash benefits, however community organizations can distribute enterprise benefits in the form of community services; (d) different stakeholders are motivated by different benefits, and, therefore, incentivizing changes in attitudes and behavior towards conservation is not straightforward; and (e) in multiple sites, partners had verified improved biodiversity conservation results in part due to their conservation enterprises....”

Davies (2018): Provides a detailed analysis of how different forms of ToC impact on their subsequent use for evaluation, identifying “...six structural problems [that] are described along with their consequences for

evaluation. The paper then outlines a range of different ways of addressing these problems..." The paper provides many examples in its overview.

Thornton et al. (2017): Important description of how to use ToC to manage constrained flexibility in project delivery. "...a monitoring, evaluation and learning system that combines indicators of progress in research along with indicators of change aimed at understanding the factors that enable or inhibit the behavioural changes that can bring about development impacts...."

Tengberg and Valencia (2017): STAP doc noting ToC for scaling and transformation. "...understand how higher-level processes along the theory of change can influence agent behaviour at lower levels through scaling out, scaling up, nesting, and institutionalization..."

Butler et al. (2016): An example of ToC to support mainstreaming. "Mainstreaming climate change and future uncertainty into rural development planning in developing countries... describes a 4 year governance experiment in Nusa Tenggara Barat Province, Indonesia, which applied adaptive co-management (ACM) as a governance approach to 'prime' a transformation to adaptation pathways-based development planning. The project's Theory of Change (ToC) consisted of three causally-linked phases which mirrored the evolutionary stages of ACM: priming stakeholders, enabling policies and programs, and implementing adaptation."

Rogers and Coates (2015): ToC to support durability in Food for Peace projects with USAID: "Awardees should base their sustainability plans and related exit strategies on clearly articulated theories of change. They need to assess carefully and realistically the assumptions underlying sustainability plans and reassess them continually to account for changes in the external environment.... Sustainability plans should clearly articulate the sustainability [durability] theory of change as part of project design."

Costanza (2013): Much wider use to theorise social change. "...a true theory of social change is ...what Elinor Ostrom was reaching for in her target article (Ostrom 2013). Such a theory must, Lin believed, be grounded in an expanded evolutionary paradigm that is capable of explaining not only how organisms evolve and change, but also how rules, norms, institutions, and cultures evolve and change." [See also Gallopín (2006)]

Larrosa et al. (2016): Example of barriers to success relevant to ToC in conservation: "Human reactions to conservation interventions can trigger unintended feedbacks resulting in poor conservation outcomes. Understanding unintended feedbacks is a necessary first step toward the diagnosis and solution of environmental problems, but existing anecdotal evidence cannot support decision-making. Using conservation examples, we present a conceptual framework and typology of unintended feedbacks based on a social-ecological systems (SES) approach. Three types of causal mechanisms for unintended feedbacks are distinguished: (1) flow unintended feedbacks when pre-existing feedbacks are enhanced or dampened; (2) deletion unintended feedbacks; and (3) addition unintended feedbacks when interventions, respectively, remove or add actors or links to the SES structure."

Loiseau et al. (2016): An example of ToC linked to MEL in volunteerism: "...a Theory of Change framework, appropriately deployed in the design and conduct of short-term international volunteerism, could help improve volunteer efforts by identifying problems and clearly defining goals, designing and implementing effective strategies, and evaluating the real impacts these have on identified concerns."

Higgins et al. (2018): An example of ToC related to land tenure, identifying core effects and relating them to key contextual factors: "...the multiple effects of increased land tenure security on rural people through a systematic review...guided by a theory of change that reflects expected effects from the main land tenure security-related activities. Based on the analysis of 59 robust studies, the paper finds strong evidence for positive effects of land tenure security on productive and environmentally-beneficial agricultural investments as well as on female empowerment, but a lack of support for links with productivity, access to credit, and income. Key contextual factors that shape the validity of expected causal chains are also identified and relate to the potential for discrimination and

elite capture, which can affect intervention implementation and enforcement; historical experiences with land ownership, which can shape perceptions of current land tenure security, regardless of the actual level; and the characteristics of local lending institutions, which can influence intended effects on credit access..."

Wicander and Coad (2018): Builds on Wicander and Coad (2015) to review the success of applying a ToC regarding substituting new livelihoods for illegal wildlife harvesting, showing some successes but also noting failures of implicit assumptions in that "...many projects are funded through small, short-term grants and struggle to meet their objectives with the available time, funding and capacity. Given these constraints, few projects monitor their outcomes and impacts. Projects also seldom implement conditionalities and sanctions, which may lead to the alternatives offered becoming additional rather than substitutional activities." Biggs et al. (2017) describe a related ToC, which has also been extensively field-tested with projects in East and Southern Africa through the "First Line of Defence" initiative (cf. documents on it at <https://www.iucn.org/regions/eastern-and-southern-africa/our-work/conservation-areas-and-species/local-communities-first-line-defence-against-illegal-wildlife-trade-flod>).

Maini et al. (2018): Discusses the impact of choices about stakeholder engagement in a "complex intervention aiming to improve government payments to health workers in the Democratic Republic of Congo. Lessons learnt include: the need for the ToC to understand how the intervention produces effects on the wider system and having broad stakeholder engagement at the outset to maximise chances of the intervention's success and ensure ownership. Power relationships between stakeholders may also affect the ToC discourse but can be minimised by having an independent facilitator."

Rehfuess et al. (2018): Developing theory of ToC through a classification in terms of approaches: "The taxonomy distinguishes 3 approaches (a priori, staged, and iterative) and 2 types (systems-based and process-orientated) of logic models. An a priori logic model is specified at the start of the systematic review/HTA and remains unchanged. With a staged logic model, the reviewer prespecifies several points, at which major data inputs require a subsequent version. An iterative logic model is continuously modified throughout the systematic review/HTA process. System-based logic models describe the system, in which the interaction between participants, intervention, and context takes place; process-orientated models display the causal pathways leading from the intervention to multiple outcomes."

White (2018): Using ToC to structure systematic reviews: "...address not just the question of what works, but also how, where, for whom and at what cost? A unifying framework for such an approach is the theory of change. This paper lays out an approach for using such a theory-based approach to systematic reviews, discussing issues which arise in mixed-methods causal chain analysis. I illustrate the funnel of attrition which is a heuristic device to understand why effect sizes are lower at the higher reaches of the causal chain, including why participation is less than usually expected. Examples are given from the international development sector."

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