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## **THEORY OF CHANGE PRIMER**

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***A STAP document***

**December 2019**

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### Foreword

This document provides a synthesis of guidance specifically aimed at carrying out Theory of Change processes in a GEF context, as part of a growing suite of STAP documents designed to support the design of interventions within GEF's goal to apply leading practices to deliver transformational change. Theory of Change interacts with many other elements of project and program design, which this document is not intended to replicate, so these interactions are only discussed briefly in terms of their implications for ToC, and are often cross-referenced to other STAP, GEF or external sources for more details.

In drawing up this primer, STAP spoke with diverse practitioners in the GEF family, whose inputs were greatly appreciated; a wide range of sources, on-line and in the peer-reviewed literature, were also reviewed, more details about which can be found in the companion Supplement to this Primer (a short literature review and annotated bibliography)<sup>1</sup>. As one correspondent commented, *"ToC is challenging as it requires you to deconstruct your assumptions and the mini-outcomes towards goal achievement in a much more detailed way. It takes a lot of practice to be able to use the tool/process in a comprehensive and intelligent way."* This is very true, but as The Annie E. Casey Foundation says bluntly, *"Communities have too much at stake to engage in work without a clearly defined purpose."* This primer aims to structure the complexity of ToC so that significant improvement in outcomes can be achieved for as little pain as possible.

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<sup>1</sup> See <http://stapgef.org/theory-change-primer>

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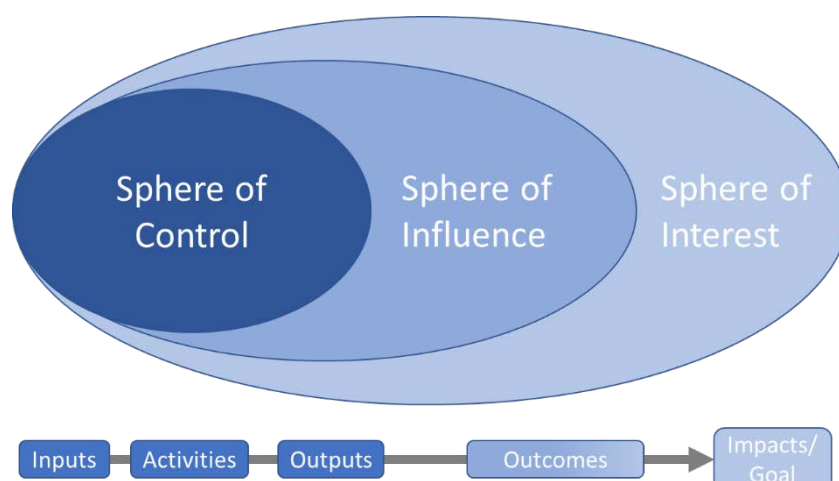
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## Glossary

Some terms are used in subtly different ways in different Theory of Change guides. There is no absolute standard of right and wrong, but here they are used consistently as follows:

- **Goal:** the impact in society and the environment that an intervention means to effect, at least partly described in terms of global environmental benefits in the GEF context, which GEF would aim to ensure are scaled and enduring.
- **Intervention:** used as a general term to cover program and project level activities enabled by GEF co-investments and entrained resources
- **Outputs:** the immediate results of the activities of an intervention, which are essentially within the sphere of control of the intervention to deliver (cf. Figure 1)
- **Outcomes:** flow-on effects outside the intervention expected as a result of the outputs interacting with other things happening in the wider world; these may be short to long-term, becoming decreasingly within the sphere of influence of the intervention (cf. Figure 1) (also described as *pre-conditions* for achieving the goal or impact in some guides)
- **Causal pathway:** a backwards mapping from an intervention goal through all the long and short-term outcomes to the outputs needed to achieve it, identifying a logic arrangement of *causal links* between these (also called an *impact pathway*, *outcomes chain* or *solution tree*)
- **Program, project:** these follow GEF usage, meaning that a program will be a collection of related projects, where the projects are generally at individual country level, and the program increasingly will not only coordinate the development of these 'child' projects but also take an integrated view across them, to enable enduring, transformative impact
- **Activities:** this is a catch-all term for the various specific actions taken in the intervention that lead to its outputs – at the program level this includes the development and coordination of its child projects as well as pursuing additional program level actions such as knowledge management or regional and value chain engagement
- **Assumptions:** these appear in various places in a ToC but principally refer to *beliefs that are accepted as true or taken for granted* in defining the causal links in the causal pathway. These are also sometimes called 'pre-conditions' (referring specifically to assumptions about things that must be in place for the link to work, such as good governance or education levels) or 'hypotheses' (where the assumption is plausible but unproven). More generally, assumptions may also involve complementary activities by other actors, and internal and external risks, opportunities, barriers and enablers as discussed in the main text here. Assumptions are elicited through the ToC process.

Figure 1: A widely reproduced depiction of the relationship between the goal (or impact), outcomes, outputs and activities of an intervention, and its level of control over them (redrawn for here). The ToC process works back from the right to the left.



## 1. A brief overview of ToC

Theory of Change (ToC) methodology is widely used in development activities and increasingly applied in other walks of life. The concept was first popularised in the 1990s<sup>2</sup>, and has gradually become more widespread and sophisticated since then<sup>3</sup>. There are numerous sources available on ToC processes<sup>4</sup>, most notably consolidated through the *theoryofchange.org* website<sup>5</sup>. There is also a peer-reviewed scientific literature that more formally assesses the value and use of ToCs<sup>6</sup>.

This guide consolidates sources of ToC advice for a GEF context, following the *Resilience, Adaptation Pathways and Transformation Approach* (RAPTA)<sup>7</sup> in emphasising a systems-based approach, to have the best chance of contributing to interventions that meet GEF's goals of being *transformative* and *durable*. Most GEF agencies explicitly require or recommend some form of ToC for their interventions, though they vary as to the use of in-house or generic guides; this primer aims to be compatible with these guides<sup>8</sup>, but consolidate their advice. Section 1 outlines some background to ToC approaches, which Section 2 implements in the form of guidance.

### 1.1 What is a Theory of Change?

There is still diversity in precisely how a ToC is defined, but here it is taken to mean the *process* and *product* of developing an *explicit* account of *how and why* an **intervention** is expected to achieve its intended **outcomes and impact goal**, based on outlining a set of key **causal pathways** arising from the **activities** and **outputs** of the intervention (whether at **program** or **project** level) and the **assumptions** underlying these causal connections. The account will usually include a *ToC diagram* to help summarise the logic through these causal pathways, but also a *narrative* that explains the *context*, what the logic is *based* on, and how success will be *measured*. (For **bold** terms, see Glossary, p.5.)

The essential distinctive elements of ToC compared to other approaches are to:

- identify specific causal links among outputs and outcomes, with evidence
- describe the causal pathways by which interventions are expected to have effect, and identify indicators to test their validity over time
- be explicit about assumptions about these causal pathways, which includes an analysis of barriers and enablers as well as indicators of success.

Despite widespread information, there is still confusion about the distinction between a ToC and project descriptions such as log-frames<sup>9</sup> – the former establish the logic as to why and how an intervention is expected to achieve the intended change, whereas the latter more simply describe

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<sup>2</sup> e.g. see Weiss (1995)

<sup>3</sup> For a good short review, see Harries et al. (2014)

<sup>4</sup> Key useful resources, though including some divergence in detail: CLINKS/NPC (2014); Colby and Collins (2013); Harries et al. (2014); Montague-Clouse and Taplin (2011); O'Connell et al. (2019); Organizational Research Services (2004); Taplin and Clark (2012); Taplin and Rasic (2012); USAID OFP (2016); and the *theoryofchange.org* website (through which some of these can be accessed)

<sup>5</sup> See also <https://learningforsustainability.net/theory-of-change/>; <http://fosonline.org/library/using-results-chains/> for other aggregator sites with more of a focus on sustainable environments

<sup>6</sup> For some useful recent commentaries, see Dhillon and Vaca (2018); Maru et al. (2018); Thornton et al. (2017); Davies (2018) (with regard to evaluation especially); Oberlack et al. (2019) (for theoretical need)

<sup>7</sup> O'Connell et al. (2016, 2019) – RAPTA provides an integrated set of approaches to designing transformative interventions and shows where ToC fits among other tools to this end

<sup>8</sup> E.g. UN Development Group (2017); UN Environment Evaluation Office (2017); UNDP Effectiveness Group (2016); World Bank Group, WB-DIME Wiki; some other unpublished material was kindly made available

<sup>9</sup> Clearly explained by Clark and Anderson (2004). For more detail, see FAQs, Appendix 1, p.16

the components of such an intervention. There also remains confusion about what makes a good ToC, partly related to the following different reasons for doing one; this guide seeks to summarise current leading practice in this regard.

## 1.2 Why do a Theory of Change?

There are multiple reasons for carrying out a ToC, which can be summarised into four areas<sup>10</sup>:

- **Design** – to **make projects more effective**, partly by bringing in diverse sources of understanding and by opening up ‘black boxes’ in thinking through explicit causal pathways, to be more likely to deliver enduring and transformative impact efficiently
- **Engage** – to **help teams work together** to achieve a shared understanding of an intervention; and to help to engage and develop ownership with partners and stakeholders (including those important for durability and scaling)
- **Communicate** – to **quickly communicate** a project’s aims and set of activities, internally and externally, as well as to highlight the process of change
- **Measure** – to **help teams learn** from data collection on gaps in the existing evidence base, to allow adaptive adjustments of an intervention during its lifetime, and to ensure indicators of success are in place for later evaluation (the reason most highlighted by evaluation offices<sup>11</sup>)

What balance of multiple purposes is important in a particular ToC exercise should determine what emphasis is placed on different aspects of the ToC (e.g. whether to prioritise partner engagement or causal understanding), though all aspects are important in the use of ToC across the lifetime of an intervention (see Figure 2 below). For GEF, a good ToC is foundational to having confidence that an intervention is likely to have durable and transformative impact<sup>12</sup>, whether at the project or program level. This is particularly important to GEF given that most of its interventions tackle complex social-ecological problems involving multi-level governance and will fail if they are based on over-simplistic or disciplinarily-narrow conceptual models<sup>13</sup>.

Monitoring of interventions is linked to ToC for various reasons. It is required internally to determine progress (*has this outcome been achieved to a level that it will cause the expected flow-on effect?*) and externally for evaluation (*is this investment achieving its promised aims?*). However, an additional key reason to link ToC and monitoring is to test whether changes in the short-term outcomes really lead to the intended long-term changes (sometimes called ‘proximate’ and ‘ultimate’ outcomes, usually measured by ‘activity-based’ and ‘outcome-oriented’ indicators respectively). Detecting change in the ultimate outcomes and the contribution of the intervention to these outcomes is (usually) harder and slower than for shorter-term ones, so confirming the proposed causal logic of the ToC enables early evaluation of progress to be more focused confidently on indicators of the short-term outcomes, and thus occur more quickly. For example, if you can be sure that a specified improvement in land management knowledge coupled with a certain level of land tenure security leads to a known reduction in land degradation outcomes, then measuring the proximate (activity) indicators of farmer knowledge and tenure becomes a reliable predictor of the outcome indicator of this ultimate global benefit. If well-structured, this is a powerful contribution to learning in the intervention. Where presumed links and assumptions turn out to be untrue (or only partial), this also allows a structured approach to adapting the way the intervention is delivered

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<sup>10</sup> E.g. Harries et al. (2014); UN Development Group (2017). See also Appendix 2

<sup>11</sup> E.g. GEF IEO; World Bank IEG (Vaessen, 2016); UN Environment Evaluation Office (2017)

<sup>12</sup> See GEF STAP (2019); interesting perspectives for ToC aimed specifically at transformation may be found at Reos Partners (2018, pp.2-5) and the SDGs Transformations Forum (<https://www.transformationsforum.net/>)

<sup>13</sup> Davies (2018) discusses how ‘complicated’ as opposed to ‘complex’ interventions affect ToC logics

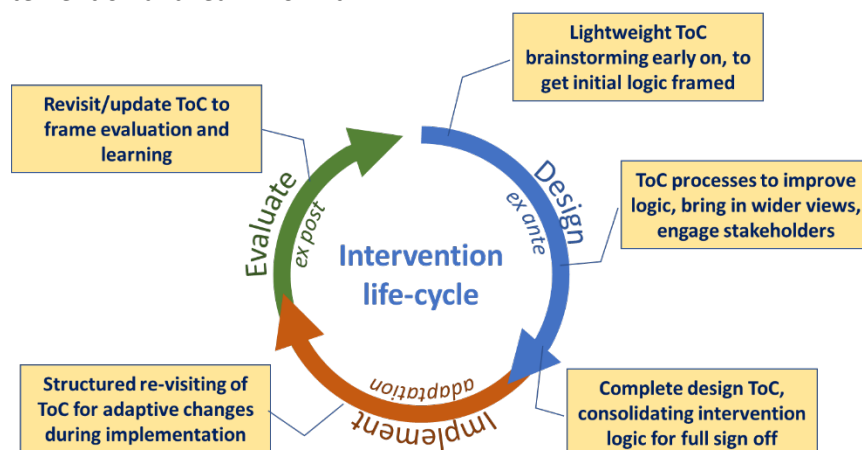
before it fails. This is important for GEF, that seeks to have an adaptive but accountable level of flexibility in its program implementation.

### 1.3 When to do a Theory of Change exercise?

For large interventions, ToC should help design thinking improve iteratively; repeated ToC exercises can improve the success of the intervention in different ways at different stages in the design-implement-evaluate lifecycle. ToC is not an add-on but an integral contributor through the whole cycle of an intervention<sup>14</sup>. These multiple uses should be designed to provide maximum benefit for effort. Key stages at which ToC exercises can be important, as shown in Figure 2, are:

- Early design – core team develop the basic logic to frame the intervention
- Continuing design – team brings in potential partners and other stakeholders, to develop ownership and to challenge and extend team’s logic, detailing assumptions about causal links as well as internal and external risks, especially in aspects that relate to durability and transformational scaling of the intervention
- Late design – team ensures indicators and monitoring are defined and completes ToC as part of signed-off proposal
- During implementation – at key review points, the (extended) team reflects on short and long-term indicators (see above) and determines whether ToC requires any modification (probably with funding stakeholders)
- At and after completion – team and independent evaluators reflect on ToC and indicator data to evaluate intervention and learn from it

Figure 2: Key stages of an intervention lifecycle when ToC processes may be useful. The consequences are reflected in Table 1 below.



### 1.4 How to make a Theory of Change?

There is considerable consistency about how to develop a ToC, both in sources used by GEF agencies and in the wider literature:

*All ToC processes* include: being clear about goals or intended impacts; working back from these to intervention outputs; being explicit about causal pathways and assumptions; testing the logic of these and associated risks; identifying what is within the intervention’s scope; defining indicators of success; and, reporting on the ToC.

*Most ToC sources* also discuss the value of ToC to engage intervention partners and stakeholders, and the need to be iterative in ToC development and hence not too perfectionist. Many sources provide tips about helping the steps in these ToC processes work well.

<sup>14</sup> See RAPTA (O’Connell et al., 2019) for more on the interactions between ToC and other elements of design, implementation and evaluation



*Recent literature* also emphasises the value of the ToC in reviewing and learning about the intervention's progress, and as a means of allowing flexibility in implementation that is adaptive in approach but still focused on achieving agreed goals (important to GEF's oversight function).

*The mode of a ToC exercise* can be a small group brainstorm, small workshop or larger stakeholder engagement, according to purpose; it can be spread in steps over multiple meetings or an initial iteration may be largely achieved in a single (e.g. half day to full day) workshop with write up afterwards. These modes interact with the purposes noted above and the resulting number of people involved, and should be chosen appropriately.

The implementation of these elements is reflected in the next section of this guide.

The *science* of a good ToC is to ensure causal pathways are likely to be valid, as well as necessary and sufficient; the *art* of a good ToC is to use the participants' collective wisdom to select a manageable but useful number of key pathways that probably entrain good results across other aspects anyway; and the *culture* of a good ToC is to create engagement, ownership, critical reflection and learning among all key actors.

### 1.5 Project or program level Theory of Change?

'Intervention' is used to include programs and projects for most of this guide, as most aspects of ToCs are relevant to both; but some different issues are emphasised in the lifecycles of programs compared to projects<sup>15</sup>:

The *program* design phase should articulate a ToC of typical causal pathways for the general goal of the program, such that these provide a consistent approach that is then tailored to the context of individual projects in the program. For GEF, programs (especially Impact Programs) will also emphasise causal pathways that enable scaled, transformative impacts<sup>16</sup> beyond the scope of individual projects, for example combining outputs and outcomes across multiple countries to change policies or practices within a whole region or global value chain. The program ToC should also probably contain some causal pathways related to managing and coordinating the subsidiary projects, such as knowledge management systems to enhance cross learning. At the program level, stakeholder engagement and partnerships are likely to revolve around whole value chains, or multi-country institutions, and adaptive learning about progress may be fed directly into other child projects. Inputs to and outputs from the ToC will be embedded throughout the program design document (Program Framework Document [PFD] for GEF).

*Project-level* ToCs at the design phase will draw on the program level logic for some consistency but must tailor this to the context of the individual projects – for example a program ToC may emphasise the need for good governance, but then the implication of this for a project will depend on current governance characteristics of its focal country, sector or tele-connected value chain. Projects should explore context-specific barriers, enablers and risks that go beyond the more generic program detail. Project ToCs will become much more specific about outputs, stakeholder engagement, and partners, and draw on more local evidence for assumptions where possible. Complementary interventions by others will be explicitly identified. Once again, input to and outputs from the ToC will be embedded throughout the project design document (Project Identification Form [PIF] and subsequent project design for GEF).

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<sup>15</sup> Usefully outlined in section 3 of UNDP Effectiveness Group (2016)

<sup>16</sup> See sources in footnote 12, also Tengberg and Valencia (2017), Toth (2018), and GEF IEO (2018)

## 1.6 What to do with a Theory of Change after the design phase?

Of course, the primary reason for a ToC is to quality assure the design of an intervention in contexts that are usually complex and multi-causal, where a well-structured approach can help avoid simplistic and ultimately wasteful (or even damaging<sup>17</sup>) investments. Aside from being a requirement of funders, the time investment should be seen as greatly enhancing interventions.

However, GEF should capture other benefits from the ToC under the purposes noted above, by:

- Using the ToC process to keep stakeholders engaged (especially as policy and other representative stakeholders change, as is often frustratingly the case), through simple communications based on clear causal pathways, and in reviews of whether the circumstances justifying the ToC logic have changed
- Using the ToC product to help define and analyse monitoring data that contributes to continuous learning through the intervention: within the project team this can provide a powerful sense of feedback and knowledge management
- Using ToC reviews to ensure that ‘flexibility’ in intervention (important to adjust to changing circumstances and information) is constrained to genuine adaptability justified by thoughtful amendments to the ToC consistent with agreed goals, rather than arbitrary or politically-motivated deviations
- Using the ToC product to frame *ex post* evaluation – one of the main original purposes of ToC, especially important for accountability to investors, and to aid learning that informs subsequent interventions.

Thus a ToC is integral to guiding implementation and longer-term scaling of impact, not a tick-box.

## 1.7 How to assess a Theory of Change?

ToCs will mostly be assessed by the intervention team themselves, by funding stakeholders (e.g. GEF Secretariat and Council members), or by evaluators (e.g. GEF IEO) later. The intervention team should assess the quality of every separate ToC exercise against the reason for doing it (cf. Figure 2) – that is, has a ToC focused on design delivered high quality logic and evidence, whereas has a ToC focused on stakeholder engagement included the right suite of stakeholders? The GEF Secretariat or Council is more likely to see the overall ToC product of a project or program, which was probably developed from multiple ToC exercises; this needs to meet the general design qualities below.

In general, ToCs should be<sup>18</sup>:

*Plausible*: present clear logical pathways from the intervention outputs through outcomes to the long-term goal, and show these are necessary and sufficient to achieve the eventual global benefits

*Feasible*: identify realistic outputs, partnerships and complementary pathways by others to drive the necessary change, taking account of potential barriers, enablers and risks

*Testable*: clearly outline measurable indicators of change through the pathways, and points where the causal logic in the ToC might be reviewed

In addition to the above, for those commissioning or funding a ToC process, such as the GEF Secretariat, some indicators of how good the ToC process itself was likely to have been (by the completion of the design phase) are<sup>19</sup>:

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<sup>17</sup> A sobering example is provided by Bloem (2019) where well-intended regulation of conflict minerals in central Africa may have in fact tragically increased conflict through overlooked causal pathways

<sup>18</sup> E.g. Taplin and Clark (2012)

<sup>19</sup> See Dhillon and Vaca (2018), p.74; Colby and Collins (2013), ‘red flags’; Harries et al. (2014), p.21

- Is there a mandate and buy-in from key decision-maker(s)? Did the right people participate in the ToC development, with sufficiently diverse representation? (Consider not only those who need to approve the design but also those groups whose eventual support or opposition could be critical to success.)
- Are the outcomes explicit, clear, and mapped into sequence? Does each outcome state which actors (outside the project itself) are expected to be doing what differently? Are key barriers to, and enablers of, the outcomes identified, especially for outcomes related to intended transformative scaling?
- Are the links in the causal pathways explicit, including underlying assumptions for each link? Is the cited evidence base for causal links strong, or are there plans to test unconfirmed assumptions (with appropriate indicator identification as necessary)?
- Are opportunities and risks from long term changes (e.g. demographic, climate, market, technology, social, cultural) considered and accounted for?
- Was the process properly facilitated, with enough time and follow through? Do the results embed insights from multiple sources, including key actors and prior research?
- Is the ToC adequately reported, with a diagram and narrative, appropriately drawing on and affecting other sections of the proposal or design document?

When reviewed earlier in the design phase (e.g. PIF for GEF), expectations for some of these indicators will be more preliminary; for example, stakeholder engagement will be incomplete, the key outcomes and causal pathways should be present but with less evidence and testing, there may be limited attention paid to indicators at this stage, and the ToC reporting will be simpler. Assessors at this stage should acknowledge that details will change as additional perspectives and evidence are brought into the ToC process, and the design logic of the intervention is made more detailed and more robust.

### 1.8 Getting help with a Theory of Change

Although the following section provides a brief introduction to the practical steps of doing a ToC, and many GEF agencies have individuals with considerable experience in ToC, or have their own approaches (see Supplement), readers may wish to seek outside support. This may be in the form of help to run the ToC process overall, to run individual ToC exercises, or to report the ToC.

Terms of reference should seek competence in the issues covered in this Overview. In particular, consultants running the overall ToC or individual ToC exercises should be able to articulate the key principles that set a ToC apart from other approaches (sections 1.2, 1.4), and be across the main criteria for assessing a ToC (section 1.7). They should expect to understand what stage of design the ToC is in (Figure 2) and be able to indicate what aspects of a process might be emphasised at this stage. They should have enough awareness of the subject area to be able to understand and challenge the logic of general outcomes, causal pathways and causal links proposed by participants in this area (without needing to know the details). They should articulate a process that contains at least the elements of Figure 3, even if these are named differently.

Help specifically on the step of reporting, both structuring the logic and visualising it, can draw directly from some software tools now available through various websites – some of these are summarised in Dhillon and Vaca (2018, p.78-82) and Davies (2018, p.451). van der Laan (2019) also provides useful practical steps in developing a visualisation.

## 2. Short guide to doing a ToC

ToC is both a *process*, which may be applied in exercises at different stages in the lifecycle of an intervention, and a *product*, especially in the description of the design of an intervention but also at later stages of learning and evaluation. This section provides a short introduction to the practical *process* steps of a single ToC exercise, and then works through these steps to produce the *product*.

### 2.1 Before doing a ToC

It is important to be clear on the purpose of a particular ToC exercise, and to design the process to suit. Table 1 outlines how the purposes at the different stages shown in Figure 2 flow through to design implications. This includes deciding who should be involved, recognising that this will change through the stages; a prior stakeholder analysis<sup>20</sup> may help. The following guide is mainly aimed at a workshop process, but similar considerations can be applied in a small group brainstorming. Guides note that ToC is hard work and people soon lose focus, so it is best to spend a few hours to a day on it at most, if necessary reconvening later, which will allow time for writing-up and review<sup>21</sup>.

Table 1: The purpose (see section 1.2) and intervention lifecycle stage (see Figure 2) drive the design and intended results of a ToC exercise.

Purpose	Stage	Implications for process of ToC exercise	Result
<b>Design</b>	<i>Initial framing</i>	Small group brainstorm Swift exercise, initial iteration May be broad ToC with limited depth	Problem/goal & basic design and scope of intervention are defined
	<i>Deep design</i>	Wider group with new perspectives Detailed iterations (e.g. half day workshops) with strong facilitation Comprehensive pathways & deep logic testing	Design now tested with insights from key wider perspectives Basis for ToC in proposal now well-developed (may need to include some engagement too)
<b>Engage</b>	<i>Team/ partners</i>	Intensive workshop(s) with full team Needs strong facilitation, and to resolve disagreements together Bring all to same understanding	Ownership & understanding by team & partners, to ensure consistent implementation
	<i>Wider actors</i>	Bigger group workshop Process more important than content (focus on fewer key pathways?)	Acceptance & ownership by stakeholders for scaling out, up and deep, and for durability
<b>Communicate</b>	<i>Internally</i>	Summarise underlying ToC logic in forms that are found useful, maybe in multiple formats (e.g. log-frame, etc)	Explanation to changing staff & partners
	<i>Outside world</i>	Illustrate major pathway narratives that resonate and explain the intervention	Public/community/stakeholder support
<b>Measure</b>	<i>Adaptive learning</i>	Emphasise assumption testing & progress on nearer-term outcomes Explore adaptive implementation in response to new evidence/contexts	Learning from progress Justification for flexibility in implementation, that is not open-ended
	<i>Post hoc evaluation</i>	Test links between shorter & longer term outcomes Evaluation & learning for funders	Confirm near-term outcomes do predict eventual impact Meet formal evaluation

<sup>20</sup> See O'Connell et al. (2016), p.44-46 for approaches to stakeholder analysis; also Reed et al. (2009)

<sup>21</sup> E.g. Harries et al. (2014), p.9

Inputs to a ToC should include a draft of the problem and goal (or impact) to be addressed. If there has been prior work on a systems analysis of the social-ecological system of concern, this should inform the logic of the causal pathways<sup>22</sup>, otherwise this can be part of the ToC discussions.

## 2.2 Steps in doing a ToC

The basic steps for a ToC process should be the same, whether for one or two individuals brainstorming<sup>23</sup>, a small project team with key partners, or a major stakeholder engagement, though different levels of emphasis may be put on different elements and forms of output. There are many guides for this with various numbers of steps; Figure 3 shows the 3 phases – A. *Set up causal pathways*, B. *Test logic and scope*, and C. *Monitor, review, summarise* – and 8 steps used here to capture leading practice in a GEF context.

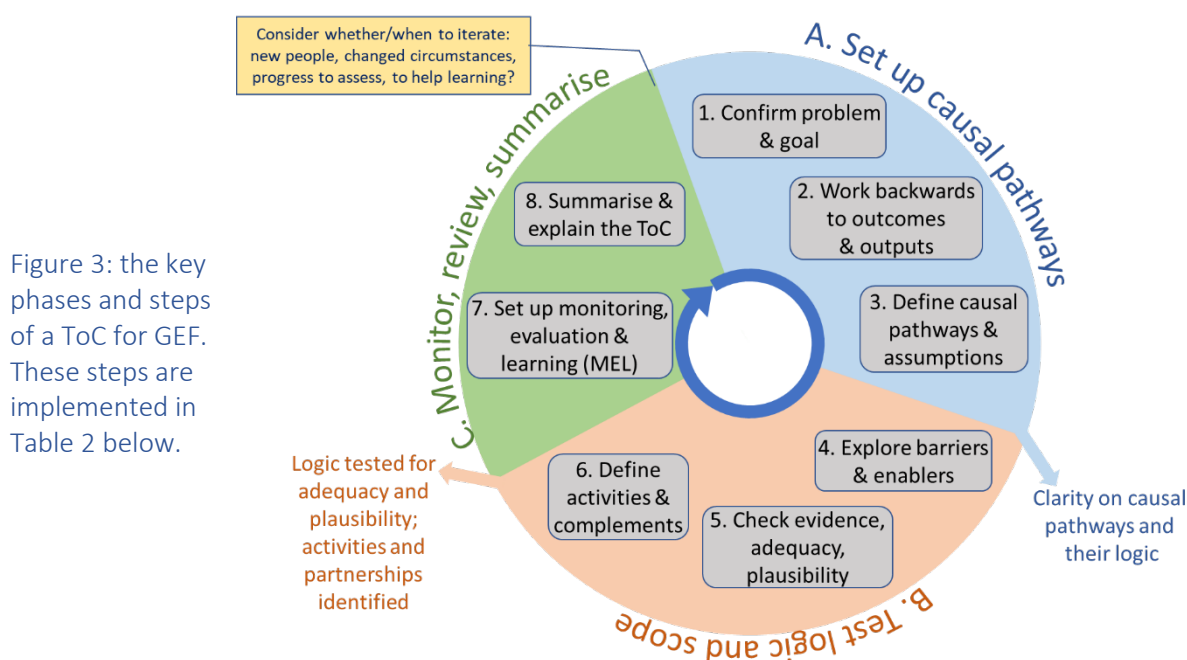


Figure 3: the key phases and steps of a ToC for GEF. These steps are implemented in Table 2 below.

There are various other good guides and primers<sup>24</sup>, including practical advice for facilitators; if using others, it is important to ensure that all the elements in Table 2 are included. In some guides the detailed order of the steps is different or more combined, especially for those in phase B – again, fine as long as the elements are covered.

There can be a convenient working break between phases A and B, allowing reflection on the causal pathways; and again at the end of phase B. Detailed assembling of evidence in Phase B, as well as more detailed development of indicators and the summary narrative in Phase C, is best completed outside a workshop (though some discussion of all of these with everyone is important).

There remain diverse ways of displaying a ToC diagram<sup>25</sup>, with on-going innovation; however, key issues are to show a coherent and logical causal model (each element should plausibly lead to the

<sup>22</sup> RAPTA (O’Connell et al., 2016, 2019) provides guidance on goal setting and systems analysis

<sup>23</sup> Taplin and Rasic (2012) discuss ‘ToC-Lite’ on p.10

<sup>24</sup> E.g. Taplin and Rasic (2012); Taplin and Clark (2012); Harries et al. (2014), e.g. Box 3, p.10; UN Development Group (2017). CLINKS/NPC (2014) provide a workshop template with rough timings (their Appendix 4, p.32)

<sup>25</sup> Useful pointers in: Harries et al. (2014), p.15ff including Box 8 p.17; Dhillon and Vaca (2018), p.77-81; van der Laan (2019); recent analysis (with regard to evaluation) in Davies (2018)

next); and to communicate clearly. Between the diagram and narrative, items often omitted from the ToCs reviewed here, which users of this guide should try to cover, include:

- Proper attention to assumptions underlying the causal chains of outcomes and the expected effects of interventions, including evidence or a means of adaptively testing them in the intervention
- Clear identification of actions needed from actors outside the current intervention, and whether the current intervention needs to do anything to encourage or align with these actions outside its immediate sphere of control
- Coverage of the implications of long-term drivers such as changes in population, market demand, globalisation, climate and other global environmental changes, disruptive technologies, etc, for both the goal definition and the proposed responses; these include many uncertainties and suggest the need for robust options (that work in any plausible future, rather than being optimised for one future and likely to fail in others)
- Explicit attention to issues of scaling and durability of the impacts intended for the intervention (especially, for GEF, of the global environmental benefits), including changes in policy, governance and culture that may be required for transformative scaling<sup>26</sup>
- Critical justification that the causal pathways are collectively *necessary and sufficient*

### 2.3 After doing a ToC

A ToC is an iterative part of intervention design, implementation and evaluation, and only one part of the description of an intervention, whether at program or project level. Just as the ToC process should draw on other parts of an intervention proposal (context, systems analysis, stakeholder analysis, etc), it should also feed into other parts (possibly back to scoping and goal setting, to monitoring and active learning, to knowledge management, and to adaptive governance of the intervention)<sup>27</sup>. Where a ToC is part of a complete proposal, some of the results of the ToC will (and should) be elaborated elsewhere than in the narrative on the ToC itself.

In completing one ToC exercise, consideration should be given to what the next iteration needs to be and what will trigger this. Early in intervention lifecycles, this is likely to be further elaboration of the ToC, and the engaging of partners and stakeholders; later on, it may be review, evaluation and learning (see Table 1 and “When to do a ToC”, p.8).

*Finally, it is worth emphasising that a ToC will never be perfect, so time should not be wasted worrying too much over wording or exhaustive detail. The main aim is to produce something that everyone broadly agrees with that is useful for the intervention aims, and then see the ToC as a actively evolving, working document<sup>28</sup>.*

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<sup>26</sup> See STAP (2019) for scaling out, up and deep and the different forms of change these paths may require, as well as other sources in footnote 16; Stachowiak (2013) outlines of 10 types of policy pathways for change

<sup>27</sup> RAPTA (O’Connell et al., 2019, pp.8-11) outlines these links further in the whole intervention design process

<sup>28</sup> Harries et al. (2014), Box 3, p.10.



## 2.4 Summary guide to carrying out a Theory of Change process

Table 2: Elements of a comprehensive ToC process (for 'RAPTA', see O'Connell et al. (2016, 2019))

Phase	Step	Elements	Practical tips
Before	Inputs to a ToC	<ul style="list-style-type: none"> <li>• Be clear on the purpose(s) of the ToC</li> </ul>	<ul style="list-style-type: none"> <li>- This will direct how you do it, who you involve, and how its success is assessed (section 1.2 and Table 1)</li> </ul>
		<ul style="list-style-type: none"> <li>• Be clear on the goal of the intervention</li> </ul>	<ul style="list-style-type: none"> <li>- Provide a simple statement of the problem being treated and intended impacts from the intervention, including their relevance to GEF's global benefits (NB may be amended during the design stage). When you circulate this beforehand, include definitions of key terms (e.g. p. 5)</li> </ul>
		<ul style="list-style-type: none"> <li>• Choose who to involve</li> </ul>	<ul style="list-style-type: none"> <li>- Depends on purpose and lifecycle stage (Table 1); if the purpose is engagement, ideally do a stakeholder analysis first (RAPTA)</li> <li>- More people provide more perspectives, but make the process more complex. It is hard to do a ToC with more than about 15 people; but less than 3 may be too narrow</li> </ul>
		<ul style="list-style-type: none"> <li>• Have a systems analysis</li> </ul>	<ul style="list-style-type: none"> <li>- A good systems-based ToC depends on an appreciation of how the social-ecological system of concern functions, including across scales. This can source a formal systems analysis process (RAPTA), a strawman situation analysis, or be explored more simply in the ToC, focusing particularly on factors that facilitate or inhibit change. Circulate something beforehand</li> </ul>
Set up potential impact pathways	1. Confirm problem and goal	<ul style="list-style-type: none"> <li>• Ensure everyone is on the same page as regards the overall problem and goal of the intervention</li> </ul>	<ul style="list-style-type: none"> <li>- Circulate proposed problem and goal statements for feedback before any workshop; the goal should be a positive opposite of the problem, and it should be credible in the face of long-term drivers like population growth, urbanisation, climate change and technological disruption</li> <li>- If possible do not spend too much workshop time on this; but it is important that everyone agrees on it, and on the definition of terms in it</li> <li>- If there is debate, acknowledge and capture issues for possible adjustment later, but limit the time and if necessary then ask people to suspend judgement for now. You may be able to make a few clarifying amendments or definitions on the fly</li> <li>- Once you proceed, you may need to remind people of the goal repeatedly (have them add comments on a sheet of paper on the wall if their views change, to keep the process going)</li> <li>- If the disagreement is very heated, you may not be ready to discuss a ToC! This is an important finding - redesign the workshop to work it through</li> </ul>
	2. Work backwards from goal through outcomes to outputs	<ul style="list-style-type: none"> <li>• Work backwards from the goal to specify necessary and sufficient and outputs for achieving them</li> <li>• Identify longer-term outcomes needed to deliver the goal first, adding shorter-term outcomes to achieve these</li> <li>• Then add the outputs needed to deliver the outcomes</li> </ul>	<ul style="list-style-type: none"> <li>- Place the goal on the right or top of a large sheet of paper or wall (this is useful even if you are a small group); people may need to warm up with some collective discussion of key long-term outcomes/pre-conditions for the goal, but get into small groups soon so everyone contributes</li> <li>- Use sticky notes to add outcomes and outputs, with one on each sheet, working back from long-term to short term; use different coloured sticky notes for outcomes and outputs (Figure 1 may help people distinguish these; see Supplement for sources of examples)</li> <li>- Ensure outcomes and outputs are stated as results, not processes – for outcomes ask “who will be doing what differently?”</li> </ul>

		<ul style="list-style-type: none"> <li>• Discuss what is <i>necessary and sufficient</i> to achieve the goal</li> </ul>	<ul style="list-style-type: none"> <li>- Have everyone concentrate on the outcomes first, and only then add the outputs (to avoid people putting up their preferred projects). At this stage do not ask for connecting arrows, though people may provide some of them</li> <li>- If the group is small, this step can occur through discussion with one person recording; if it is larger, let people take 20 min to write their ideas on sticky notes, and then have the whole group review what has been put up, and combine similar ideas</li> <li>- Have some initial discussion about which outcomes are really <i>necessary and sufficient</i> to achieve the goal. (This will start to challenge people's assumptions, to be re-visited below.)</li> <li>- Do not be limited to outputs that people initially imagine to be within the scope of the intervention (but also do not let the scope get too crazily broad) – it's important to know what scope of outputs is really needed to interact with them</li> <li>- Don't write down outcome/outputs already being pursued just because they are. Encourage people to think 'out of the box'! Too often people only suggest what they are familiar with (A full intervention design will include activities and resources to deliver the outputs; this level of detail is not needed here, except to reality-check what is possible)</li> </ul>
	3. Define causal pathways and assumptions	<ul style="list-style-type: none"> <li>• Organise the outputs and outcomes into causal pathways, linking items together with arrows</li> <li>• Use each pathway to show how one (or more) of the outputs leads to one or more shorter and longer-term outcomes, that contribute to the overall goal</li> <li>• Draw arrows between these to show the assumed causal logic</li> <li>• Tag each arrow with key assumptions justifying it (especially where people disagree on these)</li> </ul>	<ul style="list-style-type: none"> <li>- If you have a prior systems analysis, you may start this step with a brief reflection of it to get people thinking about causal links</li> <li>- Consolidate sticky notes with similar outcomes: with a big group, you might start this in a break; in a small group it can be done together</li> <li>- Put assumptions (requirements for the outcomes which are assumed to already exist) on a different colour of sticky note beside the arrow/outcome each relates to</li> <li>- In a workshop process the product will be messy, as people add to others' opinions – just make sure the key pathways and assumptions are clear so it can be tidied up and documented afterwards to reflect back to the attendees</li> <li>- Remind participants you are trying to document <i>important</i> causal links and assumptions, not every single one. Is the one they are adding as or more important than others already there?</li> <li>- Give the pathways preliminary narratives to explain them (e.g. governance pathway, local capacity building pathway, private sector pathway); if possible, these should engage and resonate with stakeholders (note any descriptions suggested by stakeholders in the workshop)</li> <li>- Before finishing this step, gather everyone by the diagram and outline the main pathways: revisit the question of what is <i>necessary and sufficient</i> – are there any crucial gaps? Can some pathways be given lower priority? Check if any pathways have no explicit assumptions – does no-one really believe in them or are they happening anyway?</li> </ul> <p>The end of this step is a good spot for a break and reflection</p>



Test logic and scope	4. Explore barriers and enablers	<ul style="list-style-type: none"> <li>Identify the barriers and enablers (and risks and opportunities) for achieving each pathway.</li> <li>Add any additional outputs and outcomes (and associated logic) required to overcome the barriers and activate the enablers</li> </ul>	<ul style="list-style-type: none"> <li>In a large group get people to document barriers and enablers on a different colour sticky note on the relevant pathway (by now you might have each pathway on a different wall or table so sub-groups can move around them)</li> <li>Some enablers are just the reverse of barriers, but considering enablers explicitly often raises new (and positive) issues – focus on these enablers, noting they may be either internal (e.g. right partners) or external (e.g. land tenure policy) to the intervention</li> <li>Ask whether any long-term changes – e.g. population, product demand, globalisation, new technologies, climate and other global environmental changes, economy, social expectations – are risks to (or create opportunities for) the pathways (and the durability of results)</li> <li>After adding examples for ~20 min, identify the most important ones (in a large group, hand out voting dots to identify ~6 top barriers/risk and ~3 top enablers/opportunities)</li> <li>For these top ones, ask whether these require any additional causal pathways</li> <li>Bringing in more viewpoints can help to think through all possible causal pathways and thus to avoid later unintended consequences (which usually result from unforeseen pathways)</li> </ul>
	5. Check evidence, adequacy and plausibility	<ul style="list-style-type: none"> <li>For the main causal pathways, list the evidence that exists or is required to support the ToC</li> <li>Challenge existing assumptions and logic on how and why change could happen, and ensure key assumptions are plausible and valid</li> <li>Is the total set of pathways <i>necessary and sufficient</i> (possibly including complementary actions by others)?</li> </ul>	<ul style="list-style-type: none"> <li>In practice, dealing with more than about 6 pathways (perhaps including 1 or 2 that other actors will do) is beyond a large group (and may be unnecessary for engagement purposes); more may be feasible in comprehensive planning by a small team</li> <li>If you have many pathways identified, at this stage you may need to have a discussion about which are the 4-6 that will carry other pathways along, or you may need to combine some into a larger pathway; assessing evidence may help this, as will revisiting the question of what is <i>necessary and sufficient</i></li> <li>Here you are wanting people to draw on their experience or literature to provide evidence – but capture enough detail that the team can verify it later if necessary</li> <li>In a large group process for engagement purposes, detailed evidence may be less important – but capture any insights that help to challenge or support assumptions. In a smaller process, team members may assemble more evidence outside the workshop</li> </ul>
	6. Define activities and complements	<ul style="list-style-type: none"> <li>Draw a line around the pathways that are realistically achievable within your intervention</li> <li>Identify the activities needed for your outputs, and who you need to partner with for these</li> <li>Identify who may achieve the impact pathways outside that scope and ask what you need to do to ensure these complementary pathways take place</li> </ul>	<ul style="list-style-type: none"> <li>The ToC literature calls this line the ‘accountability ceiling’ for your intervention: but if complementary pathways are vital for you to achieve impact then you must still consider whether you can influence them. Some may be barriers or enablers needing action by others</li> <li>In a workshop, do not over-develop the activity details – just clarify what type of activity was intended to produce each output (people usually find activities much easier to talk about than outcomes, so spend most of the time on the latter!)</li> <li>Do you need to add any pathways to your intervention to influence someone else to deliver outcomes outside your ‘accountability’ but essential to your success?</li> <li>Be realistic – if you cannot control what is critical to your success, is your intervention the right one at this time? Perhaps a focus at a different scale or sector would be more profitable</li> <li>In a more leisurely ToC process, expect to iterate steps 2-6, and within this steps 4-6.</li> </ul>

Monitor, review and summarise	7. Identify what to monitor for evaluation and learning (MEL)	<ul style="list-style-type: none"> <li>Identify what needs to be monitored on each causal pathway or for each outcome</li> <li>Develop indicators to measure whether you have been successful and set targets for these</li> </ul>	<ul style="list-style-type: none"> <li>A complete MEL strategy and specific indicator details should be elsewhere in an intervention proposal; but the ToC should help define what such a strategy must achieve and hence what parts of each causal pathway need monitoring (RAPTA 2)</li> <li>Ideally every outcome should have an indicator aimed at “how well this outcome must be met to deliver the next step in the causal pathway”</li> <li>Defining outcomes measurably can help clarify what people mean by them, so this may lead to some iteration back to step 2 or 3</li> <li>But don’t belabour indicator detail as a group – elaborate after the session. It should be possible to think of a ‘SMART’ indicator for anything suggested</li> <li>Think about what criteria (e.g. failure to confirm a logical link) might trigger a review of the ToC and implementation logic</li> </ul>
	8. Summarise and explain your Theory of Change	<ul style="list-style-type: none"> <li>Develop a summary diagram with a 1-2 page narrative accompaniment</li> </ul>	<ul style="list-style-type: none"> <li>This will usually be developed after a workshop, but you may want to discuss what to highlight while the logic is on the wall</li> <li>Various diagram forms are possible (see Appendix 3): keep it manageable, as its main purpose is to communicate; remember it is a complement to the narrative</li> <li>The narrative should stay short but contain as a minimum: a rationale for the intervention, a situation/context analysis, a description of the diagram logic (explaining barriers and enablers, and addressing the issue of ‘necessary and sufficient’), key elements of evidence, and the basis for a MEL plan (RAPTA)</li> <li>Also explicitly state the intention of the ToC (see p.7) and mention who (in what roles) was involved in developing it (as this should frame any assessment of the quality of the ToC process)</li> </ul>
After	Follow up to a ToC	<ul style="list-style-type: none"> <li>Review overall quality</li> <li>Develop other representations if needed</li> <li>Consider structured iteration/revision, both during proposal development and longer-term</li> </ul>	<ul style="list-style-type: none"> <li>Common criteria to consider for internal quality review: plausibility, feasibility, testability, as well as communicability</li> <li>Other representations such as logframe may be useful for some purposes, now based on a strong ToC</li> <li>You may run this process iteratively with other sets of stakeholders, in which case be prepared to revisit/refine goals, engagement, the pathways and assumptions, barriers and enablers, and evidence</li> <li>Also consider iteration from program to project levels, or through the process of the intervention in response to emerging new evidence</li> </ul>

## Appendix 1: Some frequently asked questions (FAQs)

**Does a ToC really matter?** There are various ways of improving the design of interventions. The specific benefit of a ToC is its emphasis on making the mental models and causal logic that underlie an intervention explicit, and helping design monitoring and learning related to these. One result is to have the whole team understanding these rather than working at cross purposes. Beyond this, the Annie E Casey Foundation comments: “Communities have too much at stake to engage in work without a clearly defined purpose” (Organizational Research Services, 2004).

**What’s the difference between a ToC and a logframe (or results chains)?** Logframes, Logic models and other forms of Program Logic document the intended steps of an intervention by describing the inputs, activities and outputs to reach the desired outcomes. A ToC *product* encompasses this but the ToC *process* strategically engages designers, teams, partners and stakeholders in explaining the ‘why’ – the perceived causal logic behind the set of activities – and documenting these assumptions in a way that enables evaluation of and efficient learning from successes and failures. ToC is needed to design a rigorous plan for a complex initiative; for evaluating appropriate outcomes at the right time and in the right sequence; and for explaining why an initiative worked or did not work, and why. A logframe or similar may be better for showing the basic inputs, outputs and outcomes at a glance, and may be used to partially communicate the results of a ToC<sup>29</sup>. A Results Chain approach<sup>30</sup> is closely aligned and in essence provides the causal chain logic of a ToC.

**Is ToC just another name for the whole project design?!** No! It is the core rationale on which many aspects of the design should be built. But among other things, it says nothing about activity plans, budgets, responsibilities, implementation timelines, etc. RAPTA (O’Connell et al., 2016; O’Connell et al., 2019) provides one framework for where ToC fits in among other tools and steps that are useful to project and program design – different combinations can be applied to suit the context.

**Isn’t the project identification stage too early to expect a ToC?** ToC can be carried out very simply or be elaborated in great detail. Even at a very early stage in project identification (e.g. PIF for GEF), it is useful to sketch a rough ToC diagram and brief narrative that identifies the main causal pathways and causal logic, which may come from just a few core proponents brainstorming for an hour (a ‘ToC-lite’). This immediately provides logical structure to the proposal, immensely helpful for visualising the intent and helping to direct the next steps in development with fuller stakeholder engagement, testing, and analysis.

**Is a program level ToC just the sum of the ToCs for all the projects in it?** In general, no. If all the projects are dealing with a similar issue in different contexts, then some general pattern may be useful (see next FAQ). However, for a program to add value, the program level should be aiming at different outcomes to individual projects. For example, the GEF Impact Programs (IPs) mean to coordinate across multiple projects to gain efficiencies and learning; which are different outcomes from individual projects; in addition, the IPs aim to achieve scaling beyond the sum of individual projects, for example by engaging the value chain that might service projects in several countries. Thus a program ToC will engage different actors in its process and deliver a different product, at the same time as it may partially provide some common considerations for all its child projects to contextualise.

**Can I have one ToC for a load of similar projects?** In general, no; as Montague-Clouse and Taplin (2011) say, “ToC is *not* a general theory of how change happens; rather, the theory is specific to your effort.” However, it may make good sense to have a basic pattern derived from findings in multiple projects (for example, there is good evidence that global benefits related to management of land degradation depend in general on coherent national land planning policies as well as local land tenure security and effective land management extension), that is then tested in a specific context (for example, priority actions in a country that already has good national planning will be different to those in a neighbour that has just emerged from conflict). Thus a common pattern can be a useful starting point that saves re-inventing much evidence; but it needs to be deeply contextualised for any specific intervention with care not to assume

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<sup>29</sup> See also: Clark and Anderson (2004, slides 19-21); Harries et al. (2014, p.15); <http://www.tools4dev.org/resources/theory-of-change-vs-logical-framework-whats-the-difference-in-practice/>

<sup>30</sup> See Margoluis et al. (2013) and <http://fosonline.org/library/using-results-chains/>

that something that works in one place will automatically work elsewhere. In addition, a part of ToC is engaging local ownership – this requires the process even where interventions are very similar.

**What if we just can't agree on barriers, or enablers, or assumptions or risks?** Surfacing these disagreements is a vital benefit of ToC, since it enables you to understand (and perhaps resolve) different mental models in your team and wider stakeholders before they emerge destructively during project implementation. Often, talking about them will bring new insights, which might involve changing or adding causal pathways – for example, stakeholders may highlight the importance of power relations that mean other actors need consulting. Sometimes you will come to agree that the evidence for or against a logical link is not there but it is still worth pursuing – it is really a hypothesis and you should establish monitoring to learn about it. Very occasionally you may have irreconcilable disagreements, in which case it is better to know before big investments are made.

**What if some of the change processes are political?** Change processes are almost *always* partly political, so related assumptions and risks should not be ignored. Often additional stakeholders may help develop insights in to these. Vogel (2012) and Stachowiak (2013) contain useful guidance on this.

**What if the evidence base is slim?** Projects and programs seeking to advance innovation and transformation will usually have to take some risks (cf. GEF STAP, 2019). It is fine to phrase some of the causal links as hypotheses to be tested, where there is some evidence they could be powerful levers for scaling and transformation. Importantly, this should be explicit, and monitoring should be targeted at testing, validating and if necessary adapting the link.

**How long should a ToC take?** This depends very much on the purpose and stage of the intervention lifecycle is under consideration (see section 1.2, Figure 2, and Table 2), and how many people are involved. An early stage ToC with just a few team members may take only 1-2 hours. ToC in the full design stage may require several meetings with different actors; it is recommended not to extend any individual ToC workshop beyond a half to one full day. The total iterative process of developing a complete design ToC may take many days for a large investment.

**Does a ToC require both a visual and narrative form?** The documentation of a ToC can begin with either, but good practice indicates both are needed, to explain and reinforce each other. Step 8 in Table 2 list key elements.

**What if stakeholders change from the time of project identification to implementation?** This should be a crucial expectation in the iterative development of the ToC, which may in fact cause you to wish to engage different stakeholders as the scope of the intervention is challenged, though this may also happen due to external factors. It is important to engage the adjusted set of stakeholders and accept that they may be drive further amendment of the ToC – far better to allow this early than have them disengage and undermine the intervention later. Critical stakeholders may also change during implementation, for example as a pathway to scaling emerges and requires actors across scales.

**Do I need to map 'power/influence' of stakeholders?** A simple diagram of who is who and what their perceived influence is in the socio-economic and geographic context of the project implementation helps to identify 'who to involve', when to involve them, why to involve them, and also to anticipate 'resistance' from groups which may perceive the project does not carry benefits to them. RAPTA (O'Connell et al., 2016, pp.44-46) provides approaches to stakeholder mapping or analysis (see also Reed et al. (2009)).

**Where in the process of ToC design do I include 'leverage' with other initiatives that are relevant/complementary to the vision of the ToC?** The ToC causal logic should outline all outputs and outcomes that are key to achieving an impact, including those being satisfactorily implemented by others. The scope of the intervention can then be limited (step 6 in Table 2) to filling in what others are not doing; but might include actions to ensure coordination with those other initiatives (for example engaging with policy makers to know when a new regulation will come into force; or ensuring that on-ground training by another NGO is compatible with the proposed project).

## Appendix 2: A short theory of change for ToC

*Why do we think using ToC is important? We should be able to write a ToC to address this question, of course! Here is a short, generalised example of a ToC diagram and narrative on this subject, with perhaps the level of detail that might be expected at project identification stage.*

Situation analysis: as global environmental change accelerates, funders are increasingly being required to tackle complex, cross-sector, cross-scale challenges needing rapid transformative change, yet independent evaluations often cast doubt on whether the resulting interventions have the desired, durable impact. Failings often arise from emerging issues that were missed in linear intervention design. The evaluations and leading practice from the literature show that interventions with better structured design that more consciously the way the system works and engages stakeholders in this have a better chance of success.

Logic narrative: The goal of this ToC is to achieve more durable, scaled impacts from development project investments. This ToC focuses on the role of Theory of Change processes in achieving this<sup>31</sup>, recognising that other aspects, such as adequate financing and good project management, are also essential but complementary activities achieved through other pathways. In general, the literature highlights four outcomes related to project design which will drive better impact – better design, better engagement, better learning and adaptive management from measurement, and better communication, resulting in four causal pathways<sup>32</sup>, regarded as necessary and sufficient with respect to Theory of Change:

- a. Strategically, there is good evidence that systematically thinking through the logic of an intervention produces a better intervention *design*, and that this may be enhanced by bringing in stakeholders who understand how the intervention is likely to play out in their context. Outside the pathway, there is still a need for strong project management skills and sources of (co-)finance.
- b. In terms of partnerships and ownership, there is strong evidence that real *engagement* in intervention design builds ownership and improves the likelihood of ‘local’ partners continuing the activity when the funded intervention ceases. This pathway is dependent on a degree of stability in the partnership and stakeholder, or regular review to re-engage new actors.
- c. As regards *measurement*, targeting indicators to critical logic pathways is known to improve the value of the monitoring and is believed to improve learning outcomes about the intervention; and there is emerging evidence that using the Theory of Change with this monitoring to frame adaptive adjustments to the intervention through its lifetime is effective at avoiding unwarranted flexibility. This requires acceptance of flexibility by funders.
- d. And it is believed the Theory of Change process can be useful to *communicate* the logic of the intervention to those not originally involved in its development, though there is limited real evidence of this.

Assumptions: key assumptions in this logic include that projects fail more due to poor design or inadequate engagement than from chance changes in external context; and that strong engagement of stakeholders is sufficient to improve the likelihood of success in the face of changing power balances. These should be tested through monitoring across intervention portfolios. Other key

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<sup>31</sup> Thus this is not a ToC for this primer specifically, but for the use of Theory of Change methods across investors such as GEF; if it was for this primer, the primer would appear as an output in the diagram and be linked to assumptions about uptake, which would require logic pathways such as engaging with appropriate people during its development to ensure ownership, making it easy to use and readily accessible, etc

<sup>32</sup> Sources for evidence (which should normally be cited) in this case may be found in the Supplement review

assumptions include that intervention teams have (or have access to) skills to run good ToC processes, that they are stable, and that funders are willing to allow adjustment in committed activities. A key external risk – that global environmental change continues to accelerate – is likely to be mitigated by applying ToC regardless of the rate of change; however, this is unlikely to be enough by itself, and other pathways, including increasing rates of financing, will also need mobilising over time.

MEL: to test the (less strong) causal logic of this Theory of Change across a large investment portfolio, monitoring of (i) the quality of ToC processes across multiple interventions should be combined with (ii) assessment of the levels of team and partner awareness and engagement in the investment logic, and (iii) the establishment of a baseline for longer term stakeholder engagement in scaling the outcomes. The Measure, learn & adapt pathway effectiveness should be monitored by tracking whether (iv) the indicators emerging from the ToC resulted in (v) useful learning and adaptation. The weak understanding of the communications pathway should be extended by monitoring whether (vi) different forms of ToC reporting were detectable in (vii) stakeholder descriptions of the interventions.

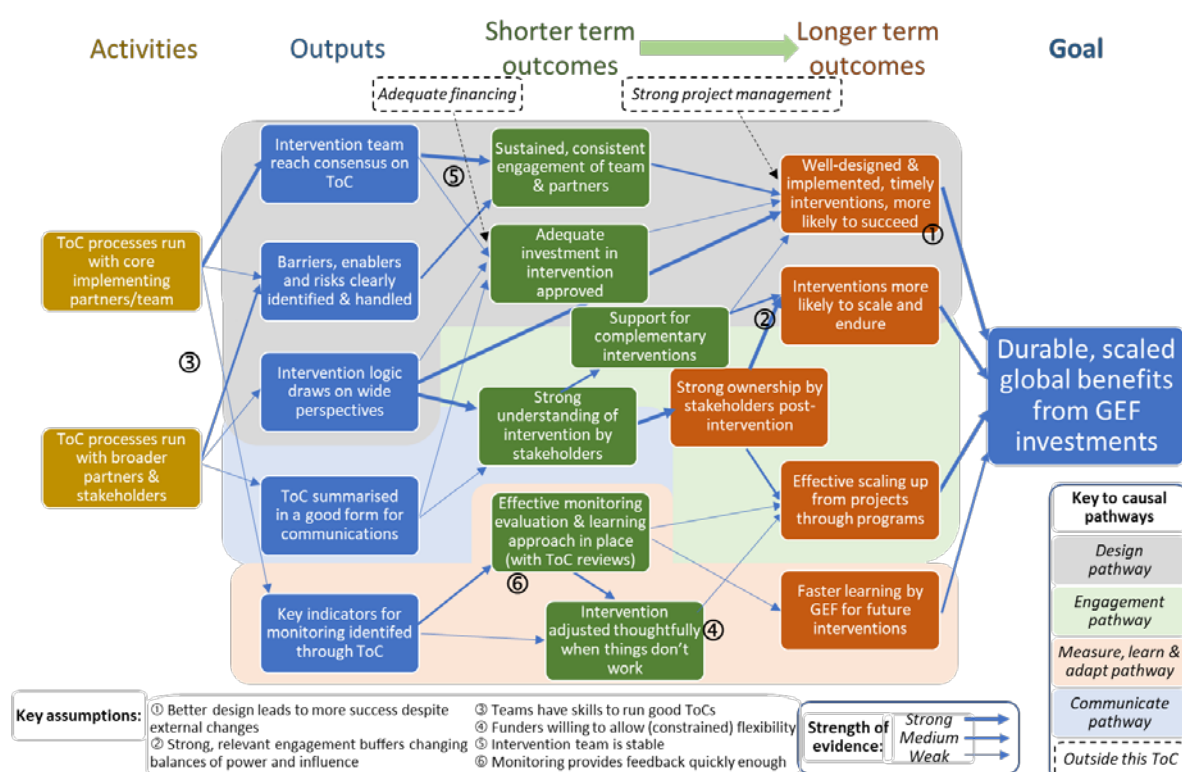


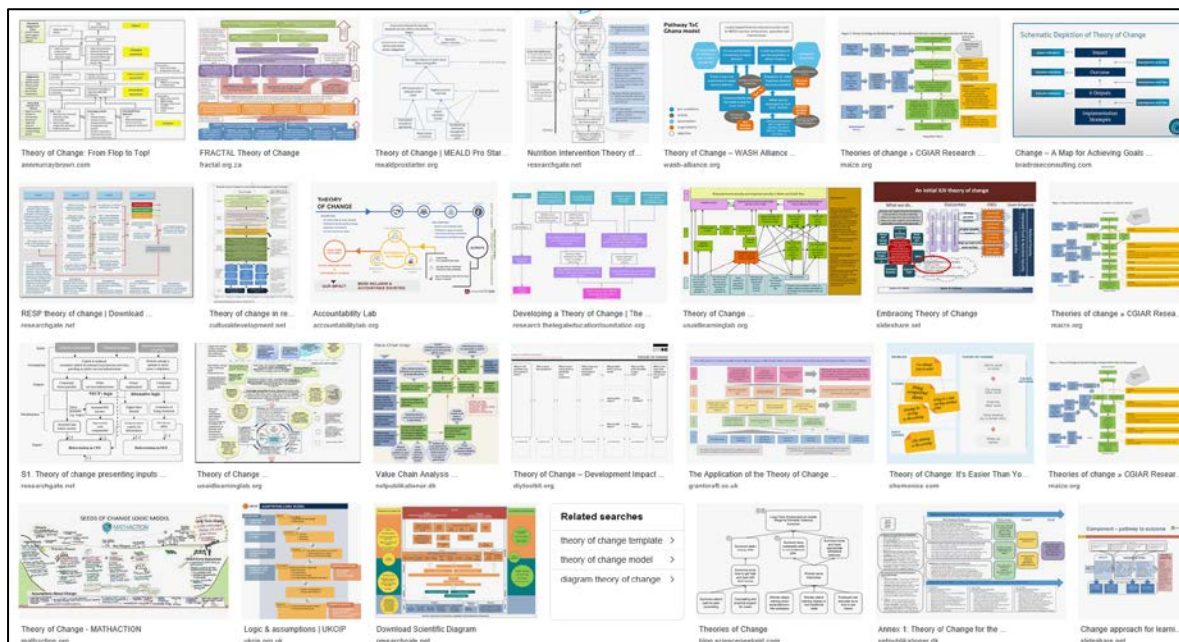
Figure 4: A preliminary theory of change for using ToC in large institutional investors such as the GEF, to be read in conjunction with the adjacent narrative



## Appendix 3: Some examples of ToC products

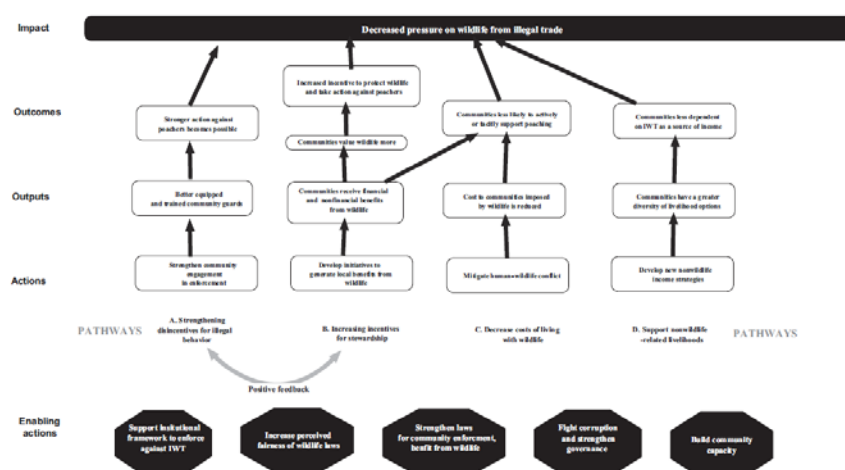
This appendix provides some examples and sources of examples of ToC products; ideally this would be both diagrams and narratives but the latter are too extensive to reproduce here. Instead a few key diagrammatic forms are illustrated here, and some other examples and lessons are briefly referenced.

The figure below (following the example of Davies (2018), p.439) shows the first page of a google images search for 'theory of change' (as of Nov 2019), illustrating a portion of the diversity of diagrams. Many of these do not capture all the features highlighted here, though they may still be useful as a simplified form of the logic for communications. The reader can repeat this search.



Along with Davies (2018), Dhillon and Vaca (2018), Vogel (2012) and the theoryofchange website<sup>33</sup> among others also provide many examples of ToC images – see also discussion in the Supplement to this primer. A few examples are annotated below:

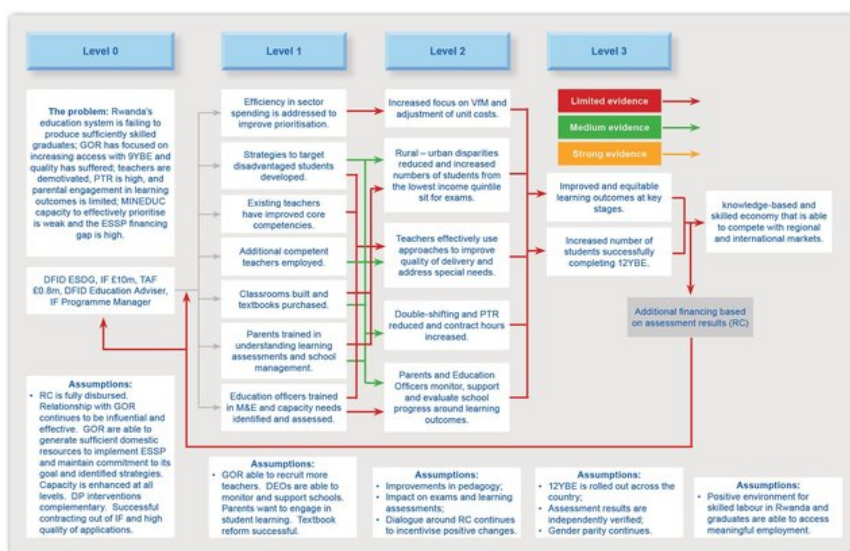
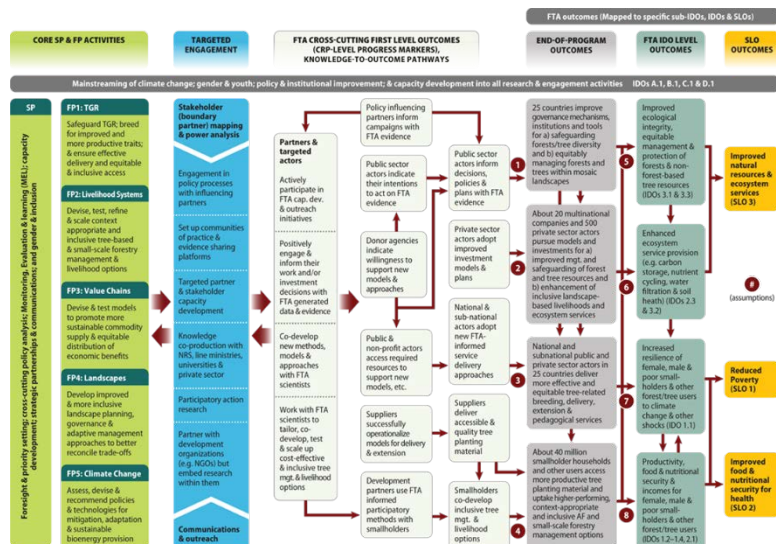
A simple, vertical ToC for community-based actions against illegal wildlife trading is provided by Biggs et al. (2017), with backing assumptions and other details in supplementary material. It highlights enabling actions, and has been subsequently field-tested<sup>34</sup>.



<sup>33</sup> See: <https://www.theoryofchange.org/library/toc-examples/>

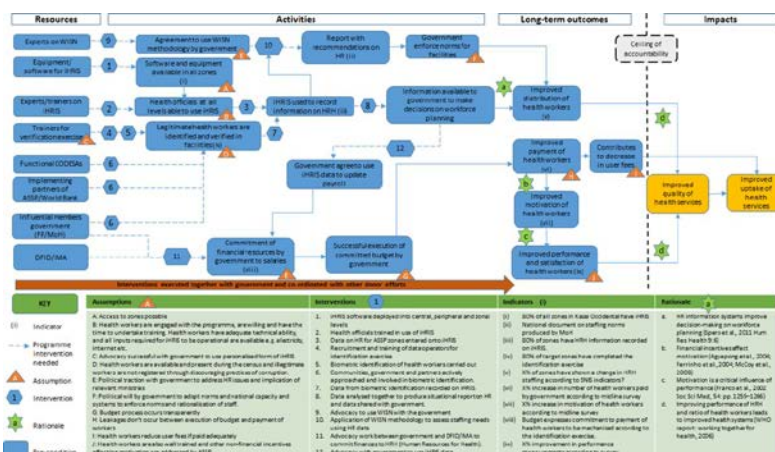
<sup>34</sup> See: <https://www.iucn.org/regions/eastern-and-southern-africa/our-work/conservation-areas-and-species/local-communities-first-line-defence-against-illegal-wildlife-trade-flood>

The horizontal ToC diagram for the CGIAR's Forest Trees and Agriculture program illustrates other key features; the related narrative can be found in CGIAR (2017) with a description of the assumptions (red numbers here) in Table 1c at p.19.



This ToC from the evaluation of a Dfid supported project on Rwandan education shows assumptions, but also illustrates the use of (here, colour) coding to show the strength of evidence for proposed causal links<sup>35</sup>.

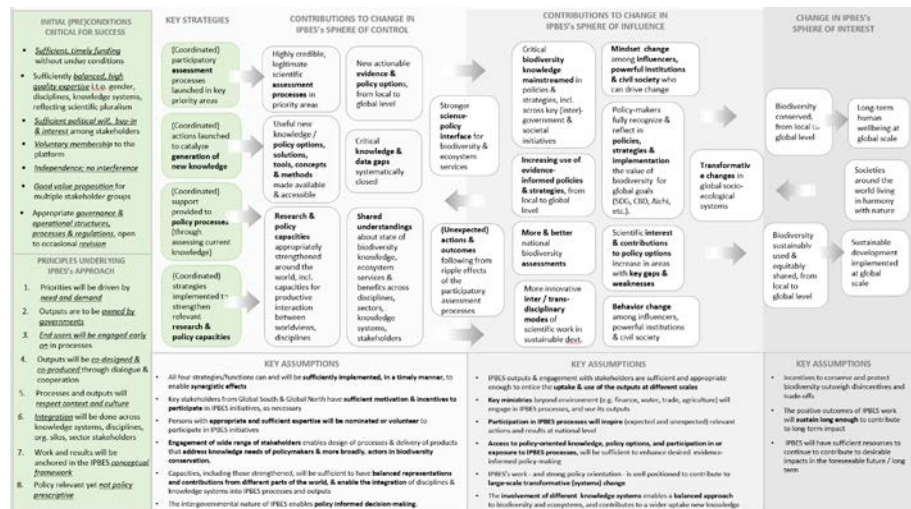
This ToC on an intervention in Congo from shows the extension of the outputs-outcomes-impact mapping back into program resources and activities; it also shows a good development of assumptions and indicators. It is actually from a paper reflecting on the ToC process, including a candid discussion of what did not work so well in this case<sup>36</sup>.



<sup>35</sup> Downloaded from: [https://www.researchgate.net/publication/314221074\\_Evaluation\\_of\\_Results\\_Based\\_Aid\\_in\\_Rwandan Education - Year Two Evaluation Report/figures?lo=1](https://www.researchgate.net/publication/314221074_Evaluation_of_Results_Based_Aid_in_Rwandan_Education_-_Year_Two_Evaluation_Report/figures?lo=1)  
<sup>36</sup> Downloaded from: <https://gh.bmj.com/content/3/1/e000617> (open access)



The IPBES ToC is a program/strategy level example, with a surrounding narrative focused on testing its logic (Bridgewater et al., 2019, pp.91-93).



In contrast to the above diagrams, p.30-35 in Wicander and Coad (2015) contains a theory of change that is entirely articulated in text and a table, although individual causal chains may be illustrated (e.g. Wicander and Coad, 2018, p.447, Fig.3). Appendix 5 in CLiNKS/NPC (2014) contains a good example of a 4 page summary of evidence in support of a ToC (for a supported housing project) – see <https://www.clinks.org/sites/default/files/2019-01/TheoryofChangeGuide.pdf>.

Again, van der Laan (2019) provides useful steps in developing a representation.

## Appendix 4: References

*(See also more extensive sources in companion Literature Review.)*

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