**What is a theory of change?**

A Theory of Change (TOC) is a valuable conceptual model for project design that describes the way by which change is expected to occur from output to outcome and impact along an impact pathway. Included are assumptions about causality underlying the relationships between outputs, outcomes and impacts.  These assumptions must be tested throughout project duration to build up the evidence base to validate the impact pathways. In other words, a TOC is a map that illustrates the relationships between actions and outcomes, and also shows how outcomes are related to each other over the lifespan of the project.

Other ways to think of a TOC:

* An articulation of how and why a given intervention will lead to a specific change
* A conscious and creative visualization exercise
* A set of assumptions and abstract projections
* A thinking-action approach
* A semi-structured change map
* A process tool

**Why develop a project theory of change?**

A key function of a TOC is to help build common understanding among group member ideas regarding the desired changes to take place, creating an enabling environment for project execution and facilitating monitoring, evaluation and learning (ME&L) procedures for a more holistic measurement of program achievement and project-wide learning. Consequently, potential weaknesses or gaps in collective thinking can be identified and addressed. In addition, if objectives are made explicit across levels of leadership and responsibilities, linkages between teams on a project can be leveraged to set priorities and commitments so that priorities can be established.

**When would you develop a project theory of change?**

A theory of change is ideally created at the inception of a project. This is due to the maximum utility that a TOC can have as a tool for project guidance and implementation from the beginning stages of a project, as well as any monitoring that might be carried out in the early onset of a project. However, a TOC is useful at any stage of the project as its intended purpose is to inform monitoring and evaluation, as well as create a collective understanding of project objectives and outcomes. At any point in a project’s timeline, the opportunity is created for learning as a component of ME&L. Even at the midterm stage a TOC would significantly support the project’s learning and midterm assessment effort, should there be one. Alternatively, the gain in the absence of a midterm assessment would be a learning culture, established via an interactive workshop that would last throughout the remainder of the project, and ultimately contribute to the evaluation effort at the conclusion of the project. The value of such a workshop is a collaborative discourse on challenges and opportunities at multiple implementation levels; this is invaluable for program execution that will lead to Development for Impact.

**How do you develop a project theory of change?**

What do you need before you start?

The first step in planning a TOC workshop is making the need for one clear. This is done in some version of a proposal to management. Management will then need to approve the proposal and ensure that there is buy-in from key participants.

The next step is deciding the critical participants that must be involved in the creation of the TOC are, i.e. those who will participate in the workshop. In order to develop a TOC in a participatory manner, which is vital for program ownership and commitment and for a truly representative end product, the TOC must be developed by a team of representatives of active stakeholder groups (e.g. team members). These individuals, as participants in the TOC workshop, must possess viewpoints that encompass the many positions relevant to the project.

Who needs to be involved?

Participants should include members of teams on the project for which the TOC will be developed. The mix of participants is ideally proportionately representative of the entirety of stakeholders involved in a project. It is important that there be different levels of people in terms of rank, but that everybody has an equal role in the workshop. Everybody’s ideas are valid and every contribution is valuable.

What is the process to follow?

*Logistics & Materials:*

**Step 1: Invite participants and get confirmation of attendance**

After confirming the list of desired participants, an invitation must be extended to these team members. The invitation in whatever form it may take should include a clear explanation of the purpose of the workshop and its importance, as well as clear and precise details of when and where the workshop will take place.

**Step 2: Securing location of workshop**

A specific place will be needed for the workshop congregation. Whenever possible, meeting rooms should be reserved and confirmed ahead of time and these details must be accurate on the informative invitation. Should the invitation be unclear, participants could show up late, and the confusion could additionally interrupt a smooth and productive start to the workshop. In cases in which there is limited time to complete a workshop, time is valuable and a timely pace is critical.

**Step 3: Allocate time for health and food breaks**

It is important to keep participants focused, which could become a challenge if they become fatigued or hungry. Whether or not food is contemplated in the itinerary, time should be allowed for participants to eat a meal or snack, depending on the length of the workshop. Several days would be an ideal allocation of time for a TOC workshop. However, due to time constraints for a multitude of reasons, a much shorter time allocation is likely to be allotted. These details should be determined ahead of time so that participants can plan for their meals and time.

**Step 4: Preparation of workshop materials**

In addition to the physical location of the workshop, other things to consider are lighting, room temperature, and any distractions that might detract from the focus of the presentation and activities. These considerations should be managed ahead of time. Again, time for quality collaboration is incredibly valuable. Additionally, if there is material for a presentation aid such as PowerPoint, this presentation should be prepared and reviewed for consistency and fluency ahead of time in order to allow for a smooth presentation delivery. Links to external sites should be checked for functionality. All materials that will be used should be gathered ahead of time, including:

* Packets of pertinent workshop materials, including strategic frameworks and TOCs
* Sticky Notes
* Markers
* Larger sheets of paper (for SLOs and “parking lots”)

*Presentation:*

**Step 1: Introduction & Ground Rules**

Make known who will be involved in the workshop. Introduce the workshop facilitators. If there are participants who may not know each other, have them introduce themselves. Be sure that everyone knows what role each participant is playing and who they are representing. This is crucial to collaboration. Set the ground rules for participation. These should include respect, participation, punctuality and no distractions. No participant should feel as though their ideas are not valued. Every participant should have an equal opportunity to contribute. Communicate the workshop objectives:

* Establish a theory of change for the project in a participatory process
* Increase participants’ awareness of results-based management
* Encourage sharing and   
  learning

Keep participants focused and engaged. If there is no need for technology use in the workshop, it would be beneficial to instruct participants to refrain from using their laptops, cellular phones, and other technology. Their attention should be on the workshop taking place. Set aside time for coffee breaks. Let the participants know that they will have time to take care of matters unrelated to the workshop during those times.

**Step 2: Setting the stage & Common Language**

Provide an example. It may be the first TOC workshop for many of the participants. For this reason, it is important to explain how the process will work. One way to set the stage is to show a video that explains the process and shows it taking place. An example can be found at this link:

<http://www.ted.com/talks/tom_wujec_got_a_wicked_problem_first_tell_me_how_you_make_toast?language=en#t-138304> While the process will be more complex than the example given, a clear and simple explanation of the process will get all participants on the same page and prepare them to work together collaboratively.

Equip participants with a common language.

In order to facilitate a conversation between participants in which everyone can express themselves and be understood, the space for a common understanding must be constructed. This space is created by explicitly stating the language that will be used. Terminology, while nuanced, can be the cause of failed communication or incorrect assumptions if unclear. For this reason, all pertinent terminology should be defined and explained prior to beginning the institutional framework analysis. Specific to results-based management, the following terms should be defined and explained in the exact terms that they will be used and considered throughout the workshop:

* Impact / ultimate outcomes
* Intermediate outcomes
* Immediate outcomes
* Outputs
* Inputs
* Activities

Converting these to the CGIAR terms:

* System level outcomes
* Intermediate development outcomes
* Research outcomes
* CRP outcomes & processes

The following should also be defined:

* Assumptions
* Risks

**Step 3: Strategy and framework review**

Provide the [CGIAR Strategy and Results Framework](https://library.cgiar.org/bitstream/handle/10947/3865/CGIAR%20Strategy%20and%20Results%20Framework.pdf?sequence=1) (SRF) as context. It is likely that some of the participants are unfamiliar with the strategic framework within which their team functions. It is important to make this framework clear for all participants. Not only is it beneficial as general functional knowledge, it will ensure that the TOC generated reflects and is aligned with the organization’s objectives and broader goals. It should be clear that the simplicity of the framework is recognized and that in its digestible form does not do justice to the complexity of the pathways of change. Participants should also be reminded of the CGIAR mission and vision.

*Vision:* A world free of hunger, poverty and environmental degradation.

*Mission:* To advance agri-food science and innovation to enable poor people, especially poor women, to increase agricultural productivity and resilience, share in economic growth, feed themselves and their families better, and conserve natural resources in the face of climate change and other threats.

Finally, the global context should be highlighted, as in the contribution to the active global development agenda (i.e. the Sustainable Development Goals).

Review relevant CRPs. Particularly at CIMMYT, the MAIZE and WHEAT CRPs should be reviewed with the participants in the same way that the SRF was covered, again reinforcing objectives and the context in which the project is situated. It is important to explain the relationships and interconnections between flagship projects. A flagship project is a major research theme. Flagship projects are intended to produce research outputs that will contribute to the solutions of significant development challenges, as identified by the CGIAR in collaboration with countries.

**Step 4: Build the TOC by identifying the components to be included**

Identify relevant flagship TOCs to which the project will contribute or is contributing. As a group, the relevant flagships should be identified and discussed. Participants should be prompted to think about the flagships that their project significantly contributes to in a direct way. Once these are agreed upon, the pertinent TOCs will be used to identify R&D outcomes for the new TOC that is under construction. This step does not require Sticky Notes.

Identify R&D outcomes for the project. First, using the selected flagship(s) TOC(s), participants should individually identify 2-3 R&D outcomes that are relevant to the project. They will write these down, one outcome per Sticky Note, and post them on the wall, forming clusters of similar outcomes. Facilitators should help with this process of organization.

Next, these clusters must be refined. This should be an inclusive and collaborative process. All participants’ input should be considered in making the decision to keep or discard an outcome. Outcomes may be consolidated if the group decides this action makes sense and the combined outcome adequately represents the underlying activities. Facilitators should again guide the participants to consider outcomes which the project actively carries out.

It is likely that this step will be time –consuming, as participants will have varying views and ideas of what activities in the field look like, considering they are strategically representing various perspectives. The discourse during this interaction is crucial due to the limited space and opportunity that may exist outside of this space for this type of conversation, in light of busy schedules and other barriers to interaction between teams and team members.

Identify key sub-IDOs for the project. From the previously selected flagship TOC(s) participants should individually identify 2-3 sub-IDOs that represent the success of the project and write these on Sticky Notes, one sub-IDO per Sticky Note. Facilitators can then help place these on the designated SLO or Cross-cutting Theme on the wall (these should be set up on the wall beforehand in the preparation stage). The next step will then echo the refining process for the R&D outcomes. Inclusively and collaboratively, all participants’ input should be considered in making the decision to keep or discard the selected sub-IDOs. Facilitators should again guide the participants to consider sub-IDOs most relevant project activity.

Identify immediate outcomes, as necessary. As a group, any pertinent immediate outcomes not found in the flagship TOCs should be discussed. If the group identifies the need for additional immediate outcomes, these should be refined and added.

Identify strategies to achieve outcomes.

In small groups, participants should review interventions and outputs identified in the selected flagship(s) TOC(s) and identify those which are relevant to the project and any new interventions and outputs that should be added. These should then be reviewed and refined, following the already established process. Due to the more specific nature of interventions and outputs, this process could require a discussion about priorities. Allow time for this vital discussion.

Establish assumptions and risks behind the pathways of change. In small groups, participants should review the assumptions and risks identified in the pertinent flagship(s) TOC(s) and identify those which are relevant to the project and any new assumptions and risks to be included. These should then be reviewed and refined, following the already established process. The concept of an assumption or risk could potentially be difficult to understand for participants. It is a good idea to remind participants of the following definitions:

*Assumptions:* statements about how and why a set of outcomes is expected to come about as depicted in the pathway of change.

*Risks:* internal and external risks with potential to undermine the success of the project.

**Step 5: Conclude and establish next steps**

To conclude, objectives achieved should be restated and unmet objectives addressed. Assuming all objectives have been met, next steps are:

* Documentation of the TOC
* Consultation with workshop participants for final approval of the TOC (see *Who approves?* Section)
* Finalization of the TOC
* Create/review and revise Monitoring Plan to ensure alignment with TOC and process for validating the TOC

**Step 6: Thank the participants**

Everyone has a busy schedule and their time and participation is valuable. It is essential that the participants understand the importance of their role in establishing a project TOC and that they feel ownership of the newly created TOC. They will be the agents working on the execution of the activities behind the TOC and as such should understand their duty in the realization of project goals and ultimate impact.

**Who approves?**

A TOC diagram is constructed given the agreed upon outcomes, pathways of change, and assumptions and risks. This diagram in the shape of a flow chart is the draft TOC which must be approved by those who took part in the construction and any designated person in management in order to ensure that it is an accurate depiction of the theory of change behind the project. This is essential to the acceptance of the team members who have a hand in how the project is carried out. If those involved in the action behind the theory do not approve or agree with the TOC, it could cause implementation and future planning conflicts.

**Where to get additional help?**

Please follow the [link](http://inside.cimmyt.org/monitoringevaluationandlearning/SitePages/Home.aspx) to Monitoring, Evaluation and Learning Inside-CIMMYT page.